NOT YET SCHEDULED FOR ORAL ARGUMENT

No. 20-1026

IN THE UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

FRIENDS OF THE EARTH, NATURAL RESOURCES DEFENSE COUNCIL, INC., AND MIAMI WATERKEEPER,
Petitioners,

v.

UNITED STATES NUCLEAR REGULATORY COMMISSION AND UNITED STATES OF AMERICA,
Respondents.

Petition for Review of a Final Order of the
United States Nuclear Regulatory Commission

ADDENDUM OF STATUTES, REGULATIONS AND FEDERAL REGISTER NOTICES TO INITIAL BRIEF OF PETITIONERS

Richard E. Ayres
Friends of the Earth
2923 Foxhall Road, N.W.
Washington, D.C. 20016
202-722-6930
Counsel for Friends of the Earth

Kelly Cox
Miami Waterkeeper
2103 Coral Way 2nd Floor
Miami, FL 33145
305-905-0856
Counsel for Miami Waterkeeper

Kenneth J. Rumelt
Environmental Advocacy Clinic
Vermont Law School
164 Chelsea Street, PO Box 96
South Royalton, VT 05068
802-831-1031
Counsel for Friends of the Earth

Caroline Reiser, Geoffrey Fettus
Natural Resources Defense Council
1152 15th Street, NW, Suite 300
Washington, DC 20005
202-289-2371
Counsel for Natural Resources Defense Council

ADDENDUM OF STATUTES, RULES AND REGULATIONS

I. STATUTES

II. REGULATIONS

III. FEDERAL REGISTER NOTICES

out below] shall take effect 180 days after the date of its enactment [Sept. 13, 1976].

''(b) Subsection (g) of section 552b of title 5, United States Code, as added by section 3(a) of this Act, shall take effect upon enactment [Sept. 13, 1976].''

SHORT TITLE OF 1976 AMENDMENT

Pub. L. 94–409, §1, Sept. 13, 1976, 90 Stat. 1241, provided: ''That this Act [enacting this section, amending sections 551, 552, 556, and 557 of this title, section 10 of Pub. L. 92–463, set out in the Appendix to this title, and section 410 of Title 39, and enacting provisions set out as notes under this section] may be cited as the 'Government in the Sunshine Act'.''

TERMINATION OF REPORTING REQUIREMENTS

For termination, effective May 15, 2000, of provisions of law requiring submittal to Congress of any annual, semiannual, or other regular periodic report listed in House Document No. 103–7 (in which the report required by subsec. (j) of this section is listed on page 151), see section 3003 of Pub. L. 104–66, as amended, set out as a note under section 1113 of Title 31, Money and Finance.

TERMINATION OF ADMINISTRATIVE CONFERENCE OF UNITED STATES

For termination of Administrative Conference of United States, see provision of title IV of Pub. L. 104–52, set out as a note preceding section 591 of this title.

DECLARATION OF POLICY AND STATEMENT OF PURPOSE

Pub. L. 94–409, §2, Sept. 13, 1976, 90 Stat. 1241, provided that: ''It is hereby declared to be the policy of the United States that the public is entitled to the fullest practicable information regarding the decisionmaking processes of the Federal Government. It is the purpose of this Act [see Short Title note set out above] to provide the public with such information while protecting the rights of individuals and the ability of the Government to carry out its responsibilities.''

§ 553. Rule making

(a) This section applies, according to the provisions thereof, except to the extent that there is involved—

(1) a military or foreign affairs function of the United States; or

(2) a matter relating to agency management or personnel or to public property, loans, grants, benefits, or contracts.

(b) General notice of proposed rule making shall be published in the Federal Register, unless persons subject thereto are named and either personally served or otherwise have actual notice thereof in accordance with law. The notice shall include—

(1) a statement of the time, place, and nature of public rule making proceedings;

(2) reference to the legal authority under which the rule is proposed; and

(3) either the terms or substance of the proposed rule or a description of the subjects and issues involved.

Except when notice or hearing is required by statute, this subsection does not apply—

(A) to interpretative rules, general statements of policy, or rules of agency organization, procedure, or practice; or

(B) when the agency for good cause finds (and incorporates the finding and a brief statement of reasons therefor in the rules issued) that notice and public procedure thereon are impracticable, unnecessary, or contrary to the public interest.

(c) After notice required by this section, the agency shall give interested persons an opportunity to participate in the rule making through submission of written data, views, or arguments with or without opportunity for oral presentation. After consideration of the relevant matter presented, the agency shall incorporate in the rules adopted a concise general statement of their basis and purpose. When rules are required by statute to be made on the record after opportunity for an agency hearing, sections 556 and 557 of this title apply instead of this subsection.

(d) The required publication or service of a substantive rule shall be made not less than 30 days before its effective date, except—

(1) a substantive rule which grants or recognizes an exemption or relieves a restriction;

(2) interpretative rules and statements of policy; or

(3) as otherwise provided by the agency for good cause found and published with the rule.

(e) Each agency shall give an interested person the right to petition for the issuance, amendment, or repeal of a rule.

(Pub. L. 89–554, Sept. 6, 1966, 80 Stat. 383.)

HISTORICAL AND REVISION NOTES

Derivation	*U.S. Code*	*Revised Statutes and Statutes at Large*
.....	5 U.S.C. 1003.	June 11, 1946, ch. 324, §4, 60 Stat. 238.

In subsection (a)(1), the words ''or naval'' are omitted as included in ''military''.

In subsection (b), the word ''when'' is substituted for ''in any situation in which''.

In subsection (c), the words ''for oral presentation'' are substituted for ''to present the same orally in any manner''. The words ''sections 556 and 557 of this title apply instead of this subsection'' are substituted for ''the requirements of sections 1006 and 1007 of this title shall apply in place of the provisions of this subsection''.

Standard changes are made to conform with the definitions applicable and the style of this title as outlined in the preface to the report.

CODIFICATION

Section 553 of former Title 5, Executive Departments and Government Officers and Employees, was transferred to section 2245 of Title 7, Agriculture.

EXECUTIVE ORDER NO. 12044

Ex. Ord. No. 12044, Mar. 23, 1978, 43 F.R. 12661, as amended by Ex. Ord. No. 12221, June 27, 1980, 45 F.R. 44249, which related to the improvement of Federal regulations, was revoked by Ex. Ord. No. 12291, Feb. 17, 1981, 46 F.R. 13193, formerly set out as a note under section 601 of this title.

§ 554. Adjudications

(a) This section applies, according to the provisions thereof, in every case of adjudication required by statute to be determined on the record after opportunity for an agency hearing, except to the extent that there is involved—

(1) a matter subject to a subsequent trial of the law and the facts de novo in a court;

§ 703. Form and venue of proceeding

The form of proceeding for judicial review is the special statutory review proceeding relevant to the subject matter in a court specified by statute or, in the absence or inadequacy thereof, any applicable form of legal action, including actions for declaratory judgments or writs of prohibitory or mandatory injunction or habeas corpus, in a court of competent jurisdiction. If no special statutory review proceeding is applicable, the action for judicial review may be brought against the United States, the agency by its official title, or the appropriate officer. Except to the extent that prior, adequate, and exclusive opportunity for judicial review is provided by law, agency action is subject to judicial review in civil or criminal proceedings for judicial enforcement.

(Pub. L. 89–554, Sept. 6, 1966, 80 Stat. 392; Pub. L. 94–574, §1, Oct. 21, 1976, 90 Stat. 2721.)

HISTORICAL AND REVISION NOTES

Derivation	*U.S. Code*	*Revised Statutes and Statutes at Large*
.....	5 U.S.C. 1009(b).	June 11, 1946, ch. 324, §10(b), 60 Stat. 243.

Standard changes are made to conform with the definitions applicable and the style of this title as outlined in the preface to the report.

AMENDMENTS

1976—Pub. L. 94–574 provided that if no special statutory review proceeding is applicable, the action for judicial review may be brought against the United States, the agency by its official title, or the appropriate officer as defendant.

§ 704. Actions reviewable

Agency action made reviewable by statute and final agency action for which there is no other adequate remedy in a court are subject to judicial review. A preliminary, procedural, or intermediate agency action or ruling not directly reviewable is subject to review on the review of the final agency action. Except as otherwise expressly required by statute, agency action otherwise final is final for the purposes of this section whether or not there has been presented or determined an application for a declaratory order, for any form of reconsideration, or, unless the agency otherwise requires by rule and provides that the action meanwhile is inoperative, for an appeal to superior agency authority.

(Pub. L. 89–554, Sept. 6, 1966, 80 Stat. 392.)

HISTORICAL AND REVISION NOTES

Derivation	*U.S. Code*	*Revised Statutes and Statutes at Large*
.....	5 U.S.C. 1009(c).	June 11, 1946, ch. 324, §10(c), 60 Stat. 243.

Standard changes are made to conform with the definitions applicable and the style of this title as outlined in the preface of this report.

§ 705. Relief pending review

When an agency finds that justice so requires, it may postpone the effective date of action taken by it, pending judicial review. On such conditions as may be required and to the extent necessary to prevent irreparable injury, the reviewing court, including the court to which a case may be taken on appeal from or on application for certiorari or other writ to a reviewing court, may issue all necessary and appropriate process to postpone the effective date of an agency action or to preserve status or rights pending conclusion of the review proceedings.

(Pub. L. 89–554, Sept. 6, 1966, 80 Stat. 393.)

HISTORICAL AND REVISION NOTES

Derivation	*U.S. Code*	*Revised Statutes and Statutes at Large*
.....	5 U.S.C. 1009(d).	June 11, 1946, ch. 324, §10(d), 60 Stat. 243.

Standard changes are made to conform with the definitions applicable and the style of this title as outlined in the preface of this report.

§ 706. Scope of review

To the extent necessary to decision and when presented, the reviewing court shall decide all relevant questions of law, interpret constitutional and statutory provisions, and determine the meaning or applicability of the terms of an agency action. The reviewing court shall—

(1) compel agency action unlawfully withheld or unreasonably delayed; and

(2) hold unlawful and set aside agency action, findings, and conclusions found to be—

(A) arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law;

(B) contrary to constitutional right, power, privilege, or immunity;

(C) in excess of statutory jurisdiction, authority, or limitations, or short of statutory right;

(D) without observance of procedure required by law;

(E) unsupported by substantial evidence in a case subject to sections 556 and 557 of this title or otherwise reviewed on the record of an agency hearing provided by statute; or

(F) unwarranted by the facts to the extent that the facts are subject to trial de novo by the reviewing court.

In making the foregoing determinations, the court shall review the whole record or those parts of it cited by a party, and due account shall be taken of the rule of prejudicial error.

(Pub. L. 89–554, Sept. 6, 1966, 80 Stat. 393.)

HISTORICAL AND REVISION NOTES

Derivation	*U.S. Code*	*Revised Statutes and Statutes at Large*
.....	5 U.S.C. 1009(e).	June 11, 1946, ch. 324, §10(e), 60 Stat. 243.

Standard changes are made to conform with the definitions applicable and the style of this title as outlined in the preface of this report.

ABBREVIATION OF RECORD

Pub. L. 85–791, Aug. 28, 1958, 72 Stat. 941, which authorized abbreviation of record on review or enforcement of orders of administrative agencies and review on the original papers, provided, in section 35 thereof,

§ 703. Form and venue of proceeding

The form of proceeding for judicial review is the special statutory review proceeding relevant to the subject matter in a court specified by statute or, in the absence or inadequacy thereof, any applicable form of legal action, including actions for declaratory judgments or writs of prohibitory or mandatory injunction or habeas corpus, in a court of competent jurisdiction. If no special statutory review proceeding is applicable, the action for judicial review may be brought against the United States, the agency by its official title, or the appropriate officer. Except to the extent that prior, adequate, and exclusive opportunity for judicial review is provided by law, agency action is subject to judicial review in civil or criminal proceedings for judicial enforcement.

(Pub. L. 89–554, Sept. 6, 1966, 80 Stat. 392; Pub. L. 94–574, §1, Oct. 21, 1976, 90 Stat. 2721.)

HISTORICAL AND REVISION NOTES

Derivation	*U.S. Code*	*Revised Statutes and Statutes at Large*
.....	5 U.S.C. 1009(b).	June 11, 1946, ch. 324, §10(b), 60 Stat. 243.

Standard changes are made to conform with the definitions applicable and the style of this title as outlined in the preface to the report.

AMENDMENTS

1976—Pub. L. 94–574 provided that if no special statutory review proceeding is applicable, the action for judicial review may be brought against the United States, the agency by its official title, or the appropriate officer as defendant.

§ 704. Actions reviewable

Agency action made reviewable by statute and final agency action for which there is no other adequate remedy in a court are subject to judicial review. A preliminary, procedural, or intermediate agency action or ruling not directly reviewable is subject to review on the review of the final agency action. Except as otherwise expressly required by statute, agency action otherwise final is final for the purposes of this section whether or not there has been presented or determined an application for a declaratory order, for any form of reconsideration, or, unless the agency otherwise requires by rule and provides that the action meanwhile is inoperative, for an appeal to superior agency authority.

(Pub. L. 89–554, Sept. 6, 1966, 80 Stat. 392.)

HISTORICAL AND REVISION NOTES

Derivation	*U.S. Code*	*Revised Statutes and Statutes at Large*
.....	5 U.S.C. 1009(c).	June 11, 1946, ch. 324, §10(c), 60 Stat. 243.

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(Pub. L. 89–554, Sept. 6, 1966, 80 Stat. 393.)

HISTORICAL AND REVISION NOTES

Derivation	*U.S. Code*	*Revised Statutes and Statutes at Large*
.....	5 U.S.C. 1009(d).	June 11, 1946, ch. 324, §10(d), 60 Stat. 243.

Standard changes are made to conform with the definitions applicable and the style of this title as outlined in the preface of this report.

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To the extent necessary to decision and when presented, the reviewing court shall decide all relevant questions of law, interpret constitutional and statutory provisions, and determine the meaning or applicability of the terms of an agency action. The reviewing court shall—

(1) compel agency action unlawfully withheld or unreasonably delayed; and

(2) hold unlawful and set aside agency action, findings, and conclusions found to be—

(A) arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law;

(B) contrary to constitutional right, power, privilege, or immunity;

(C) in excess of statutory jurisdiction, authority, or limitations, or short of statutory right;

(D) without observance of procedure required by law;

(E) unsupported by substantial evidence in a case subject to sections 556 and 557 of this title or otherwise reviewed on the record of an agency hearing provided by statute; or

(F) unwarranted by the facts to the extent that the facts are subject to trial de novo by the reviewing court.

In making the foregoing determinations, the court shall review the whole record or those parts of it cited by a party, and due account shall be taken of the rule of prejudicial error.

(Pub. L. 89–554, Sept. 6, 1966, 80 Stat. 393.)

HISTORICAL AND REVISION NOTES

Derivation	*U.S. Code*	*Revised Statutes and Statutes at Large*
.....	5 U.S.C. 1009(e).	June 11, 1946, ch. 324, §10(e), 60 Stat. 243.

Standard changes are made to conform with the definitions applicable and the style of this title as outlined in the preface of this report.

ABBREVIATION OF RECORD

Pub. L. 85–791, Aug. 28, 1958, 72 Stat. 941, which authorized abbreviation of record on review or enforcement of orders of administrative agencies and review on the original papers, provided, in section 35 thereof,

that: ''This Act [see Tables for classification] shall not be construed to repeal or modify any provision of the Administrative Procedure Act [see Short Title note set out preceding section 551 of this title].''

CHAPTER 8—CONGRESSIONAL REVIEW OF AGENCY RULEMAKING

§ 801. Congressional review

(a)(1)(A) Before a rule can take effect, the Federal agency promulgating such rule shall submit to each House of the Congress and to the Comptroller General a report containing—

(i) a copy of the rule;

(ii) a concise general statement relating to the rule, including whether it is a major rule; and

(iii) the proposed effective date of the rule.

(B) On the date of the submission of the report under subparagraph (A), the Federal agency promulgating the rule shall submit to the Comptroller General and make available to each House of Congress—

(i) a complete copy of the cost-benefit analysis of the rule, if any;

(ii) the agency's actions relevant to sections 603, 604, 605, 607, and 609;

(iii) the agency's actions relevant to sections 202, 203, 204, and 205 of the Unfunded Mandates Reform Act of 1995; and

(iv) any other relevant information or requirements under any other Act and any relevant Executive orders.

(C) Upon receipt of a report submitted under subparagraph (A), each House shall provide copies of the report to the chairman and ranking member of each standing committee with jurisdiction under the rules of the House of Representatives or the Senate to report a bill to amend the provision of law under which the rule is issued.

(2)(A) The Comptroller General shall provide a report on each major rule to the committees of jurisdiction in each House of the Congress by the end of 15 calendar days after the submission or publication date as provided in section 802(b)(2). The report of the Comptroller General shall include an assessment of the agency's compliance with procedural steps required by paragraph (1)(B).

(B) Federal agencies shall cooperate with the Comptroller General by providing information relevant to the Comptroller General's report under subparagraph (A).

(3) A major rule relating to a report submitted under paragraph (1) shall take effect on the latest of—

(A) the later of the date occurring 60 days after the date on which—

(i) the Congress receives the report submitted under paragraph (1); or

(ii) the rule is published in the Federal Register, if so published;

(B) if the Congress passes a joint resolution of disapproval described in section 802 relating to the rule, and the President signs a veto of such resolution, the earlier date—

(i) on which either House of Congress votes and fails to override the veto of the President; or

(ii) occurring 30 session days after the date on which the Congress received the veto and objections of the President; or

(C) the date the rule would have otherwise taken effect, if not for this section (unless a joint resolution of disapproval under section 802 is enacted).

(4) Except for a major rule, a rule shall take effect as otherwise provided by law after submission to Congress under paragraph (1).

(5) Notwithstanding paragraph (3), the effective date of a rule shall not be delayed by operation of this chapter beyond the date on which either House of Congress votes to reject a joint resolution of disapproval under section 802.

(b)(1) A rule shall not take effect (or continue), if the Congress enacts a joint resolution of disapproval, described under section 802, of the rule.

(2) A rule that does not take effect (or does not continue) under paragraph (1) may not be reissued in substantially the same form, and a new rule that is substantially the same as such a rule may not be issued, unless the reissued or new rule is specifically authorized by a law enacted after the date of the joint resolution disapproving the original rule.

(c)(1) Notwithstanding any other provision of this section (except subject to paragraph (3)), a rule that would not take effect by reason of subsection (a)(3) may take effect, if the President makes a determination under paragraph (2) and submits written notice of such determination to the Congress.

(2) Paragraph (1) applies to a determination made by the President by Executive order that the rule should take effect because such rule is—

(A) necessary because of an imminent threat to health or safety or other emergency;

(B) necessary for the enforcement of criminal laws;

(C) necessary for national security; or

(D) issued pursuant to any statute implementing an international trade agreement.

(3) An exercise by the President of the authority under this subsection shall have no effect on the procedures under section 802 or the effect of a joint resolution of disapproval under this section.

(d)(1) In addition to the opportunity for review otherwise provided under this chapter, in the case of any rule for which a report was submitted in accordance with subsection (a)(1)(A) during the period beginning on the date occurring—

(A) in the case of the Senate, 60 session days, or

(B) in the case of the House of Representatives, 60 legislative days,

before the date the Congress adjourns a session of Congress through the date on which the same

1988—Par. (3)(D). Pub. L. 100–430 added subpar. (D).

1975—Par. (3)(A). Pub. L. 93–584 inserted reference to the Interstate Commerce Commission.

EFFECTIVE DATE OF 1995 AMENDMENT

Amendment by Pub. L. 104–88 effective Jan. 1, 1996, see section 2 of Pub. L. 104–88, set out as an Effective Date note under section 1301 of Title 49, Transportation.

EFFECTIVE DATE OF 1988 AMENDMENT

Amendment by Pub. L. 100–430 effective on the 180th day beginning after Sept. 13, 1988, see section 13(a) of Pub. L. 100–430, set out as a note under section 3601 of Title 42, The Public Health and Welfare.

EFFECTIVE DATE OF 1975 AMENDMENT

Amendment by Pub. L. 93–584 not applicable to actions commenced on or before last day of first month beginning after Jan. 2, 1975, and actions to enjoin or suspend orders of Interstate Commerce Commission which are pending when this amendment becomes effective shall not be affected thereby, but shall proceed to final disposition under the law existing on the date they were commenced, see section 10 of Pub. L. 93–584, set out as a note under section 2321 of this title.

TRANSFER OF FUNCTIONS

Atomic Energy Commission abolished and functions transferred by sections 5814 and 5841 of Title 42, The Public Health and Welfare. See, also, Transfer of Functions notes set out under those sections.

§ 2342. Jurisdiction of court of appeals

The court of appeals (other than the United States Court of Appeals for the Federal Circuit) has exclusive jurisdiction to enjoin, set aside, suspend (in whole or in part), or to determine the validity of—

(1) all final orders of the Federal Communication Commission made reviewable by section 402(a) of title 47;

(2) all final orders of the Secretary of Agriculture made under chapters 9 and 20A of title 7, except orders issued under sections 210(e), 217a, and 499g(a) of title 7;

(3) all rules, regulations, or final orders of—

(A) the Secretary of Transportation issued pursuant to section 50501, 50502, 56101–56104, or 57109 of title 46 or pursuant to part B or C of subtitle IV, subchapter III of chapter 311, chapter 313, or chapter 315 of title 49; and

(B) the Federal Maritime Commission issued pursuant to section 305, 41304, 41308, or 41309 or chapter 421 or 441 of title 46;

(4) all final orders of the Atomic Energy Commission made reviewable by section 2239 of title 42;

(5) all rules, regulations, or final orders of the Surface Transportation Board made reviewable by section 2321 of this title;

(6) all final orders under section 812 of the Fair Housing Act; and

(7) all final agency actions described in section 20114(c) of title 49.

Jurisdiction is invoked by filing a petition as provided by section 2344 of this title.

(Added Pub. L. 89–554, § 4(e), Sept. 6, 1966, 80 Stat. 622; amended Pub. L. 93–584, § 4, Jan. 2, 1975, 88 Stat. 1917; Pub. L. 95–454, title II, § 206, Oct. 13, 1978, 92 Stat. 1144; Pub. L. 96–454, § 8(b)(2), Oct. 15, 1980, 94 Stat. 2021; Pub. L. 97–164, title I, § 137, Apr. 2, 1982, 96 Stat. 41; Pub. L. 98–554, title II, § 227(a)(4), Oct. 30, 1984, 98 Stat. 2852; Pub. L. 99–336, § 5(a), June 19, 1986, 100 Stat. 638; Pub. L. 100–430, § 11(a), Sept. 13, 1988, 102 Stat. 1635; Pub. L. 102–365, § 5(c)(2), Sept. 3, 1992, 106 Stat. 975; Pub. L. 103–272, § 5(h), July 5, 1994, 108 Stat. 1375; Pub. L. 104–88, title III, § 305(d)(5)–(8), Dec. 29, 1995, 109 Stat. 945; Pub. L. 104–287, § 6(f)(2), Oct. 11, 1996, 110 Stat. 3399; Pub. L. 109–59, title IV, § 4125(a), Aug. 10, 2005, 119 Stat. 1738; Pub. L. 109–304, § 17(f)(3), Oct. 6, 2006, 120 Stat. 1708.)

HISTORICAL AND REVISION NOTES

Derivation	*U.S. Code*	*Revised Statutes and Statutes at Large*
.....	5 U.S.C. 1032.	Dec. 29, 1950, ch. 1189, § 2, 64 Stat. 1129. Aug. 30, 1954, ch. 1073, § 2(b), 68 Stat. 961.

The words ''have exclusive jurisdiction'' are substituted for ''shall have exclusive jurisdiction''.

In paragraph (1), the word ''by'' is substituted for ''in accordance with''.

In paragraph (3), the word ''now'' is omitted as unnecessary. The word ''under'' is substituted for ''pursuant to the provisions of''. Reference to ''Federal Maritime Commission'' is substituted for ''Federal Maritime Board'' on authority of 1961 Reorg. Plan No. 7, eff. Aug. 12, 1961, 75 Stat. 840. Reference to the United States Maritime Commission is omitted because that Commission was abolished by 1950 Reorg. Plan No. 21, § 306, eff. May 24, 1951, 64 Stat. 1277, and any existing rights are preserved by technical sections 7 and 8.

REFERENCES IN TEXT

Section 812 of the Fair Housing Act, referred to in par. (6), is classified to section 3612 of Title 42, The Public Health and Welfare.

AMENDMENTS

2006—Par. (3)(A). Pub. L. 109–304, § 17(f)(3)(A), substituted ''section 50501, 50502, 56101–56104, or 57109 of title 46'' for ''section 2, 9, 37, or 41 of the Shipping Act, 1916 (46 U.S.C. App. 802, 803, 808, 835, 839, and 841a)''.

Par. (3)(B). Pub. L. 109–304, § 17(f)(3)(B), added subpar. (B) and struck out former subpar. (B) which read as follows:

''(B) the Federal Maritime Commission issued pursuant to—

''(i) section 19 of the Merchant Marine Act, 1920 (46 U.S.C. App. 876);

''(ii) section 14 or 17 of the Shipping Act of 1984 (46 U.S.C. App. 1713 or 1716); or

''(iii) section 2(d) or 3(d) of the Act of November 6, 1966 (46 U.S.C. App. 817d(d) or 817e(d));''.

2005—Par. (3)(A). Pub. L. 109–59 inserted '', subchapter III of chapter 311, chapter 313, or chapter 315'' before ''of title 49''.

1996—Par. (3)(A). Pub. L. 104–287 amended Pub. L. 104–88, § 305(d)(6). See 1995 Amendment note below.

1995—Par. (3)(A). Pub. L. 104–88, § 305(d)(6), as amended by Pub. L. 104–287, inserted ''or pursuant to part B or C of subtitle IV of title 49'' before the semicolon.

Pub. L. 104–88, § 305(d)(5), substituted ''or 41'' for ''41, or 43''.

Par. (3)(B). Pub. L. 104–88, § 305(d)(7), redesignated cls. (ii), (iv), and (v) as (i), (ii), and (iii), respectively, and struck out former cls. (i) and (iii) which read as follows:

''(i) section 23, 25, or 43 of the Shipping Act, 1916 (46 U.S.C. App. 822, 824, or 841a);

''(iii) section 2, 3, 4, or 5 of the Intercoastal Shipping Act, 1933 (46 U.S.C. App. 844, 845, 845a, or 845b);''.

Par. (5). Pub. L. 104–88, § 305(d)(8), added par. (5) and struck out former par. (5) which read as follows: ''all rules, regulations, or final orders of the Interstate Commerce Commission made reviewable by section 2321

of this title and all final orders of such Commission made reviewable under section 11901(j)(2) of title 49, United States Code;''.

1994—Par. (7). Pub. L. 103–272 substituted ''section 20114(c) of title 49'' for ''section 202(f) of the Federal Railroad Safety Act of 1970''.

1992—Par. (7). Pub. L. 102–365, which directed the addition of par. (7) at end, was executed by adding par. (7) after par. (6) and before concluding provisions, to reflect the probable intent of Congress.

1988—Par. (6). Pub. L. 100–430 added par. (6).

1986—Par. (3). Pub. L. 99–336 amended par. (3) generally. Prior to amendment, par. (3) read as follows: ''such final orders of the Federal Maritime Commission or the Maritime Administration entered under chapters 23 and 23A of title 46 as are subject to judicial review under section 830 of title 46;''.

1984—Par. (5). Pub. L. 98–554 substituted ''11901(j)(2)'' for ''11901(i)(2)''.

1982—Pub. L. 97–164 inserted ''(other than the United States Court of Appeals for the Federal Circuit)'' after ''court of appeals'' in provisions preceding par. (1), and struck out par. (6) which had given the court of appeals jurisdiction in cases involving all final orders of the Merit Systems Protection Board except as provided for in section 7703(b) of title 5. See section 1295(a)(9) of this title.

1980—Par. (5). Pub. L. 96–454 inserted ''and all final orders of such Commission made reviewable under section 11901(i)(2) of title 49, United States Code'' after ''section 2321 of this title''.

1978—Par. (6). Pub. L. 95–454 added par. (6).

1975—Par. (5). Pub. L. 93–584 added par. (5).

EFFECTIVE DATE OF 1996 AMENDMENT

Pub. L. 104–287, § 6(f), Oct. 11, 1996, 110 Stat. 3399, provided that the amendment made by that section is effective Dec. 29, 1995.

EFFECTIVE DATE OF 1995 AMENDMENT

Amendment by Pub. L. 104–88 effective Jan. 1, 1996, see section 2 of Pub. L. 104–88, set out as an Effective Date note under section 1301 of Title 49, Transportation.

EFFECTIVE DATE OF 1988 AMENDMENT

Amendment by Pub. L. 100–430 effective on 180th day beginning after Sept. 13, 1988, see section 13(a) of Pub. L. 100–430, set out as a note under section 3601 of Title 42, The Public Health and Welfare.

EFFECTIVE DATE OF 1986 AMENDMENT

Pub. L. 99–336, § 5(b), June 19, 1986, 100 Stat. 638, provided that: ''The amendment made by this section [amending this section] shall apply with respect to any rule, regulation, or final order described in such amendment which is issued on or after the date of the enactment of this Act [June 19, 1986].''

EFFECTIVE DATE OF 1982 AMENDMENT

Amendment by Pub. L. 97–164 effective Oct. 1, 1982, see section 402 of Pub. L. 97–164, set out as a note under section 171 of this title.

EFFECTIVE DATE OF 1978 AMENDMENT

Amendment by Pub. L. 95–454 effective 90 days after Oct. 13, 1978, see section 907 of Pub. L. 95–454, set out as a note under section 1101 of Title 5, Government Organization and Employees.

EFFECTIVE DATE OF 1975 AMENDMENT

Amendment by Pub. L. 93–584 not applicable to actions commenced on or before last day of first month beginning after Jan. 2, 1975, and actions to enjoin or suspend orders of Interstate Commerce Commission which are pending when this amendment becomes effective shall not be affected thereby, but shall proceed to final disposition under the law existing on the date they were commenced, see section 10 of Pub. L. 93–584, set out as a note under section 2321 of this title.

TRANSFER OF FUNCTIONS

Atomic Energy Commission abolished and functions transferred by sections 5814 and 5841 of Title 42, The Public Health and Welfare. See, also, Transfer of Functions notes set out under those sections.

§ 2343. Venue

The venue of a proceeding under this chapter is in the judicial circuit in which the petitioner resides or has its principal office, or in the United States Court of Appeals for the District of Columbia Circuit.

(Added Pub. L. 89–554, § 4(e), Sept. 6, 1966, 80 Stat. 622.)

HISTORICAL AND REVISION NOTES

Derivation	*U.S. Code*	*Revised Statutes and Statutes at Large*
.....	5 U.S.C. 1033.	Dec. 29, 1950, ch. 1189, § 3, 64 Stat. 1130.

The section is reorganized for clarity and conciseness. The word ''is'' is substituted for ''shall be''. The word ''petitioner'' is substituted for ''party or any of the parties filing the petition for review'' in view of the definition of ''petitioner'' in section 2341 of this title.

§ 2344. Review of orders; time; notice; contents of petition; service

On the entry of a final order reviewable under this chapter, the agency shall promptly give notice thereof by service or publication in accordance with its rules. Any party aggrieved by the final order may, within 60 days after its entry, file a petition to review the order in the court of appeals wherein venue lies. The action shall be against the United States. The petition shall contain a concise statement of—

(1) the nature of the proceedings as to which review is sought;

(2) the facts on which venue is based;

(3) the grounds on which relief is sought; and

(4) the relief prayed.

The petitioner shall attach to the petition, as exhibits, copies of the order, report, or decision of the agency. The clerk shall serve a true copy of the petition on the agency and on the Attorney General by registered mail, with request for a return receipt.

(Added Pub. L. 89–554, § 4(e), Sept. 6, 1966, 80 Stat. 622.)

HISTORICAL AND REVISION NOTES

Derivation	*U.S. Code*	*Revised Statutes and Statutes at Large*
.....	5 U.S.C. 1034.	Dec. 29, 1950, ch. 1189, § 4, 64 Stat. 1130.

The section is reorganized, with minor changes in phraseology. The words ''as prescribed by section 1033 of this title'' are omitted as surplusage. The words ''of the United States'' following ''Attorney General'' are omitted as unnecessary.

§ 2345. Prehearing conference

The court of appeals may hold a prehearing conference or direct a judge of the court to hold a prehearing conference.

ment and renumbering of act Aug. 1, 1946, by act Aug. 30, 1954.

AMENDMENTS

2004—Pub. L. 108–458, §6904(a)(1), designated existing provisions as subsec. (a).

Pub. L. 108–458, §6803(b)(2), inserted ''participate in the development of,'' after ''interstate or foreign commerce,''.

Pub. L. 108–458, §6803(b)(1), inserted '', inside or outside of the United States,'' after ''for any person''.

Subsec. (a). Pub. L. 108–458, §6904(a)(4), which directed amendment by striking out ''transfer or receive in interstate or foreign commerce,'' before ''manufacture'', was executed by striking out such phrase before ''participate in the development of, manufacture'' to reflect the probable intent of Congress and the intervening amendment by Pub. L. 108–458, §6803(b)(2). See above.

Pub. L. 108–458, §6904(a)(3), (5), (6), inserted ''receive,'' after ''acquire,'', struck out ''or'' before ''export'', and inserted '', or use, or possess and threaten to use,'' before ''any atomic weapon''.

Pub. L. 108–458, §6904(a)(2), which directed amendment by inserting ''knowingly'' after ''for any person to'', was executed by making the insertion after ''for any person, inside or outside of the United States, to'' to reflect the probable intent of Congress and the amendment by Pub. L. 108–458, §6803(b)(1). See above.

Subsec. (b). Pub. L. 108–458, §6904(a)(7), added subsec. (b).

1958—Pub. L. 85–479 included transfers or receipts in foreign commerce.

§ 2122a. Repealed. Pub. L. 106–65, div. C, title XXXII, § 3294(e)(1)(A), Oct. 5, 1999, 113 Stat. 970

Section, act Aug. 1, 1946, ch. 724, title I, §93, as added Pub. L. 103–160, div. C, title XXXI, §3156(a), Nov. 30, 1993, 107 Stat. 1953, related to congressional oversight of special access programs. See section 2426 of Title 50, War and National Defense.

EFFECTIVE DATE OF REPEAL

Repeal effective Mar. 1, 2000, see section 3299 of Pub. L. 106–65, set out as an Effective Date note under section 2401 of Title 50, War and National Defense.

§ 2123. Transferred

CODIFICATION

Section, Pub. L. 102–190, div. C, title XXXI, §3136, Dec. 5, 1991, 105 Stat. 1577; Pub. L. 103–35, title II, §203(b)(3), May 31, 1993, 107 Stat. 102, which related to critical technology partnerships between laboratories of the Department of Energy and other entities, was renumbered section 4813 of Pub. L. 107–314, the Bob Stump National Defense Authorization Act for Fiscal Year 2003, by Pub. L. 108–136, div. C, title XXXI, §3141(k)(8), Nov. 24, 2003, 117 Stat. 1785, and transferred to section 2794 of Title 50, War and National Defense.

SUBCHAPTER IX—ATOMIC ENERGY LICENSES

§ 2131. License required

It shall be unlawful, except as provided in section 2121 of this title, for any person within the United States to transfer or receive in interstate commerce, manufacture, produce, transfer, acquire, possess, use, import, or export any utilization or production facility except under and in accordance with a license issued by the Commission pursuant to section 2133 or 2134 of this title.

(Aug. 1, 1946, ch. 724, title I, §101, as added Aug. 30, 1954, ch. 1073, §1, 68 Stat. 936; amended Aug. 6, 1956, ch. 1015, §11, 70 Stat. 1071; renumbered title I, Pub. L. 102–486, title IX, §902(a)(8), Oct. 24, 1992, 106 Stat. 2944.)

PRIOR PROVISIONS

Provisions similar to this section were contained in section 1807(a) of this title, prior to the general amendment and renumbering of act Aug. 1, 1946, by act Aug. 30, 1954.

AMENDMENTS

1956—Act Aug. 6, 1956, inserted ''use,'' after ''possess,''.

§ 2132. Utilization and production facilities for industrial or commercial purposes

(a) Issuance of licenses

Except as provided in subsections (b) and (c), or otherwise specifically authorized by law, any license hereafter issued for a utilization or production facility for industrial or commercial purposes shall be issued pursuant to section 2133 of this title.

(b) Facilities constructed or operated under section 2134(b)

Any license hereafter issued for a utilization or production facility for industrial or commercial purposes, the construction or operation of which was licensed pursuant to section 2134(b) of this title prior to enactment into law of this subsection, shall be issued under section 2134(b) of this title.

(c) Cooperative Power Reactor Demonstration facilities

Any license for a utilization or production facility for industrial or commercial purposes constructed or operated under an arrangement with the Commission entered into under the Cooperative Power Reactor Demonstration Program shall, except as otherwise specifically required by applicable law, be issued under section 2134(b) of this title.

(Aug. 1, 1946, ch. 724, title I, §102, as added Aug. 30, 1954, ch. 1073, §1, 68 Stat. 936; amended Pub. L. 91–560, §3, Dec. 19, 1970, 84 Stat. 1472; renumbered title I, Pub. L. 102–486, title IX, §902(a)(8), Oct. 24, 1992, 106 Stat. 2944.)

AMENDMENTS

1970—Pub. L. 91–560 substituted provisions authorizing Commission to issue licenses for a utilization or production facility for industrial or commercial purposes under section 2133, except that license may be issued under section 2134(b), for such utilization or production facility, construction or operation of which was licensed under section 2134(b) before December 19, 1970 or constructed or operated under an arrangement with Commission entered into under Cooperative Power Reactor Demonstration Program, for provisions authorizing Commission to issue licenses pursuant to section 2133 of this title on a determination that such utilization or production facility has been sufficiently developed to be of practical value for industrial or commercial purposes.

§ 2133. Commercial licenses

(a) Conditions

The Commission is authorized to issue licenses to persons applying therefor to transfer or receive in interstate commerce, manufacture,

produce, transfer, acquire, possess, use, import, or export under the terms of an agreement for cooperation arranged pursuant to section 2153 of this title, utilization or production facilities for industrial or commercial purposes. Such licenses shall be issued in accordance with the provisions of subchapter XV and subject to such conditions as the Commission may by rule or regulation establish to effectuate the purposes and provisions of this chapter.

(b) Nonexclusive basis

The Commission shall issue such licenses on a nonexclusive basis to persons applying therefor (1) whose proposed activities will serve a useful purpose proportionate to the quantities of special nuclear material or source material to be utilized; (2) who are equipped to observe and who agree to observe such safety standards to protect health and to minimize danger to life or property as the Commission may by rule establish; and (3) who agree to make available to the Commission such technical information and data concerning activities under such licenses as the Commission may determine necessary to promote the common defense and security and to protect the health and safety of the public. All such information may be used by the Commission only for the purposes of the common defense and security and to protect the health and safety of the public.

(c) License period

Each such license shall be issued for a specified period, as determined by the Commission, depending on the type of activity to be licensed, but not exceeding forty years from the authorization to commence operations, and may be renewed upon the expiration of such period.

(d) Limitations

No license under this section may be given to any person for activities which are not under or within the jurisdiction of the United States, except for the export of production or utilization facilities under terms of an agreement for cooperation arranged pursuant to section 2153 of this title, or except under the provisions of section 2139 of this title. No license may be issued to an alien or any any[1] corporation or other entity if the Commission knows or has reason to believe it is owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government. In any event, no license may be issued to any person within the United States if, in the opinion of the Commission, the issuance of a license to such person would be inimical to the common defense and security or to the health and safety of the public.

(f)[2] Accident notification condition; license revocation; license amendment to include condition

Each license issued for a utilization facility under this section or section 2134(b) of this title shall require as a condition thereof that in case of any accident which could result in an unplanned release of quantities of fission products in excess of allowable limits for normal operation established by the Commission, the licensee shall immediately so notify the Commission. Violation of the condition prescribed by this subsection may, in the Commission's discretion, constitute grounds for license revocation. In accordance with section 2237 of this title, the Commission shall promptly amend each license for a utilization facility issued under this section or section 2134(b) of this title which is in effect on June 30, 1980, to include the provisions required under this subsection.

(Aug. 1, 1946, ch. 724, title I, § 103, as added Aug. 30, 1954, ch. 1073, § 1, 68 Stat. 936; amended Aug. 6, 1956, ch. 1015, §§ 12, 13, 70 Stat. 1071; Pub. L. 91–560, § 4, Dec. 19, 1970, 84 Stat. 1472; Pub. L. 96–295, title II, § 201, June 30, 1980, 94 Stat. 786; renumbered title I, Pub. L. 102–486, title IX, § 902(a)(8), Oct. 24, 1992, 106 Stat. 2944; Pub. L. 109–58, title VI, § 621, Aug. 8, 2005, 119 Stat. 782.)

REFERENCES IN TEXT

This chapter, referred to in subsec. (a), was in the original ''this Act'', meaning act Aug. 1, 1946, ch. 724, as added by act Aug. 30, 1954, ch. 1073, § 1, 68 Stat. 919, known as the Atomic Energy Act of 1954, which is classified principally to this chapter. For complete classification of this Act to the Code, see Short Title note set out under section 2011 of this title and Tables.

AMENDMENTS

2005—Subsec. (c). Pub. L. 109–58 inserted ''from the authorization to commence operations'' after ''forty years''.

1980—Subsec. (f). Pub. L. 96–295 added subsec. (f).

1970—Subsec. (a). Pub. L. 91–560 struck out requirement of a finding of practical value under section 2132 and substituted ''utilization and production facilities for industrial or commercial purposes'' for ''such type of utilization or production facility''.

1956—Subsec. (a). Act Aug. 6, 1956, § 12, inserted ''use,'' after ''possess,''.

Subsec. (d). Act Aug. 6, 1956, § 13, inserted ''an alien or any'' after ''issued to''.

ADVANCED NUCLEAR REACTOR PROGRAM LICENSING

Pub. L. 115–439, title I, § 103(a), Jan. 14, 2019, 132 Stat. 5571, provided that:

''(1) STAGED LICENSING.—For the purpose of predictable, efficient, and timely reviews, not later than 270 days after the date of enactment of this Act [Jan. 14, 2019], the [Nuclear Regulatory] Commission shall develop and implement, within the existing regulatory framework, strategies for—

''(A) establishing stages in the licensing process for commercial advanced nuclear reactors; and

''(B) developing procedures and processes for—

''(i) using a licensing project plan; and

''(ii) optional use of a conceptual design assessment.

''(2) RISK-INFORMED LICENSING.—Not later than 2 years after the date of enactment of this Act, the Commission shall develop and implement, where appropriate, strategies for the increased use of risk-informed, performance-based licensing evaluation techniques and guidance for commercial advanced nuclear reactors within the existing regulatory framework, including evaluation techniques and guidance for the resolution of the following:

''(A) Applicable policy issues identified during the course of review by the Commission of a commercial advanced nuclear reactor licensing application.

''(B) The issues described in SECY–93–092 and SECY–15–077, including—

''(i) licensing basis event selection and evaluation;

''(ii) source terms;

[1] So in original.

[2] So in original. Probably should be ''(e)''.

''(iii) containment performance; and

''(iv) emergency preparedness.

''(3) RESEARCH AND TEST REACTOR LICENSING.—For the purpose of predictable, efficient, and timely reviews, not later than 2 years after the date of enactment of this Act, the Commission shall develop and implement strategies within the existing regulatory framework for licensing research and test reactors, including the issuance of guidance.

''(4) TECHNOLOGY-INCLUSIVE REGULATORY FRAMEWORK.—Not later than December 31, 2027, the Commission shall complete a rulemaking to establish a technology-inclusive, regulatory framework for optional use by commercial advanced nuclear reactor applicants for new reactor license applications.

''(5) TRAINING AND EXPERTISE.—As soon as practicable after the date of enactment of this Act, the Commission shall provide for staff training or the hiring of experts, as necessary—

''(A) to support the activities described in paragraphs (1) through (4); and

''(B) to support preparations—

''(i) to conduct pre-application interactions; and

''(ii) to review commercial advanced nuclear reactor license applications.

''(6) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to the Commission to carry out this subsection $14,420,000 for each of fiscal years 2020 through 2024.''

[For definitions of terms used in section 103(a) of Pub. L. 115–439, set out above, see section 3 of Pub. L. 115–439, set out as a note under section 2215 of this title.]

§ 2134. Medical, industrial, and commercial licenses

(a) Medical therapy

The Commission is authorized to issue licenses to persons applying therefor for utilization facilities for use in medical therapy. In issuing such licenses the Commission is directed to permit the widest amount of effective medical therapy possible with the amount of special nuclear material available for such purposes and to impose the minimum amount of regulation consistent with its obligations under this chapter to promote the common defense and security and to protect the health and safety of the public.

(b) Industrial and commercial purposes

As provided for in subsection (b) or (c) of section 2132 of this title, or where specifically authorized by law, the Commission is authorized to issue licenses under this subsection to persons applying therefor for utilization and production facilities for industrial and commercial purposes. In issuing licenses under this subsection, the Commission shall impose the minimum amount of such regulations and terms of license as will permit the Commission to fulfill its obligations under this chapter.

(c) Research and development activities

The Commission is authorized to issue licenses to persons applying therefor for utilization and production facilities useful in the conduct of research and development activities of the types specified in section 2051 of this title. The Commission is directed to impose only such minimum amount of regulation of the licensee as the Commission finds will permit the Commission to fulfill its obligations under this chapter to promote the common defense and security and to protect the health and safety of the public and will permit the conduct of widespread and diverse research and development. The Commission is authorized to issue licenses under this section for utilization facilities useful in the conduct of research and development activities of the types specified in section 2051 of this title in which the licensee sells research and testing services and energy to others, subject to the condition that the licensee shall recover not more than 75 percent of the annual costs to the licensee of owning and operating the facility through sales of nonenergy services, energy, or both, other than research and development or education and training, of which not more than 50 percent may be through sales of energy.

(d) Limitations

No license under this section may be given to any person for activities which are not under or within the jurisdiction of the United States, except for the export of production or utilization facilities under terms of an agreement for cooperation arranged pursuant to section 2153 of this title or except under the provisions of section 2139 of this title. No license may be issued to any corporation or other entity if the Commission knows or has reason to believe it is owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government. In any event, no license may be issued to any person within the United States if, in the opinion of the Commission, the issuance of a license to such person would be inimical to the common defense and security or to the health and safety of the public.

(Aug. 1, 1946, ch. 724, title I, § 104, as added Aug. 30, 1954, ch. 1073, § 1, 68 Stat. 937; amended Pub. L. 91–560, § 5, Dec. 19, 1970, 84 Stat. 1472; renumbered title I, Pub. L. 102–486, title IX, § 902(a)(8), Oct. 24, 1992, 106 Stat. 2944; Pub. L. 115–439, title I, § 106(b), Jan. 14, 2019, 132 Stat. 5577.)

REFERENCES IN TEXT

This chapter, referred to in subsecs. (a) to (c), was in the original ''this Act'', meaning act Aug. 1, 1946, ch. 724, as added by act Aug. 30, 1954, ch. 1073, § 1, 68 Stat. 919, known as the Atomic Energy Act of 1954, which is classified principally to this chapter. For complete classification of this Act to the Code, see Short Title note set out under section 2011 of this title and Tables.

AMENDMENTS

2019—Subsec. (c). Pub. L. 115–439 struck out ''and which are not facilities of the type specified in subsection (b)'' after ''section 2051 of this title'' and inserted at end ''The Commission is authorized to issue licenses under this section for utilization facilities useful in the conduct of research and development activities of the types specified in section 2051 of this title in which the licensee sells research and testing services and energy to others, subject to the condition that the licensee shall recover not more than 75 percent of the annual costs to the licensee of owning and operating the facility through sales of nonenergy services, energy, or both, other than research and development or education and training, of which not more than 50 percent may be through sales of energy.''

1970—Subsec. (b). Pub. L. 91–560 substituted provisions authorizing the issue of licenses for utilization or production facilities for industrial or commercial purposes (i) where specifically authorized by law or (ii) where the facility was constructed or operated under an arrangement with the Commission entered into under the cooperative power reactor demonstration program, and the applicable statutory authorization does not require licensing under section 2133, or (iii)

by the United States to the owner of the patent application. The Commission shall determine such compensation. If the compensation so determined is unsatisfactory to the person entitled thereto, such person shall be paid 75 per centum of the amount so determined, and shall be entitled to sue the United States in the United States Court of Federal Claims or in any district court of the United States for the district in which such claimant is a resident in a manner provided by section 1346 of title 28 to recover such further sum as added to such 75 per centum will constitute just compensation.

(Aug. 1, 1946, ch. 724, title I, §173, as added Aug. 30, 1954, ch. 1073, §1, 68 Stat. 953; amended Pub. L. 97–164, title I, §160(a)(16), Apr. 2, 1982, 96 Stat. 48; renumbered title I, Pub. L. 102–486, title IX, §902(a)(8), Oct. 24, 1992, 106 Stat. 2944; Pub. L. 102–572, title IX, §902(b)(1), Oct. 29, 1992, 106 Stat. 4516.)

AMENDMENTS

1992—Pub. L. 102–572 substituted ''United States Court of Federal Claims'' for ''United States Claims Court''.

1982—Pub. L. 97–164 substituted ''United States Claims Court'' for ''Court of Claims''.

EFFECTIVE DATE OF 1992 AMENDMENT

Amendment by Pub. L. 102–572 effective Oct. 29, 1992, see section 911 of Pub. L. 102–572, set out as a note under section 171 of Title 28, Judiciary and Judicial Procedure.

EFFECTIVE DATE OF 1982 AMENDMENT

Amendment by Pub. L. 97–164 effective Oct. 1, 1982, see section 402 of Pub. L. 97–164, set out as a note under section 171 of Title 28, Judiciary and Judicial Procedure.

§2224. Attorney General approval of title

All real property acquired under this chapter shall be subject to the provisions of sections 3111 and 3112 of title 40: *Provided*, *however*, That real property acquired by purchase or donation, or other means of transfer may also be occupied, used, and improved for the purposes of this chapter prior to approval of title by the Attorney General in those cases where the President determines that such action is required in the interest of the common defense and security.

(Aug. 1, 1946, ch. 724, title I, §174, as added Aug. 30, 1954, ch. 1073, §1, 68 Stat. 953; renumbered title I, Pub. L. 102–486, title IX, §902(a)(8), Oct. 24, 1992, 106 Stat. 2944.)

REFERENCES IN TEXT

This chapter, referred to in text, was in the original ''this Act'', meaning act Aug. 1, 1946, ch. 724, as added by act Aug. 30, 1954, ch. 1073, §1, 68 Stat. 919, known as the Atomic Energy Act of 1954, which is classified principally to this chapter. For complete classification of this Act to the Code, see Short Title note set out under section 2011 of this title and Tables.

CODIFICATION

In text, ''sections 3111 and 3112 of title 40'' substituted for ''section 355 of the Revised Statutes, as amended'' on authority of Pub. L. 107–217, §5(c), Aug. 21, 2002, 116 Stat. 1303, the first section of which enacted Title 40, Public Buildings, Property, and Works.

PRIOR PROVISIONS

Provisions similar to this section were contained in section 1813(b) of this title, prior to the general amendment and renumbering of act Aug. 1, 1946, by act Aug. 30, 1954.

SUBCHAPTER XV—JUDICIAL REVIEW AND ADMINISTRATIVE PROCEDURE

§2231. Applicability of administrative procedure provisions; definitions

The provisions of subchapter II of chapter 5, and chapter 7, of title 5 shall apply to all agency action taken under this chapter, and the terms ''agency'' and ''agency action'' shall have the meaning specified in section 551 of title 5: *Provided*, *however*, That in the case of agency proceedings or actions which involve Restricted Data, defense information, safeguards information protected from disclosure under the authority of section 2167 of this title or information protected from dissemination under the authority of section 2168 of this title, the Commission shall provide by regulation for such parallel procedures as will effectively safeguard and prevent disclosure of Restricted Data, defense information, such safeguards information, or information protected from dissemination under the authority of section 2168 of this title to unauthorized persons with minimum impairment of the procedural rights which would be available if Restricted Data, defense information, such safeguards information, or information protected from dissemination under the authority of section 2168 of this title were not involved.

(Aug. 1, 1946, ch. 724, title I, §181, as added Aug. 30, 1954, ch. 1073, §1, 68 Stat. 953; amended Pub. L. 96–295, title II, §207(b), June 30, 1980, 94 Stat. 789; Pub. L. 97–90, title II, §210(b), Dec. 4, 1981, 95 Stat. 1170; renumbered title I, Pub. L. 102–486, title IX, §902(a)(8), Oct. 24, 1992, 106 Stat. 2944.)

REFERENCES IN TEXT

This chapter, referred to in text, was in the original ''this Act'', meaning act Aug. 1, 1946, ch. 724, as added by act Aug. 30, 1954, ch. 1073, §1, 68 Stat. 919, known as the Atomic Energy Act of 1954, which is classified principally to this chapter. For complete classification of this Act to the Code, see Short Title note set out under section 2011 of this title and Tables.

CODIFICATION

''Subchapter II of chapter 5, and chapter 7, of title 5'' substituted in text for the first reference to the Administrative Procedure Act on authority of Pub. L. 89–554, §7(b), Sept. 6, 1966, 80 Stat. 631, the first section of which enacted Title 5, Government Organization and Employees. ''Section 551 of title 5'' substituted for the second reference to the Administrative Procedure Act to reflect the codification of the definitions of ''agency'' and ''agency action'' in that section. Prior to the enactment of Title 5, the Administrative Procedure Act was classified to sections 1001 to 1011 of Title 5.

PRIOR PROVISIONS

Provisions similar to this section were contained in section 1814(a), (c) of this title, prior to the general amendment and renumbering of act Aug. 1, 1946, by act Aug. 30, 1954.

AMENDMENTS

1981—Pub. L. 97–90, in proviso, substituted ''involve Restricted Data, defense information, safeguards information protected from disclosure under the authority of section 2167 of this title or information protected from dissemination under the authority of section 2168 of this title, the Commission shall provide by regula-

tion for such parallel procedures as will effectively safeguard and prevent disclosure of Restricted Data, defense information, such safeguards information, or information protected from dissemination under the authority of section 2168 of this title to unauthorized persons with minimum impairment of the procedural rights which would be available if Restricted Data, defense information, such safeguards information, or information protected from dissemination under the authority of section 2168 of this title were not involved'' for ''involve Restricted Data, defense information, or safeguards information protected from disclosure under the authority of section 2167 of this title, the Commission shall provide by regulation for such parallel procedures as will effectively safeguard and prevent disclosure of Restricted Data, defense information, or such safeguards information, to unauthorized persons with minimum impairment of the procedural rights which would be available if Restricted Data, defense information, or such safeguards information, were not involved''.

1980—Pub. L. 96–295 inserted references and made provisions applicable to safeguards information.

§ 2232. License applications

(a) Contents and form

Each application for a license hereunder shall be in writing and shall specifically state such information as the Commission, by rule or regulation, may determine to be necessary to decide such of the technical and financial qualifications of the applicant, the character of the applicant, the citizenship of the applicant, or any other qualifications of the applicant as the Commission may deem appropriate for the license. In connection with applications for licenses to operate production or utilization facilities, the applicant shall state such technical specifications, including information of the amount, kind, and source of special nuclear material required, the place of the use, the specific characteristics of the facility, and such other information as the Commission may, by rule or regulation, deem necessary in order to enable it to find that the utilization or production of special nuclear material will be in accord with the common defense and security and will provide adequate protection to the health and safety of the public. Such technical specifications shall be a part of any license issued. The Commission may at any time after the filing of the original application, and before the expiration of the license, require further written statements in order to enable the Commission to determine whether the application should be granted or denied or whether a license should be modified or revoked. All applications and statements shall be signed by the applicant or licensee. Applications for, and statements made in connection with, licenses under sections 2133 and 2134 of this title shall be made under oath or affirmation. The Commission may require any other applications or statements to be made under oath or affirmation.

(b) Review of applications by Advisory Committee on Reactor Safeguards; report

The Advisory Committee on Reactor Safeguards shall review each application under section 2133 or section 2134(b) of this title for a construction permit or an operating license for a facility, any application under section 2134(c) of this title for a construction permit or an operating license for a testing facility, any application under subsection (a) or (c) of section 2134 of this title specifically referred to it by the Commission, and any application for an amendment to a construction permit or an amendment to an operating license under section 2133 or 2134(a), (b), or (c) of this title specifically referred to it by the Commission, and shall submit a report thereon which shall be made part of the record of the application and available to the public except to the extent that security classification prevents disclosure.

(c) Commercial power; publication

The Commission shall not issue any license under section 2133 of this title for a utilization or production facility for the generation of commercial power until it has given notice in writing to such regulatory agency as may have jurisdiction over the rates and services incident to the proposed activity; until it has published notice of the application in such trade or news publications as the Commission deems appropriate to give reasonable notice to municipalities, private utilities, public bodies, and cooperatives which might have a potential interest in such utilization or production facility; and until it has published notice of such application once each week for four consecutive weeks in the Federal Register, and until four weeks after the last notice.

(d) Preferred consideration

The Commission, in issuing any license for a utilization or production facility for the generation of commercial power under section 2133 of this title, shall give preferred consideration to applications for such facilities which will be located in high cost power areas in the United States if there are conflicting applications for a limited opportunity for such license. Where such conflicting applications resulting from limited opportunity for such license include those submitted by public or cooperative bodies such applications shall be given preferred consideration.

(Aug. 1, 1946, ch. 724, title I, § 182, as added Aug. 30, 1954, ch. 1073, § 1, 68 Stat. 953; amended Aug. 6, 1956, ch. 1015, § 5, 70 Stat. 1069; Pub. L. 85–256, § 6, Sept. 2, 1957, 71 Stat. 579; Pub. L. 87–615, § 3, Aug. 29, 1962, 76 Stat. 409; Pub. L. 91–560, § 9, Dec. 19, 1970, 84 Stat. 1474; renumbered title I, Pub. L. 102–486, title IX, § 902(a)(8), Oct. 24, 1992, 106 Stat. 2944.)

AMENDMENTS

1970—Subsec. (c). Pub. L. 91–560 substituted provisions requiring notification by publication giving reasonable notice to municipalities, private utilities, public bodies, and cooperatives which might have a potential interest in such utilization or production facility, for provisions requiring notice in writing to municipalities, private utilities, public bodies and cooperatives within transmission distance authorized to engage in the distribution of electric energy.

1962—Subsec. (b). Pub. L. 87–615 substituted provisions requiring review of applications under section 2133 or 2134(b) of this title for a construction permit or an operating license for a facility, or under section 2134(c) of this title for a testing facility, for provisions which required review of license applications for such facilities, and inserted provisions requiring review of any application for an amendment to a construction

mission may, after consultation with the appropriate regulatory agency, State or Federal, having jurisdiction, order that possession be taken of and such facility be operated for such period of time as the public convenience and necessity or the production program of the Commission may, in the judgment of the Commission, require, or until a license for the operation of the facility shall become effective. Just compensation shall be paid for the use of the facility.

(Aug. 1, 1946, ch. 724, title I, §188, as added Aug. 30, 1954, ch. 1073, §1, 68 Stat. 955; renumbered title I, Pub. L. 102–486, title IX, §902(a)(8), Oct. 24, 1992, 106 Stat. 2944.)

§ 2239. Hearings and judicial review

(a)(1)(A) In any proceeding under this chapter, for the granting, suspending, revoking, or amending of any license or construction permit, or application to transfer control, and in any proceeding for the issuance or modification of rules and regulations dealing with the activities of licensees, and in any proceeding for the payment of compensation, an award or royalties under sections[1] 2183, 2187, 2236(c) or 2238 of this title, the Commission shall grant a hearing upon the request of any person whose interest may be affected by the proceeding, and shall admit any such person as a party to such proceeding. The Commission shall hold a hearing after thirty days' notice and publication once in the Federal Register, on each application under section 2133 or 2134(b) of this title for a construction permit for a facility, and on any application under section 2134(c) of this title for a construction permit for a testing facility. In cases where such a construction permit has been issued following the holding of such a hearing, the Commission may, in the absence of a request therefor by any person whose interest may be affected, issue an operating license or an amendment to a construction permit or an amendment to an operating license without a hearing, but upon thirty days' notice and publication once in the Federal Register of its intent to do so. The Commission may dispense with such thirty days' notice and publication with respect to any application for an amendment to a construction permit or an amendment to an operating license upon a determination by the Commission that the amendment involves no significant hazards consideration.

(B)(i) Not less than 180 days before the date scheduled for initial loading of fuel into a plant by a licensee that has been issued a combined construction permit and operating license under section 2235(b) of this title, the Commission shall publish in the Federal Register notice of intended operation. That notice shall provide that any person whose interest may be affected by operation of the plant, may within 60 days request the Commission to hold a hearing on whether the facility as constructed complies, or on completion will comply, with the acceptance criteria of the license.

(ii) A request for hearing under clause (i) shall show, prima facie, that one or more of the acceptance criteria in the combined license have not been, or will not be met, and the specific operational consequences of nonconformance that would be contrary to providing reasonable assurance of adequate protection of the public health and safety.

(iii) After receiving a request for a hearing under clause (i), the Commission expeditiously shall either deny or grant the request. If the request is granted, the Commission shall determine, after considering petitioners' prima facie showing and any answers thereto, whether during a period of interim operation, there will be reasonable assurance of adequate protection of the public health and safety. If the Commission determines that there is such reasonable assurance, it shall allow operation during an interim period under the combined license.

(iv) The Commission, in its discretion, shall determine appropriate hearing procedures, whether informal or formal adjudicatory, for any hearing under clause (i), and shall state its reasons therefor.

(v) The Commission shall, to the maximum possible extent, render a decision on issues raised by the hearing request within 180 days of the publication of the notice provided by clause (i) or the anticipated date for initial loading of fuel into the reactor, whichever is later. Commencement of operation under a combined license is not subject to subparagraph (A).

(2)(A) The Commission may issue and make immediately effective any amendment to an operating license or any amendment to a combined construction and operating license, upon a determination by the Commission that such amendment involves no significant hazards consideration, notwithstanding the pendency before the Commission of a request for a hearing from any person. Such amendment may be issued and made immediately effective in advance of the holding and completion of any required hearing. In determining under this section whether such amendment involves no significant hazards consideration, the Commission shall consult with the State in which the facility involved is located. In all other respects such amendment shall meet the requirements of this chapter.

(B) The Commission shall periodically (but not less frequently than once every thirty days) publish notice of any amendments issued, or proposed to be issued, as provided in subparagraph (A). Each such notice shall include all amendments issued, or proposed to be issued, since the date of publication of the last such periodic notice. Such notice shall, with respect to each amendment or proposed amendment (i) identify the facility involved; and (ii) provide a brief description of such amendment. Nothing in this subsection shall be construed to delay the effective date of any amendment.

(C) The Commission shall, during the ninety-day period following the effective date of this paragraph, promulgate regulations establishing (i) standards for determining whether any amendment to an operating license or any amendment to a combined construction and operating license involves no significant hazards consideration; (ii) criteria for providing or, in emergency situations, dispensing with prior notice and reasonable opportunity for public comment on any such determination, which criteria

[1] So in original. Probably should be ''section''.

shall take into account the exigency of the need for the amendment involved; and (iii) procedures for consultation on any such determination with the State in which the facility involved is located.

(b) The following Commission actions shall be subject to judicial review in the manner prescribed in chapter 158 of title 28 and chapter 7 of title 5:

(1) Any final order entered in any proceeding of the kind specified in subsection (a).

(2) Any final order allowing or prohibiting a facility to begin operating under a combined construction and operating license.

(3) Any final order establishing by regulation standards to govern the Department of Energy's gaseous diffusion uranium enrichment plants, including any such facilities leased to a corporation established under the USEC Privatization Act [42 U.S.C. 2297h et seq.].

(4) Any final determination under section 2297f(c) of this title relating to whether the gaseous diffusion plants, including any such facilities leased to a corporation established under the USEC Privatization Act [42 U.S.C. 2297h et seq.], are in compliance with the Commission's standards governing the gaseous diffusion plants and all applicable laws.

(Aug. 1, 1946, ch. 724, title I, § 189, as added Aug. 30, 1954, ch. 1073, § 1, 68 Stat. 955; amended Pub. L. 85–256, § 7, Sept. 2, 1957, 71 Stat. 579; Pub. L. 87–615, § 2, Aug. 29, 1962, 76 Stat. 409; Pub. L. 97–415, § 12(a), Jan. 4, 1983, 96 Stat. 2073; renumbered title I and amended Pub. L. 102–486, title IX, § 902(a)(8), title XXVIII, §§ 2802, 2804, 2805, Oct. 24, 1992, 106 Stat. 2944, 3120, 3121; Pub. L. 104–134, title III, § 3116(c), Apr. 26, 1996, 110 Stat. 1321–349.)

REFERENCES IN TEXT

This chapter, referred to in subsec. (a)(1)(A), (2)(A), was in the original ''this Act'', meaning act Aug. 1, 1946, ch. 724, as added by act Aug. 30, 1954, ch. 1073, § 1, 68 Stat. 919, known as the Atomic Energy Act of 1954, which is classified principally to this chapter. For complete classification of this Act to the Code, see Short Title note set out under section 2011 of this title and Tables.

The effective date of this paragraph, referred to in subsec. (a)(2)(C), probably means the date of enactment of Pub. L. 97–415, which was approved Jan. 4, 1983.

The USEC Privatization Act, referred to in subsec. (b)(3), (4), is subchapter A (§§ 3101–3117) of chapter 1 of title III of Pub. L. 104–134, Apr. 26, 1996, 110 Stat. 1321–335, which is classified principally to subchapter VIII (§ 2297h et seq.) of this chapter. For complete classification of this Act to the Code, see Short Title of 1996 Amendment note set out under section 2011 of this title and Tables.

AMENDMENTS

1996—Subsec. (b). Pub. L. 104–134 amended subsec. (b) generally. Prior to amendment, subsec. (b) read as follows: ''Any final order entered in any proceeding of the kind specified in subsection (a) of this section or any final order allowing or prohibiting a facility to begin operating under a combined construction and operating license shall be subject to judicial review in the manner prescribed in the Act of December 29, 1950, as amended (ch. 1189, 64 Stat. 1129), and to the provisions of section 10 of the Administrative Procedure Act, as amended.''

1992—Subsec. (a)(1). Pub. L. 102–486, § 2802, designated existing provisions as subpar. (A) and added subpar. (B).

Subsec. (a)(2)(A), (C). Pub. L. 102–486, § 2804, inserted ''or any amendment to a combined construction and operating license'' after ''any amendment to an operating license''.

Subsec. (b). Pub. L. 102–486, § 2805, inserted ''or any final order allowing or prohibiting a facility to begin operating under a combined construction and operating license'' before ''shall be subject to judicial review''.

1983—Subsec. (a). Pub. L. 97–415 designated existing provisions as par. (1) and added par. (2).

1962—Subsec. (a). Pub. L. 87–615 substituted ''construction permit for a facility'' and ''construction permit for a testing facility'' for ''license for a facility'' and ''license for a testing facility'' respectively, and authorized the commission in cases where a permit has been issued following a hearing, and in the absence of a request therefor by anyone whose interest may be affected, to issue an operating license or an amendment to a construction permit or an operating license without a hearing upon thirty days' notice and publication once in the Federal Register of its intent to do so, and to dispense with such notice and publication with respect to any application for an amendment to a construction permit or to an operating license upon its determination that the amendment involves no significant hazards consideration.

1957—Subsec. (a). Pub. L. 85–256 required the Commission to hold a hearing after 30 days notice and publication once in the Federal Register on an application for a license for a facility or a testing facility.

EFFECTIVE DATE OF 1992 AMENDMENT

Subsec. (a)(1)(B) of this section, as added by section 2802 of Pub. L. 102–486, applicable to all proceedings involving combined license for which application was filed after May 8, 1991, see section 2806 of Pub. L. 102–486, set out as a note under section 2235 of this title.

AUTHORITY TO EFFECTUATE AMENDMENTS TO OPERATING LICENSES

Pub. L. 97–415, § 12(b), Jan. 4, 1983, 96 Stat. 2073, provided that: ''The authority of the Nuclear Regulatory Commission, under the provisions of the amendment made by subsection (a) [amending this section], to issue and to make immediately effective any amendment to an operating license shall take effect upon the promulgation by the Commission of the regulations required in such provisions.''

REVIEW OF NUCLEAR PROLIFERATION ASSESSMENT STATEMENTS

No court or regulatory body to have jurisdiction to compel performance of or to review adequacy of performance of any Nuclear Proliferation Assessment Statement called for by the Atomic Energy Act of 1954 [this chapter] or by the Nuclear Non-Proliferation Act of 1978, Pub. L. 95–242, Mar. 10, 1978, 92 Stat. 120, see section 2160a of this title.

ADMINISTRATIVE ORDERS REVIEW ACT

Court of appeals exclusive jurisdiction respecting final orders of Atomic Energy Commission, now the Nuclear Regulatory Commission and the Secretary of Energy, made reviewable by this section, see section 2342 of Title 28, Judiciary and Judicial Procedure.

§ 2240. Licensee incident reports as evidence

No report by any licensee of any incident arising out of or in connection with a licensed activity made pursuant to any requirement of the Commission shall be admitted as evidence in any suit or action for damages growing out of any matter mentioned in such report.

(Aug. 1, 1946, ch. 724, title I, § 190, as added Pub. L. 87–206, § 16, Sept. 6, 1961, 75 Stat. 479; renumbered title I, Pub. L. 102–486, title IX, § 902(a)(8), Oct. 24, 1992, 106 Stat. 2944.)

the preservation and enhancement of the environment.

(Pub. L. 91–190, title I, § 101, Jan. 1, 1970, 83 Stat. 852.)

COMMISSION ON POPULATION GROWTH AND THE AMERICAN FUTURE

Pub. L. 91–213, §§ 1–9, Mar. 16, 1970, 84 Stat. 67–69, established the Commission on Population Growth and the American Future to conduct and sponsor such studies and research and make such recommendations as might be necessary to provide information and education to all levels of government in the United States, and to our people regarding a broad range of problems associated with population growth and their implications for America's future; prescribed the composition of the Commission; provided for the appointment of its members, and the designation of a Chairman and Vice Chairman; required a majority of the members of the Commission to constitute a quorum, but allowed a lesser number to conduct hearings; prescribed the compensation of members of the Commission; required the Commission to conduct an inquiry into certain prescribed aspects of population growth in the United States and its foreseeable social consequences; provided for the appointment of an Executive Director and other personnel and prescribed their compensation; authorized the Commission to enter into contracts with public agencies, private firms, institutions, and individuals for the conduct of research and surveys, the preparation of reports, and other activities necessary to the discharge of its duties, and to request from any Federal department or agency any information and assistance it deems necessary to carry out its functions; required the General Services Administration to provide administrative services for the Commission on a reimbursable basis; required the Commission to submit an interim report to the President and the Congress one year after it was established and to submit its final report two years after Mar. 16, 1970; terminated the Commission sixty days after the date of the submission of its final report; and authorized to be appropriated, out of any money in the Treasury not otherwise appropriated, such amounts as might be necessary to carry out the provisions of Pub. L. 91–213.

EXECUTIVE ORDER NO. 11507

Ex. Ord. No. 11507, eff. Feb. 4, 1970, 35 F.R. 2573, which related to prevention, control, and abatement of air and water pollution at federal facilities was superseded by Ex. Ord. No. 11752, eff. Dec. 17, 1973, 38 F.R. 34793, formerly set out below.

EXECUTIVE ORDER NO. 11752

Ex. Ord. No. 11752, Dec. 17, 1973, 38 F.R. 34793, which related to the prevention, control, and abatement of environmental pollution at Federal facilities, was revoked by Ex. Ord. No. 12088, Oct. 13, 1978, 43 F.R. 47707, set out as a note under section 4321 of this title.

§ 4332. Cooperation of agencies; reports; availability of information; recommendations; international and national coordination of efforts

The Congress authorizes and directs that, to the fullest extent possible: (1) the policies, regulations, and public laws of the United States shall be interpreted and administered in accordance with the policies set forth in this chapter, and (2) all agencies of the Federal Government shall—

(A) utilize a systematic, interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts in planning and in decisionmaking which may have an impact on man's environment;

(B) identify and develop methods and procedures, in consultation with the Council on Environmental Quality established by subchapter II of this chapter, which will insure that presently unquantified environmental amenities and values may be given appropriate consideration in decisionmaking along with economic and technical considerations;

(C) include in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official on—

(i) the environmental impact of the proposed action,

(ii) any adverse environmental effects which cannot be avoided should the proposal be implemented,

(iii) alternatives to the proposed action,

(iv) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and

(v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.

Prior to making any detailed statement, the responsible Federal official shall consult with and obtain the comments of any Federal agency which has jurisdiction by law or special expertise with respect to any environmental impact involved. Copies of such statement and the comments and views of the appropriate Federal, State, and local agencies, which are authorized to develop and enforce environmental standards, shall be made available to the President, the Council on Environmental Quality and to the public as provided by section 552 of title 5, and shall accompany the proposal through the existing agency review processes;

(D) Any detailed statement required under subparagraph (C) after January 1, 1970, for any major Federal action funded under a program of grants to States shall not be deemed to be legally insufficient solely by reason of having been prepared by a State agency or official, if:

(i) the State agency or official has statewide jurisdiction and has the responsibility for such action,

(ii) the responsible Federal official furnishes guidance and participates in such preparation,

(iii) the responsible Federal official independently evaluates such statement prior to its approval and adoption, and

(iv) after January 1, 1976, the responsible Federal official provides early notification to, and solicits the views of, any other State or any Federal land management entity of any action or any alternative thereto which may have significant impacts upon such State or affected Federal land management entity and, if there is any disagreement on such impacts, prepares a written assessment of such impacts and views for incorporation into such detailed statement.

The procedures in this subparagraph shall not relieve the Federal official of his responsibil-

ities for the scope, objectivity, and content of the entire statement or of any other responsibility under this chapter; and further, this subparagraph does not affect the legal sufficiency of statements prepared by State agencies with less than statewide jurisdiction.[1]

(E) study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources;

(F) recognize the worldwide and long-range character of environmental problems and, where consistent with the foreign policy of the United States, lend appropriate support to initiatives, resolutions, and programs designed to maximize international cooperation in anticipating and preventing a decline in the quality of mankind's world environment;

(G) make available to States, counties, municipalities, institutions, and individuals, advice and information useful in restoring, maintaining, and enhancing the quality of the environment;

(H) initiate and utilize ecological information in the planning and development of resource-oriented projects; and

(I) assist the Council on Environmental Quality established by subchapter II of this chapter.

(Pub. L. 91–190, title I, § 102, Jan. 1, 1970, 83 Stat. 853; Pub. L. 94–83, Aug. 9, 1975, 89 Stat. 424.)

AMENDMENTS

1975—Subpars. (D) to (I). Pub. L. 94–83 added subpar. (D) and redesignated former subpars. (D) to (H) as (E) to (I), respectively.

CERTAIN COMMERCIAL SPACE LAUNCH ACTIVITIES

Pub. L. 104–88, title IV, § 401, Dec. 29, 1995, 109 Stat. 955, provided that: ''The licensing of a launch vehicle or launch site operator (including any amendment, extension, or renewal of the license) under [former] chapter 701 of title 49, United States Code [now chapter 509 (§ 50901 et seq.) of Title 51, National and Commercial Space Programs], shall not be considered a major Federal action for purposes of section 102(C) of the National Environmental Policy Act of 1969 (42 U.S.C. 4332(C)) if—

''(1) the Department of the Army has issued a permit for the activity; and

''(2) the Army Corps of Engineers has found that the activity has no significant impact.''

EX. ORD. NO. 13352. FACILITATION OF COOPERATIVE CONSERVATION

Ex. Ord. No. 13352, Aug. 26, 2004, 69 F.R. 52989, provided:

By the authority vested in me as President by the Constitution and the laws of the United States of America, it is hereby ordered as follows:

SECTION 1. *Purpose*. The purpose of this order is to ensure that the Departments of the Interior, Agriculture, Commerce, and Defense and the Environmental Protection Agency implement laws relating to the environment and natural resources in a manner that promotes cooperative conservation, with an emphasis on appropriate inclusion of local participation in Federal decisionmaking, in accordance with their respective agency missions, policies, and regulations.

SEC. 2. *Definition*. As used in this order, the term ''cooperative conservation'' means actions that relate to use, enhancement, and enjoyment of natural resources, protection of the environment, or both, and that involve collaborative activity among Federal, State, local, and tribal governments, private for-profit and nonprofit institutions, other nongovernmental entities and individuals.

SEC. 3. *Federal Activities*. To carry out the purpose of this order, the Secretaries of the Interior, Agriculture, Commerce, and Defense and the Administrator of the Environmental Protection Agency shall, to the extent permitted by law and subject to the availability of appropriations and in coordination with each other as appropriate:

(a) carry out the programs, projects, and activities of the agency that they respectively head that implement laws relating to the environment and natural resources in a manner that:

(i) facilitates cooperative conservation;

(ii) takes appropriate account of and respects the interests of persons with ownership or other legally recognized interests in land and other natural resources;

(iii) properly accommodates local participation in Federal decisionmaking; and

(iv) provides that the programs, projects, and activities are consistent with protecting public health and safety;

(b) report annually to the Chairman of the Council on Environmental Quality on actions taken to implement this order; and

(c) provide funding to the Office of Environmental Quality Management Fund (42 U.S.C. 4375) for the Conference for which section 4 of this order provides.

SEC. 4. *White House Conference on Cooperative Conservation*. The Chairman of the Council on Environmental Quality shall, to the extent permitted by law and subject to the availability of appropriations:

(a) convene not later than 1 year after the date of this order, and thereafter at such times as the Chairman deems appropriate, a White House Conference on Cooperative Conservation (Conference) to facilitate the exchange of information and advice relating to (i) cooperative conservation and (ii) means for achievement of the purpose of this order; and

(b) ensure that the Conference obtains information in a manner that seeks from Conference participants their individual advice and does not involve collective judgment or consensus advice or deliberation.

SEC. 5. *General Provision*. This order is not intended to, and does not, create any right or benefit, substantive or procedural, enforceable at law or in equity by any party against the United States, its departments, agencies, instrumentalities or entities, its officers, employees or agents, or any other person.

GEORGE W. BUSH.

§ 4332a. Repealed. Pub. L. 114–94, div. A, title I, § 1304(j)(2), Dec. 4, 2015, 129 Stat. 1386

Section, Pub. L. 112–141, div. A, title I, § 1319, July 6, 2012, 126 Stat. 551, related to accelerated decisionmaking in environmental reviews.

EFFECTIVE DATE OF REPEAL

Repeal effective Oct. 1, 2015, see section 1003 of Pub. L. 114–94, set out as an Effective Date of 2015 Amendment note under section 5313 of Title 5, Government Organization and Employees.

§ 4333. Conformity of administrative procedures to national environmental policy

All agencies of the Federal Government shall review their present statutory authority, administrative regulations, and current policies and procedures for the purpose of determining whether there are any deficiencies or inconsistencies therein which prohibit full compliance with the purposes and provisions of this chapter

[1] So in original. The period probably should be a semicolon.

(1) All parties stipulate that the initial decision may be made effective immediately and waive their rights to file a petition for review, to request oral argument, and to seek judicial review;

(2) No unresolved substantial issue of fact, law, or discretion remains and the record clearly warrants granting the relief requested; and

(3) The presiding officer finds that it is in the public interest to make the initial decision effective immediately.

(d) The provisions of this section do not apply to an initial decision directing the issuance of a limited work authorization under 10 CFR 50.10, an early site permit under subpart A of part 52 of this chapter, a construction permit or construction authorization, a combined license under subpart C of part 52 of this chapter, or a manufacturing license under subpart F of part 52.

[69 FR 2236, Jan. 14, 2004, as amended at 72 FR 49475, Aug. 28, 2007]

§ 2.340 Initial decision in certain contested proceedings; immediate effectiveness of initial decisions; issuance of authorizations, permits, and licenses.

(a) *Initial decision—production or utilization facility operating license.* (1) Matters in controversy; presiding officer consideration of matters not put in controversy by parties. In any initial decision in a contested proceeding on an application for an operating license or renewed license (including an amendment to or renewal of an operating license or renewed license) for a production or utilization facility, the presiding officer shall make findings of fact and conclusions of law on the matters put into controversy by the parties and any matter designated by the Commission to be decided by the presiding officer. The presiding officer shall also make findings of fact and conclusions of law on any matter not put into controversy by the parties, but only to the extent that the presiding officer determines that a serious safety, environmental, or common defense and security matter exists, and the Commission approves of an examination of and decision on the matter upon its referral by the presiding officer under, inter alia, the provisions of §§ 2.323 and 2.341.

(2) *Presiding officer initial decision and issuance of permit or license.* (i) In a contested proceeding for the initial issuance or renewal of a construction permit, operating license, or renewed license, or the amendment of an operating or renewed license where the NRC has not made a determination of no significant hazards consideration, the Commission or the Director, Office of Nuclear Reactor Regulation, as appropriate, after making the requisite findings, shall issue, deny, or appropriately condition the permit or license in accordance with the presiding officer's initial decision once that decision becomes effective.

(ii) In a contested proceeding for the amendment of a construction permit, operating license, or renewed license where the NRC has made a determination of no significant hazards consideration, the Commission or the Director, Office of Nuclear Reactor Regulation, as appropriate (appropriate official), after making the requisite findings and complying with any applicable provisions of § 2.1202(a) or § 2.1403(a), may issue the amendment before the presiding officer's initial decision becomes effective. Once the presiding officer's initial decision becomes effective, the appropriate official shall take action with respect to that amendment in accordance with the initial decision. If the presiding officer's initial decision becomes effective before the appropriate official issues the amendment, then the appropriate official, after making the requisite findings, shall issue, deny, or appropriately condition the amendment in accordance with the presiding officer's initial decision.

(b) *Initial decision—combined license under 10 CFR part 52.* (1) Matters in controversy; presiding officer consideration of matters not put in controversy by parties. In any initial decision in a contested proceeding on an application for a combined license under part 52 of this chapter (including an amendment to or renewal of combined license), the presiding officer shall make findings of fact and conclusions of law on the matters put into controversy by the parties and any matter designated by the Commission to be decided by the presiding officer. The presiding officer shall also make findings of fact and

conclusions of law on any matter not put into controversy by the parties, but only to the extent that the presiding officer determines that a serious safety, environmental, or common defense and security matter exists, and the Commission approves of an examination of and decision on the matter upon its referral by the presiding officer under, inter alia, the provisions of §§ 2.323 and 2.341.

(2) *Presiding officer initial decision and issuance of permit or license.* (i) In a contested proceeding for the initial issuance or renewal of a combined license under part 52 of this chapter, or the amendment of a combined license where the NRC has not made a determination of no significant hazards consideration, the Commission or the Director, Office of Nuclear Reactor Regulation, as appropriate, after making the requisite findings, shall issue, deny, or appropriately condition the permit or license in accordance with the presiding officer's initial decision once that decision becomes effective.

(ii) In a contested proceeding for the amendment of a combined license under part 52 of this chapter where the NRC has made a determination of no significant hazards consideration, the Commission or the Director, Office of Nuclear Reactor Regulation, as appropriate (appropriate official), after making the requisite findings and complying with any applicable provisions of § 2.1202(a) or § 2.1403(a), may issue the amendment before the presiding officer's initial decision becomes effective. Once the presiding officer's initial decision becomes effective, the appropriate official shall take action with respect to that amendment in accordance with the initial decision. If the presiding officer's initial decision becomes effective before the appropriate official issues the amendment, then the appropriate official, after making the requisite findings, shall issue, deny, or appropriately condition the amendment in accordance with the presiding officer's initial decision.

(c) *Initial decision on findings under 10 CFR 52.103 with respect to acceptance criteria in nuclear power reactor combined licenses.* In any initial decision under § 52.103(g) of this chapter with respect to whether acceptance criteria have been or will be met, the presiding officer shall make findings of fact and conclusions of law on the matters put into controversy by the parties, and any matter designated by the Commission to be decided by the presiding officer. Matters not put into controversy by the parties, but identified by the presiding officer as matters requiring further examination, shall be referred to the Commission for its determination; the Commission may, in its discretion, treat any of these referred matters as a request for action under § 2.206 and process the matter in accordance with § 52.103(f) of this chapter.

(d) *Initial decision—manufacturing license under 10 CFR part 52.* (1) Matters in controversy; presiding officer consideration of matters not put in controversy by parties. In any initial decision in a contested proceeding on an application for a manufacturing license under subpart C of part 52 of this chapter (including an amendment to or renewal of a manufacturing license), the presiding officer shall make findings of fact and conclusions of law on the matters put into controversy by the parties and any matter designated by the Commission to be decided by the presiding officer. The presiding officer also shall make findings of fact and conclusions of law on any matter not put into controversy by the parties, but only to the extent that the presiding officer determines that a serious safety, environmental, or common defense and security matter exists, and the Commission approves of an examination of and decision on the matter upon its referral by the presiding officer under, inter alia, the provisions of §§ 2.323 and 2.341.

(2) *Presiding officer initial decision and issuance of permit or license.* (i) In a contested proceeding for the initial issuance or renewal of a manufacturing license under subpart C of part 52 of this chapter, or the amendment of a manufacturing license, the Commission or the Director, Office of Nuclear Reactor Regulation, as appropriate, after making the requisite findings, shall issue, deny, or appropriately condition the permit or license in accordance with the presiding officer's initial decision once that decision becomes effective.

(ii) In a contested proceeding for the initial issuance or renewal of a manufacturing license under subpart C of part 52 of this chapter, or the amendment of a manufacturing license, the Commission or the Director, Office of Nuclear Reactor Regulation, as appropriate, may issue the license, permit, or license amendment in accordance with §2.1202(a) or §2.1403(a) before the presiding officer's initial decision becomes effective. If, however, the presiding officer's initial decision becomes effective before the license, permit, or license amendment is issued under §2.1202 or §2.1403, then the Commission or the Director, Office of Nuclear Reactor Regulation, as appropriate, shall issue, deny, or appropriately condition the license, permit, or license amendment in accordance with the presiding officer's initial decision.

(e) *Initial decision—other proceedings not involving production or utilization facilities*—(1) *Matters in controversy; presiding officer consideration of matters not put in controversy by parties.* In a proceeding not involving production or utilization facilities, the presiding officer shall make findings of fact and conclusions of law on the matters put into controversy by the parties to the proceeding, and on any matters designated by the Commission to be decided by the presiding officer. Matters not put into controversy by the parties, but identified by the presiding officer as requiring further examination, must be referred to the Director, Office of Nuclear Material Safety and Safeguards. Depending on the resolution of those matters, the Director, Office of Nuclear Material Safety and Safeguards, after making the requisite findings, shall issue, deny, revoke or appropriately condition the license, or take other action as necessary or appropriate.

(2) *Presiding officer initial decision and issuance of permit or license.* (i) In a contested proceeding under this paragraph (e), the Commission or the Director, Office of Nuclear Material Safety and Safeguards, as appropriate, shall issue, deny, or appropriately condition the permit, license, or license amendment in accordance with the presiding officer's initial decision once that decision becomes effective.

(ii) In a contested proceeding under this paragraph (e), the Commission or the Director, Office of Nuclear Material Safety and Safeguards, as appropriate, may issue the permit, license, or amendment in accordance with §2.1202(a) or §2.1403(a) before the presiding officer's initial decision becomes effective. If, however, the presiding officer's initial decision becomes effective before the permit, license, or amendment is issued under §2.1202 or §2.1403, then the Commission or the Director, Office of Nuclear Material Safety and Safeguards, as appropriate,shall issue, deny, or appropriately condition the permit, license, or amendment in accordance with the presiding officer's initial decision.

(f) *Immediate effectiveness of certain presiding officer decisions.* A presiding officer's initial decision directing the issuance or amendment of a limited work authorization under §50.10 of this chapter, an early site permit under subpart A of part 52 of this chapter, a construction permit or construction authorization under part 50 of this chapter, an operating license under part 50 of this chapter, a combined license under subpart C of part 52 of this chapter, a manufacturing license under subpart F of part 52 of this chapter, a renewed license under part 54, or a license under part 72 of this chapter to store spent fuel in an independent spent fuel storage facility (ISFSI) or a monitored retrievable storage installation (MRS), an initial decision directing issuance of a license under part 61 of this chapter, or an initial decision under §52.103(g) of this chapter that acceptance criteria in a combined license have been met, is immediately effective upon issuance unless the presiding officer finds that good cause has been shown by a party why the initial decision should not become immediately effective.

(g)–(h) [Reserved]

(i) *Issuance of authorizations, permits, and licenses—production and utilization facilities.* The Commission or the Director, Office of Nuclear Reactor Regulation, as appropriate, shall issue a limited work authorization under §50.10 of this chapter, an early site permit under subpart A of part 52 of this chapter, a construction permit or construction

authorization under part 50 of this chapter, an operating license under part 50 of this chapter, a combined license under subpart C of part 52 of this chapter, or a manufacturing license under subpart F of part 52 of this chapter within 10 days from the date of issuance of the initial decision:

(1) If the Commission or the Director has made all findings necessary for issuance of the authorization, permit or license, not within the scope of the initial decision of the presiding officer; and

(2) Notwithstanding the pendency of a petition for reconsideration under § 2.345, a petition for review under § 2.341, or a motion for stay under § 2.342, or the filing of a petition under § 2.206.

(j) *Issuance of finding on acceptance criteria under 10 CFR 52.103.* The Commission or the Director, Office of Nuclear Reactor Regulation, as appropriate, shall make the finding under 10 CFR 52.103(g) that acceptance criteria in a combined license are met within 10 days from the date of the presiding officer's initial decision:

(1) If the Commission or the Director is otherwise able to make the finding under 10 CFR 52.103(g) that the prescribed acceptance criteria are met for those acceptance criteria not within the scope of the initial decision of the presiding officer;

(2) If the presiding officer's initial decision—with respect to contentions that the prescribed acceptance criteria have not been met—finds that those acceptance criteria have been met, and the Commission or the Director thereafter is able to make the finding that those acceptance criteria are met;

(3) If the presiding officer's initial decision—with respect to contentions that the prescribed acceptance criteria will not be met—finds that those acceptance criteria will be met, and the Commission or the Director thereafter is able to make the finding that those acceptance criteria are met; and

(4) Notwithstanding the pendency of a petition for reconsideration under 10 CFR 2.345, a petition for review under 10 CFR 2.341, or a motion for stay under 10 CFR 2.342, or the filing of a petition under 10 CFR 2.206.

(k) *Issuance of other licenses.* The Commission or the Director, Office of Nuclear Material Safety and Safeguards, as appropriate, shall issue a license, including a license under part 72 of this chapter to store spent fuel in either an independent spent fuel storage facility (ISFSI) located away from a reactor site or at a monitored retrievable storage installation (MRS), within 10 days from the date of issuance of the initial decision:

(1) If the Commission or the Director has made all findings necessary for issuance of the license, not within the scope of the initial decision of the presiding officer; and

(2) Notwithstanding the pendency of a petition for reconsideration under § 2.345, a petition for review under § 2.341, or a motion for stay under § 2.342, or the filing of a petition under § 2.206.

[77 FR 46594, Aug. 3, 2012, as amended at 77 FR 51891, Aug. 28, 2012;79 FR 75739, Dec. 19, 2014; 84 FR 65643, Nov. 29, 2019]

§ 2.341 Review of decisions and actions of a presiding officer.

(a)(1) Review of decisions and actions of a presiding officer are treated under this section; provided, however, that no party may request further Commission review of a Commission determination to allow a period of interim operation under § 52.103(c) of this chapter. This section does not apply to appeals under § 2.311 or to appeals in the high-level waste proceeding, which are governed by § 2.1015.

(2) Within 120 days after the date of a decision or action by a presiding officer, or within 120 days after a petition for review of the decision or action has been served under paragraph (b) of this section, whichever is greater, the Commission may review the decision or action on its own motion, unless the Commission, in its discretion, extends the time for its review.

(b)(1) Within 25 days after service of a full or partial initial decision by a presiding officer, and within 25 days after service of any other decision or action by a presiding officer with respect to which a petition for review is authorized by this part, a party may file a petition for review with the Commission on the grounds specified in paragraph

authorization under part 50 of this chapter, an operating license under part 50 of this chapter, a combined license under subpart C of part 52 of this chapter, or a manufacturing license under subpart F of part 52 of this chapter within 10 days from the date of issuance of the initial decision:

(1) If the Commission or the Director has made all findings necessary for issuance of the authorization, permit or license, not within the scope of the initial decision of the presiding officer; and

(2) Notwithstanding the pendency of a petition for reconsideration under §2.345, a petition for review under §2.341, or a motion for stay under §2.342, or the filing of a petition under §2.206.

(j) *Issuance of finding on acceptance criteria under 10 CFR 52.103.* The Commission or the Director, Office of Nuclear Reactor Regulation, as appropriate, shall make the finding under 10 CFR 52.103(g) that acceptance criteria in a combined license are met within 10 days from the date of the presiding officer's initial decision:

(1) If the Commission or the Director is otherwise able to make the finding under 10 CFR 52.103(g) that the prescribed acceptance criteria are met for those acceptance criteria not within the scope of the initial decision of the presiding officer;

(2) If the presiding officer's initial decision—with respect to contentions that the prescribed acceptance criteria have not been met—finds that those acceptance criteria have been met, and the Commission or the Director thereafter is able to make the finding that those acceptance criteria are met;

(3) If the presiding officer's initial decision—with respect to contentions that the prescribed acceptance criteria will not be met—finds that those acceptance criteria will be met, and the Commission or the Director thereafter is able to make the finding that those acceptance criteria are met; and

(4) Notwithstanding the pendency of a petition for reconsideration under 10 CFR 2.345, a petition for review under 10 CFR 2.341, or a motion for stay under 10 CFR 2.342, or the filing of a petition under 10 CFR 2.206.

(k) *Issuance of other licenses.* The Commission or the Director, Office of Nuclear Material Safety and Safeguards, as appropriate, shall issue a license, including a license under part 72 of this chapter to store spent fuel in either an independent spent fuel storage facility (ISFSI) located away from a reactor site or at a monitored retrievable storage installation (MRS), within 10 days from the date of issuance of the initial decision:

(1) If the Commission or the Director has made all findings necessary for issuance of the license, not within the scope of the initial decision of the presiding officer; and

(2) Notwithstanding the pendency of a petition for reconsideration under §2.345, a petition for review under §2.341, or a motion for stay under §2.342, or the filing of a petition under §2.206.

[77 FR 46594, Aug. 3, 2012, as amended at 77 FR 51891, Aug. 28, 2012;79 FR 75739, Dec. 19, 2014; 84 FR 65643, Nov. 29, 2019]

§ 2.341 Review of decisions and actions of a presiding officer.

(a)(1) Review of decisions and actions of a presiding officer are treated under this section; provided, however, that no party may request further Commission review of a Commission determination to allow a period of interim operation under §52.103(c) of this chapter. This section does not apply to appeals under §2.311 or to appeals in the high-level waste proceeding, which are governed by §2.1015.

(2) Within 120 days after the date of a decision or action by a presiding officer, or within 120 days after a petition for review of the decision or action has been served under paragraph (b) of this section, whichever is greater, the Commission may review the decision or action on its own motion, unless the Commission, in its discretion, extends the time for its review.

(b)(1) Within 25 days after service of a full or partial initial decision by a presiding officer, and within 25 days after service of any other decision or action by a presiding officer with respect to which a petition for review is authorized by this part, a party may file a petition for review with the Commission on the grounds specified in paragraph

(b)(4) of this section. Unless otherwise authorized by law, a party to an NRC proceeding must file a petition for Commission review before seeking judicial review of an agency action.

(2) A petition for review under this paragraph may not be longer than twenty-five (25) pages, and must contain the following:

(i) A concise summary of the decision or action of which review is sought;

(ii) A statement (including record citation) where the matters of fact or law raised in the petition for review were previously raised before the presiding officer and, if they were not, why they could not have been raised;

(iii) A concise statement why in the petitioner's view the decision or action is erroneous; and

(iv) A concise statement why Commission review should be exercised.

(3) Any other party to the proceeding may, within 25 days after service of a petition for review, file an answer supporting or opposing Commission review. This answer may not be longer than 25 pages and should concisely address the matters in paragraph (b)(2) of this section to the extent appropriate. The petitioning party may file a reply brief within 10 days of service of any answer. This reply brief may not be longer than 5 pages.

(4) The petition for review may be granted in the discretion of the Commission, giving due weight to the existence of a substantial question with respect to the following considerations:

(i) A finding of material fact is clearly erroneous or in conflict with a finding as to the same fact in a different proceeding;

(ii) A necessary legal conclusion is without governing precedent or is a departure from or contrary to established law;

(iii) A substantial and important question of law, policy, or discretion has been raised;

(iv) The conduct of the proceeding involved a prejudicial procedural error; or

(v) Any other consideration which the Commission may deem to be in the public interest.

(5) A petition for review will not be granted to the extent that it relies on matters that could have been but were not raised before the presiding officer. A matter raised sua sponte by a presiding officer has been raised before the presiding officer for the purpose of this section.

(6) A petition for review will not be granted as to issues raised before the presiding officer on a pending motion for reconsideration.

(c)(1) If within 120 days after the filing of a petition for review the Commission does not grant the petition, in whole or in part, the petition is deemed to be denied, unless the Commission, in its discretion, extends the time for its consideration of the petition and any answers to the petition.

(2) If a petition for review is granted, the Commission may issue an order specifying the issues to be reviewed and designating the parties to the review proceeding. The Commission may, in its discretion, decide the matter on the basis of the petition for review or it may specify whether any briefs may be filed.

(3) Unless the Commission orders otherwise, any briefs on review may not exceed 30 pages in length, exclusive of pages containing the table of contents, table of citations, and any addendum containing appropriate exhibits, statutes, or regulations. A brief in excess of 10 pages must contain a table of contents with page references and a table of cases (alphabetically arranged), cited statutes, regulations, and other authorities, with references to the pages of the brief where they are cited.

(d) Petitions for reconsideration of Commission decisions granting or denying review in whole or in part will not be entertained. A petition for reconsideration of a Commission decision after review may be filed within ten (10) days, but is not necessary for exhaustion of administrative remedies. However, if a petition for reconsideration is filed, the Commission decision is not final until the petition is decided. Any petition for reconsideration will be evaluated against the standard in § 2.323(e).

(e) Neither the filing nor the granting of a petition under this section stays the effect of the decision or action of the presiding officer, unless the Commission orders otherwise.

(f) *Interlocutory review.* (1) A ruling referred or question certified to the Commission under §§ 2.319(l) or 2.323(f) may be reviewed if the certification or referral raises significant and novel legal or policy issues, or resolution of the issues would materially advance the orderly disposition of the proceeding.

(2) The Commission may, in its discretion, grant interlocutory review at the request of a party despite the absence of a referral or certification by the presiding officer. A petition and answer to it must be filed within the times and in the form prescribed in paragraph (b) of this section and must be treated in accordance with the general provisions of this section. The petition for interlocutory review will be granted only if the party demonstrates that the issue for which the party seeks interlocutory review:

(i) Threatens the party adversely affected by it with immediate and serious irreparable impact which, as a practical matter, could not be alleviated through a petition for review of the presiding officer's final decision; or

(ii) Affects the basic structure of the proceeding in a pervasive or unusual manner.

[69 FR 2236, Jan. 14, 2004, as amended at 72 FR 49476, Aug. 28, 2007; 77 FR 46596, Aug. 3, 2012]

§ 2.342 Stays of decisions.

(a) Within ten (10) days after service of a decision or action of a presiding officer, any party to the proceeding may file an application for a stay of the effectiveness of the decision or action pending filing of and a decision on a petition for review. This application may be filed with the Commission or the presiding officer, but not both at the same time.

(b) An application for a stay may be no longer than ten (10) pages, exclusive of affidavits, and must contain the following:

(1) A concise summary of the decision or action which is requested to be stayed;

(2) A concise statement of the grounds for stay, with reference to the factors specified in paragraph (e) of this section; and

(3) To the extent that an application for a stay relies on facts subject to dispute, appropriate references to the record or affidavits by knowledgeable persons.

(c) Service of an application for a stay on the other parties must be by the same method, e.g., electronic or facsimile transmission, mail, as the method for filing the application with the Commission or the presiding officer.

(d) Within ten (10) days after service of an application for a stay under this section, any party may file an answer supporting or opposing the granting of a stay. This answer may not be longer than ten (10) pages, exclusive of affidavits, and should concisely address the matters in paragraph (b) of this section to the extent appropriate. Further replies to answers will not be entertained. Filing of and service of an answer on the other parties must be by the same method, e.g., electronic or facsimile transmission, mail, as the method for filing the application for the stay.

(e) In determining whether to grant or deny an application for a stay, the Commission or presiding officer will consider:

(1) Whether the moving party has made a strong showing that it is likely to prevail on the merits;

(2) Whether the party will be irreparably injured unless a stay is granted;

(3) Whether the granting of a stay would harm other parties; and

(4) Where the public interest lies.

(f) In extraordinary cases, where prompt application is made under this section, the Commission or presiding officer may grant a temporary stay to preserve the status quo without waiting for filing of any answer. The application may be made orally provided the application is promptly confirmed by electronic or facsimile transmission message. Any party applying under this paragraph shall make all reasonable efforts to inform the other parties of the application, orally if made orally.

§ 2.343 Oral argument.

In its discretion, the Commission may allow oral argument upon the request of a party made in a petition for

§ 2.1209 Findings of fact and conclusions of law.

Each party shall file written post-hearing proposed findings of fact and conclusions of law on the contentions addressed in an oral hearing under § 2.1207 or a written hearing under § 2.1208 within 30 days of the close of the hearing or at such other time as the presiding officer directs. Proposed findings of fact and conclusions of law must conform to the format requirements in § 2.712(c).

[77 FR 46598, Aug. 3, 2012]

§ 2.1210 Initial decision and its effect.

(a) Unless the Commission directs that the record be certified to it in accordance with paragraph (b) of this section, the presiding officer shall render an initial decision after completion of an informal hearing under this subpart. That initial decision constitutes the final action of the Commission on the contested matter 120 days after the date of issuance, unless:

(1) Any party files a petition for Commission review in accordance with § 2.1212;

(2) The Commission, in its discretion, determines that the presiding officer's initial decision is inconsistent with the staff's action as described in the notice required by § 2.1202(a) and that the inconsistency warrants Commission review, in which case the Commission will review the initial decision; or

(3) The Commission takes review of the decision sua sponte.

(b) The Commission may direct that the presiding officer certify the record to it without an initial decision and prepare a final decision if the Commission finds that due and timely execution of its functions warrants certification.

(c) An initial decision must be in writing and must be based only upon information in the record or facts officially noticed. The record must include all information submitted in the proceeding with respect to which all parties have been given reasonable prior notice and an opportunity to comment as provided in §§ 2.1207 or 2.1208. The initial decision must include:

(1) Findings, conclusions, and rulings, with the reasons or basis for them, on all material issues of fact or law admitted as part of the contentions in the proceeding;

(2) The appropriate ruling, order, or grant or denial of relief with its effective date;

(3) The action the NRC staff shall take upon transmittal of the decision to the NRC staff under paragraph (e) of this section, if the initial decision is inconsistent with the NRC staff action as described in the notice required by § 2.1202(a); and

(4) The time within which a petition for Commission review may be filed, the time within which any answers to a petition for review may be filed, and the date when the decision becomes final in the absence of a petition for Commission review or Commission sua sponte review.

(d) Pending review and final decision by the Commission, an initial decision resolving all issues before the presiding officer is immediately effective upon issuance except as otherwise provided by this part (e.g., § 2.340) or by the Commission in special circumstances.

(e) Once an initial decision becomes final, the Secretary shall transmit the decision to the NRC staff for action in accordance with the decision.

[69 FR 2267, Jan. 14, 2004, as amended at 77 FR 46598, Aug. 3, 2012; 79 FR 66601, Nov. 10, 2014]

§ 2.1212 Petitions for Commission review of initial decisions.

Parties may file petitions for review of an initial decision under this subpart in accordance with the procedures set out in § 2.341. Unless otherwise authorized by law, a party to an NRC proceeding must file a petition for Commission review before seeking judicial review of an agency action.

§ 2.1213 Application for a stay.

(a) Any application for a stay of the effectiveness of the NRC staff's action on a matter involved in a hearing under this subpart must be filed with the presiding officer within five (5) days of the issuance of the notice of the NRC staff's action under § 2.1202(a) and must be filed and considered in accordance with paragraphs (b), (c) and (d) of this section.

of deviation, and notices of nonconformance.

[49 FR 9381, Mar. 12, 1984, as amended at 54 FR 43578, Oct. 26, 1989; 61 FR 43408, Aug. 22, 1996]

§ 51.11 Relationship to other subparts. [Reserved]

§ 51.12 Application of subpart to ongoing environmental work.

(a) Except as otherwise provided in this section, the regulations in this subpart shall apply to the fullest extent practicable to NRC's ongoing environmental work.

(b) No environmental report or any supplement to an environmental report filed with the NRC and no environmental assessment, environmental impact statement or finding of no significant impact or any supplement to any of the foregoing issued by the NRC before June 7, 1984, need be redone and no notice of intent to prepare an environmental impact statement or notice of availability of these environmental documents need be republished solely by reason of the promulgation on March 12, 1984, of this revision of part 51.

[49 FR 9381, Mar. 12, 1984, as amended at 49 FR 24513, June 14, 1984]

§ 51.13 Emergencies.

Whenever emergency circumstances make it necessary and whenever, in other situations, the health and safety of the public may be adversely affected if mitigative or remedial actions are delayed, the Commission may take an action with significant environmental impact without observing the provisions of these regulations. In taking an action covered by this section, the Commission will consult with the Council as soon as feasible concerning appropriate alternative NEPA arrangements.

§ 51.14 Definitions.

(a) As used in this subpart:

Categorical Exclusion means a category of actions which do not individually or cumulatively have a significant effect on the human environment and which the Commission has found to have no such effect in accordance with procedures set out in § 51.22, and for which, therefore, neither an environmental assessment nor an environmental impact statement is required.

Cooperating Agency means any Federal agency other than the NRC which has jurisdiction by law or special expertise with respect to any environmental impact involved in a proposal (or a reasonable alternative) for legislation or other major Federal action significantly affecting the quality of the human environment. By agreement with the Commission, a State or local agency of similar qualifications or, when the effects are on a reservation, an Indian Tribe, may become a cooperating agency.

Council means the Council on Environmental Quality (CEQ) established by Title II of NEPA.

DOE means the U.S. Department of Energy or its duly authorized representatives.

Environmental Assessment means a concise public document for which the Commission is responsible that serves to:

(1) Briefly provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact.

(2) Aid the Commission's compliance with NEPA when no environmental impact statement is necessary.

(3) Facilitate preparation of an environmental impact statement when one is necessary.

Environmental document includes an environmental assessment, an environmental impact statement, a finding of no significant impact, an environmental report and any supplements to or comments upon those documents, and a notice of intent.

Environmental Impact Statement means a detailed written statement as required by section 102(2)(C) of NEPA.

Environmental report means a document submitted to the Commission by an applicant for a permit, license, or other form of permission, or an amendment to or renewal of a permit, license or other form of permission, or by a petitioner for rulemaking, in order to aid the Commission in complying with section 102(2) of NEPA.

Finding of No Significant Impact means a concise public document for

which the Commission is responsible that briefly states the reasons why an action, not otherwise excluded, will not have a significant effect on the human environment and for which therefore an environmental impact statement will not be prepared.

NEPA means the National Environmental Policy Act of 1969, as amended (Pub. L. 91–190, 83 Stat. 852, 856, as amended by Pub. L. 94–83, 89 Stat. 424, 42 U.S.C. 4321, *et seq.*).

Notice of Intent means a notice that an environmental impact statement will be prepared and considered.

Uranium enrichment facility means:

(1) Any facility used for separating the isotopes for uranium or enriching uranium in the isotope 235, except laboratory scale facilities designed or used for experimental or analytical purposes only; or

(2) Any equipment or device, or important component part especially designed for such equipment or device, capable of separating the isotopes of uranium or enriching uranium in the isotope 235.

(b) The definitions in 40 CFR 1508.3, 1508.7, 1508.8, 1508.14, 1508.15, 1508.16, 1508.17, 1508.18, 1508.20, 1508.23, 1508.25, 1508.26, and 1508.27, will also be used in implementing section 102(2) of NEPA.

[49 FR 9381, Mar. 12, 1984, as amended at 57 FR 18391, Apr. 30, 1992]

§51.15 Time schedules.

Consistent with the purposes of NEPA, the Administrative Procedure Act, the Commission's rules of practice in part 2 of this chapter, §§51.100 and 51.101, and with other essential considerations of national policy:

(a) The appropriate NRC staff director may, and upon the request of an applicant for a proposed action or a petitioner for rulemaking shall, establish a time schedule for all or any constituent part of the NRC staff NEPA process. To the maximum extent practicable, the NRC staff will conduct its NEPA review in accordance with any time schedule established under this section.

(b) As specified in 10 CFR part 2, the presiding officer, the Atomic Safety and Licensing Board or the Commissioners acting as a collegial body may establish a time schedule for all or any part of an adjudicatory or rulemaking proceeding to the extent that each has jurisdiction.

[49 FR 9381, Mar. 12, 1984, as amended at 69 FR 2276, Jan. 14, 2004]

§51.16 Proprietary information.

(a) Proprietary information, such as trade secrets or privileged or confidential commercial or financial information, will be treated in accordance with the procedures provided in §2.390 of this chapter.

(b) Any proprietary information which a person seeks to have withheld from public disclosure shall be submitted in accordance with §2.390 of this chapter. When submitted, the proprietary information should be clearly identified and accompanied by a request, containing detailed reasons and justifications, that the proprietary information be withheld from public disclosure. A non-proprietary summary describing the general content of the proprietary information should also be provided.

[69 FR 2276, Jan. 14, 2004]

§51.17 Information collection requirements; OMB approval.

(a) The Nuclear Regulatory Commission has submitted the information collection requirements contained in this part to the Office of Management and Budget (OMB) for approval as required by the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*). The NRC may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. OMB has approved the information collection requirements contained in this part under control number 3150–0021.

(b) The approved information collection requirements in this part appear in §§51.6, 51.16, 51.41, 51.45, 51.49, 51.50, 51.51, 51.52, 51.53, 51.54, 51.55, 51.58, 51.60, 51.61, 51.62, 51.66, 51.68, and 51.69.

[49 FR 24513, June 14, 1984, as amended at 62 FR 52188, Oct. 6, 1997; 67 FR 67100, Nov. 4, 2002; 72 FR 57443, Oct. 9, 2007]

Commission will independently evaluate and be responsible for the reliability of any information which it uses.

ENVIRONMENTAL REPORTS—GENERAL REQUIREMENTS

§ 51.45 Environmental report.

(a) *General.* As required by §§ 51.50, 51.53, 51.54, 51.55, 51.60, 51.61, 51.62, or 51.68, as appropriate, each applicant or petitioner for rulemaking shall submit with its application or petition for rulemaking one signed original of a separate document entitled ''Applicant's'' or ''Petitioner's Environmental Report,'' as appropriate. An applicant or petitioner for rulemaking may submit a supplement to an environmental report at any time.

(b) *Environmental considerations.* The environmental report shall contain a description of the proposed action, a statement of its purposes, a description of the environment affected, and discuss the following considerations:

(1) The impact of the proposed action on the environment. Impacts shall be discussed in proportion to their significance;

(2) Any adverse environmental effects which cannot be avoided should the proposal be implemented;

(3) Alternatives to the proposed action. The discussion of alternatives shall be sufficiently complete to aid the Commission in developing and exploring, pursuant to section 102(2)(E) of NEPA, ''appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources.'' To the extent practicable, the environmental impacts of the proposal and the alternatives should be presented in comparative form;

(4) The relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity; and

(5) Any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.

(c) *Analysis.* The environmental report must include an analysis that considers and balances the environmental effects of the proposed action, the environmental impacts of alternatives to the proposed action, and alternatives available for reducing or avoiding adverse environmental effects. An environmental report required for materials licenses under § 51.60 must also include a description of those site preparation activities excluded from the definition of construction under § 51.4 which have been or will be undertaken at the proposed site (*i.e.*, those activities listed in paragraphs (2)(i) and (2)(ii) in the definition of construction contained in § 51.4); a description of the impacts of such excluded site preparation activities; and an analysis of the cumulative impacts of the proposed action when added to the impacts of such excluded site preparation activities on the human environment. An environmental report prepared at the early site permit stage under § 51.50(b), limited work authorization stage under § 51.49, construction permit stage under § 51.50(a), or combined license stage under § 51.50(c) must include a description of impacts of the preconstruction activities performed by the applicant at the proposed site (*i.e.*, those activities listed in paragraph (1)(ii) in the definition of ''construction'' contained in § 51.4), necessary to support the construction and operation of the facility which is the subject of the early site permit, limited work authorization, construction permit, or combined license application. The environmental report must also contain an analysis of the cumulative impacts of the activities to be authorized by the limited work authorization, construction permit, or combined license in light of the preconstruction impacts described in the environmental report. Except for an environmental report prepared at the early site permit stage, or an environmental report prepared at the license renewal stage under § 51.53(c), the analysis in the environmental report should also include consideration of the economic, technical, and other benefits and costs of the proposed action and its alternatives. Environmental reports prepared at the license renewal stage under § 51.53(c) need not discuss the economic or technical benefits and costs of either the proposed action or alternatives except if these benefits

and costs are either essential for a determination regarding the inclusion of an alternative in the range of alternatives considered or relevant to mitigation. In addition, environmental reports prepared under § 51.53(c) need not discuss issues not related to the environmental effects of the proposed action and its alternatives. The analyses for environmental reports shall, to the fullest extent practicable, quantify the various factors considered. To the extent that there are important qualitative considerations or factors that cannot be quantified, those considerations or factors shall be discussed in qualitative terms. The environmental report should contain sufficient data to aid the Commission in its development of an independent analysis.

(d) *Status of compliance.* The environmental report shall list all Federal permits, licenses, approvals and other entitlements which must be obtained in connection with the proposed action and shall describe the status of compliance with these requirements. The environmental report shall also include a discussion of the status of compliance with applicable environmental quality standards and requirements including, but not limited to, applicable zoning and land-use regulations, and thermal and other water pollution limitations or requirements which have been imposed by Federal, State, regional, and local agencies having responsibility for environmental protection. The discussion of alternatives in the report shall include a discussion of whether the alternatives will comply with such applicable environmental quality standards and requirements.

(e) *Adverse information.* The information submitted pursuant to paragraphs (b) through (d) of this section should not be confined to information supporting the proposed action but should also include adverse information.

[49 FR 9381, Mar. 12, 1984, as amended at 61 FR 28486, June 5, 1996; 61 FR 66542, Dec. 18, 1996; 68 FR 58810, Oct. 10, 2003; 72 FR 49511, Aug. 28, 2007; 72 FR 57443, Oct. 9, 2007; 73 FR 22787, Apr. 28, 2008; 76 FR 56965, Sept. 15, 2011]

ENVIRONMENTAL REPORTS—PRODUCTION AND UTILIZATION FACILITIES

§ 51.49 Environmental report—limited work authorization.

(a) *Limited work authorization submitted as part of complete construction permit or combined license application.* Each applicant for a construction permit or combined license applying for a limited work authorization under § 50.10(d) of this chapter in a complete application under 10 CFR 2.101(a)(1) through (a)(4), shall submit with its application a separate document, entitled, ''Applicant's Environmental Report—Limited Work Authorization Stage,'' which is in addition to the environmental report required by § 51.50 of this part. Each environmental report must also contain the following information:

(1) A description of the activities proposed to be conducted under the limited work authorization;

(2) A statement of the need for the activities; and

(3) A description of the environmental impacts that may reasonably be expected to result from the activities, the mitigation measures that the applicant proposes to implement to achieve the level of environmental impacts described, and a discussion of the reasons for rejecting mitigation measures that could be employed by the applicant to further reduce environmental impacts.

(b) *Phased application for limited work authorization and construction permit or combined license.* If the construction permit or combined license application is filed in accordance with § 2.101(a)(9) of this chapter, then the environmental report for part one of the application may be limited to a discussion of the activities proposed to be conducted under the limited work authorization. If the scope of the environmental report for part one is so limited, then part two of the application must include the information required by § 51.50, as applicable.

(c) *Limited work authorization submitted as part of an early site permit application.* Each applicant for an early site permit under subpart A of part 52 of this chapter requesting a limited work authorization shall submit with

from the reactor, with respect to normal conditions of transport and possible accidents in transport, are as set forth in Summary Table S–4 in paragraph (c) of this section; and the values in the table represent the contribution of the transportation to the environmental costs of licensing the reactor.

(b) For reactors not meeting the conditions of paragraph (a) of this section, the statement shall contain a full description and detailed analysis of the environmental effects of transportation of fuel and wastes to and from the reactor, including values for the environmental impact under normal conditions of transport and for the environmental risk from accidents in transport. The statement shall indicate that the values determined by the analysis represent the contribution of such effects to the environmental costs of licensing the reactor.

(c)

SUMMARY TABLE S–4—ENVIRONMENTAL IMPACT OF TRANSPORTATION OF FUEL AND WASTE TO AND FROM ONE LIGHT-WATER-COOLED NUCLEAR POWER REACTOR [1]

Normal Conditions of Transport

	Environmental impact
Heat (per irradiated fuel cask in transit)	250,000 Btu/hr.
Weight (governed by Federal or State restrictions)	73,000 lbs. per truck; 100 tons per cask per rail car.
Traffic density:	
Truck	Less than 1 per day.
Rail	Less than 3 per month

Exposed population	Estimated number of persons exposed	Range of doses to exposed individuals [2] (per reactor year)	Cumulative dose to exposed population (per reactor year) [3]
Transportation workers	200	0.01 to 300 millirem	4 man-rem.
General public:			
Onlookers	1,100	0.003 to 1.3 millirem	3 man-rem.
Along Route	600,000	0.0001 to 0.06 millirem	

Accidents in Transport

	Environmental risk
Radiological effects	Small [4]
Common (nonradiological) causes	1 fatal injury in 100 reactor years; 1 nonfatal injury in 10 reactor years; $475 property damage per reactor year.

[1] Data supporting this table are given in the Commission's "Environmental Survey of Transportation of Radioactive Materials to and from Nuclear Power Plants," WASH–1238, December 1972; and Supp. 1 of NUREG–75/038, April 1975. Both documents are available for inspection and copying at the Commission's Public Document Room, One White Flint North, 11555 Rockville Pike (first floor), Rockville, Maryland 20852 and may be obtained from National Technical Information Service, Springfield, VA 22161. The WASH–1238 is available from NTIS at a cost of $5.45 (microfiche, $2.25) and NUREG–75/038 is available at a cost of $3.25 (microfiche, $2.25).

[2] The Federal Radiation Council has recommended that the radiation doses from all sources of radiation other than natural background and medical exposures should be limited to 5,000 millirem per year for individuals as a result of occupational exposure and should be limited to 500 millirem per year for individuals in the general population. The dose to individuals due to average natural background radiation is about 130 millirem per year.

[3] Man-rem is an expression for the summation of whole body doses to individuals in a group. Thus, if each member of a population group of 1,000 people were to receive a dose of 0.001 rem (1 millirem), or if 2 people were to receive a dose of 0.5 rem (500 millirem) each, the total man-rem dose in each case would be 1 man-rem.

[4] Athough the environmental risk of radiological effects stemming from transportation accidents is currently incapable of being numerically quantified, the risk remains small regardless of whether it is being appiled to a single reactor or a multireactor site.

[49 FR 9381, Mar. 12, 1984; 49 FR 10922, Mar. 23, 1984, as amended at 53 FR 43420, Oct. 27, 1988; 72 FR 49512, Aug. 28, 2007; 79 FR 66604, Nov. 10, 2014]

§ 51.53 Postconstruction environmental reports.

(a) *General.* Any environmental report prepared under the provisions of this section may incorporate by reference any information contained in a prior environmental report or supplement thereto that relates to the production or utilization facility or site, or any information contained in a final environmental document previously prepared by the NRC staff that relates to the production or utilization facility or site. Documents that may be referenced include, but are not limited to,

the final environmental impact statement; supplements to the final environmental impact statement, including supplements prepared at the license renewal stage; NRC staff-prepared final generic environmental impact statements; and environmental assessments and records of decisions prepared in connection with the construction permit, operating license, early site permit, combined license and any license amendment for that facility.

(b) *Operating license stage.* Each applicant for a license to operate a production or utilization facility covered by §51.20 shall submit with its application a separate document entitled ''Supplement to Applicant's Environmental Report—Operating License Stage,'' which will update ''Applicant's Environmental Report—Construction Permit Stage.'' Unless otherwise required by the Commission, the applicant for an operating license for a nuclear power reactor shall submit this report only in connection with the first licensing action authorizing full-power operation. In this report, the applicant shall discuss the same matters described in §§51.45, 51.51, and 51.52, but only to the extent that they differ from those discussed or reflect new information in addition to that discussed in the final environmental impact statement prepared by the Commission in connection with the construction permit. No discussion of need for power, or of alternative energy sources, or of alternative sites for the facility, is required in this report. As stated in §51.23, no discussion of the environmental impacts of the continued storage of spent fuel is required in this report.

(c) *Operating license renewal stage.* (1) Each applicant for renewal of a license to operate a nuclear power plant under part 54 of this chapter shall submit with its application a separate document entitled ''Applicant's Environmental Report—Operating License Renewal Stage.''

(2) The report must contain a description of the proposed action, including the applicant's plans to modify the facility or its administrative control procedures as described in accordance with §54.21 of this chapter. This report must describe in detail the affected environment around the plant, the modifications directly affecting the environment or any plant effluents, and any planned refurbishment activities. In addition, the applicant shall discuss in this report the environmental impacts of alternatives and any other matters described in §51.45. The report is not required to include discussion of need for power or the economic costs and economic benefits of the proposed action or of alternatives to the proposed action except insofar as such costs and benefits are either essential for a determination regarding the inclusion of an alternative in the range of alternatives considered or relevant to mitigation. The environmental report need not discuss other issues not related to the environmental effects of the proposed action and the alternatives. As stated in §51.23, no discussion of the environmental impacts of the continued storage of spent fuel is required in this report.

(3) For those applicants seeking an initial renewed license and holding an operating license, construction permit, or combined license as of June 30, 1995, the environmental report shall include the information required in paragraph (c)(2) of this section subject to the following conditions and considerations:

(i) The environmental report for the operating license renewal stage is not required to contain analyses of the environmental impacts of the license renewal issues identified as Category 1 issues in appendix B to subpart A of this part.

(ii) The environmental report must contain analyses of the environmental impacts of the proposed action, including the impacts of refurbishment activities, if any, associated with license renewal and the impacts of operation during the renewal term, for those issues identified as Category 2 issues in appendix B to subpart A of this part. The required analyses are as follows:

(A) If the applicant's plant utilizes cooling towers or cooling ponds and withdraws makeup water from a river, an assessment of the impact of the proposed action on water availability and competing water demands, the flow of the river, and related impacts on stream (aquatic) and riparian (terrestrial) ecological communities must be

provided. The applicant shall also provide an assessment of the impacts of the withdrawal of water from the river on alluvial aquifers during low flow.

(B) If the applicant's plant utilizes once-through cooling or cooling pond heat dissipation systems, the applicant shall provide a copy of current Clean Water Act 316(b) determinations and, if necessary, a 316(a) variance in accordance with 40 CFR part 125, or equivalent State permits and supporting documentation. If the applicant cannot provide these documents, it shall assess the impact of the proposed action on fish and shellfish resources resulting from thermal changes and impingement and entrainment.

(C) If the applicant's plant pumps more than 100 gallons (total onsite) of groundwater per minute, an assessment of the impact of the proposed action on groundwater must be provided.

(D) If the applicant's plant is located at an inland site and utilizes cooling ponds, an assessment of the impact of the proposed action on groundwater quality must be provided.

(E) All license renewal applicants shall assess the impact of refurbishment, continued operations, and other license-renewal-related construction activities on important plant and animal habitats. Additionally, the applicant shall assess the impact of the proposed action on threatened or endangered species in accordance with Federal laws protecting wildlife, including but not limited to, the Endangered Species Act, and essential fish habitat in accordance with the Magnuson-Stevens Fishery Conservation and Management Act.

(F) [Reserved]

(G) If the applicant's plant uses a cooling pond, lake, or canal or discharges into a river, an assessment of the impact of the proposed action on public health from thermophilic organisms in the affected water must be provided.

(H) If the applicant's transmission lines that were constructed for the specific purpose of connecting the plant to the transmission system do not meet the recommendations of the National Electric Safety Code for preventing electric shock from induced currents, an assessment of the impact of the proposed action on the potential shock hazard from the transmission lines must be provided.

(I)–(J) [Reserved]

(K) All applicants shall identify any potentially affected historic or archaeological properties and assess whether any of these properties will be affected by future plant operations and any planned refurbishment activities in accordance with the National Historic Preservation Act.

(L) If the staff has not previously considered severe accident mitigation alternatives for the applicant's plant in an environmental impact statement or related supplement or in an environmental assessment, a consideration of alternatives to mitigate severe accidents must be provided.

(M) [Reserved]

(N) Applicants shall provide information on the general demographic composition of minority and low-income populations and communities (by race and ethnicity) residing in the immediate vicinity of the plant that could be affected by the renewal of the plant's operating license, including any planned refurbishment activities, and ongoing and future plant operations.

(O) Applicants shall provide information about other past, present, and reasonably foreseeable future actions occurring in the vicinity of the nuclear plant that may result in a cumulative effect.

(P) An applicant shall assess the impact of any documented inadvertent releases of radionuclides into groundwater. The applicant shall include in its assessment a description of any groundwater protection program used for the surveillance of piping and components containing radioactive liquids for which a pathway to groundwater may exist. The assessment must also include a description of any past inadvertent releases and the projected impact to the environment (e.g., aquifers, rivers, lakes, ponds, ocean) during the license renewal term.

(iii) The report must contain a consideration of alternatives for reducing adverse impacts, as required by § 51.45(c), for all Category 2 license renewal issues in appendix B to subpart A of this part. No such consideration is

required for Category 1 issues in appendix B to subpart A of this part.

(iv) The environmental report must contain any new and significant information regarding the environmental impacts of license renewal of which the applicant is aware.

(d) *Postoperating license stage.* Each applicant for a license amendment authorizing decommissioning activities for a production or utilization facility either for unrestricted use or based on continuing use restrictions applicable to the site; and each applicant for a license amendment approving a license termination plan or decommissioning plan under § 50.82 of this chapter either for unrestricted use or based on continuing use restrictions applicable to the site; and each applicant for a license or license amendment to store spent fuel at a nuclear power reactor after expiration of the operating license for the nuclear power reactor shall submit with its application a separate document, entitled ''Supplement to Applicant's Environmental Report—Post Operating License Stage,'' which will update ''Applicant's Environmental Report—Operating License Stage,'' as appropriate, to reflect any new information or significant environmental change associated with the applicant's proposed decommissioning activities or with the applicant's proposed activities with respect to the planned storage of spent fuel. As stated in § 51.23, no discussion of the environmental impacts of the continued storage of spent fuel is required in this report. The ''Supplement to Applicant's Environmental Report—Post Operating License Stage'' may incorporate by reference any information contained in ''Applicant's Environmental Report—Construction Permit Stage.''

[61 FR 66543, Dec. 18, 1996, as amended at 64 FR 48506, Sept. 3, 1999; 68 FR 58810, Oct. 10, 2003; 72 FR 49513, Aug. 28, 2007; 78 FR 37316, June 20, 2013; 79 FR 56260, Sept. 19, 2014; 79 FR 66604, Nov. 10, 2014]

§ 51.54 Environmental report—manufacturing license.

(a) Each applicant for a manufacturing license under subpart F of part 52 of this chapter shall submit with its application a separate document entitled, ''Applicant's Environmental Report—Manufacturing License.'' The environmental report must address the costs and benefits of severe accident mitigation design alternatives, and the bases for not incorporating severe accident mitigation design alternatives into the design of the reactor to be manufactured. The environmental report need not address the environmental impacts associated with manufacturing the reactor under the manufacturing license, the benefits and impacts of utilizing the reactor in a nuclear power plant, or an evaluation of alternative energy sources.

(b) Each applicant for an amendment to a manufacturing license shall submit with its application a separate document entitled, ''Applicant's Supplemental Environmental Report—Amendment to Manufacturing License.'' The environmental report must address whether the design change which is the subject of the proposed amendment either renders a severe accident mitigation design alternative previously rejected in an environmental assessment to become cost beneficial, or results in the identification of new severe accident mitigation design alternatives that may be reasonably incorporated into the design of the manufactured reactor. The environmental report need not address the environmental impacts associated with manufacturing the reactor under the manufacturing license.

[72 FR 49513, Aug. 28, 2007]

§ 51.55 Environmental report—standard design certification.

(a) Each applicant for a standard design certification under subpart B of part 52 of this chapter shall submit with its application a separate document entitled, ''Applicant's Environmental Report—Standard Design Certification.'' The environmental report must address the costs and benefits of severe accident mitigation design alternatives, and the bases for not incorporating severe accident mitigation design alternatives in the design to be certified.

(b) Each applicant for an amendment to a design certification shall submit with its application a separate document entitled, ''Applicant's Supplemental Environmental Report—

§ 51.71 Draft environmental impact statement—contents.

(a) *Scope.* The draft environmental impact statement will be prepared in accordance with the scope decided upon in the scoping process required by §§ 51.26 and 51.29. As appropriate and to the extent required by the scope, the draft statement will address the topics in paragraphs (b), (c), (d) and (e) of this section and the matters specified in §§ 51.45, 51.50, 51.51, 51.52, 51.53, 51.54, 51.61 and 51.62.

(b) *Analysis of major points of view.* To the extent sufficient information is available, the draft environmental impact statement will include consideration of major points of view concerning the environmental impacts of the proposed action and the alternatives, and contain an analysis of significant problems and objections raised by other Federal, State, and local agencies, by any affected Indian Tribes, and by other interested persons.

(c) *Status of compliance.* The draft environmental impact statement will list all Federal permits, licenses, approvals, and other entitlements which must be obtained in implementing the proposed action and will describe the status of compliance with those requirements. If it is uncertain whether a Federal permit, license, approval, or other entitlement is necessary, the draft environmental impact statement will so indicate.

(d) *Analysis.* Unless excepted in this paragraph or § 51.75, the draft environmental impact statement will include a preliminary analysis that considers and weighs the environmental effects, including any cumulative effects, of the proposed action; the environmental impacts of alternatives to the proposed action; and alternatives available for reducing or avoiding adverse environmental effects. Additionally, the draft environmental impact statement will include a consideration of the economic, technical, and other benefits and costs of the proposed action and alternatives. The draft environmental impact statement will indicate what other interests and considerations of Federal policy, including factors not related to environmental quality, if applicable, are relevant to the consideration of environmental effects of the proposed action identified under paragraph (a) of this section. The draft supplemental environmental impact statement prepared at the license renewal stage under § 51.95(c) need not discuss the economic or technical benefits and costs of either the proposed action or alternatives except if benefits and costs are either essential for a determination regarding the inclusion of an alternative in the range of alternatives considered or relevant to mitigation. In addition, the supplemental environmental impact statement prepared at the license renewal stage need not discuss other issues not related to the environmental effects of the proposed action and associated alternatives. The draft supplemental environmental impact statement for license renewal prepared under § 51.95(c) will rely on conclusions as amplified by the supporting information in the GEIS for issues designated as Category 1 in appendix B to subpart A of this part. The draft supplemental environmental impact statement must contain an analysis of those issues identified as Category 2 in appendix B to subpart A of this part that are open for the proposed action. The analysis for all draft environmental impact statements will, to the fullest extent practicable, quantify the various factors considered. To the extent that there are important qualitative considerations or factors that cannot be quantified, these considerations or factors will be discussed in qualitative terms. Consideration will be given to compliance with environmental quality standards and requirements that have been imposed by Federal, State, regional, and local agencies having responsibility for environmental protection, including applicable zoning and land-use regulations and water pollution limitations or requirements issued or imposed under the Federal Water Pollution Control Act. The environmental impact of the proposed action will be considered in the analysis with respect to matters covered by environmental quality standards and requirements irrespective of whether a certification or license from the appropriate

authority has been obtained.[3] While satisfaction of Commission standards and criteria pertaining to radiological effects will be necessary to meet the licensing requirements of the Atomic Energy Act, the analysis will, for the purposes of NEPA, consider the radiological effects of the proposed action and alternatives.

(e) *Effect of limited work authorization.* If a limited work authorization was issued either in connection with or subsequent to an early site permit, or in connection with a construction permit or combined license application, then the environmental impact statement for the construction permit or combined license application will not address or consider the sunk costs associated with the limited work authorization.

[3] Compliance with the environmental quality standards and requirements of the Federal Water Pollution Control Act (imposed by EPA or designated permitting states) is not a substitute for, and does not negate the requirement for NRC to weigh all environmental effects of the proposed action, including the degradation, if any, of water quality, and to consider alternatives to the proposed action that are available for reducing adverse effects. Where an environmental assessment of aquatic impact from plant discharges is available from the permitting authority, the NRC will consider the assessment in its determination of the magnitude of environmental impacts for striking an overall cost-benefit balance at the construction permit and operating license and early site permit and combined license stages, and in its determination of whether the adverse environmental impacts of license renewal are so great that preserving the option of license renewal for energy planning decision-makers would be unreasonable at the license renewal stage. When no such assessment of aquatic impacts is available from the permitting authority, NRC will establish on its own, or in conjunction with the permitting authority and other agencies having relevant expertise, the magnitude of potential impacts for striking an overall cost-benefit balance for the facility at the construction permit and operating license and early site permit and combined license stages, and in its determination of whether the adverse environmental impacts of license renewal are so great that preserving the option of license renewal for energy planning decision-makers would be unreasonable at the license renewal stage.

(f) *Preliminary recommendation.* The draft environmental impact statement normally will include a preliminary recommendation by the NRC staff respecting the proposed action. This preliminary recommendation will be based on the information and analysis described in paragraphs (a) through (d) of this section and §§51.75, 51.76, 51.80, 51.85, and 51.95, as appropriate, and will be reached after considering the environmental effects of the proposed action and reasonable alternatives,[4] and, except for supplemental environmental impact statements for the operating license renewal stage prepared pursuant to §51.95(c), after weighing the costs and benefits of the proposed action. In lieu of a recommendation, the NRC staff may indicate in the draft statement that two or more alternatives remain under consideration.

[49 FR 9381, Mar. 12, 1984, as amended at 61 FR 28488, June 5, 1996; 61 FR 66544, Dec. 18, 1996; 72 FR 49514, Aug. 28, 2007; 72 FR 57445, Oct. 9, 2007; 78 FR 37317, June 20, 2013]

§51.72 Supplement to draft environmental impact statement.

(a) The NRC staff will prepare a supplement to a draft environmental impact statement for which a notice of availability has been published in the FEDERAL REGISTER as provided in §51.117, if:

(1) There are substantial changes in the proposed action that are relevant to environmental concerns; or

(2) There are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts.

(b) The NRC staff may prepare a supplement to a draft environmental impact statement when, in its opinion, preparation of a supplement will further the purposes of NEPA.

[4] The consideration of reasonable alternatives to a proposed action involving nuclear power reactors (e.g., alternative energy sources) is intended to assist the NRC in meeting its NEPA obligations and does not preclude any State authority from making separate determinations with respect to these alternatives and in no way preempts, displaces, or affects the authority of States or other Federal agencies to address these issues.

(7) Include an analysis of the issues related to the impacts of construction and operation of the facility that were resolved in the early site permit proceeding for which new and significant information has been identified, including, but not limited to, new and significant information demonstrating that the design of the facility falls outside the site characteristics and design parameters specified in the early site permit.

(f)(1) A supplement to a final environmental impact statement will be accompanied by or will include a request for comments as provided in § 51.73 and a notice of availability will be published in the FEDERAL REGISTER as provided in § 51.117 if paragraphs (a) or (b) of this section applies.

(2) If comments are not requested, a notice of availability of a supplement to a final environmental impact statement will be published in the FEDERAL REGISTER as provided in § 51.118.

[72 FR 49515, Aug. 28, 2007]

§ 51.93 Distribution of final environmental impact statement and supplement to final environmental impact statement; news releases.

(a) A copy of the final environmental impact statement will be distributed to:

(1) The Environmental Protection Agency.

(2) The applicant or petitioner for rulemaking and any other party to the proceeding.

(3) Appropriate State, regional and metropolitan clearinghouses.

(4) Each commenter.

(b) Additional copies will be made available in accordance with § 51.123.

(c) If the final environmental impact statement is unusually long or there are so many comments on a draft environmental impact statement or any supplement to a draft environmental impact statement that distribution of the entire final statement to all commenters is impracticable, a summary of the final statement and the substantive comments will be distributed. When the final environmental impact statement has been prepared by adding errata sheets to the draft environmental impact statement as provided in § 51.91(a)(3), only the comments, the responses to the comments and the changes to the environmental impact statement will be distributed.

(d) A supplement to a final environmental impact statement will be distributed in the same manner as the final environmental impact statement to which it relates.

(e) News releases stating the availability and place for obtaining or inspecting a final environmental impact statement or supplement will be provided to local newspapers and other appropriate media.

(f) A notice of availability will be published in the FEDERAL REGISTER in accordance with § 51.118.

§ 51.94 Requirement to consider final environmental impact statement.

The final environmental impact statement, together with any comments and any supplement, will accompany the application or petition for rulemaking through, and be considered in, the Commission's decisionmaking process. The final environmental impact statement, together with any comments and any supplement, will be made a part of the record of the appropriate adjudicatory or rulemaking proceeding.

FINAL ENVIRONMENTAL IMPACT STATEMENTS—PRODUCTION AND UTILIZATION FACILITIES

§ 51.95 Postconstruction environmental impact statements.

(a) *General.* Any supplement to a final environmental impact statement or any environmental assessment prepared under the provisions of this section may incorporate by reference any information contained in a final environmental document previously prepared by the NRC staff that relates to the same production or utilization facility. Documents that may be referenced include, but are not limited to, the final environmental impact statement; supplements to the final environmental impact statement, including supplements prepared at the operating license stage; NRC staff-prepared final generic environmental impact statements; environmental assessments and records of decisions prepared in connection with the construction permit,

the operating license, the early site permit, or the combined license and any license amendment for that facility. A supplement to a final environmental impact statement will include a request for comments as provided in § 51.73.

(b) *Initial operating license stage.* In connection with the issuance of an operating license for a production or utilization facility, the NRC staff will prepare a supplement to the final environmental impact statement on the construction permit for that facility, which will update the prior environmental review. The supplement will only cover matters that differ from the final environmental impact statement or that reflect significant new information concerning matters discussed in the final environmental impact statement. Unless otherwise determined by the Commission, a supplement on the operation of a nuclear power plant will not include a discussion of need for power, or of alternative energy sources, or of alternative sites, and will only be prepared in connection with the first licensing action authorizing full-power operation. As stated in § 51.23, the generic impact determinations regarding the continued storage of spent fuel in NUREG–2157 shall be deemed incorporated into the environmental impact statement.

(c) *Operating license renewal stage.* In connection with the renewal of an operating license or combined license for a nuclear power plant under 10 CFR parts 52 or 54 of this chapter, the Commission shall prepare an environmental impact statement, which is a supplement to the Commission's NUREG–1437, ''Generic Environmental Impact Statement for License Renewal of Nuclear Plants'' (June 2013), which is available in the NRC's Public Document Room, 11555 Rockville Pike, Rockville, Maryland 20852.

(1) The supplemental environmental impact statement for the operating license renewal stage shall address those issues as required by § 51.71. In addition, the NRC staff must comply with 40 CFR 1506.6(b)(3) in conducting the additional scoping process as required by § 51.71(a).

(2) The supplemental environmental impact statement for license renewal is not required to include discussion of need for power or the economic costs and economic benefits of the proposed action or of alternatives to the proposed action except insofar as such benefits and costs are either essential for a determination regarding the inclusion of an alternative in the range of alternatives considered or relevant to mitigation. In addition, the supplemental environmental impact statement prepared at the license renewal stage need not discuss other issues not related to the environmental effects of the proposed action and the alternatives. The analysis of alternatives in the supplemental environmental impact statement should be limited to the environmental impacts of such alternatives and should otherwise be prepared in accordance with § 51.71 and appendix A to subpart A of this part. As stated in § 51.23, the generic impact determinations regarding the continued storage of spent fuel in NUREG–2157 shall be deemed incorporated into the supplemental environmental impact statement.

(3) The supplemental environmental impact statement shall be issued as a final impact statement in accordance with §§ 51.91 and 51.93 after considering any significant new information relevant to the proposed action contained in the supplement or incorporated by reference.

(4) The supplemental environmental impact statement must contain the NRC staff's recommendation regarding the environmental acceptability of the license renewal action. In order to make recommendations and reach a final decision on the proposed action, the NRC staff, adjudicatory officers, and Commission shall integrate the conclusions in the generic environmental impact statement for issues designated as Category 1 with information developed for those Category 2 issues applicable to the plant under § 51.53(c)(3)(ii) and any new and significant information. Given this information, the NRC staff, adjudicatory officers, and Commission shall determine whether or not the adverse environmental impacts of license renewal are so great that preserving the option of license renewal for energy planning decisionmakers would be unreasonable.

(d) *Postoperating license stage.* In connection with the amendment of an operating or combined license authorizing decommissioning activities at a production or utilization facility covered by §51.20, either for unrestricted use or based on continuing use restrictions applicable to the site, or with the issuance, amendment or renewal of a license to store spent fuel at a nuclear power reactor after expiration of the operating or combined license for the nuclear power reactor, the NRC staff will prepare a supplemental environmental impact statement for the post operating or post combined license stage or an environmental assessment, as appropriate, which will update the prior environmental documentation prepared by the NRC for compliance with NEPA under the provisions of this part. The supplement or assessment may incorporate by reference any information contained in the final environmental impact statement—for the operating or combined license stage, as appropriate, or in the records of decision prepared in connection with the early site permit, construction permit, operating license, or combined license for that facility. The supplement will include a request for comments as provided in §51.73. As stated in §51.23, the generic impact determinations regarding the continued storage of spent fuel in NUREG–2157 shall be deemed incorporated into the supplemental environmental impact statement or shall be considered in the environmental assessment, if the impacts of continued storage of spent fuel are applicable to the proposed action.

[61 FR 66545, Dec. 18, 1996, as amended at 72 FR 49516, Aug. 28, 2007; 78 FR 37317, June 20, 2013; 79 FR 56262, Sept. 19, 2014]

FINAL ENVIRONMENTAL IMPACT STATEMENTS—MATERIALS LICENSES

§51.97 Final environmental impact statement—materials license.

(a) *Independent spent fuel storage installation (ISFSI).* As stated in §51.23, the generic impact determinations regarding the continued storage of spent fuel in NUREG–2157 shall be deemed incorporated into the environmental impact statement.

(b) *Monitored retrievable storage facility (MRS).* As provided in sections 141 (c), (d), and (e) and 148 (a) and (c) of the Nuclear Waste Policy Act of 1982, as amended (NWPA) (96 Stat. 2242, 2243, 42 U.S.C. 10161 (c), (d), (e); 101 Stat. 1330–235, 1330–236, 42 U.S.C. 10168 (a), (c)) a final environmental impact statement for the construction of a monitored retrievable storage installation (MRS) will not address the need for the MRS or any alternative to the design criteria for an MRS set forth in section 141(b)(1) of the NWPA (96 Stat. 2242, 42 U.S.C. 10161(b)(1)) but may consider alternative facility designs which are consistent with these design criteria.

(c) *Uranium enrichment facility.* As provided in section 5(e) of the Solar, Wind, Waste, and Geothermal Power Production Incentives Act of 1990 (104 Stat. 2834 at 2835, 42 U.S.C. 2243), a final environmental impact statement must be prepared before the hearing on the issuance of a license for a uranium enrichment facility is completed.

[49 FR 34695, Aug. 31, 1984, as amended at 53 FR 31682, Aug. 19, 1988; 57 FR 18392, Apr. 30, 1992; 79 FR 56262, Sept. 19, 2014]

FINAL ENVIRONMENTAL IMPACT STATEMENTS—RULEMAKING

§51.99 [Reserved]

NEPA PROCEDURE AND ADMINISTRATIVE ACTION

GENERAL

§51.100 Timing of Commission action.

(a)(1) Except as provided in §51.13 and paragraph (b) of this section, no decision on a proposed action, including the issuance of a permit, license, or other form of permission, or amendment to or renewal of a permit, license, or other form of permission, or the issuance of an effective regulation, for which an environmental impact statement is required, will be made and no record of decision will be issued until the later of the following dates:

(i) Ninety (90) days after publication by the Environmental Protection Agency of a FEDERAL REGISTER notice stating that the draft environmental impact statement has been filed with EPA.

Act and the Commission's regulations. These matters are:

(1) managing the effects of aging during the period of extended operation on the functionality of structures and components that have been identified to require review under § 54.21(a)(1); and

(2) time-limited aging analyses that have been identified to require review under § 54.21(c).

(b) Any applicable requirements of subpart A of 10 CFR part 51 have been satisfied.

(c) Any matters raised under § 2.335 have been addressed.

[60 FR 22491, May 8, 1995, as amended at 69 FR 2279, Jan. 14, 2004]

§ 54.30 Matters not subject to a renewal review.

(a) If the reviews required by § 54.21 (a) or (c) show that there is not reasonable assurance during the current license term that licensed activities will be conducted in accordance with the CLB, then the licensee shall take measures under its current license, as appropriate, to ensure that the intended function of those systems, structures or components will be maintained in accordance with the CLB throughout the term of its current license.

(b) The licensee's compliance with the obligation under Paragraph (a) of this section to take measures under its current license is not within the scope of the license renewal review.

§ 54.31 Issuance of a renewed license.

(a) A renewed license will be of the class for which the operating license or combined license currently in effect was issued.

(b) A renewed license will be issued for a fixed period of time, which is the sum of the additional amount of time beyond the expiration of the operating license or combined license (not to exceed 20 years) that is requested in a renewal application plus the remaining number of years on the operating license or combined license currently in effect. The term of any renewed license may not exceed 40 years.

(c) A renewed license will become effective immediately upon its issuance, thereby superseding the operating license or combined license previously in effect. If a renewed license is subsequently set aside upon further administrative or judicial appeal, the operating license or combined license previously in effect will be reinstated unless its term has expired and the renewal application was not filed in a timely manner.

(d) A renewed license may be subsequently renewed in accordance with all applicable requirements.

[60 FR 22491, May 8, 1995, as amended at 72 FR 49560, Aug. 28, 2007]

§ 54.33 Continuation of CLB and conditions of renewed license.

(a) Whether stated therein or not, each renewed license will contain and otherwise be subject to the conditions set forth in 10 CFR 50.54.

(b) Each renewed license will be issued in such form and contain such conditions and limitations, including technical specifications, as the Commission deems appropriate and necessary to help ensure that systems, structures, and components subject to review in accordance with § 54.21 will continue to perform their intended functions for the period of extended operation. In addition, the renewed license will be issued in such form and contain such conditions and limitations as the Commission deems appropriate and necessary to help ensure that systems, structures, and components associated with any time-limited aging analyses will continue to perform their intended functions for the period of extended operation.

(c) Each renewed license will include those conditions to protect the environment that were imposed pursuant to 10 CFR 50.36b and that are part of the CLB for the facility at the time of issuance of the renewed license. These conditions may be supplemented or amended as necessary to protect the environment during the term of the renewed license and will be derived from information contained in the supplement to the environmental report submitted pursuant to 10 CFR part 51, as analyzed and evaluated in the NRC record of decision. The conditions will identify the obligations of the licensee in the environmental area, including, as appropriate, requirements for reporting and recordkeeping of environmental data and any conditions and

(§1508.28). Whenever a broad environmental impact statement has been prepared (such as a program or policy statement) and a subsequent statement or environmental assessment is then prepared on an action included within the entire program or policy (such as a site specific action) the subsequent statement or environmental assessment need only summarize the issues discussed in the broader statement and incorporate discussions from the broader statement by reference and shall concentrate on the issues specific to the subsequent action. The subsequent document shall state where the earlier document is available. Tiering may also be appropriate for different stages of actions. (Sec. 1508.28).''

40 CFR 1508.28 states:

'' 'Tiering' refers to the coverage of general matters in broader environmental impact statements (such as national program or policy statements) with subsequent narrower statements or environmental analyses (such as regional or basinwide program statements or ultimately site-specific statements) incorporating by reference the general discussions and concentrating solely on the issues specific to the statement subsequently prepared. Tiering is appropriate when the sequence of statements or analyses is:

''(a) From a program, plan, or policy environmental impact statement to a program, plan, or policy statement or analysis of lesser scope or to a site-specific statement or analysis.

''(b) From an environmental impact statement on a specific action at an early stage (such as need and site selection) to a supplement (which is preferred) or a subsequent statement or analysis at a later stage (such as environmental mitigation). Tiering in such cases is appropriate when it helps the lead agency to focus on the issues which are ripe for decision and exclude from consideration issues already decided or not yet ripe.''

Incorporation by reference. 40 CFR 1502.21 states:

''Agencies shall incorporate material into an environmental impact statement by reference when the effect will be to cut down on bulk without impeding agency and public review of the action. The incorporated material shall be cited in the statement and its content briefly described. No material may be incorporated by reference unless it is reasonably available for inspection by potentially interested persons within the time allowed for comment. Material based on proprietary data which is itself not available for review and comment shall not be incorporated by reference.''

2. *Adoption.*

40 CFR 1506.3 states:

''(a) An agency may adopt a Federal draft or final environmental impact statement or portion thereof provided that the statement or portion thereof meets the standards for an adequate statement under these regulations.

''(b) If the actions covered by the original environmental impact statement and the proposed action are substantially the same, the agency adopting another agency's statement is not required to recirculate it except as a final statement. Otherwise the adopting agency shall treat the statement as a draft and recirculate it (except as provided in paragraph (c) of this section).

''(c) A cooperating agency may adopt without recirculating the environmental impact statement of a lead agency when, after an independent review of the statement, the cooperating agency concludes that its comments and suggestions have been satisfied.

''(d) When an agency adopts a statement which is not final within the agency that prepared it, or when the action it assesses is the subject of a referral under part 1504, or when the statement's adequacy is the subject of a judicial action which is not final, the agency shall so specify.''

[49 FR 9381, Mar. 12, 1984, as amended at 61 FR 28490, June 5, 1996; 61 FR 66546, Dec. 18, 1996]

APPENDIX B TO SUBPART A OF PART 51—ENVIRONMENTAL EFFECT OF RENEWING THE OPERATING LICENSE OF A NUCLEAR POWER PLANT

The Commission has assessed the environmental impacts associated with granting a renewed operating license for a nuclear power plant to a licensee who holds either an operating license or construction permit as of June 30, 1995. Table B–1 summarizes the Commission's findings on the scope and magnitude of environmental impacts of renewing the operating license for a nuclear power plant as required by section 102(2) of the National Environmental Policy Act of 1969, as amended. Table B–1, subject to an evaluation of those issues identified in Category 2 as requiring further analysis and possible significant new information, represents the analysis of the environmental impacts associated with renewal of any operating license and is to be used in accordance with §51.95(c). On a 10-year cycle, the Commission intends to review the material in this appendix and update it if necessary. A scoping notice must be published in the FEDERAL REGISTER indicating the results of the NRC's review and inviting public comments and proposals for other areas that should be updated.

TABLE B–1—SUMMARY OF FINDINGS ON NEPA ISSUES FOR LICENSE RENEWAL OF NUCLEAR POWER PLANTS [1]

Issue	Category [2]	Finding [3]
Land Use		
Onsite land use	1	SMALL. Changes in onsite land use from continued operations and refurbishment associated with license renewal would be a small fraction of the nuclear power plant site and would involve only land that is controlled by the licensee.
Offsite land use	1	SMALL. Offsite land use would not be affected by continued operations and refurbishment associated with license renewal.
Offsite land use in transmission line right-of-ways (ROWs) [4].	1	SMALL. Use of transmission line ROWs from continued operations and refurbishment associated with license renewal would continue with no change in land use restrictions.
Visual Resources		
Aesthetic impacts	1	SMALL. No important changes to the visual appearance of plant structures or transmission lines are expected from continued operations and refurbishment associated with license renewal.
Air Quality		
Air quality impacts (all plants)	1	SMALL. Air quality impacts from continued operations and refurbishment associated with license renewal are expected to be small at all plants. Emissions resulting from refurbishment activities at locations in or near air quality nonattainment or maintenance areas would be short-lived and would cease after these refurbishment activities are completed. Operating experience has shown that the scale of refurbishment activities has not resulted in exceedance of the *de minimis* thresholds for criteria pollutants, and best management practices including fugitive dust controls and the imposition of permit conditions in State and local air emissions permits would ensure conformance with applicable State or Tribal Implementation Plans. Emissions from emergency diesel generators and fire pumps and routine operations of boilers used for space heating would not be a concern, even for plants located in or adjacent to nonattainment areas. Impacts from cooling tower particulate emissions even under the worst-case situations have been small.
Air quality effects of transmission lines [4].	1	SMALL. Production of ozone and oxides of nitrogen is insignificant and does not contribute measurably to ambient levels of these gases.
Noise		
Noise impacts	1	SMALL. Noise levels would remain below regulatory guidelines for offsite receptors during continued operations and refurbishment associated with license renewal.
Geologic Environment		
Geology and soils	1	SMALL. The effect of geologic and soil conditions on plant operations and the impact of continued operations and refurbishment activities on geology and soils would be small for all nuclear power plants and would not change appreciably during the license renewal term.
Surface Water Resources		
Surface water use and quality (non-cooling system impacts).	1	SMALL. Impacts are expected to be small if best management practices are employed to control soil erosion and spills. Surface water use associated with continued operations and refurbishment associated with license renewal would not increase significantly or would be reduced if refurbishment occurs during a plant outage.
Altered current patterns at intake and discharge structures.	1	SMALL. Altered current patterns would be limited to the area in the vicinity of the intake and discharge structures. These impacts have been small at operating nuclear power plants.
Altered salinity gradients	1	SMALL. Effects on salinity gradients would be limited to the area in the vicinity of the intake and discharge structures. These impacts have been small at operating nuclear power plants.
Altered thermal stratification of lakes	1	SMALL. Effects on thermal stratification would be limited to the area in the vicinity of the intake and discharge structures. These impacts have been small at operating nuclear power plants.
Scouring caused by discharged cooling water.	1	SMALL. Scouring effects would be limited to the area in the vicinity of the intake and discharge structures. These impacts have been small at operating nuclear power plants.

TABLE B–1—SUMMARY OF FINDINGS ON NEPA ISSUES FOR LICENSE RENEWAL OF NUCLEAR POWER PLANTS [1]—Continued

Issue	Category [2]	Finding [3]
Discharge of metals in cooling system effluent.	1	SMALL. Discharges of metals have not been found to be a problem at operating nuclear power plants with cooling-tower-based heat dissipation systems and have been satisfactorily mitigated at other plants. Discharges are monitored and controlled as part of the National Pollutant Discharge Elimination System (NPDES) permit process.
Discharge of biocides, sanitary wastes, and minor chemical spills.	1	SMALL. The effects of these discharges are regulated by Federal and State environmental agencies. Discharges are monitored and controlled as part of the NPDES permit process. These impacts have been small at operating nuclear power plants.
Surface water use conflicts (plants with once-through cooling systems).	1	SMALL. These conflicts have not been found to be a problem at operating nuclear power plants with once-through heat dissipation systems.
Surface water use conflicts (plants with cooling ponds or cooling towers using makeup water from a river).	2	SMALL or MODERATE. Impacts could be of small or moderate significance, depending on makeup water requirements, water availability, and competing water demands.
Effects of dredging on surface water quality.	1	SMALL. Dredging to remove accumulated sediments in the vicinity of intake and discharge structures and to maintain barge shipping has not been found to be a problem for surface water quality. Dredging is performed under permit from the U.S. Army Corps of Engineers, and possibly, from other State or local agencies.
Temperature effects on sediment transport capacity.	1	SMALL. These effects have not been found to be a problem at operating nuclear power plants and are not expected to be a problem.
Groundwater Resources		
Groundwater contamination and use (non-cooling system impacts).	1	SMALL. Extensive dewatering is not anticipated from continued operations and refurbishment associated with license renewal. Industrial practices involving the use of solvents, hydrocarbons, heavy metals, or other chemicals, and/or the use of wastewater ponds or lagoons have the potential to contaminate site groundwater, soil, and subsoil. Contamination is subject to State or Environmental Protection Agency regulated cleanup and monitoring programs. The application of best management practices for handling any materials produced or used during these activities would reduce impacts.
Groundwater use conflicts (plants that withdraw less than 100 gallons per minute [gpm]).	1	SMALL. Plants that withdraw less than 100 gpm are not expected to cause any groundwater use conflicts.
Groundwater use conflicts (plants that withdraw more than 100 gallons per minute [gpm]).	2	SMALL, MODERATE, or LARGE. Plants that withdraw more than 100 gpm could cause groundwater use conflicts with nearby groundwater users.
Groundwater use conflicts (plants with closed-cycle cooling systems that withdraw makeup water from a river).	2	SMALL, MODERATE, or LARGE. Water use conflicts could result from water withdrawals from rivers during low-flow conditions, which may affect aquifer recharge. The significance of impacts would depend on makeup water requirements, water availability, and competing water demands.
Groundwater quality degradation resulting from water withdrawals.	1	SMALL. Groundwater withdrawals at operating nuclear power plants would not contribute significantly to groundwater quality degradation.
Groundwater quality degradation (plants with cooling ponds in salt marshes).	1	SMALL. Sites with closed-cycle cooling ponds could degrade groundwater quality. However, groundwater in salt marshes is naturally brackish and thus, not potable. Consequently, the human use of such groundwater is limited to industrial purposes.
Groundwater quality degradation (plants with cooling ponds at inland sites).	2	SMALL, MODERATE, or LARGE. Inland sites with closed-cycle cooling ponds could degrade groundwater quality. The significance of the impact would depend on cooling pond water quality, site hydrogeologic conditions (including the interaction of surface water and groundwater), and the location, depth, and pump rate of water wells.
Radionuclides released to groundwater.	2	SMALL or MODERATE. Leaks of radioactive liquids from plant components and pipes have occurred at numerous plants. Groundwater protection programs have been established at all operating nuclear power plants to minimize the potential impact from any inadvertent releases. The magnitude of impacts would depend on site-specific characteristics.
Terrestrial Resources		
Effects on terrestrial resources (non-cooling system impacts).	2	SMALL, MODERATE, or LARGE. Impacts resulting from continued operations and refurbishment associated with license renewal may affect terrestrial communities. Application of best management practices would reduce the potential for impacts. The magnitude of impacts would depend on the nature of the activity, the status of the resources that could be affected, and the effectiveness of mitigation.

TABLE B–1—SUMMARY OF FINDINGS ON NEPA ISSUES FOR LICENSE RENEWAL OF NUCLEAR POWER PLANTS [1]—Continued

Issue	Category [2]	Finding [3]
Exposure of terrestrial organisms to radionuclides.	1	SMALL. Doses to terrestrial organisms from continued operations and refurbishment associated with license renewal are expected to be well below exposure guidelines developed to protect these organisms.
Cooling system impacts on terrestrial resources (plants with once-through cooling systems or cooling ponds).	1	SMALL. No adverse effects to terrestrial plants or animals have been reported as a result of increased water temperatures, fogging, humidity, or reduced habitat quality. Due to the low concentrations of contaminants in cooling system effluents, uptake and accumulation of contaminants in the tissues of wildlife exposed to the contaminated water or aquatic food sources are not expected to be significant issues.
Cooling tower impacts on vegetation (plants with cooling towers).	1	SMALL. Impacts from salt drift, icing, fogging, or increased humidity associated with cooling tower operation have the potential to affect adjacent vegetation, but these impacts have been small at operating nuclear power plants and are not expected to change over the license renewal term.
Bird collisions with plant structures and transmission lines [4].	1	SMALL. Bird collisions with cooling towers and other plant structures and transmission lines occur at rates that are unlikely to affect local or migratory populations and the rates are not expected to change.
Water use conflicts with terrestrial resources (plants with cooling ponds or cooling towers using makeup water from a river).	2	SMALL or MODERATE. Impacts on terrestrial resources in riparian communities affected by water use conflicts could be of moderate significance.
Transmission line right-of-way (ROW) management impacts on terrestrial resources [4].	1	SMALL. Continued ROW management during the license renewal term is expected to keep terrestrial communities in their current condition. Application of best management practices would reduce the potential for impacts.
Electromagnetic fields on flora and fauna (plants, agricultural crops, honeybees, wildlife, livestock) [4].	1	SMALL. No significant impacts of electromagnetic fields on terrestrial flora and fauna have been identified. Such effects are not expected to be a problem during the license renewal term.
Aquatic Resources		
Impingement and entrainment of aquatic organisms (plants with once-through cooling systems or cooling ponds).	2	SMALL, MODERATE, or LARGE. The impacts of impingement and entrainment are small at many plants but may be moderate or even large at a few plants with once-through and cooling-pond cooling systems, depending on cooling system withdrawal rates and volumes and the aquatic resources at the site.
Impingement and entrainment of aquatic organisms (plants with cooling towers).	1	SMALL. Impingement and entrainment rates are lower at plants that use closed-cycle cooling with cooling towers because the rates and volumes of water withdrawal needed for makeup are minimized.
Entrainment of phytoplankton and zooplankton (all plants).	1	SMALL. Entrainment of phytoplankton and zooplankton has not been found to be a problem at operating nuclear power plants and is not expected to be a problem during the license renewal term.
Thermal impacts on aquatic organisms (plants with once-through cooling systems or cooling ponds).	2	SMALL, MODERATE, or LARGE. Most of the effects associated with thermal discharges are localized and are not expected to affect overall stability of populations or resources. The magnitude of impacts, however, would depend on site-specific thermal plume characteristics and the nature of aquatic resources in the area.
Thermal impacts on aquatic organisms (plants with cooling towers).	1	SMALL. Thermal effects associated with plants that use cooling towers are expected to be small because of the reduced amount of heated discharge.
Infrequently reported thermal impacts (all plants).	1	SMALL. Continued operations during the license renewal term are expected to have small thermal impacts with respect to the following: Cold shock has been satisfactorily mitigated at operating nuclear plants with once-through cooling systems, has not endangered fish populations or been found to be a problem at operating nuclear power plants with cooling towers or cooling ponds, and is not expected to be a problem. Thermal plumes have not been found to be a problem at operating nuclear power plants and are not expected to be a problem. Thermal discharge may have localized effects but is not expected to affect the larger geographical distribution of aquatic organisms. Premature emergence has been found to be a localized effect at some operating nuclear power plants but has not been a problem and is not expected to be a problem. Stimulation of nuisance organisms has been satisfactorily mitigated at the single nuclear power plant with a once-through cooling system where previously it was a problem. It has not been found to be a problem at operating nuclear power plants with cooling towers or cooling ponds and is not expected to be a problem.

TABLE B–1—SUMMARY OF FINDINGS ON NEPA ISSUES FOR LICENSE RENEWAL OF NUCLEAR POWER PLANTS [1]—Continued

Issue	Category [2]	Finding [3]
Effects of cooling water discharge on dissolved oxygen, gas supersaturation, and eutrophication.	1	SMALL. Gas supersaturation was a concern at a small number of operating nuclear power plants with once-through cooling systems but has been mitigated. Low dissolved oxygen was a concern at one nuclear power plant with a once-through cooling system but has been mitigated. Eutrophication (nutrient loading) and resulting effects on chemical and biological oxygen demands have not been found to be a problem at operating nuclear power plants.
Effects of non-radiological contaminants on aquatic organisms.	1	SMALL. Best management practices and discharge limitations of NPDES permits are expected to minimize the potential for impacts to aquatic resources during continued operations and refurbishment associated with license renewal. Accumulation of metal contaminants has been a concern at a few nuclear power plants but has been satisfactorily mitigated by replacing copper alloy condenser tubes with those of another metal.
Exposure of aquatic organisms to radionuclides.	1	SMALL. Doses to aquatic organisms are expected to be well below exposure guidelines developed to protect these aquatic organisms.
Effects of dredging on aquatic organisms.	1	SMALL. Dredging at nuclear power plants is expected to occur infrequently, would be of relatively short duration, and would affect relatively small areas. Dredging is performed under permit from the U.S. Army Corps of Engineers, and possibly, from other State or local agencies.
Water use conflicts with aquatic resources (plants with cooling ponds or cooling towers using makeup water from a river).	2	SMALL or MODERATE. Impacts on aquatic resources in stream communities affected by water use conflicts could be of moderate significance in some situations.
Effects on aquatic resources (non-cooling system impacts).	1	SMALL. Licensee application of appropriate mitigation measures is expected to result in no more than small changes to aquatic communities from their current condition.
Impacts of transmission line right-of-way (ROW) management on aquatic resources [4].	1	SMALL. Licensee application of best management practices to ROW maintenance is expected to result in no more than small impacts to aquatic resources.
Losses from predation, parasitism, and disease among organisms exposed to sublethal stresses.	1	SMALL. These types of losses have not been found to be a problem at operating nuclear power plants and are not expected to be a problem during the license renewal term.
Special Status Species and Habitats		
Threatened, endangered, and protected species and essential fish habitat.	2	The magnitude of impacts on threatened, endangered, and protected species, critical habitat, and essential fish habitat would depend on the occurrence of listed species and habitats and the effects of power plant systems on them. Consultation with appropriate agencies would be needed to determine whether special status species or habitats are present and whether they would be adversely affected by continued operations and refurbishment associated with license renewal.
Historic and Cultural Resources		
Historic and cultural resources [4]	2	Continued operations and refurbishment associated with license renewal are expected to have no more than small impacts on historic and cultural resources located onsite and in the transmission line ROW because most impacts could be mitigated by avoiding those resources. The National Historic Preservation Act (NHPA) requires the Federal agency to consult with the State Historic Preservation Officer (SHPO) and appropriate Native American Tribes to determine the potential effects on historic properties and mitigation, if necessary.
Socioeconomics		
Employment and income, recreation and tourism.	1	SMALL. Although most nuclear plants have large numbers of employees with higher than average wages and salaries, employment, income, recreation, and tourism impacts from continued operations and refurbishment associated with license renewal are expected to be small.
Tax revenues	1	SMALL. Nuclear plants provide tax revenue to local jurisdictions in the form of property tax payments, payments in lieu of tax (PILOT), or tax payments on energy production. The amount of tax revenue paid during the license renewal term as a result of continued operations and refurbishment associated with license renewal is not expected to change.

TABLE B–1—SUMMARY OF FINDINGS ON NEPA ISSUES FOR LICENSE RENEWAL OF NUCLEAR POWER PLANTS [1]—Continued

Issue	Category [2]	Finding [3]
Community services and education ..	1	SMALL. Changes resulting from continued operations and refurbishment associated with license renewal to local community and educational services would be small. With little or no change in employment at the licensee's plant, value of the power plant, payments on energy production, and PILOT payments expected during the license renewal term, community and educational services would not be affected by continued power plant operations.
Population and housing	1	SMALL. Changes resulting from continued operations and refurbishment associated with license renewal to regional population and housing availability and value would be small. With little or no change in employment at the licensee's plant expected during the license renewal term, population and housing availability and values would not be affected by continued power plant operations.
Transportation	1	SMALL. Changes resulting from continued operations and refurbishment associated with license renewal to traffic volumes would be small.
Human Health		
Radiation exposures to the public	1	SMALL. Radiation doses to the public from continued operations and refurbishment associated with license renewal are expected to continue at current levels, and would be well below regulatory limits.
Radiation exposures to plant workers	1	SMALL. Occupational doses from continued operations and refurbishment associated with license renewal are expected to be within the range of doses experienced during the current license term, and would continue to be well below regulatory limits.
Human health impact from chemicals	1	SMALL. Chemical hazards to plant workers resulting from continued operations and refurbishment associated with license renewal are expected to be minimized by the licensee implementing good industrial hygiene practices as required by permits and Federal and State regulations. Chemical releases to the environment and the potential for impacts to the public are expected to be minimized by adherence to discharge limitations of NPDES and other permits.
Microbiological hazards to the public (plants with cooling ponds or canals or cooling towers that discharge to a river).	2	SMALL, MODERATE, or LARGE. These organisms are not expected to be a problem at most operating plants except possibly at plants using cooling ponds, lakes, or canals, or that discharge into rivers. Impacts would depend on site-specific characteristics.
Microbiological hazards to plant workers.	1	SMALL. Occupational health impacts are expected to be controlled by continued application of accepted industrial hygiene practices to minimize worker exposures as required by permits and Federal and State regulations.
Chronic effects of electromagnetic fields (EMFs) [4] [6].	N/A [5]	Uncertain impact. Studies of 60-Hz EMFs have not uncovered consistent evidence linking harmful effects with field exposures. EMFs are unlike other agents that have a toxic effect (e.g., toxic chemicals and ionizing radiation) in that dramatic acute effects cannot be forced and longer-term effects, if real, are subtle. Because the state of the science is currently inadequate, no generic conclusion on human health impacts is possible.
Physical occupational hazards	1	SMALL. Occupational safety and health hazards are generic to all types of electrical generating stations, including nuclear power plants, and are of small significance if the workers adhere to safety standards and use protective equipment as required by Federal and State regulations.
Electric shock hazards [4]	2	SMALL, MODERATE, or LARGE. Electrical shock potential is of small significance for transmission lines that are operated in adherence with the National Electrical Safety Code (NESC). Without a review of conformance with NESC criteria of each nuclear power plant's in-scope transmission lines, it is not possible to determine the significance of the electrical shock potential.
Postulated Accidents		
Design-basis accidents	1	SMALL. The NRC staff has concluded that the environmental impacts of design-basis accidents are of small significance for all plants.
Severe accidents	2	SMALL. The probability-weighted consequences of atmospheric releases, fallout onto open bodies of water, releases to groundwater, and societal and economic impacts from severe accidents are small for all plants. However, alternatives to mitigate severe accidents must be considered for all plants that have not considered such alternatives.

TABLE B–1—SUMMARY OF FINDINGS ON NEPA ISSUES FOR LICENSE RENEWAL OF NUCLEAR POWER PLANTS [1]—Continued

Issue	Category [2]	Finding [3]
Environmental Justice		
Minority and low-income populations	2	Impacts to minority and low-income populations and subsistence consumption resulting from continued operations and refurbishment associated with license renewal will be addressed in plant-specific reviews. See NRC Policy Statement on the Treatment of Environmental Justice Matters in NRC Regulatory and Licensing Actions (69 FR 52040; August 24, 2004).
Waste Management		
Low-level waste storage and disposal.	1	SMALL. The comprehensive regulatory controls that are in place and the low public doses being achieved at reactors ensure that the radiological impacts to the environment would remain small during the license renewal term.
Onsite storage of spent nuclear fuel	1	During the license renewal term, SMALL. The expected increase in the volume of spent nuclear fuel from an additional 20 years of operation can be safely accommodated onsite during the license renewal term with small environmental impacts through dry or pool storage at all plants. For the period after the licensed life for reactor operations, the impacts of onsite storage of spent nuclear fuel during the continued storage period are discussed in NUREG–2157 and as stated in §51.23(b), shall be deemed incorporated into this issue.
Offsite radiological impacts of spent nuclear fuel and high-level waste disposal.	1	For the high-level waste and spent-fuel disposal component of the fuel cycle, the EPA established a dose limit of 0.15 mSv (15 millirem) per year for the first 10,000 years and 1.0 mSv (100 millirem) per year between 10,000 years and 1 million years for offsite releases of radionuclides at the proposed repository at Yucca Mountain, Nevada. The Commission concludes that the impacts would not be sufficiently large to require the NEPA conclusion, for any plant, that the option of extended operation under 10 CFR part 54 should be eliminated. Accordingly, while the Commission has not assigned a single level of significance for the impacts of spent fuel and high level waste disposal, this issue is considered Category 1.
Mixed-waste storage and disposal	1	SMALL. The comprehensive regulatory controls and the facilities and procedures that are in place ensure proper handling and storage, as well as negligible doses and exposure to toxic materials for the public and the environment at all plants. License renewal would not increase the small, continuing risk to human health and the environment posed by mixed waste at all plants. The radiological and nonradiological environmental impacts of long-term disposal of mixed waste from any individual plant at licensed sites are small.
Nonradioactive waste storage and disposal.	1	SMALL. No changes to systems that generate nonradioactive waste are anticipated during the license renewal term. Facilities and procedures are in place to ensure continued proper handling, storage, and disposal, as well as negligible exposure to toxic materials for the public and the environment at all plants.
Cumulative Impacts		
Cumulative impacts	2	Cumulative impacts of continued operations and refurbishment associated with license renewal must be considered on a plant-specific basis. Impacts would depend on regional resource characteristics, the resource-specific impacts of license renewal, and the cumulative significance of other factors affecting the resource.
Uranium Fuel Cycle		
Offsite radiological impacts—individual impacts from other than the disposal of spent fuel and high-level waste.	1	SMALL. The impacts to the public from radiological exposures have been considered by the Commission in Table S–3 of this part. Based on information in the GEIS, impacts to individuals from radioactive gaseous and liquid releases, including radon-222 and technetium-99, would remain at or below the NRC's regulatory limits.
Offsite radiological impacts—collective impacts from other than the disposal of spent fuel and high-level waste.	1	There are no regulatory limits applicable to collective doses to the general public from fuel-cycle facilities. The practice of estimating health effects on the basis of collective doses may not be meaningful. All fuel-cycle facilities are designed and operated to meet the applicable regulatory limits and standards. The Commission concludes that the collective impacts are acceptable.

TABLE B–1—SUMMARY OF FINDINGS ON NEPA ISSUES FOR LICENSE RENEWAL OF NUCLEAR POWER PLANTS [1]—Continued

Issue	Category [2]	Finding [3]
		The Commission concludes that the impacts would not be sufficiently large to require the NEPA conclusion, for any plant, that the option of extended operation under 10 CFR part 54 should be eliminated. Accordingly, while the Commission has not assigned a single level of significance for the collective impacts of the uranium fuel cycle, this issue is considered Category 1.
Nonradiological impacts of the uranium fuel cycle.	1	SMALL. The nonradiological impacts of the uranium fuel cycle resulting from the renewal of an operating license for any plant would be small.
Transportation	1	SMALL. The impacts of transporting materials to and from uranium-fuel-cycle facilities on workers, the public, and the environment are expected to be small.
Termination of Nuclear Power Plant Operations and Decommissioning		
Termination of plant operations and decommissioning.	1	SMALL. License renewal is expected to have a negligible effect on the impacts of terminating operations and decommissioning on all resources.

[1] Data supporting this table are contained in NUREG–1437, Revision 1, ''Generic Environmental Impact Statement for License Renewal of Nuclear Plants'' (June 2013).

[2] The numerical entries in this column are based on the following category definitions:

Category 1: For the issue, the analysis reported in the Generic Environmental Impact Statement has shown:

(1) The environmental impacts associated with the issue have been determined to apply either to all plants or, for some issues, to plants having a specific type of cooling system or other specified plant or site characteristic;

(2) A single significance level (*i.e.*, small, moderate, or large) has been assigned to the impacts (except for Offsite radiological impacts—collective impacts from other than the disposal of spent fuel and high-level waste); and

(3) Mitigation of adverse impacts associated with the issue has been considered in the analysis, and it has been determined that additional plant-specific mitigation measures are not likely to be sufficiently beneficial to warrant implementation.

The generic analysis of the issue may be adopted in each plant-specific review.

Category 2: For the issue, the analysis reported in the Generic Environmental Impact Statement has shown that one or more of the criteria of Category 1 cannot be met, and therefore additional plant-specific review is required.

[3] The impact findings in this column are based on the definitions of three significance levels. Unless the significance level is identified as beneficial, the impact is adverse, or in the case of ''small,'' may be negligible. The definitions of significance follow:

SMALL—For the issue, environmental effects are not detectable or are so minor that they will neither destabilize nor noticeably alter any important attribute of the resource. For the purposes of assessing radiological impacts, the Commission has concluded that those impacts that do not exceed permissible levels in the Commission's regulations are considered small as the term is used in this table.

MODERATE—For the issue, environmental effects are sufficient to alter noticeably, but not to destabilize, important attributes of the resource.

LARGE—For the issue, environmental effects are clearly noticeable and are sufficient to destabilize important attributes of the resource.

For issues where probability is a key consideration (*i.e.*, accident consequences), probability was a factor in determining significance.

[4] This issue applies only to the in-scope portion of electric power transmission lines, which are defined as transmission lines that connect the nuclear power plant to the substation where electricity is fed into the regional power distribution system and transmission lines that supply power to the nuclear plant from the grid.

[5] NA (not applicable). The categorization and impact finding definitions do not apply to these issues.

[6] If, in the future, the Commission finds that, contrary to current indications, a consensus has been reached by appropriate Federal health agencies that there are adverse health effects from electromagnetic fields, the Commission will require applicants to submit plant-specific reviews of these health effects as part of their license renewal applications. Until such time, applicants for license renewal are not required to submit information on this issue.

[61 FR 66546, Dec. 18, 1996, as amended at 62 FR 59276, Nov. 3, 1997; 64 FR 48507, Sept. 3, 1999; 66 FR 39278, July 30, 2001; 78 FR 37317, June 20, 2013; 79 FR 56262, Sept. 19, 2014]

Subpart B [Reserved]

PART 52—LICENSES, CERTIFICATIONS, AND APPROVALS FOR NUCLEAR POWER PLANTS

GENERAL PROVISIONS

Sec.

Subpart A—Early Site Permits

among alternatives). The summary will normally not exceed 15 pages.

§ 1502.13 Purpose and need.

The statement shall briefly specify the underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed action.

§ 1502.14 Alternatives including the proposed action.

This section is the heart of the environmental impact statement. Based on the information and analysis presented in the sections on the Affected Environment (§ 1502.15) and the Environmental Consequences (§ 1502.16), it should present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decisionmaker and the public. In this section agencies shall:

(a) Rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated.

(b) Devote substantial treatment to each alternative considered in detail including the proposed action so that reviewers may evaluate their comparative merits.

(c) Include reasonable alternatives not within the jurisdiction of the lead agency.

(d) Include the alternative of no action.

(e) Identify the agency's preferred alternative or alternatives, if one or more exists, in the draft statement and identify such alternative in the final statement unless another law prohibits the expression of such a preference.

(f) Include appropriate mitigation measures not already included in the proposed action or alternatives.

§ 1502.15 Affected environment.

The environmental impact statement shall succinctly describe the environment of the area(s) to be affected or created by the alternatives under consideration. The descriptions shall be no longer than is necessary to understand the effects of the alternatives. Data and analyses in a statement shall be commensurate with the importance of the impact, with less important material summarized, consolidated, or simply referenced. Agencies shall avoid useless bulk in statements and shall concentrate effort and attention on important issues. Verbose descriptions of the affected environment are themselves no measure of the adequacy of an environmental impact statement.

§ 1502.16 Environmental consequences.

This section forms the scientific and analytic basis for the comparisons under § 1502.14. It shall consolidate the discussions of those elements required by sections 102(2)(C)(i), (ii), (iv), and (v) of NEPA which are within the scope of the statement and as much of section 102(2)(C)(iii) as is necessary to support the comparisons. The discussion will include the environmental impacts of the alternatives including the proposed action, any adverse environmental effects which cannot be avoided should the proposal be implemented, the relationship between short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and any irreversible or irretrievable commitments of resources which would be involved in the proposal should it be implemented. This section should not duplicate discussions in § 1502.14. It shall include discussions of:

(a) Direct effects and their significance (§ 1508.8).

(b) Indirect effects and their significance (§ 1508.8).

(c) Possible conflicts between the proposed action and the objectives of Federal, regional, State, and local (and in the case of a reservation, Indian tribe) land use plans, policies and controls for the area concerned. (See § 1506.2(d).)

(d) The environmental effects of alternatives including the proposed action. The comparisons under § 1502.14 will be based on this discussion.

(e) Energy requirements and conservation potential of various alternatives and mitigation measures.

(f) Natural or depletable resource requirements and conservation potential of various alternatives and mitigation measures.

may be incorporated by reference unless it is reasonably available for inspection by potentially interested persons within the time allowed for comment. Material based on proprietary data which is itself not available for review and comment shall not be incorporated by reference.

§ 1502.22 Incomplete or unavailable information.

When an agency is evaluating reasonably foreseeable significant adverse effects on the human environment in an environmental impact statement and there is incomplete or unavailable information, the agency shall always make clear that such information is lacking.

(a) If the incomplete information relevant to reasonably foreseeable significant adverse impacts is essential to a reasoned choice among alternatives and the overall costs of obtaining it are not exorbitant, the agency shall include the information in the environmental impact statement.

(b) If the information relevant to reasonably foreseeable significant adverse impacts cannot be obtained because the overall costs of obtaining it are exorbitant or the means to obtain it are not known, the agency shall include within the environmental impact statement:

(1) A statement that such information is incomplete or unavailable; (2) a statement of the relevance of the incomplete or unavailable information to evaluating reasonably foreseeable significant adverse impacts on the human environment; (3) a summary of existing credible scientific evidence which is relevant to evaluating the reasonably foreseeable significant adverse impacts on the human environment, and (4) the agency's evaluation of such impacts based upon theoretical approaches or research methods generally accepted in the scientific community. For the purposes of this section, ''reasonably foreseeable'' includes impacts which have catastrophic consequences, even if their probability of occurrence is low, provided that the analysis of the impacts is supported by credible scientific evidence, is not based on pure conjecture, and is within the rule of reason.

(c) The amended regulation will be applicable to all environmental impact statements for which a Notice of Intent (40 CFR 1508.22) is published in the FEDERAL REGISTER on or after May 27, 1986. For environmental impact statements in progress, agencies may choose to comply with the requirements of either the original or amended regulation.

[51 FR 15625, Apr. 25, 1986]

§ 1502.23 Cost-benefit analysis.

If a cost-benefit analysis relevant to the choice among environmentally different alternatives is being considered for the proposed action, it shall be incorporated by reference or appended to the statement as an aid in evaluating the environmental consequences. To assess the adequacy of compliance with section 102(2)(B) of the Act the statement shall, when a cost-benefit analysis is prepared, discuss the relationship between that analysis and any analyses of unquantified environmental impacts, values, and amenities. For purposes of complying with the Act, the weighing of the merits and drawbacks of the various alternatives need not be displayed in a monetary cost-benefit analysis and should not be when there are important qualitative considerations. In any event, an environmental impact statement should at least indicate those considerations, including factors not related to environmental quality, which are likely to be relevant and important to a decision.

§ 1502.24 Methodology and scientific accuracy.

Agencies shall insure the professional integrity, including scientific integrity, of the discussions and analyses in environmental impact statements. They shall identify any methodologies used and shall make explicit reference by footnote to the scientific and other sources relied upon for conclusions in the statement. An agency may place discussion of methodology in an appendix.

Proposed Rules

Federal Register
Vol. 56, No. 180
Tuesday, September 17, 1991

This section of the FEDERAL REGISTER contains notices to the public of the proposed issuance of rules and regulations. The purpose of these notices is to give interested persons an opportunity to participate in the rule making prior to the adoption of the final rules.

NUCLEAR REGULATORY COMMISSION

10 CFR Part 51

RIN 3150-AD 94

Environmental Review for Renewal of Operating Licenses

AGENCY: Nuclear Regulatory Commission.

ACTION: Proposed rule.

SUMMARY: The Nuclear Regulatory Commission (NRC) is proposing to amend its regulations to establish new requirements for environmental review of applications to renew operating licenses for nuclear power plants. The proposed amendments would define the number and scope of environmental impacts that would need to be addressed as part of a license renewal application. Concurrent with the proposed amendments, the NRC is publishing for comment (1) a draft generic environmental impact statement, (2) a draft regulatory guide, (3) a draft environmental standard review plan, and (4) a draft regulatory analysis, which supplement the proposed amendments. A workshop on the proposed amendments and the draft generic environmental impact statement will be held during the comment period.

DATES: Comment period expires December 16, 1991. Comments received after this date will be considered if it is practical to do so, but the Commission is able to assure consideration only of comments received on or before this date. Notification of intent to attend the workshop, concurrent session preferences, and desire to participate as a panelist during a specific session should be received by the staff no later than October 4, 1991. Comments on the proposed agenda received by the staff by October 4, 1991, will be considered in developing the final workshop agenda. A final agenda and detailed information on each session will be available after October 18, 1991. This information will be mailed to all individuals and organizations who notify the NRC of their intent to attend and to others who request it. The workshop will be held on November 4 and 5, 1991.

ADDRESSES: Send comments to: The Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, DC 20555, Attention: Docketing and Services Branch, or hand deliver comments to the Office of the Secretary, One White Flint North, 11555 Rockville Pike, Rockville, Maryland between 7:30 a.m. and 4:15 p.m. on Federal workdays. Copies of comments received may be examined at the NRC Public Document Room, 2120 L Street NW., (Lower Level), Washington, DC between the hours of 7:45 a.m. and 4:15 p.m. on Federal workdays. The workshop will be held at the Rosslyn Westpark Hotel, 1900 North Fort Myer Drive, Arlington, Virginia 22209. Send notification of intent to attend and desire to participate as a panelist during a specific session to Donald Cleary, Office of Nuclear Regulatory Research, U.S. Nuclear Regulatory Commission, Washington, DC 20555.

FOR FURTHER INFORMATION CONTACT: Donald Cleary, Division of Safety Issues Resolution, Office of Nuclear Regulatory Research, U.S. Nuclear Regulatory Commission, Washington, DC 20555, telephone (301) 492-3936.

SUPPLEMENTARY INFORMATION:

I. Introduction

The Commission is proposing to amend 10 CFR part 51 to improve the efficiency of the process of environmental review when an applicant seeks to renew an operating license for up to an additional 20 years. To prepare for possible license renewal applications, the Commission considered the merits of relying on the existing framework for environmental review in part 51 rather than revising part 51. In reaching its decision to revise part 51, the Commission considered the following factors: (1) License renewal will involve nuclear power plants for which the environmental impacts of operation are well understood as a result of data evaluated from operating experience to date; (2) activities and requirements associated with license renewal are anticipated to be within this range of operating experience, thus environmental impacts can reasonably be predicted; and (3) changes in the environment around nuclear power plants are generally gradual and predictable with respect to characteristics important to environmental impact analyses.

The Commission has conducted a study of the potential environmental impacts of license renewal. The objective of the study was to (1) identify all the potential impacts to the environmental and other National Environmental Policy Act (NEPA) issues associated with plant license renewal, (2) determine which of these environmental impacts and other NEPA issues could be evaluated generically for all plants, and (3) determine the significance of these issues that could be generically evaluated. The analyses and results of this study are presented in the draft Generic Environmental Impact Statement (GEIS) (NUREG-1437), which is being published for comment concurrently with this proposed rule. The staff concludes in the GEIS that only a limited number of the total potential impacts cannot be evaluated generically. Those impacts that cannot be evaluated generically will have to be evaluated for each plant before its license is renewed. However, the environmental impacts that can be generically evaluated will not have to be evaluated for each plant.

The GEIS provides the basis for this rulemaking. To develop the GEIS, the NRC staff followed the recommended procedures of the Council on Environmental Quality (CEQ), including scoping activities such as consulting the CEQ and other Federal agencies, a

public workshop held on November 12–14, 1989 (54 FR 41980; October 13, 1989), and publication of a Notice of Intent to prepare the GEIS (55 FR 29967; July 23, 1990).

The proposed rule addresses the potential environmental impacts that are generically evaluated for all plants in the GEIS and codifies the findings in the GEIS. In addition, those potential impacts that are not generically evaluated in the GEIS are identified in the proposed rule to be evaluated on a plant-specific basis. By assessing and codifying certain potential environmental impacts on a generic basis, no need exists to address these impacts for each future license renewal. The proposed amendments should result in considerable savings to the NRC, the nuclear utility industry, and the nuclear utility ratepayers, while ensuring that the environmental impacts of license renewal are evaluated, as required by the NEPA.

The basic information and the supporting analysis of environmental impacts that serve as the basis of this proposed rulemaking are presented in the draft GEIS, NUREG–1437. The draft GEIS and these proposed amendments to 10 CFR part 51 also provide the basis for developing a license renewal draft supplement to Regulatory Guide 4.2, "Preparation of Environmental Reports for Nuclear Power Stations," which provides guidance on the format and content of the environmental report to be submitted as part of the license renewal application. Additionally, the staff also prepared a draft Environmental Standard Review Plan (NUREG–1429) to provide guidance to the staff on the scope of the review necessary to implement the proposed amendments to part 51.

II. Background

A. License Renewal—10 CFR Part 54

A significant number of the operating licenses for the existing nuclear power plants are due to expire in the early part of the 21st century. The NRC anticipates that a number of licensees will submit applications to renew an operating license 10 to 20 years before the license expires. The first of these applications is expected in the near future. The NRC has issued a proposed rule, 10 CFR Part 54, "Requirements for Renewal of Operating Licenses for Nuclear Power Plants" (55 FR 29043; July 17, 1990), that would establish the requirements that an applicant must meet, the information that must be submitted to the NRC for review so that the agency can determine whether these requirements have in fact been met, and the application procedures. The proposed part 54 permits the renewal of an operating license for up to an additional 20-year increment beyond the expiration of its current license (initial licensee authorize 40 years of operation). The part 54 rule could be applied to multiple renewals of an operating license for various increments. However, the part 51 amendments apply to one renewal of the initial license for up to 20 years beyond the expiration of the initial license.

License renewal for each plant will be based on the current licensing basis (i.e., the original licensing basis for the plant as amended during the initial license term) and changes, as necessary, to address the effects of age-related degradation on systems, structures, and components important to license renewal. To comply with 10 CFR part 54, the licensee shall assess and determine those activities and modifications that are necessary, at the time of license renewal and throughout the renewal term, to ensure continued safe operation of the plant. Each licensee shall identify and incorporate those activities necessary for managing aging into its licensing basis, thereby ensuring that acceptable margins of safety are preserved throughout the license renewal term. In addition, each applicant for a license renewal shall submit an environmenal report that complies with the requirements of 10 CFR part 51, the NRC regulations governing environmental protection for domestic licensing.

B. Environmental Review

The scope of the NRC's National Environmental Policy Act (NEPA) review is found in 10 CFR part 51. To meet the provisions of 10 CFR 51.45, the applicant shall submit an environmental report (ER) that discusses (1) the impact of the proposed action on the environment, (2) any adverse environmental impacts that cannot be avoided, (3) alternatives to the proposed action, (4) the relationship between local short-term uses of the environment and maintenance and enhancement of long-term productivity, and (5) any irreversible or irretrievable commitments of resources. In addition, the licensee shall submit an analysis that considers and balances the environmental effects of the proposed action and the alternatives available for reducing or avoiding adverse environmental effects, as well as the benefits of the action. The NRC will independently review this material and publish the results.

Before issuing a construction permit (CP) or an operating license (OL) for a nuclear power plant, the NRC is required to assess the potential environmental impacts of the plant to ensure that the issuance of a permit or license is consistent with the NEPA and the NRC implementing regulations of the NEPA in 10 CFR part 51. For those plants licensed subsequent to the enactment of the NEPA, baseline quantitative studies and monitoring programs were often developed for comparison with data gathered from later programs if adverse effects of construction or operation were reasonably inferred from information obtained during the gathering of preconstruction or operational baseline phases. These studies were part of the applicant's environmental report and were reviewed in the staff's final environmental statement (FES) for the specific plant. These studies and programs were restricted to the impact assessment of important resources and important species described in the staff's guidance documents such as Regulatory Guide 4.2, and Environmental Standard Review Plans (NUREG–0555). The staff's final assessments of these programs were normally summarized in each plant-specific FES. On the basis of these reviews, appropriate environmental parameters would have been proposed for monitoring or for special studies.

Although two operating nuclear power plants were licensed before the NEPA was enacted and do not have FESs, the GEIS did consider and envelop these plants. Accordingly, the Commission believes that no reason exists to treat these two plants differently in the environmental review for each plant's license renewal.

Additionally, nonradiological discharges of pollutants to receiving waters from operating nuclear power plants that are licensed by the NRC are subject to limitations or monitoring under the Federal Water Pollution Control Act (FWPCA), administered by the U.S. Environmental Protection Agency (EPA) or designated State agencies. The resultant reporting requirements of a National Pollutant Discharge Elimination System (NPDES) permit are relied upon by the EPA and designated State agencies to provide data on potential problems. Permits are subject to review and approval every 5 years and may be modified by the permitting authority on the basis of an analysis of data generated from plant-specific NPDES monitoring programs.

The Commission considers that one of its responsibilities under the NEPA is to be cognizant of significant environmental impacts during the term of a plant's operations. For impacts

involving degradation of the aquatic environment, the reporting requirements of an NPDES permit authorized by the FWPCA are generally relied upon to alert the NRC to potential problems. In addition, the Commission includes conditions in its licenses to protect the environment in accordance with 10 CFR 50.36(b). These conditions identify appropriate requirements for reporting and recording environmental data and for monitoring requirements to protect the nonaquatic environment under 10 CFR part 50, a license may also reference environmental protection plans, environmental technical specifications, and radiological technical specifications. Therefore, the environmental effect of current operating reactors is well known and the probable future effect if licenses are renewed can be predicted with some confidence. This practice is consistent with regulations promulgated by the CEQ that direct agencies to adopt monitoring and enforcement programs, where appropriate. As a result of the staff's environmental reviews, certain environmental conditions, including monitoring requirements, may be included in NRC licenses. Licensees submit the information from monitoring of these conditions to the NRC on a routine basis, and the Commission responds as appropriate.

C. Use of Generic Rulemaking

The Commission has previously endorsed the generic rulemaking process and recognized the advantages of generic rulemaking. In an interim policy statement on generic rulemaking to improve nuclear power plant licensing, these advantages were identified:

(a) enhance stability and predictability of the licensing process by providing regulatory criteria and requirements in discrete generic areas on matters which are significant in the review and approval of license applications; (b) enhance public understanding and confidence in the integrity of the licensing process by bringing out for public participation important generic issues which are of concern to the agency and the public; (c) enhance administrative efficiency in licensing by removing, in whole or in part, generic issues from staff review and adjudicatory resolution in individual licensing proceedings and/or by establishing the importance (or lack of importance) of various safety and environmental issues to the decision process; (d) assist the Commission in resolving complex methodology and policy issues involved in recurring issues in the review and approval of individual licensing applications; and (e) yield an overall savings in the utilization of resources in the licensing process by the utility industry, those of the public whose interest may be affected by the rulemaking, the NRC and other Federal, State, and local governments with an expected improvement in the quality of the decision process.[1]

The NRC has used this generic approach in several part 51 rulemakings. Table S–4 of § 51.52 that gives the environmental impacts of the transportation of radioactive waste and nuclear fuel is an example. Applicants meeting certain criteria can use the information in Table S–4 as the basis for their evaluation of the environmental impacts of the transportation of radioactive waste and spent fuel. They are not required to conduct their own analysis of these impacts. Other examples of past generic part 51 rulemakings are Table S–3 of § 51.51 that gives the environmental impacts of the nuclear fuel cycle and § 51.53 and § 51.95, that eliminate the requirement to consider need for power and alternative energy sources for nuclear reactors at the operating license stage (47 FR 12940, March 26, 1982). Therefore, this rule is consistent with the NRC policy.

III. Proposed Action

A. Proposed Amendments

The proposed amendments to 10 CFR part 51 would establish new requirements for environmental review of an application to renew a license for a single plant. These amendments would require the applicant to address only those environmental issues that require a plant-specific assessment as part of an application for each plant. Applicants for all plants will have to assess environmental impacts on threatened and endangered species and impacts on local transportation during periods of refurbishment activities related to license renewal. These refurbishment activities are those activities that are planned for and performed on a nuclear power plant to prepare the plant for operation during the period the license is being renewed. These activities include equipment replacements, overhauls, maintenance, inspection, and testing. For other issues, all applicants either will have to demonstrate that their plants fall within defined bounds of plants for which a generic conclusion about an issue can be reached, or, if an issue does not fall within these bounds, assess that issue. Also, as part of its ER, an applicant will have to include an analysis of whether or not the findings of the assessment of each issue overturns the favorable cost-benefit balance for license renewal found in proposed appendix B to 10 CFR part 51.

[1] Generic Rulemaking To Improve Nuclear Power Plant Licensing, Interim Policy Statement, 43 FR 58377; December 14, 1978.

The proposed amendments codify the conclusions of the GEIS for those issues for which a generic conclusion can be reached. The proposed appendix B, which summarizes the Commission's findings on the scope and magnitude of environmental and other effects of renewing the operating license of each nuclear power plant, is added to 10 CFR part 51. In the proposed appendix, the Commission also states its finding that the "renewal of any operating license for up to 20 years will have accrued benefits that outweigh the economic, environmental, and social costs of license renewal * * *."

In addition, the proposed amendments eliminate the requirement that the NRC staff must prepare a supplemental environmental impact statement (EIS) for every license renewal application; instead, the amendments permit the staff to prepare an environmental assessment (EA) if certain conditions are met. The basis for this proposed change is the GEIS finding that only a limited number of potential impacts need to be addressed to renew a license for each plant.

The Commission believes that, in many instances, this limited set of potential environmental issues will be found to have impacts that are nonexistent or small and, therefore, could be analyzed in an EA that results in a finding of no significant impact (FONSI). If no significant impacts are found in the EA, the NRC will issue a FONSI. If a FONSI cannot be made, the environmental review process would require developing a draft EIS for public comment and a final supplemental EIS. The supplemental EIS would evaluate the environmental impacts identified in the EA and their effect on the overall cost-benefit balance. The NRC will issue a supplemental EIS if any of the issues addressed are determined to have impacts that are negative and either moderate or large, as the terms are defined in proposed Appendix B of Subpart A of Part 51. Impacts that otherwise might be considered moderate could be mitigated to small by commitments made in a license renewal application.

The proposed amendments would define those environmental issues that need to be addressed in an application to renew a license for a single plant. The Commission wishes to emphasize the importance of the public commenting at this time on environmental reviews in the GEIS and the findings in the proposed rule. After the final rule is published, comment on environmental impacts of a licensing renewal action for a plant will be limited to those impacts

that the rule requires to have a plant-specific evaluation.

However, the adoption of the proposed amendments would not preclude reopening environmental issues if significant new information becomes available. A petition to amend 10 CFR part 51 will be acted upon if new information warrants a reopening of issues. The Commission plans to periodically review the GEIS findings contained in appendix B to part 51 and its supporting documentation.

Environmental Impacts To Be Reviewed To Renew a License for Each Plant

The Commission concludes that the adverse environmental impacts of license renewal are minor compared to the benefits to be gained from continued operation for up to an additional 20 years beyond the initial license period. However, the proposed amendments require that each applicant address in its ER those environmental issues for which no generic conclusion can be reached.

The NRC staff, in its GEIS, divided its conclusions about environmental impacts into three categories and further drew a conclusion about the significance of each impact.

The NRC drew one of the following three conclusions about each impact:

Category 1. The NRC reached a conclusion about this impact that applies to all affected plants.

Category 2. The NRC reached a conclusion about this impact that applies to all affected plants that are within certain bounds.

Category 3. The NRC reached a conclusion about this impact that the licensee shall evaluate this impact for each plant for which it applies to renew a license.

The NRC then determined whether the significance of an impact about which it had drawn one of these three conclusions is "small," "moderate,"or "large."

- A small impact is so minor that it warrants neither detailed investigation nor consideration of mitigative actions when the impact is negative.
- A moderate impact is usually evident and usually warrants consideration of mitigation alternatives when the impact is negative.
- A large impact involves either a severe penalty or a major benefit and mitigation alternatives are always considered when an impact is negative.

The following includes 2 Category 3 issues and combines 22 Category 2 issues into 10 issues. The issues which must be addressed are as follows:

(1) The applicant must submit an assessment of potential impacts on threatened or endangered species.

(2) Aquatic impacts of entrainment, impingement, and heat shock are potential problems at plants with once-through or cooling-pond heat dissipation systems. However, plant operations and effluents that have the potential to cause these impacts are under the regulatory authority of EPA of State authorities. The permit process authorized by the FWPCA is an adequate mechanism for control and mitigation of these potential aquatic impacts. If an applicant to renew a license has appropriate EPA or State permits, further NRC review of these potential impacts is not warranted. Therefore, the proposed rule requires an applicant to provide the NRC with certification that it holds FWPCA permits, or if State regulation applies, current State permits. If the applicant does not so certify, it must assess these aquatic impacts.

(3) Potential aquatic impacts from any refurbishment activities would be minor or insignificant if best management practices are used to control soil erosion or spills. The proposed rule requires applicants to submit evidence of a construction impact control program.

(4) For plants located at inland sites and using cooling ponds, the applicant must assess groundwater quality impacts.

(5) For plants using Ranney wells or pumping 100 or more gallons per minute and having wells in the cone of depression, the applicant must assess groundwater-use conflicts.

(6) For potential terrestrial impacts, the NRC staff, in the GEIS, concluded that the only potential impact that need be evaluated to renew a license for each plant was any potential impact on important plant and animal habitats. These could include wetlands, wildlife concentration areas, and certain plant life environments. The proposed rule requires applicants to assess any potential impacts on such plant and animal habitats if construction activities generated by refurbishment or extended operation could affect these resources.

(7) The proposed amendments required any license renewal applicant, whose site does not have access to a low-level radioactive waste disposal facility, to assess environmental impacts of low-level waste management.

(8) Each applicant must verify that adequate provisions have been taken to ensure that transmission line electric shock effects are not a health hazard. The applicant may rely on National Electric Safety Codes for this assessment.

(9) An applicant with a plant at a site in a low-population area, as defined by numerical criteria on population and distance from sizable cities or in areas where growth control measures are in effect, must access housing impacts.

(10) For socioeconomic impacts, all applicants must assess potential transportation impacts during refurbishment.

(11) Applicants with plants using cooling ponds, lakes, or canals, or discharging cooling water to small rivers must address effects of microbiological organisms on human health.

(12) Applicants who exceed threshold criteria for cost of refurbishment, operating and maintenance, and fuel costs must submit a cost analysis to demonstrate the cost advantages of license renewal over the most reasonable replacement alternative. Applicants must also assess for certain plants the geothermal alternative.

B. Generic Environmental Impact Statement

The GEIS establishes the bounds and significance of potential environmental impacts at all 118 light-water nuclear power reactors currently licensed to operate or expected to be licensed to operate in the United States (113 nuclear power plants were licensed to operate as of June 30, 1992, plus Bellefonte Units 1 and 2, Comanche Peak Unit 2, and Watts Bar Units 1 and 2). For the GEIS, the NRC staff assessed all environmental issues that may be of concern to the NRC in its reviews of applications to renew operating licenses at these 118 nuclear power plants. The scope of these issues reflects the potential effects of plant refurbishment activities associated with license renewal, an additional 20 years of plant operation, and possible change in the plant environmental setting. For this analysis, all of the environmental issues identified were combined into 104 issues. For each type of environmental impact, the staff attempts to establish generic findings encompassing as many nuclear power plants as possible. Plant- and site-specific information is used in developing these generic findings. In conjunction with the proposed rule change, this GEIS also provides an applicant seeking to renew an operating license information and analyses that it may reference in the application. Further guidance on the format, content, and analysis standards for environmental documentation in their application is provided in draft Regulatory Guide 4.2, Supplement 1.

The analytical approach to assessing environmental impacts in this GEIS involves four stages:

(1) Characterize each issue on the basis of information from past plant construction and current operating experience to establish a baseline.

(2) Assess the extent to which activities and requirements associated with license renewal may differ from the baseline.

(3) Assess potential relevant changes in the environment and estimate trends for the technology and economics of alternative energy sources.

(4) Combine these separate analyses to fully characterize the nature and magnitude of impacts and other issues that will result from the refurbishments necessary for license renewal and the potential environmental impacts of operating plants for 20 years beyond their current 40-year licensing limit.

The upper bound scenario of refurbishment activities and plant operation that may be brought about by license renewal is described in detail in appendix B to the GEIS. All plants are considered enveloped by appendix B to the GEIS. The range of environmental issues considered in the GEIS was identified from past studies of nuclear power plant construction and operation (principally EISs), consultations with Federal and State regulatory agencies, and input from the nuclear utility industry and the general public.

The analyses in the GEIS drew on an extensive body of published materials from government, industry, academia, and other sources about operation and maintenance of nuclear power plants and their effects on the environment. Additional plant-specific information not otherwise available was collected by the Nuclear Utilities Management and Resources Council (NUMARC) and made available to Oak Ridge National Laboratory (ORNL) for use in the report. This information is available in the NRC Public Document Room. A team of environmental specialists from ORNL interviewed Federal, State, and local regulatory officials, as well as persons from business and other private organizations in the vicinity of nuclear power plants, as part of the effort to establish the scope for the GEIS.

The objectives of the GEIS are to (1) provide an understanding of the types and severity of environmental impacts that may occur as a result of renewing operating licenses for nuclear power plants, (2) identify and assess those impacts expected to be generic to license renewal, and (3) define the issues that need to be addressed by the NRC and the applicants in plant-specific license renewal proceedings.

The broad topical areas covered are surface-water quality, aquatic ecology, groundwater, terrestrial ecology, human health, socioeconomics, postulated accidents, waste management, decommissioning, need for generating capacity, and alternatives to license renewal.

In the GEIS, the NRC staff identified and evaluated the significance of the environmental impact of each of 104 environmental issues associated with the renewal of individual plant licenses. For 80 issues, the staff reached a generic conclusion that the potential environmental impacts are acceptable. For 22 issues, this conclusion could be reached for some subset of all nuclear power plants that were within bounds defined in the GEIS. For 2 issues, the staff concluded that no generic conclusion on impacts could be reached.

The Commission is proposing to limit the scope of environmental review for each plant license renewal to only those impacts for which no generic conclusion could be reached (i.e., Categories 2 and 3). All applicants will be required to provide appropriate information and analyses in their license renewal applications for all Category 2 and 3 impacts identified in the GEIS.

An evaluation of the impacts that have been assessed on a generic basis is summarized in a proposed new appendix B to part 51.

The NRC's NEPA review procedures in part 51 require "a preliminary analysis which considers and balances the environmental and other effects of the proposed action and the alternatives available for reducing or avoiding adverse environmental and other effects, as well as the environmental, economic, technical, and other benefits of the proposed action" (§ 51.71(d)). This analysis is found in chapter 10 of the GEIS. Table 10.1, "Summary of Conclusions on NEPA Issues" in the GEIS is included in these proposed amendments as proposed Table B.1 of appendix B of subpart A of part 51. The table lists each environmental issue addressed in the GEIS, states the conclusions, and includes an assessment of the benefit or cost involved. The major benefit is the electric energy that would be produced by a plant whose license is renewed. The major economic costs are those for refurbishing and for operating and maintaining a plant during the renewal term of up to 20 years. For those adverse environmental impacts that can be assessed generically (Category 1 and, for a subset of plants, Category 2), the adverse impact is identified as small. For environmental impacts for which generic conclusions can be reached, Table B–1 shows that no adverse environmental impacts exist that would offset the benefits of license renewal.

The other NEPA review requirements in 10 CFR part 51 that have been codified in Table B–1 are a review of short- and long-term benefits and productivity and irreversible commitments of resources. The principal short-term benefit from continued operation of nuclear plants is the production of electrical energy from an existing capital asset.

The Commission finds that the resource commitments involved in license renewal do not differ from resource commitments required during the initial operating license term. However, additional nuclear fuel will be used, and small amounts of materials will be used for plant refurbishment. A minor amount of additional land would be used.

Summary of Issues Analyzed in the GEIS

The following describes those environmental issues that were examined for the GEIS, and summarizes the conclusions by major topical area.

1. Surface Water Quality

For the GEIS, the NRC staff examined water quality, water-use conflicts, altered salinity gradients, altered current patterns, temperature effects on sediment transport, altered thermal stratification, scouring caused by discharged cooling water, eutrophication, discharge of chlorine or other biocides or chemical contaminants, and discharge of sanitary wastes.

Aquatic impacts from plant refurbishment activities to support license renewal could occur at any type of plant if erosion or spills occur. In the GEIS, the staff concluded that "best management practices" need to be used during refurbishment to prevent adverse impacts. Site-specific mitigation measures can be implemented during refurbishment to prevent or minimize construction-related aquatic impacts from erosion or spills. These impacts are normally of limited duration and affect only a portion of the aquatic environment. Potential impacts on threatened or endangered species cannot be assessed generically and will require plant-specific analysis.

2. Aquatic Ecology

For the GEIS, the staff examined impingement and entrainment, heat shock, cold shock, thermal plume barriers to migration, premature emergence of aquatic insects,

stimulation of nuisance organisms, gas supersaturation, low dissolved oxygen in the discharge, accumulation of contaminants in sediment or biota, and losses from predators, parasites, and disease.

For nuclear power plants using once-through cooling systems, the operational experience of existing plants indicates that many early concerns about aquatic resources have not materialized. Neither the published literature nor the responses of regulatory and resource agencies have revealed potential concerns about such early issues as phytoplankton and zooplankton entrainment and premature emergence of aquatic insects in thermal discharges. Although significant localized effects of these stresses have occasionally been demonstrated, the populations' rapid regeneration and biological compensatory mechanisms are sufficient to preclude long-term or far-field impacts.

However, some issues involving aquatic resources warranted further monitoring, and in some cases, mitigative measures to define and correct adverse impacts. The entrainment and impingement of fish and the discharge of large volumes of heated effluents into small or warm ambient waters were a source of concern at some nuclear power plants. These issues were examined and resolved through the mechanisms of NPDES permits and associated FWPCA 316(a) and (b) determinations and were either found to be acceptable or actions were implemented to mitigate the problems. For a few plants, the NPDES process has not been completed and the issues relating impingement, entrainment, and thermal discharges have not all been resolved. For these plants, issues relating to intake and discharge effects on fish and shellfish may be unresolved.

Resource agencies are expending major efforts to restore anadromous fish runs, particularly salmon and American shad, through water quality improvements, stocking, and removal of migration barriers. As a result, a number of the agencies have expressed concerns about future impingement and entrainment impacts at plants that operate on certain rivers. These concerns are routinely addressed during the NPDES permit renewal process. Nuclear power plants with once-through cooling systems that currently discharge cooling water near the upper temperature limits of their NPDES permits may find complying with those requirements increasingly difficult if climates change and ambient water temperatures warm in the coming decades. Under these conditions, such plants may need to modify their operations during the warmest months or rely more on helper cooling towers to prevent adverse thermal impacts. Continuing to consult resource agencies and permitting agencies and to promptly resolve NPDES permit issues are expected to ensure that future changes in the environment do not lead to unacceptable impacts on aquatic ecology.

3. Groundwater Use and Quality

For the GEIS, the NRC staff examined groundwater use and quality; groundwater-use conflicts, including use of Ranney wells; and groundwater quality degradation and concluded that ground-water use conflicts and quality degradation may be a problem at certain plants. Groundwater quality at some river sites may be degraded by induced infiltration of poor-quality river water into an aquifer that supplies large quantities of plant cooling water.

Sites with closed-cycle cooling ponds may degrade groundwater quality. For those plants located inland, the quality of groundwater in the vicinity of ponds must be shown to remain within the State regulatory agency's defined-use category.

4. Terrestrial Ecology

For the GEIS, the NRC staff examined refurbishment impacts, cooling tower impacts on crops and native plants, bird collisions with cooling towers and transmission lines, cooling-pond impacts, power line right-of-way management, electromagnetic field effects, and effects on floodplains and wetlands, threatened or endangered species, air quality, and land use.

Refurbishment activities would disturb only small areas of land and should result in no significant loss of terrestrial habitats. Air quality impacts from refurbishment are not expected to lead to significant environmental impact. Salt draft from cooling towers at nuclear plants has not been shown to threaten agricultural crops, orchards, or other cultivated vegetation. Cooling tower operation has not been reported to reduce crops yields except in situations where crops were experimentally placed next to cooling towers. No significant adverse impacts of transmission lines and their maintenance was identified. Potential refurbishment impacts that will require an analysis for each plant would be those that may occur if one or more important terrestrial resources (wetlands, endangered species) would be affected.

5. Public Health

For the GEIS, the NRC staff examined radiation exposures to the public, occupational radiation exposures from refurbishment and extended operation, acute and chronic health effects of the electromagnetic fields of transmission lines, microbiological organisms associated with the cooling system known as the ultimate heat sink and noise.

For the GEIS, the staff assessed public health impacts from refurbishment activities and extended operation. Occupational exposure and doses to the public are expected to remain well within regulatory limits. The 9 plants using cooling ponds, lakes, or canals and the 14 plants discharging to small rivers have the potential to influence thermophilic organisms. Health questions related to public use of affected waters need to be addressed by utilities for each plant license renewal. The potential for electrical shock-induced currents from transmission lines should be reviewed with respect to the National Electric Safety Code (NESC) recommendations. Biological and physical studies of 60-Hz electromagnetic fields have not demonstrated consistent evidence linking harmful effects with field exposures.

6. Socioeconomics

For the GEIS, the staff assessed impacts in the following socioeconomic areas: housing, taxes, public services (excluding transportation), transportation, offsite land use, economic structure, and historic and aesthetic resources. They examined impacts from refurbishment activities as well as extended operation of nuclear power plants and reached generic conclusions for taxes, public services, excluding transportation, offsite land use, transportation impacts during continued operation, economic structure, and historic and aesthetic resources. These impacts may be either positive (taxes, employment, income) or negative, but small, and thus need not be addressed for each plant.

Housing impacts during refurbishment could be negative and potentially significant (moderate or large impact) for plants located in areas categorized as "low" population or as those that have growth control measures to limit housing development. In particular circumstances, transportation impacts during refurbishment could also be negative and significant. As a result, only housing and transportation issues need to be evaluated for each plant.

7. Uranium Fuel Cycle

For the GEIS, the NRC staff assessed the impacts of the uranium fuel cycle, which is based on the values given in 10 CFR 51.51 Table S–3, and analyzed the radiological impact from radon-222 and technetium-99. Categories of natural resource use that were analyzed include land use, water consumption and thermal effluents, radioactive releases, burial of transuranic and high- and low-level wastes, and radiation doses from transportation and occupational exposures. Radiological and nonradiological impacts were found to be small.

8. Waste Management

For the GEIS, the NRC staff examined the potential environmental impacts from the generation of various types of wastes during refurbishment and extended operation for an additional 20 years. More specifically, the staff examined nonradiological waste, mixed waste, low-level radiological waste storage and disposal, spent fuel storage and disposal, and transportation.

In the GEIS, the staff concluded that license renewal would have only minor impacts on mixed waste and nonradiological waste management activities. For low-level radioactive waste, onsite storage was judged to be adequate as suitable land is available at all plants for interim storage of additional waste from refurbishment and extended plant operation if disposal sites continue to accept waste in normal increments. The conclusions regarding low-level radioactive waste disposal hinge on the timely implementation of present plans for siting regional compact and individual State disposal sites. If circumstances change and the GEIS assumptions are no longer valid, these impacts would need to be addressed for each plant.

The greater volume of spent fuel resulting from up to 20 years of operation beyond the 40-year license can be safely accommodated onsite through dry or pool storage at all plants. The staff concluded that radioactive waste transportation impacts were small and bounded by the values in 10 CFR 51.52, Table S–4.

9. Postulated Accidents

For Chapter 5 of the GEIS, the NRC staff evaluated the environmental impacts of postulated accidents for the license renewal period. This evaluation included severe accidents as well as design-basis accidents. For design-basis accidents, all plants have had a previous evaluation of their environmental impacts. In addition, the licensees will be required to maintain acceptable design and performance criteria throughout the plant license renewal period. The calculated releases from design-basis accidents would not be expected to change. Therefore, the NRC staff concluded that the design of the plants associated with impacts from design-basis accidents remains acceptable. Severe accident environmental impacts were not evaluated in the past for all plants. However, since 1981, all plant FESs have included an analysis of severe accidents. In addition, in the past 10 years, extensive work has taken place on severe accident analysis and safety issue resolution. Therefore, the severe accident analyses done previously in support of FESs (a total of 27 FESs contain analyses of severe accidents) plus the results of other severe accident analyses done in the past were utilized and extrapolated to predict the severe accident environmental impacts for all plants at the midpoint of their license renewal period. For this assessment, the staff evaluted the environmental impacts of releases of radioactive materials to the atmosphere and groundwater as well as fallout over land and water. In addition, they evaluated the economic consequences of such accidents and the need to evaluate severe accident mitigation design alternatives (SAMDAs).

In the GEIS, the staff concluded that the environmental impacts of severe accidents during the license renewal period represent a low risk to the population and environment. Although the offsite consequences are potentially large, they are of low likelihood. Because of the low likelihood, the staff concluded that these impacts need not be considered further for each plant license renewal application. In addition to the low risk, Commission policy is to consider SAMDAs only at the initial construction stage (during which plant design features may be more easily incorporated). Accordingly, SAMDA evaluations at the license renewal stage are not necessary.

10. Decommissioning

For the GEIS, the staff examined radiation doses, waste management, air quality, water quality, ecological resources, economic impacts, and socioeconomic impacts.

The physical requirements and attendant effects of decommissioning nuclear power plants after a 20-year license renewal period are not expected to be different from those of decommissioning at the end of the current 40-year license period. Decommissioning after a 20-year license renewal period would increase the occupational dose by about 0.5 person-rem and the public dose by a negligible amount. License renewal would not increase the quantity or classification of low-level radioactive waste generated by decommissioning to any appreciable extent. Air and water quality and ecological impacts of decommissioning would not change as a result of license renewal.

Considerable uncertainty exists about the cost of decommissioning. While license renewal would not be expected to change the ultimate cost of decommissioning, it would reduce the present value of the cost. The socioeconomic effects of decommissioning will depend on the magnitude of the decommissioning effort, the size of the community, and other economic activities at the time. However, the NRC does not expect that the impacts would be increased by decommissioning at the end of a 20-year license renewal period rather than at the end of the current license term. Because the NRC can reach a generic conclusion on the acceptability of the incremental impacts of decommissioning for all plants, impacts on decommissioning need not be evaluated for each plant license renewal application.

11. Need for Generating Capacity

Projections of the demand for electric power from 1991 to 2030 in each of the 11 Department of Energy regions indicate that a need will exist for the generating capacity represented by license renewal of plants in all 11 regions. The projection included demands for both individual and utility service areas, which showed that the generating capacity of each nuclear power plant would be needed to meet the nation's electric power demand.

12. Alternatives to License Renewal

In chapter 8 of the GEIS, the staff established the need for the electric-generating capacity represented by the renewal of operating licenses. Chapter 9 of the GEIS addresses how the demand for this generating capacity could be filled by alternatives to license renewal and weighed the alternatives against that of license renewal.

In the GEIS, the staff concluded that new fossil-fuel and nuclear power plants are reasonable alternatives for replacing of retired nuclear capacity because they are proven commercial power-generating technologies, they can provide the baseload capacity currently generated by large nuclear units, and they are available nationwide. However, on balance, none of these alternatives

offer significant environmental advantages over license renewal. In fact, license renewal of existing nuclear generating capacity would delay or eliminate the environmental impacts associated with constructing replacement power plants. The principal issues associated with operation of new fossil plants are emissions of pollutants. This includes SO_x, NO_x, and CO_x which contribute to the degradation of air quality, including acid rain and decreased visibility, and increase the potential for global warming and climate change. Although license renewal is expected to be more advantageous than new fossil or new nuclear plants from a cost perspective in most situations, a decision to seek license renewal is a prerogative of individual utilities. For the GEIS, the staff evaluated several studies and developed an independent estimate. Each study focused on comparing the costs of license renewal and new coal-generated capacity. From this comparison, the staff concluded that license renewal offers significant savings under a diverse set of conditions over new coal-generated capacity. However, differences in operating parameters and performance of nuclear plants would affect the actual cost savings for each plant.

With respect to renewable energy sources, the staff finds that wind, sun, water, and biomass are not preferred near-term alternatives to license renewal because of technological limitations (nonbaseload power sources), availability, and economics. The potential exists for small-scale regional application of geothermal energy to replace a small fraction of current nuclear baseload capacity.

Therefore, in the GEIS, the staff concludes, for the nation as a whole, license renewal is preferable to replacing the generating capacity with a new facility. Because some uncertainty is associated with the economic costs of license renewal caused by the plant-specific nature of the refurbishment required, a limited data submittal including analysis of cost of refurbishment, should accompany each license renewal application. If these data meet the threshold criterion, no analysis of alternatives need accompanying the license application. If the submittal shows that license renewal cannot meet the threshold criterion, the applicant should submit an analysis of the most reasonable alternative. In addition, licensees for plants in California, Oregon, Washington, or Arizona should submit a cost comparison of license renewal to geothermal energy.

C. Regulatory Guidance To Support the 10 CFR Part 51 Revisions

To ensure proper implementation of the revised sections of 10 CFR part 51, the NRC is issuing a draft regulatory guide and a draft environmental standard review plan for license renewal. Both documents are being published concurrently with these proposed amendments. The draft guide, identified as Draft Supplement 1 to Regulatory Guide 4.2, establishes a uniform format and content acceptable to the staff for structuring and presenting the environmental information to be compiled and submitted by an applicant to renew an operating license. More specifically, this draft regulatory guide describes the content of environmental information to be included in a license renewal application, including the criteria to address appropriate Category 2 issues as specified in the proposed amendments to 10 CFR part 51.

Draft "Environmental Standard Review Plan for License Renewal" (ESRP–LR) NUREG–1429 provides guidance for the NRC staff when performing a 10 CFR part 51 environmental review of an application to renew an operating license. The plan parallels Regulatory Guide 4.2, Supplement 1. The primary purpose of the ESRP–LR is to ensure that these reviews are focused on those environmental concerns associated with license renewal as described in 10 CFR part 51. Specifically, it provides guidance to the NRC staff about environmental issues that should be reviewed and provides acceptance criteria to help the reviewer evaluate the information submitted as part of the license renewal appliation. It is also the intent of this plan to make information about the regulatory process available and to improve communication between the NRC, interested members of the public, and the nuclear power industry, thereby increasing understanding of the review process.

D. Public Comments on Advance Notice of Proposed Rulemaking

On July 23, 1990, the NRC published in the **Federal Register** an advance notice of proposed rulemaking (ANPR) (55 FR 29964) and a companion notice of intent to prepare a generic environmental impact statement (55 FR 29967). Advice and recommendations on the proposed rulemaking were invited from all interested persons. Comments were requested on nine specific questions. Comment were received from 29 groups and individuals. Two private individuals were opposed to the rulemaking. Of five citizens groups; one supported, three supported with qualifications, and one opposed the rulemaking. Of the two State agencies responding, one supported the rulemaking and one supported it with qualifications. Three Federal agencies supported the rulemaking with qualifications. All 16 NRC nuclear power plant licensees commenting on the ANPR supported the rulemaking. The one industry group that submitted comments supported the rulemaking. A summary of comments on each question and the staff response are as follows:

Question No. 1. Is a generic environmental impact statement or an environmental assessment required by the NEPA to support this propoed rulemaking or can the rulemaking be supported by a technical study?

Comments: Strong support for a generic environmental survey (GES) rather than a full GEIS to provide the technical basis for the rulemaking was expressed by the NUMARC, nuclear utilities, the U.S. Department of Energy, and Americans for Nuclear Energy, Inc. The EPA and the State of Wisconsin Public Service Commission (WPSC) support development of a comprehensive GEIS. Other comments offered no specific opinion on a GEIS versus a generic environmental survey. Supporters of the generic environmental survey approach stated that it is legally acceptable and would be less costly and less subject to delays. Supporters of a comprehensive GEIS believed that it is a feasible approach and a prudent one.

NRC Response: The NRC believes that while the GES provides an alternative approach to rulemaking, the GEIS approach is preferable and has been used to develop the proposed rule. The purpose of this rulemaking is to resolve as many National Environmental Policy Act (NEPA) issues as possible before beginning plant-by-plant license renewal reviews. Although the NRC recognized the possibility that not all NEPA issues would be fully resolvable in the GEIS, the NRC did not wish to make *a priori* judgments about which issues could be resolved generically and which could not. Also, even though some issues may not be fully resolved generically, the analyses performed for the GEIS have helped sharpen and focus the issues that must be addressed in specific license renewal reviews. To these ends the NEPA procedures specified in 10 CFR part 51 and followed in developing the GEIS do have the advantage of resulting in a comprehensive GEIS and rule that have been extensively reviewed by multiple outside, interested parties and therefore,

will be stronger in focusing and limiting environmental discussion during license renewal.

In addition, a GES need not follow NEPA-mandated public comment requirements. It is envisioned as a scientific document, whose contents are similar in some ways to a GEIS, but it is published in final form without public comment. However, a GES need discuss neither alternatives to license renewal nor the cost-benefit balance of the major federal action (license renewal) under discussion. Therefore, use of a GES as support for limiting environmental discussion a license renewal hearings would weaken this rulemaking endeavor because of the lack of public participation in commenting on this cornerstone document and lack of compliance with the full-disclosure provision of NEPA.

Question No. 2. What alternative forms of codifying the findings of the generic environmental impact statement should be considered?

Comments: This question was not specifically addressed by most commenters. The NUMARC recommended that the findings of the GEIS be codified by classifying potential environmental impacts of license renewal into four categories that it described.

NRC Response: The NRC believes that the categories used in the GEIS and the results of the evaluation in chapter 10 of the GEIS permit codification of findings that is at least as adequate as would result from the NUMARC recommendation. The approach taken in the proposed rulemaking to codify the results of the GEIS is a mix of the four approaches identified in the ANPR.

Question No. 3. What activities associated with license renewal will lead to environmental impacts?

Comments: Several respondents addressed this question in general terms. NUMARC stated: "In general, most of the activities associated with license renewal that may have environmental impacts are the same activities considered in environmental evaluations for the initial licenses." Activities associated with license renewal are more fully discussed in a document that NUMARC submitted with its comments. The document is "Study of Generic Environmental Issues Related to License Renewal," dated May 9, 1989. A State agency identified a number of replacement activities that would result in generating low-level radioactive waste and radiation doses to workers engaged in these activities.

NRC Response: In May 1989, NUMARC submitted a study to the NRC in the context of the rulemaking on 10 CFR Part 54, "Requirements for Renewal of Operating Licenses for Nuclear Power Plants." Information on plant modification and operation activities associated with license renewal in this document was reviewed and considered in preparing the GEIS. Activities associated with license renewal that were identified by the State agency are addressed in the GEIS in chapter 2 and appendix B.

Question No. 4. What topical areas should be covered in the generic environmental impact statements? Should the proposed outline be supplemented or restructured?

Comments: Respondents to this question identified priority topics that should be covered in the GEIS and commented on the completeness of the scope of these topics. Those addressing the scope of such topics generally were satisfied with the list in the ANPR. Most concerns were with the balance of the treatment of topics within the outline. NUMARC, supported by member utilities, believed that some topics such as plant modifications associated with license renewal and decommissioning are unduly emphasized by being given major section status. A number of respondents discussed topical areas already identified in the ANPR about which they were particularly concerned. Several topics not identified in the ANPR were identified as concerns by one or more respondents. Concern was expressed that the pool of trained nuclear engineers is diminishing. Thus, operators may be less well qualified in the future. A respondent stated that each type of reactor should be treated separately. A Federal agency stated that the GEIS could assess the utilities' efforts to comply with the Public Utilities Regulatory Policy Act (PURPA) for financial assistance to private cogeneration facilities and that it could also assess the utilities' efforts to comply with State and local conservation efforts.

The WPSC raised the following four points not explicitly covered in the ANPR:

(1) Regarding the need for generating capacity, whether the NRC should defer to the relevant State agency's determination of need for generating capacity;

(2) Whether an accident that has the potential for leading to a demand by the public that all reactors be shut down could jeopardize the supply of electricity;

(3) Whether plant management history will be considered in a license renewal decision; and

(4) Whether embrittlement of the reactor pressure vessel may result in shutting plants down for susceptibility to pressurized thermal shock soon after extending the license.

NRC Response: The NRC believes that the scope of the GEIS accommodates most of the issues of concern raised in the comments. However some issues raised are beyond the scope of the GEIS. The NRC will ensure the qualification of operators in the future through NRC regulations, especially 10 CFR Part 55, "Operator's Licenses". The NRC has not explicitly assessed compliance with PURPA and State and local conservation efforts on a utility-by-utility basis and it does not believe it is necessary to do so. Conservation and cogeneration projections are already incorporated in forecasts of need for generating capacity.

Regarding WPSC's comment that the NRC should defer to the determination of need that relevant State agencies made, the NRC encourages State agencies to review analyses in the GEIS for consistency with their own analyses and to comment on any significant disagreements between them. Regarding the concern about a possible public demand to shut down all reactors after a severe accident at one, the NRC assumes in the GEIS that the programs described in Chapter 5 of the GEIS will maintain a low probability of a severe accident and that a shutdown of all reactors is speculative. Management history is not an issue that is addressed in the GEIS or the proposed rule. Although management action will be continually monitored through the operating life of any plant, it will not be a major topic evaluated to renew a license. The NRC will consider the embrittlement status of the reactor pressure vessel for a license renewal, and its status may indeed limit the term or bar the issuance of a renewed license.

Question No. 5. For each topical area, what are the specific environmental issues that should be addressed?

Comments: NUMARC was the only respondent who specifically addressed this question. Several other respondents did identify specific topics and environmental issues that concerned them. These other responses are addressed under Question No. 4. NUMARC referred the NRC to the detailed areas treated in the NUMARC report titled "Study of Generic Environmental Issues Related to License Renewal," dated May 9, 1989, and submitted to the NRC in May 1989.

NRC Response: The NUMARC report has been reviewed and was considered in developing the scope and analyses of the GEIS.

Question No. 6. For each topical area and each specific issue, what information and data are required to perform generic analyses? Where do the information and data exist?

Comments: NUMARC referred to its study submitted to the NRC titled, "Study of Generic Environmental Issues Related to License Renewal," and point out that the study contains relevant information and an extensive list of data sources. The EPA offered to provide information about the effect of electromagnetic frequency radiation and global climate change. The WPSC stated that information about the need for power, the amount of conservation that is technically and economically possible, and load management exists at each utility and at the corresponding State utility commission.

NRC Response: All information in the NUMARC study was reviewed and was used as appropriate in developing the GEIS. The NRC considered the EPA's information and guidance on effects of electromagnetic frequency radiation and global climate change. In the GEIS, the NRC took a regional generic approach about the need for power, conservation, and load management. The NRC believes this is an adequate analysis to establish the need for generating capacity for each plant but is requesting comment on its analysis.

Question No. 7. For each topical area and each specific issue, what criteria should be used to judge the significance of the environmental impact?

Comments: This question was specifically addressed by NUMARC and Yankee Atomic Electric Company. NUMARC provided the more detailed response, and it was consistent with the Yankee Atomic response. NUMARC made a number of general observations about the significance criteria embodied in the NRC practice in the environmental and associated safety areas and in the CEQ guidelines. They provided examples of significant criteria for endangered species, impacts to aquatic biota, and radiological impacts.

NRC Response: These comments generally support the approach to determine the significance of environmental issues employed in the GEIS.

Question No. 8. For each topical area and each specific issue, what is the potential for successful analysis?

Comments: NUMARC addressed this question in detail. Commenting utilities supported the NUMARC response. Other responses ranged from a general statement that generic treatment is not feasible to a general statement that generic treatment is feasible. Several commenters each mentioned doubts about the possibility of generic treatment of at least some of the following: need for generating capacity, alternatives, climate change, impacts from refurbishment and continued operation, and severe accidents. NUMARC stated that "nearly all, if not all, of the impacts associated with license renewal have been found amenable to generic analysis." Using the four categories of generic conclusions (see Question No. 2), NUMARC presented conclusions on the categorization of various impacts from plant operation, plant modification, accidents, decommissioning, need for generating capacity, and alternative generating capacity.

NRC Response: The NRC considered the positions offered in comments on the potential of generic analysis for each topical area and each specific issue. The NRC findings are summarized in chapter 10 of the GEIS. The NRC believes that the approach taken in the GEIS resulted in generic conclusions that both encompass site- and region-specific considerations and consider forecasting uncertainties.

Question No. 9. What length of extended operating time can reasonably be addressed in the proposed rulemaking? To what extent is it possible to reach generic conclusions about the environmental impacts that would be applicable to plants having renewed operating licenses expiring in the year 2030, 2040, or 2050?

Comments: Several commenters had doubts about the accuracy of long-term forecasts of need for generating capacity, alternative energy sources, climate change, and severe accidents. NUMARC specifically addressed this question and pointed out that environmental impact evaluations are performed for new plants for 40 to 50 years into the future, but that unlike new plants, applicants who will apply for plant license renewal have an operating history with accumulated monitoring data. NUMARC also stated that the NRC has the option of revising the GEIS at any future time if experience shows an impact that deviates significantly from its predicted value.

NRC Response: The NRC agrees with NUMARC's observations and believes the conclusions reached in the GEIS issue reflect careful consideration of future uncertainties.

IV. Questions

Public comment on conclusions about potential environmental impacts is being solicited as part of this rulemaking. The Commission will evaluate comments on this notice and the draft GEIS before publishing a final rule.

In addition to general comments on the proposed rulemaking, the Commission is especially interested in public responses to the following questions:

(1) Should the NRC staff have the flexibility, as provided in the proposed rule, to choose to prepare an environmental assessment instead of a supplemental environmental impact statement for each plant license to be renewed? In answering this question, please consider whether it makes a difference if this proposed rulemaking is supported by a generic environmental survey rather than a full GEIS?

(2) For presenting a full discussion of environmental impacts from postulated accidents as required by the NEPA:

(a) Is the exposure index (EI) method, as used in chapter 5 of the GEIS to predict potential environmental impacts of atmospheric releases of radioactive material from a severe accident, sufficient to present for consideration the potential impacts from severe accident of atmospheric releases for all plants for the license renewal period? If not, what alternative analyses would be acceptable?

(b) Is the method of analysis of radionuclide deposition from fallout over open bodies of water from severe accidents of atmospheric releases, as used in chapter 5 of the GEIS, sufficient to present for consideration the potential impacts of atmospheric fallout for all plants? If not, what alternative analyses would be acceptable?

(c) Is the method of analysis of releases to groundwater from severe accidents, as used in chapter 5 of the GEIS, sufficient to present for consideration the potential impacts of releases to groundwater for all plants? If not, what alternative analyses would be acceptable?

(3) It is reasonable to conclude that, based upon the calculated low risk to the environment from severe accidents and the June 13, 1990, Commission Policy Statement on accident considerations under the NEPA (45 FR 40101), SAMDAs need not be considered in individual license renewal applications? If not, what alternative would be acceptable?

(4) What significant environmental issues, if any, have not been evaluated in the GEIS?

(5) Which evaluations presented, if any, are not sufficient for drawing generic conclusions?

(6) What additional analyses can be done to further address the Category 2 and 3 items? For example, what screening criteria could be applied to local transportation during

refurbishment and to threatened and endangered species to change these issues from Category 3 to Category 2? Are the criteria for meeting the defined bounding conditions for each of the Category 2 items sufficiently clear?

(7) The GEIS and this proposed action apply to all plants currently holding an OL or CP, except for Washington Nuclear Plant 1 and 3, Grand Gulf 2, and Perry 2. Should these plants be included in the scope of this action?

V. Availability of Documents

The principal supporting documents of this supplementary information are as follows:

(1) Draft Generic Environmental Impact Statement, NUREG–1437

(2) Draft Regulatory Analysis: Proposed Part 51 Amendments, NUREG–1440

(3) Draft Supplement to Regulatory Guide 4.2 (DG–4002)

(4) Draft Environmental Standard Review Plan—License Renewal, NUREG–1429

A free single copy of each of these documents, to the extent of supply, may be requested by those who are considering commenting by writing to the U.S. Nuclear Regulatory Commission, Washington, DC 20555 (ATTN: Distribution and Mail Services Section). Copies of all documents cited in the supplementary information are available for inspection and/or for copying for a fee, in the NRC Public Document Room, 2120 L St. NW. (Lower Level), Washington, DC.

In addition, copies of NRC documents cited here may be purchased from the Superintendent of Documents, U.S. Government Printing Office, PO Box 37082, Washington, DC 20013–7082. Copies are also available for purchase from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161.

VI. Workshop

A workshop is being scheduled during which experts with a diversity of perspectives can review the technical basis of the proposed amendments. Such interaction is expected to contribute information for the NRC to consider that may not otherwise have surfaced through written comments on the proposed amendments. In addition, the workshop may provide additional information that will assist those who comment in developing written comments.

The workshop is being designed to focus on the substantive technical findings of the GEIS codified in the proposed amendment. Workshop sessions will correspond to the major topical areas found in the GEIS and appendix B of subpart A of 10 CFR part 51. Workshop participants will be experts selected from industry, Federal and State agencies, and environmental organizations. Each workshop concurrent session will be limited to 15 participants and will be conducted in a panel format. Questions and statements from the audience will be taken if time permits.

Comments are invited on the following tentative agenda.

Day 1

7:45–8:30 Registration
8:30–8:45 Welcome
8:45–9:00 Workshop objectives, structure, ground rules
9:00–10:15 General Session—GEIS and proposed 10 CFR part 51 rulemaking overview
10:15–10:30 Break
10:30–11:45 General Session (cont.)
11:45–1:00 Lunch
1:00–3:00 *Concurrent Sessions*
A. Surface Water, Aquatic Ecology, Groundwater
B. Terrestrial Ecology, Land Use
C. Socioeconomics
3:00–3:15 Break
3:15–5:15 *Concurrent Sessions*
D. Decommissioning
E. Human Health
F. Need for Generating Capacity and Direct Economic Costs and Benefits

Day 2

8:30–10:15 *Concurrent Sessions*
G. Postulated Accidents
H. Solid Waste Management
I. Alternatives
10:15–10:30 Break
10:30–11:45 Concurrent Sessions G, H and I (cont.)
11:45–1:00 Lunch
1:00–2:00 General Session—NEPA Process
2:00–3:00 Summary and Conclusion of Sessions

VII. Submittal of Comments in an Electronic Format

Commenters are encouraged to submit, in addition to the original paper copy, a copy of their letter in an electronic format on IBM PC DOS-compatible 3.5- or 5.25-inch, double-sided, double-density (DS/DD) diskettes. Data files should be provided in Wordperfect 5.1. ASCII code is also acceptable or, if formatted text is required, data files should be provided in IBM Revisable-Form Text Document Content Architecture (RFT/DCA) format.

VIII. Environmental Impact: Categorical Exclusion

The NRC has determined that this proposed regulation is the type of action described in categorical exclusion 10 CFR 51.22(c)(3). Therefore neither an environmental impact statement nor an environmental assessment has been prepared for this proposed regulation. This action is procedural in nature in that it pertains to the type of environmental information to be reviewed.

IX. Paperwork Reduction Act Statement

This proposed rule amends information collection requirements that are subject to the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 *et seq.*). This rule has been submitted to the Office of Management and Budget for review and approval of the paperwork requirements. Public reporting burden for this collection of information is estimated to average about 3000 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Information and Records Management Branch (MNBB–7714), U.S. Nuclear Regulatory Commission, Washington, DC 20555 and to the Desk Officer Office of Information and Regulatory Affairs, NEOB–3019 (3150–0021), Office of Management and Budget, Washington, DC 20503.

X. Regulatory Analysis

The Commission has prepared a draft regulatory analysis on this proposed regulation. The analysis examines the costs and benefits of the alternatives considered by the Commission. The two alternatives considered were (a) retaining the existing part 51 review process for license renewal, which requires that all review be done on a plant-specific basis, and (b) amending part 51 to allow a portion of the environmental review to be conducted on a generic basis. The conclusions of the draft regulatory analysis show substantial cost savings of alternative (b) over alternative (a).

The draft analysis is available for inspection in the NRC Public Document Room, 2120 L Street, NW. (Lower Level), Washington, DC. Copies of the analysis are available as described in Section V of this proposed rule. The Commission requests public comment on the draft regulatory analysis. Comments on the draft analysis may be submitted to the NRC as indicated under the addresses' heading.

XI. Regulatory Flexibility Act Certification

As required by the Regulatory Flexibility Act of 1980, 5 U.S.C. 605(b), the Commission certifies that this proposed rule will not have a significant impact on a substantial number of small entities. The proposed rule states application procedures and environmental information to be submitted by nuclear power plant licensees to facilitate the NRC's obligations under the NEPA. Nuclear power plant licensees do not fall within the definition of small businesses as defined in section 3 of the Small Business Act, 15 U.S.C. 632, the Small Business Size Standards of the Small Business Administrator (13 CFR part 121), or the Commission's Size Standards (50 FR 50241; December 9, 1985).

XII. Backfit Analysis

The rulemaking does not constitute a "backfit" as defined in 10 CFR 50.109(a)(1) and a backfit analysis need not be prepared. This rule addresses procedural requirements for considering the environmental effects of issuing a renewed operating license for a nuclear power plant. The Commission has not previously addressed these requirements either in rulemaking or in guidance documents. Moreover, policy considerations weigh against considering part 51 and its amendments as a "backfit." The primary impetus for the Backfit Rule was "regulatory stability," namely, that once the Commission decides to issue a license, the terms and conditions for operating under that license would not be arbitrarily changed *post hoc*. Regulatory stability is not a relevant issue with respect to license renewal. This rule has only a prospective effect upon nuclear power plant licensees. No licensee currently holds a renewed nuclear power plant operating license and therefore, no valid expectations could be changed regarding the terms and conditions for holding a renewed operating license.

List of Subjects in 10 CFR Part 51

Administrative practice and procedure, Environmental impact statement, Nuclear materials, Nuclear power plants and reactors, Reporting and recordkeeping requirements.

For the reasons set out in the preamble and under the authority of the Atomic Energy Act of 1954, as amended; the Energy Reorganization Act of 1974, as amended; the National Environmental Policy Act of 1969, as amended; and 5 U.S.C. 553; the NRC is proposing to adopt the following amendments to 10 CFR part 51.

PART 51—ENVIRONMENTAL PROTECTION REGULATIONS FOR DOMESTIC LICENSING AND RELATED REGULATORY FUNCTIONS

1. The authority citation for part 51 continues to read as follows:

Authority: Sec. 161, 68 Stat. 948, as amended (42 U.S.C. 2201); secs. 201, as amended, 202, 88 Stat. 1242, as amended, 1244 (42 U.S.C. 5841, 5842). Subpart A also issued under National Environmental Policy Act of 1969, secs. 102, 104, 105, 83 Stat. 853–854, as amended (42 U.S.C. 4332, 4334, 4335); and Pub. L. 95–604, Title II, 92 Stat. 3033–3041. Sections 51.20, 51.30, 51.60, 51.61, 51.80, and 51.97 also issued under secs. 135, 141, Pub. L. 97–425, 96 Stat. 2232, 2241, and sec. 148, Pub. L. 100–203, 101 Stat. 1330–223 (42 U.S.C. 10155, 10161, 10168). Section 51.22 also issued under sec. 274, 73 Stat. 688, as amended by 92 Stat. 3036–3038 (42 U.S.C. 2021) and under Nuclear Waste Policy Act of 1982, sec. 121, 96 Stat. 2228 (42 U.S.C. 10141). Sections 51.43, 51.67, and 51.109 also under Nuclear Waste Policy Act of 1982, sec. 114(f), 96 Stat. 2216, as amended (42 U.S.C. 10134(f)).

2. Section 51.20 is amended by revising paragraph (b)(2) to read as follows:

§ 51.20 Criteria for and identification of licensing and regulatory actions requiring environmental impact statements.

* * * * *

(b) * * *

(2) Issuance of a full-power or design-capacity license to operate a nuclear power reactor pursuant to part 50 of this chapter, or issuance or renewal of a full-power or design-capacity license to operate a testing facility or a fuel reprocessing plant pursuant to part 50 of this chapter.

* * * * *

2A. Footnotes 3 through 8 in part 51 are redesignated as footnotes 5 through 10.

3. Section 51.53 is revised to read as follows:

§ 51.53 Supplement to environmental report.

(a) *General.* Any supplement to an environmental report prepared under the provisions of this section may incorporate by reference any information contained in a prior environmental report or supplement thereto that relates to the same production or utilization facility or any information contained in a final environmental document previously prepared by the NRC staff that relates to the same production or utilization facility. Documents that may be referenced include, but are not limited to, the final environmental impact statement; supplements to the final environmental impact statement, including supplements prepared at the license renewal stage; environmental assessments and records of decisions prepared in connection with the construction permit, the operating license, and any license amendment for that facility.

(b) *Operating license stage.* Each applicant for a license to operate a production or utilization facility covered by § 51.20 shall submit with its application the number of copies, as specified in § 51.55, of a separate document, entitled "Supplement to Applicant's Environmental Report—Operating License Stage," which will update "Applicant's Environmental Report—Construction Permit Stage." Unless otherwise required by the Commission, the applicant for an operating license for a nuclear power plant shall submit this report only in connection with the first licensing action authorizing full-power operation. In this report, the applicant shall discuss the same matters described in §§ 51.45, 51.51, and 51.52, but only to the extent that they differ from those discussed or reflect new information in addition to that discussed in the final environmental impact statement prepared by the Commission in connection with the construction permit. Unless otherwise required by the Commission, no discussion of need for power or alternative energy sources or alternative sites for the facility or of any aspect of the storage of spent fuel for the facility within the scope of the generic determination in § 51.23(a) and in accordance with § 51.23(b) is required in this report.

(c) *Operating license renewal stage.* (1) Each applicant for renewal of a license to operate a nuclear power plant under part 54 of this chapter shall submit with its application the number of copies, as specified in § 51.55, of a separate document, entitled "Supplement to Applicant's Environmental Report—Operating License Renewal Stage."

(2) The supplemental report must contain a description of the proposed action, including the applicant's plans to modify the facility or its administrative control procedures as described in accordance with § 54.21(e) of this chapter. The report must describe in detail the modifications directly affecting the environment or affecting plant effluents that affect the environment.

(3) For those applicants seeking an initial renewal license and holding an operating license as of June 30, 1992, or

who hold an operating license for Bellefonte Unit 1 or 2, Comanche Peak Unit 2, or Watts Bar Unit 1 or 2, the scope of issues to be addressed in the supplemental report will be limited to the following:

(i) Unless otherwise required by the Commission, no discussion of license renewal issues identified as Category 1 issues in appendix B of subpart A of this part is required in the supplemental report.

(ii) For those issues identified as Category 2 in appendix B of subpart A of this part, the supplemental report must contain a demonstration that:

(A) The nuclear power plant uses only cooling towers for primary condenser cooling or that the license renewal applicant holds current Clean Water Act 316(b) determinations and if necessary a 316(a) variance in accordance with 40 CFR part 125, or equivalent State permits. If no such demonstration can be made, an assessment of the impact of the individual nuclear power plant license renewal on fish and shellfish resources resulting from heat shock and impingement and entrainment must be provided.

(B) The nuclear power plant is not located at an inland site or does not have cooling ponds. If no such demonstration can be made, an assessment of the impact of the individual nuclear power plant license renewal on groundwater quality must be provided.

(C) The nuclear power plant does not use Ranney wells and either does not pump 100 or more gallons per minute of groundwater or does not have private wells located within the cones of depression of the nuclear power plant wells. If no such demonstration can be made, an assessment of the impact of the individual nuclear power plant license renewal on groundwater-use conflicts must be provided.

(D) Construction activities that are related to license renewal that involve additional onsite land use will not affect important plant and animal habitats. If no such demonstration can be made, an assessment of the impact of the individual plant license renewal on important plant and animal habitats must be provided.

(E) No major construction activities associated with the nuclear power plant license renewal will take place at the site. If no such demonstration can be made, a construction impact control program that will mitigate potential impacts on the aquatic environment from soil erosion or spills must be implemented and a description of this program must be provided.

(F) The nuclear power plant is in a medium or high population area[3] and not in an area where growth-control measures that limit housing development are in effect. If no such demonstration can be made, an assessment of the impact of the individual nuclear power plant license renewal on housing availability must be provided.

(G) The design of the transmission lines of the nuclear power plant meets the recommendations of the National Electric Safety Code for preventing electric shock from induced currents. If no such demonstration can be made, an assessment of the impact of the individual nuclear power plant license renewal on the potential electric shock hazard from the transmission lines of the plant must be provided.

(H) The nuclear power plant does not use a cooling pond, lake, or canal and does not discharge water to a small river. If no such demonstration can be made, an assessment of the impact of thermophilic organisms in the affected water on the health of recreational users must be provided.

(I) The nuclear power plant will have access to a low-level radioactive waste disposal facility through a low-level waste compact or an unaffiliated State. If no such demonstration can be made, a presentation of capability and plans for interim waste storage must be provided with an assessment of potential ecological habitat destruction caused by construction activities.

(J) The replacement of equivalent generating capacity by a coal-fired plant has no demonstrated cost advantage[4] over the individual nuclear power plant license renewal. If no such demonstration can be made, a justification for choosing the license renewal alternative must be provided. For nuclear power plants located in California, Oregon, Washington, or Arizona, applicants to renew a license must also provide an assessment of geothermal generating capacity as an alternative to license renewal in addition to the cost demonstration results.

(iii) For those issues identified in Category 3 in appendix B of subpart A of this part, the supplemental report must contain an assessment about the following:

(A) The impact of renewing the license for the nuclear power plant on threatened or endangered species.

(B) The impact of renewing the license for the nuclear power plant on local transportation during periods of license-renewal-related refurbishment activities.

(4) The supplemental report must contain an analysis of whether the assessment required by paragraphs (c)(3)(ii)–(iii) of this section changes the findings documented in Table B–1 of appendix B of subpart A of this part that the renewal of any operating license for up to 20 years will have accrued benefits that outweigh the economic, environmental, and social costs of license renewal.

(d) *Postoperating license stage.* Each applicant for a license amendment authorizing the decommissioning of a production or utilization facility covered by § 51.20 and each applicant for a license or license amendment to store spent fuel at a nuclear power plant after expiration of the operating license for the nuclear power plant shall submit with its application the number of copies, as specified in § 51.55, of a separate document, entitled "Supplement to Applicant's Environmental Report—Post Operating License Stage," which will update "Supplement to Applicant's Environmental Report—Operating License Stage," and "Supplement to Applicant's Environmental Report—Operating License Renewal Stage," as appropriate, to reflect any new information or significant environmental change associated with the applicant's proposed decommissioning activities or with the applicant's proposed activities with respect to the planned storage of spent fuel. Unless otherwise required by the Commission, in accordance with the generic determination in § 51.23(a) and the provisions in § 51.23(b), the applicant shall only address the environmental impact of spent fuel storage for the term of the license applied for.

4. In § 51.55, paragraph (a) is revised to read as follows:

§ 51.55 Environmental report—number of copies; distribution.

(a) Each applicant for a license to construct and operate a production or utilization facility covered by paragraph (b)(1), (b)(2), (b)(3) or (b)(4) of § 51.20,

[3] An area is considered to have a medium or high population if any of the following conditions is satisfied:

(a) The plant is within 20 miles of a city of 25,000;

(b) The plant is within 50 miles of a city of 100,000;

(c) The population of the area within 20 miles of the plant is 75,000 or more;

(d) The population of the area within 50 miles of the plant is 1,500,000 or more; or

(e) The population of the area within 20 miles of the plant is 50,000 or more and, within 50 miles of the plant, the population is 400,000 or more.

[4] In performing the cost demonstration, costs of refurbishment, construction, fuel, operation, and maintenance must be considered.

each applicant for renewal of an operating license for a nuclear power plant, each applicant for a license amendment authorizing the decommissioning of a production or utilization facility covered by § 51.20, and each applicant for a license or license amendment to store spent fuel at a nuclear power plant after expiration of the operating license for the nuclear power plant shall submit to the Director of the Office of Nuclear Reactor Regulation or the Director of the Office of Nuclear Material Safety and Safeguards, as appropriate, 41 copies of an environmental report or any supplement to an environmental report. The applicant shall retain an additional 109 copies of the environmental report or any supplement to the environmental report for distribution to parties and Boards in the NRC proceedings; Federal, State, and local officials; and any affected Indian tribes; in accordance with written instructions issued by the Director of the Office of Nuclear Reactor Regulation or the Director of the Office Nuclear Material Safety and Safeguards, as appropriate.

* * * * *

5. Section 51.95 is revised to read as follows:

§ 51.95 Supplement to final environmental impact statement; environmental assessment.

(a) *General.* Any supplement to a final environmental impact statement or any environmental assessment prepared under the provisions of this section may incorporate by reference any information contained in a final environmental document previously prepared by the NRC staff that relates to the same production or utilization facility. Documents that may be referenced include, but are not limited to, the final environmental impact statement; supplements to the final environmental impact statement, including supplements prepared at the operating license stage; environmental assessments and records of decisions prepared in connection with the construction permit, the operating license, and any license amendment for that facility. A supplement to a final environmental impact statement will include a request for comments as provided in § 51.73.

(b) *Operating license stage.* In connection with the issuance of an operating license for a production or utilization facility, the NRC staff will prepare a supplement to the final environmental impact statement on the construction permit for that facility, which will update the prior environmental review. The supplement will only cover matters that differ from or that reflect significant new information concerning matters discussed in the final environmental impact statement. Unless otherwise determined by the Commission, a supplement on the operation of a nuclear power plant will not include a discussion of need for power or alternative energy sources or alternative sites or of any aspect of the storage of spent fuel for the nuclear power plant within the scope of the generic determination in § 51.23(a) and in accordance with § 51.23(b), and will only be prepared in connection with the first licensing action authorizing full-power operation.

(c) *Operating license renewal stage.* In connection with the renewal of an operating license for a nuclear power plant under part 54 of this chapter, the NRC staff will prepare an environmental assessment or, if warranted, a supplemental environmental impact statement. Unless otherwise determined by the Commission, the environmental assessment or the supplemental environmental impact statement will address only the matters in § 51.53(c) of this part. A supplemental environmental impact statement is required if significant impacts are found in the environmental assessment.

(d) *Postoperating license stage.* In connection with the amendment of an operating license to authorize the decommissioning of a production or utilization facility covered by § 51.20 or with the issuance, amendment, or renewal of a license to store spent fuel at a nuclear power plant after expiration of the operating license for the nuclear power plant, the NRC staff will prepare a supplemental environmental impact statement for the postoperating license stage or an environmental assessment, as appropriate, which will update the prior environmental review. Unless otherwise required by the Commission, in accordance with the generic determination in § 51.23(a) and the provisions of § 51.23(b), a supplemental environmental impact statement for the postoperating license stage or an environmental assessment, as appropriate, will address the environmental impacts of spent fuel storage only for the term of the license, license amendment, or license renewal applied for.

6. A new appendix B is added to subpart A, 10 CFR part 51 to read as follows:

Appendix B to Subpart A—Environmental Effect of Renewing the Operating License of a Nuclear Power Plant

The Commission has considered the environmental and other costs and benefits of alternatives to granting a renewed operating license for a nuclear power plant to a licensee who holds an operating license as of June 30, 1992, or who holds an operating license for Bellefonte Unit 1 or 2, Comanche Peak Unit 2, or Watts Bar Unit 1 or 2. The Commission has found that the renewal of any operating license for up to 20 years will have accrued benefits that outweigh the economic, environmental, and social costs of license renewal, subject to an evaluation of those issues identified as Category 2 (only for those nuclear power plants that are outside the envelope defined in each issue) and Category 3 in Table B–1. Table B–1 summarizes the Commission findings on the scope and magnitude of environmental and other effects of renewing the operating license for a nuclear power plant as required by section 102(2) of the National Environmental Policy Act of 1969, as amended. The Commission will periodically review the material in this appendix and update it if necessary.

TABLE B–1. SUMMARY OF FINDINGS ON NEPA ISSUES FOR LICENSE RENEWAL OF NUCLEAR POWER PLANTS

Issue	Category[1]	Findings[2]
PART I. NEED FOR GENERATING CAPACITY		
Need for generating capacity via license renewal	1	LARGE BENEFIT. License renewal of an individual nuclear power plant will be needed to meet generating capacity requirements in the service area and to avoid constructing and operating new generating facilities which would otherwise be necessary to replace the retired nuclear plant.

TABLE B-1. SUMMARY OF FINDINGS ON NEPA ISSUES FOR LICENSE RENEWAL OF NUCLEAR POWER PLANTS—Continued

Issue	Category[1]	Findings[2]
PART II. IMPACTS OF ALTERNATIVES		
Advances of alternatives to license renewal	1	NO ADVANTAGE. License renewal of an individual nuclear power plant is found to be preferable to replacement of the generating capacity with a new facility to the year 2020. License renewal is found to be preferable, both environmentally and economically[3] to either new fossil-fuel or new nuclear capacity. Wind, solar photovoltaic cells, solar thermal power, hydropower, and biomass are found to be not preferable to license renewal because of technological limitations, availability, and economics. Geothermal power could be competitive in areas where geothermal resources are readily available. These areas are in the states of California, Oregon, Washington, and Arizona.
PART III. BENEFITS/COST ASSESSMENT BENEFITS		
Direct Economic		
Generating capacity	1	LARGE BENEFIT. Will provide from 72 × 10^3 to 1270 × 10^3 net kW(e) reflecting the smallest to the largest plant.
Electric energy	1	LARGE BENEFIT. Will provide from 391 × 10^6 to 6898 × 10^6 kWh/yr reflecting the smallest to the largest plant.
Avoided costs	2[3]	SMALL TO LARGE BENEFIT. Compared to replacement of electric generating capacity with a new coal-fired plant, license renewal offers savings under a diverse set of conditions.
Indirect		
Local taxes Refurbishment	1	SMALL BENEFIT. Tax revenues will increase due to capital improvements.
Local taxes Renewal term	1	SMALL BENEFIT. The impact of tax revenues may vary from small to large depending on the total tax base of the taxing jurisdictions.
Employment Refurbishment	1	SMALL BENEFIT. Impacts on regional employment will be small to moderate depending on the total employment base of the region, and will be short-lived.
Employment Renewal term	1	SMALL BENEFIT. Impacts on regional employment will be small to large depending on the total employment base of the region.
COSTS **Direct Economic[3]**		
Refurbishment	2	MODERATE COST. Refurbishment costs will vary widely depending on specific plant requirements. In general, costs will be significantly lower relative to the capital cost of new coal-fired plants.
Fuel	2	SMALL COST. Fuel costs will be much lower than for a new coal-fired plant.
Operation and maintenance	2	LARGE COST. O&M costs will vary widely depending on specific plant performance but on the average they will be significantly more that for a new coal-fired plant.
Environmental and Socioeconomic **Surface Water Quality, Hydrology, and Use (for all plants)**		
Effects of refurbishment on surface-water quality	2	SMALL COST. Impacts are expected to be minor and insignificant during refurbishment if there are no major construction activities associated with the individual plant license renewal or if best management practices (BMPs) are employed to control soil erosion and spills; applicant must provide evidence of approved BMPs in license renewal application.
Effects of refurbishment on surface-water use	1	SMALL COST. Water use during refurbishment will not change or will be reduced during reactor outage.
Altered current patterns at intake and discharge structures	1	SMALL COST. Has not been found to be a problem at operating nuclear power plants and is not expected to be a problem during the license renewal term.
Altered salinity gradients	1	SMALL COST. Has not been found to be a problem at operating nuclear power plants and is not expected to be a problem during the license renewal term.
Altered thermal stratification of lakes	1	SMALL COST. Has not been found to be a problem at operating nuclear power plants and is not expected to be a problem during the license renewal term.
Temperature effects on sediment transport capacity	1	SMALL COST. Has not been found to be a problem at operating nuclear power plants and is not expected to be a problem during the license renewal term.
Scouring caused by discharged cooling water	1	SMALL COST. Has not been found to be a problem at operating nuclear power plants and is not expected to be a problem during the license renewal term.
Eutrophication	1	SMALL COST. Has not been found to be a problem at operating nuclear power plants and is not expected to be a problem during the license renewal term.
Discharge of chlorine or other biocides	1	SMALL COST. Effects are readily controlled through National Pollutant Discharge Elimination System (NPDES) permit and periodic modifications, if needed, and is not expected to be a problem during the license renewal term.
Discharge of sanitary wastes	1	SMALL COST. Effects are readily controlled through NPDES permit and periodic modifications, if needed, and is not expected to be a problem during the license renewal term.
Discharge of other chemical contaminants (e.g., metals)	1	SMALL COST. Has not been found to be a problem at operating nuclear power plants with cooling-tower-based heat dissipation systems. Has been satisfactorily mitigated at other plants. It is not expected to be a problem during the license renewal term.

TABLE B-1. SUMMARY OF FINDINGS ON NEPA ISSUES FOR LICENSE RENEWAL OF NUCLEAR POWER PLANTS—Continued

Issue	Category[1]	Findings[2]
Water-use conflicts	1	SMALL COST. Has not been found to be a problem at operating nuclear power plants with once-through heat dissipation systems. The issue has been a concern at two nuclear power plants with cooling ponds and at two plants with cooling towers, but it will be resolved with appropriate state or regional regulatory agencies outside of NRC license renewal actions. It is not expected to be a problem during the license renewal term.
Aquatic Ecology (for all plants)		
Refurbishment	1	SMALL COST. During plant shutdown and refurbishment there will be negligible effects on aquatic biota due to a reduction of entrainment and impingement of organisms or reduced release of chemicals.
Accumulation of contaminants in sediments or biota	1	SMALL COST. Has been a concern at a single nuclear power plant with a cooling pond, but has been satisfactorily mitigated. Has not been found to be a problem at operating nuclear power plants with cooling towers or once-through cooling systems, or a cooling pond, except for one plant. It was successfully mitigated at that plant. It is not expected to be a problem during the license renewal term.
Entrainment of phytoplankton and zooplankton	1	SMALL COST. Has not been found to be a problem at operating nuclear power plants and is not expected to be a problem during the license renewal term.
Cold shock	1	SMALL COST. Has been satisfactorily mitigated at operating nuclear plants with once-through cooling systems and has not endangered fish populations. Has not been found to be a problem at operating nuclear power plants with cooling towers or cooling ponds. It is not expected to be a problem during the license renewal term.
Thermal plume barrier to migrating fish	1	SMALL COST. Has not been found to be a problem at operating nuclear power plants and is not expected to be a problem during the license renewal term.
Premature emergence of aquatic insects	1	SMALL COST. Has not been found to be a problem at operating nuclear power plants and is not expected to be a problem during the license renewal term.
Gas supersaturation (gas bubble disease)	1	SMALL COST. Previously a concern at a small number of operating nuclear power plants with once-through cooling systems, but has been satisfactorily migated. Has not been found to be a problem at operating nuclear power plants with cooling towers or cooling ponds. It is not expected to be a problem during the license renewal term.
Low dissolved oxygen in the discharge	1	SMALL COST. Has been a concern at one nuclear power plant with a once-through cooling system, but issue will be monitored in the NPDES permit renewal process. Has not been found to be a problem at operating nuclear power plants with cooling towers or cooling ponds. It is not expected to be a problem during the license renewal term.
Losses from predation, parasitism, and disease among organisms exposed to sublethal stresses.	1	SMALL COST. Has not been found to be a problem at operating nuclear power plants and is not expected to be a problem during the license renewal term.
Stimulation of nuisance organisms (e.g., shipworms)	1	SMALL COST. Has been satisfactorily mitigated at the single nuclear power plant with a once-through cooling system where it was a problem. Has not been found to be a problem at operating nuclear power plants with cooling towers or cooling ponds. It is not expected to be a problem during the license renewal term.
Aquatic Ecology (for plant with once-through heat dissipation systems)		
Entrainment of fish and shellfish in early life stages	2	SMALL COST. Has not been found to be a problem at most operating plants and is not expected to be a problem during the license renewal term. Licensees of plants that do not have an approved Clean Water Act 316(b) determination or equivalent State permit at the time of license renewal application must evaluate the entrainment issue in the license renewal application.
Impingement of fish and shellfish	2	SMALL COST. Has not been found to be a problem at most operating plants and is not expected to be a problem during the license renewal term. Licensees, of plants that do not have an approved Clean Water Act 316(b) determination or equivalent State permit if required at the time of license renewal application must evaluate the impingement issue in the license renewal application.
Heat shock	2	SMALL COST. Has not been found to be a problem at most operating plants and is not expected to be a problem during the license renewal term. Licensees, of plants that do not have an approved Clean Water Act 316(b) determination or equivalent State permit, if required, at the time of license renewal application must evaluate the heat shock issue in the license renewal application.
Aquatic Ecology (for plants with cooling-tower-based heat dissipation systems)		
Entrainment of fish and shellfish in early life stages	1	SMALL COST. Has not been found to be a problem at operating nuclear power plants with this type of cooling system and is not expected to be a problem during the license renewal term.
Impingement of fish and shellfish	1	SMALL COST. Has not been found to be a problem at operating nuclear power plants with this type of cooling system and is not expected to be a problem during the license renewal term.
Heat shock	1	SMALL COST. Has not been found to be a problem at operating nuclear power plants with this type of cooling system and is not expected to be a problem during the license renewal term.

TABLE B-1. SUMMARY OF FINDINGS ON NEPA ISSUES FOR LICENSE RENEWAL OF NUCLEAR POWER PLANTS—Continued

Issue	Category[1]	Findings[2]
Aquatic Ecology (for plants with cooling pond heat dissipation systems)		
Impingement of fish	2	SMALL COST. Has not been found to be a problem at most operating plants and is not expected to be a problem during the license renewal term. Licensees of plants that do not have an approved Clean Water Act 316(b) determination or equivalent State permit at the time of license renewal application must evaluate the impingement issue in the license renewal application.
Entrainment of fish in early life stages	2	SMALL COST. Has not been found to be a problem at most operating plants and is not expected to be a problem during the license renewal term. Licensees of plants that do not have an approved Clean Water Act 316(b) determination or equivalent State permit at the time of license renewal application must evaluate the entrainment issue in the license renewal application.
Heat shock	2	SMALL COST. Has not been found to be a problem at most operating plants and is not expected to be a problem during the license renewal term. Licensees of plants that do not have an approved Clean Water act 316(a) determination or equivalent State permit, if required at the time of license renewal application must evaluate the heat shock issue in the license renewal application.
Groundwater Use and Quality, Impacts of Refurbishment		
Groundwater-use and quality	1	SMALL COST. Extensive dewatering during the original construction on some sites will not be repeated during refurbishment on any sites. Any plants wastes produced during refurbishment will be handled in the same manner as in current operating practices and is not expected to be a problem during the license renewal term.
Groundwater Use and Quality, Impacts of Operation		
Groundwater-use conflicts (potable and service water)	2	SMALL COST. Has not been found to be a problem at most operating plants and is not expected to be a problem during the license renewal term. Plants pumping 100 or more gpm *and* having private wells located within cones of depression of reactor wells are required to assess for use conflict during the license renewal term.
Groundwater-use conflicts (water pumped for dewatering)	2	SMALL COST. Has not been found to be a problem at most operating plants and is not expected to be a problem during the license renewal term. Plants pumping 100 or more gpm *and* having private wells located within cones of depression of plant wells are required to assess for use conflict during the license renewal term.
Groundwater-use conflicts (surface water used as makeup water—potentially affecting aquifer recharge).	1	SMALL COST. Water use conflicts are small and will be resolved as necessary through surface water regulatory mechanism outside of NRC license renewal process and is not expected to be a problem for any plant during the license renewal term.
Groundwater-use conflicts (Ranney wells)	2	SMALL COST. Ranney wells can result in potential groundwater depression beyond site boundary. Impacts of large groundwater withdrawal for cooling tower makeup at nuclear power plants using Ranney wells must be evaluated at the time of application for license renewal.
Groundwater-quality degradation (Ranney wells)	1	SMALL COST. Groundwater quality at river sites may be degraded by induced infiltration of poor-quality river water into an aquifer that supplies large quantities of reactor cooling water. However, the lower quality infiltrating water would not preclude the current uses of groundwater and is not expected to be a problem during the license renewal term.
Groundwater-quality degradation (saltwater intrusion)	1	SMALL COST. Nuclear power plants do not contribute significantly to saltwater intrusion.
Groundwater-quality degradation (cooling ponds)	2	SMALL COST. Sites with closed-cycle cooling ponds may degrade groundwater quality. This is not an issue for those plants located in salt marshes. However, for those plants located inland, the quality of the groundwater in the vicinity of the ponds must be shown to be adequate to allow continuation of current uses.
Terrestrial Resources		
Refurbishment impacts	2	SMALL COST. Insignificant impact if no loss of important plant and animal habitat occurs. If important plant and animal habitats are affected the potential impact will be assessed at the time of license renewal.
Cooling tower impacts on crops	1	SMALL COST. Salt drift, icing, fogging, or increased humidity associated with cooling tower operation have not been found to be a problem at operating nuclear power plants and is not expected to be a problem during the license renewal term.
Cooling tower impacts on native plants	1	SMALL COST. Salt drift, icing, fogging, or increased humidity associated with cooling tower operation have not been found to be a problem at operating nuclear power plants and is not expected to be a problem during the license renewal term.
Birds colliding with cooling towers	1	SMALL COST. Has not been found to be a problem at operating nuclear power plants and is not expected to be a problem during the license renewal term.
Cooling pond impacts on terrestrial resources	1	SMALL COST. No significant damage to vegetation has been observed as a result of fogging, icing, or increased relative humidity at nuclear reactor cooling ponds. The low levels of water contaminants in cooling ponds are not a threat to wildlife using the ponds. No significant impact is expected at any nuclear power plant during the license renewal term.
Power line right of way management (cutting and herbicide application).	1	SMALL COST. Periodic vegetation control causes cyclic changes in the density of wildlife populations dependent on the right-of-way, but long-term densities appear relatively stable. Numerous studies show neither significant positive nor negative effects of power line right-of-way on wildlife. No significant impact is expected at any nuclear power plant during the license renewal term.
Birds colliding with power lines	1	SMALL COST. Has not been found to be a problem at operating nuclear power plant and is not expected to be a problem during the license renewal term.

TABLE B-1. SUMMARY OF FINDINGS ON NEPA ISSUES FOR LICENSE RENEWAL OF NUCLEAR POWER PLANTS—Continued

Issue	Category[1]	Findings[2]
Impacts of electromagnetic fields (EMFs) on flora and fauna (plants, agricultural crops, honeybees, wildlife, livestock).	1	SMALL COST. No significant impacts of electromagnetic fields on terrestrial flora and fauna have been identified as is not expected to be a problem during the license renewal term.
Floodplains and wetland on power line right of way	1	SMALL COST. Periodic vegetation control is necessary in forested wetlands underneath power lines and can be achieved with minimal damage to the wetland. On rare occasions when heavy equipment may need to enter a wetland to repair a power line, impacts can be minimized through the use of standard practices. No significant impact is expected at any nuclear power plant during the license renewal term.
Threatened or Endangered Species (for all plants)		
Threatened or endangered species	3	Generally, reactor refurbishment and continued operation is not expected to adversely affected threatened or endangered species. However, consultation with appropriate agencies must occur to determine if, in fact, threatened or endangered species are present and if they will be adversely affected.
Air Quality		
Air quality	1	SMALL COST. Air quality impacts from reactor refurbishment associated with license renewal are expected to be small.
Land Use		
Onsite land use	1	SMALL COST. Projected on-site land use changes required during refurbishment and the renewal period would be a small fraction of any nuclear power plant site.
Human Health, Impacts of Refurbishment		
Radiation exposures to the public	1	SMALL COST. During refurbishment, the gaseous effluents would result in doses well below the natural background dose. Applicable regulatory dose limits to the public are not expected to be exceeded.
Occupational radiation exposures	1	SMALL COST. Average occupational doses from refurbishment are expected to be within the range of annual average doses experienced for pressurized-water reactors and boiling-water reactors. Upper-limit cancer and genetic risks from radiation exposure from the incremental doses from refurbishment are expected to be less than 1% of the natural cancer and genetic risks.
Human Health, Impacts of Operation During License Renewal		
Microbiological organisms (occupational health)	1	SMALL COST. Occupational health questions are expected to be resolved using industrial hygiene principles to minimize worker exposures.
Microbiological organisms (public health)	2	SMALL COST. Has not been found to be a problem at most operating plants and is not expected to be a problem during the license renewal term. At the time of license renewal of plants using cooling ponds, lakes, or canals and plants discharging to small rivers applicants will assess the impact of thermophilic organisms on the health of recreational users of affected water.
Noise	1	SMALL COST. Has not been found to be a problem at operating plants and is not expected to be a problem at any reactor during the license renewal term.
Electromagnetic fields, acute effects (electric shock)	2	SMALL COST. Has not been found to be problem at most operating plants and is not expected to be a problem during the license renewal term. If it cannot be found at the time of license renewal that the transmission lines of the plant meets the National Electric Safety Code recommendations regarding the prevention of shock from induced currents then an assessment of the potential electric shock hazard from the transmission lines of the plant must be provided.
Electromagnetic fields, chronic effects	1	SMALL COST. Biological and physical studies of 60-Hz electromagnetic fields have not found consistent evidence linking harmful effects with field exposures.
Radiation exposures to public	1	SMALL COST. Present radiation doses to the public are very small with respect to natural background radiation; and doses from refurbishment are expected to be similar in magnitudes.
Occupational radiation exposures	1	SMALL COST. Projected maximum occupational doses during the license renewal term are within the range of doses experienced and are considerably below the 5 rem exposure limit.
Socioeconomics		
Housing impacts of refurbishment	2	SMALL COST. Not expected to be a problem at any plant located in a medium or high population area and not in an area where growth control measures that limit housing development are in effect. Housing impacts of the workforce associated with refurbishment will be assessed at the time of license renewal for plants located in sparsely populated areas or in areas with growth control measures that limit housing development.
Housing impacts of license renewal term	2	SMALL COST. Not expected to be a problem at any plant located in a medium or high population area and not in an area where growth control measures that limit housing development are in effect. Housing impacts of the workforce associated with refueling/maintenance outages will be assessed at the time of license renewal for plants located in sparsely populated areas or in areas with growth control measures that limit housing development.
Public service impacts of refurbishment	1	SMALL COST. Refurbishment induced population growth will be small and will not strain local infrastructure at any plant.

TABLE B-1. SUMMARY OF FINDINGS ON NEPA ISSUES FOR LICENSE RENEWAL OF NUCLEAR POWER PLANTS—Continued

Issue	Category[1]	Findings[2]
Transportation impacts of refurbishment	3	Impacts are generally expected to be small, however, they must be assessed for each plant to consider the increase in traffic associated with the additional workers and the local road and traffic control conditions.
Public service (including transportation) impacts during license renewal term.	1	SMALL COST. No significant impacts are expected during the license renewal term.
Offsite land-use impacts of refurbishment	1	SMALL COST. Impacts will not be significant at any plant because plant-induced population growth will have little effect on land use patterns.
Offsite land-use impacts of license renewal term	1	SMALL COST. Changes in land use would be associated with population and tax revenue changes resulting from license renewal of a plant. These changes are expected to be small for all plants.
Historic resources impacts of refurbishment	1	SMALL COST. No significant impacts are expected during refurbishment.
Historic resources impacts of license renewal term (transmission lines).	1	SMALL COST. No significant impacts are expected during the license renewal term.
Historic resources impacts of license renewal term (normal operations).	1	SMALL COST. No significant impacts are expected during the license renewal term.
Aesthetic impacts of refurbishment	1	SMALL COST. No significant impacts are expected during refurbishment.
Aesthetic impacts of license renewal term	1	SMALL COST. Impacts will be small to moderate depending on the visual intrusiveness of the plant on historic and aesthetic resources in the area.
Aesthetic impacts of license renewal term (transmission lines).	1	SMALL COST. No significant impacts are expected during the license renewal term.
Uranium Fuel Cycle		
Radiological and nonradiological Impacts	1	SMALL COST. Impacts on the U.S. population from radioactive gaseous and liquid releases including radon-222 and technetium-99 is small compared with the impacts of natural background radiation. Nonradiological impacts on the environment are small.
Environmental Impacts of Postulated Accidents		
Design-basis accidents	1	SMALL COST. Regulations require that consequences from design basis events remain acceptable for every plant.
Severe accidents (atmospheric releases)	1	SMALL COST. Risks from atmospheric releases is small.
Severe accidents (fallout onto open bodies of water)	1	SMALL COST. Risk from both the drinking water pathway and the aquatic food pathway are small and interdiction can further reduce both sufficiently for all plants.
Severe accidents (releases from groundwater)	1	SMALL COST. Interdiction and the low probability of base mat penetration yield a low risk to the public for all plants.
Severe accidents (economic consequences)	1	SMALL COST. Predicted costs due to postulated accidents range from $2,000/reactor-year to $374,000/reactor-year.
Severe accident mitigation design alternatives	1	SMALL COST. Low risk to the environment from severe accidents.
Solid Waste Management		
Nonradiological waste	1	SMALL COST. No changes to generating systems are anticipated for license renewal. Existing regulations will ensure proper handling and disposal at all plants.
Low-level radioactive waste storage	2	SMALL COST. Impacts will be small for plants having access to offsite disposal space. For those plants denied the use of off-site disposal space due to delayed compact plans, the potential for ecological habitat disturbance due to construction of on-site storage facilities must be evaluated.
Low-level radioactive waste disposal	2	SMALL COST. Off-site disposal facilities are planning to handle refurbishment and normal operations waste streams for an additional 20 years. If implementation of plans is delayed, plants in affected compact regions or unaffiliated states must plan for extended interim storage for an indefinite period of time and evaluate the impacts of such storage.
Mixed waste	1	SMALL COST. License renewal will not increase the small, continuing risk to human health and the environment posed by mixed waste at all plants.
Spent fuel	1	SMALL COST. A 50% greater volume of spent fuel from an additional 20 years of operation can be safely accommodated on-site with small environmental effects through dry or pool storage at all plants if a permanent repository or monitored retrievable storage facility is not available.
Transportation	1	SMALL COST. Rail and truck transport corridors can safely accommodate increased shipments of radioactive wastes associated with license renewal. Shipments would result in impacts within the scope of the Table S.4 rule and therefore would result in acceptable impact
Decommissioning		
Radiation doses	1	SMALL COST. Doses to the public are small regardless of which decommissioning method is used. Occupational doses would increase no more than 1 man-rem due to buildup of long-lived radionuclides during the license renewal term.
Waste management	1	SMALL COST. Decommissioning at the end of a 20-year license renewal period would generate no more solid wastes than at the end of the current license term. No increase in the quantities of Class C or greater than Class C wastes would be expected.
Air quality	1	SMALL COST. Air quality impacts of decommissioning are expected to be negligible whether at the end of the current operating term or at the end of the license renewal term.
Water quality	1	SMALL COST. The potential for significant water quality impacts from erosion or spills is no greater if decommissioning occurs after a 20-year license renewal period or after the original 40-year operation period, and measures are readily available to avoid such impacts.

TABLE B-1. SUMMARY OF FINDINGS ON NEPA ISSUES FOR LICENSE RENEWAL OF NUCLEAR POWER PLANTS—Continued

Issue	Category[1]	Findings[2]
Ecological resources	1	SMALL COST. Decommissioning after either the initial operating period or after a 20 year license renewal period is not expected to have any direct ecological impacts.
Socioeconomic impacts	1	SMALL COST. Decommissioning would have some short-term socioeconomic impacts. The impacts would not be increased by delaying decommissioning until the end of a 20-year relicense period, but they might be decreased by population and economic growth.

[1] The numerical entries in this column are based on the following category definitions: Category 1: A generic conclusion on the impact has been reached for all affected nuclear power plants. Category 2: A generic conclusion on the impact has been reached for affected nuclear power plants that fall within defined bounds. Category 3: A generic conclusions on the impact was not reached for any affected nuclear power plants.

[2] The findings in this column apply to Category 1 issues and Category 2 issues if a plant falls within the bounds of the generic analysis. For Part I of this table, the entry in this column indicates the level of need. For Part II of this table, the entry in this column indicates the relative advantages of alternatives to license renewal. For Part III of this table, the entries in this column are benefits or costs, as indicated by the following headings: *Small* impacts are so minor that they warrant neither detailed investigation or consideration of mitigative actions when such impacts are negative. *Moderate* impacts are likely to be clearly evident and usually warrant consideration of mitigation alternatives when such impacts are negative. *Large* impacts involve either a severe penalty or a major benefit and mitigation alternatives are always considered when such impacts are negative.

[3] The uncertainty associated with the economic cost of license renewal leads to the requirement that an applicant demonstrate for license renewal that no cost advantage exists for replacing the plant's equivalent generating capacity by a new coal-fired power plant. If no such demonstration can be made, and applicant shall justify choosing the license renewal alternative. The justification will include an assessment comparing the cost of license renewal to the cost of reasonable alternative replacement generating capacity. Costs considered must include refurbishment and construction, fuel, and operation, and maintenance.

Dated at Rockville, Maryland, this 10th day of September, 1991.

For the Nuclear Regulatory Commission.

Samuel J. Chilk,

Secretary of the Commission.

[FR Doc. 91-22194 Filed 9-16-91; 8:45 am]

BILLING CODE 7590-01-M

FEDERAL DEPOSIT INSURANCE CORPORATION

12 CFR Part 323

RIN 3064-AB05

Appraisals

AGENCY: Federal Deposit Insurance Corporation (FDIC).

ACTION: Notice of proposed rulemaking.

SUMMARY: The FDIC is proposing to amend part 323 to exempt additional transactions from the requirements of the final appraisal rule published on August 20, 1990 (55 FR 33879). If adopted, the proposed amendment would: (1) Eliminate the requirement for regulated institutions to obtain appraisals by certified or licensed appraisers for real estate-related financial transactions having a value, as defined in the rule, of $100,000 or less; (2) permit regulated institutions to use appraisals prepared for loans insured or guaranteed by an agency of the federal government if the appraisal conforms to the requirements of the federal insurer or guarantor; and (3) add a definition of "real estate" and "real property" to clarify that the appraisal regulation does not apply to mineral rights, timber rights, or growing crops.

The FDIC is proposing these amendments to address concerns raised by state nonmember insured banks concerning the cost of complying with the appraisal requirement for certain loans which have not resulted in substantial losses to such banks. If adopted, this proposal would decrease the number of real estate-related financial transactions requiring an appraisal prepared by a certified or licensed appraiser in accordance with the FDIC's final appraisal rule, thereby reducing costs associated with those transactions.

FDIC is soliciting comments regarding all aspects of the proposed rule and is requesting that comments include specific information regarding real estate related loans held by banks where the transaction value is: $50,000 or below; $50,001 to $100,000; and above $100,000. All comments received by the FDIC will be reviewed and given appropriate consideration.

DATES: Comments must be received by November 18, 1991.

ADDRESSES: Comments should be directed to: Hoyle L. Robinson, Executive Secretary, FDIC, 550 17th Street, NW., Washington, DC 20429. Comments may be hand delivered to room F-400 on business days between 8:30 a.m. and 5 p.m. Comments may also be inspected at the same location and times. (FAX number: (202) 898-3838.)

FOR FURTHER INFORMATION CONTACT: (For information on supervisory issues) James D. Leitner, Examination Specialist, Division of Supervision, (202) 898-6790, or Robert F. Miailovich, Assistant Director, DOS, (202) 898-6918; (for information on legal issues) Walter P. Doyle, Counsel, Legal Division, (202) 898-3682; (for information on liquidation issues) N. Jack Taylor, Senior Liquidation Specialist, Division of Liquidation, (202) 898-7326; FDIC, 550 17th Street, NW., Washington, DC 20429.

SUPPLEMENTARY INFORMATION:

Discussion

Background

Title XI of the Financial Institutions Reform, Recovery, and Enforcement Act of 1989 ("FIRREA") directed the FDIC, and the other financial institutions regulatory agencies,[1] to publish appraisal rules for federally related transactions within the jurisdiction of each agency. In accordance with statutory requirements, FDIC's final rule sets minimum standards for appraisals used in connection with federally related transactions and identified those federally related transactions that require a state certified appraiser and those that require either a state certified or licensed appraiser. The final rule was published August 20, 1990 (55 FR 33879).

When Services of Appraiser Required

Section 1121 of FIRREA, 12 U.S.C. 3350, defines a "federally related transaction" as a real estate-related financial transaction which, *inter alia*, requires the service of an appraiser. In the notice of proposed rulemaking published February 22, 1990 (55 FR 6266), the FDIC stated its intention not to require the services of a certified or licensed appraiser for transactions below a $15,000 threshold and asked for specific comment on "the amount and appropriateness of the *de minimis* "level" below which the services of an appraiser would not be required.

The FDIC received over 200 comments on the threshold provision, the overwhelming majority of which suggested raising the threshold. Suggested values ranged from $20,000 to $250,000, with the greatest number of commenters recommending that the threshold be raised to $100,000. However, because title XI of FIRREA expressed a preference for uniform

[1] These are: the Board of Governors of the Federal Reserve System, the Office of the Comptroller of the Currency, the Office of Thrift Supervision, and the National Credit Union Administration. In addition, the Resolution Trust Corporation has issued appraisal rules under title XI of FIRREA.

Rules and Regulations

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NUCLEAR REGULATORY COMMISSION

10 CFR Part 51

RIN 3150–AD63

Environmental Review for Renewal of Nuclear Power Plant Operating Licenses

AGENCY: Nuclear Regulatory Commission.

ACTION: Final rule.

SUMMARY: The Nuclear Regulatory Commission (NRC) is amending its regulations regarding environmental protection regulations for domestic licensing and related regulatory functions to establish new requirements for the environmental review of applications to renew the operating licenses of nuclear power plants. The amendment defines those environmental impacts for which a generic analysis has been performed that will be adopted in plant-specific reviews for license renewal and those environmental impacts for which plant-specific analyses are to be performed.

The amendment improves regulatory efficiency in environmental reviews for license renewal by drawing on the considerable experience of operating nuclear power reactors to generically assess many of the environmental impacts that are likely to be associated with license renewal. The amendment also eliminates consideration of the need for generating capacity and of utility economics from the environmental reviews because these matters are under the regulatory jurisdiction of the States and are not necessary for the NRC's understanding of the environmental consequences of a license renewal decision.

The increased regulatory efficiency will result in lower costs to both the applicant in preparing a renewal application and to the NRC for reviewing plant-specific applications and better focus of review resources on significant case specific concerns. The results should be a more focused and therefore a more effective NEPA review for each license renewal. The amendment will also provide the NRC with the flexibility to address unreviewed impacts at the site-specific stage of review and allow full consideration of the environmental impacts of license renewal.

The NRC is soliciting public comment on this rule for a period of 30 days. In developing any comment specific attention should be given to the treatment of low-level waste storage and disposal impacts, the cumulative radiological effects from the uranium fuel cycle, and the effects from the disposal of high-level waste and spent fuel.

DATES: Absent a determination by the NRC that the rule should be modified, based on comments received, the final rule shall be effective on August 5, 1996. The comment period expires on July 5, 1996.

ADDRESSES: Send comments to: The Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001, Attention: Docketing and Services Branch, or hand deliver comments to the Office of the Secretary, One White Flint North, 11555 Rockville Pike, Rockville, Maryland between 7:30 a.m. and 4:15 p.m. on Federal workdays. Copies of comments received and all documents cited in the supplementary information may be examined at the NRC Public Document Room, 2120 L Street NW. (Lower Level), Washington, DC between the hours of 7:45 a.m. and 4:15 p.m. on Federal workdays.

FOR FURTHER INFORMATION CONTACT: Donald P. Cleary, Office of Nuclear Regulatory Research, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001, telephone: (301) 415–6263; e-mail DPC@nrc.gov.

SUPPLEMENTARY INFORMATION:

I. Introduction

The Commission has amended its environmental protection regulations in 10 CFR part 51 to improve the efficiency of the process of environmental review for applicants seeking to renew an operating license for up to an additional 20 years. The amendments are based on the analyses conducted for and reported in NUREG–1437, ''Generic Environmental Impact Statement for License Renewal of Nuclear Plants'' (May 1996). The Commission's initial decision to undertake a generic assessment of the environmental impacts associated with the renewal of a nuclear power plant operating license was motivated by its beliefs that:

(1) License renewal will involve nuclear power plants for which the

environmental impacts of operation are well understood as a result of data evaluated from operating experience to date;

(2) Activities associated with license renewal are expected to be within this range of operating experience, thus environmental impacts can be reasonably predicted; and

(3) Changes in the environment around nuclear power plants are gradual and predictable with respect to characteristics important to environmental impact analyses.

Although this amendment is consistent with the generic approach and scope of the proposed amendment published on September 17, 1991 (56 FR 47016), several significant modifications have been made in response to the public comments received. The proposed amendment would have codified the findings reached in the draft generic environmental impact statement (GEIS) as well as certain procedural requirements. The draft GEIS established the bounds and significance of potential environmental impacts at 118 light-water nuclear power reactors that, as of 1991, were licensed to operate or were expected to be licensed in the future.

All potential environmental impacts and other matters treated by the NRC in an environmental review of nuclear power plants were identified and combined into 104 discrete issues. For each issue, the NRC staff established generic findings encompassing as many nuclear power plants as possible. These findings would have been codified by the proposed amendment. Of the 104 issues reviewed for the proposed rule, the staff determined that 80 issues could be adequately addressed generically and would not have been reviewed in plant-specific license renewal reviews. For 22 of the issues, it was found that the issue was adequately addressed for some but not all plants. Therefore, a plant-specific review would be required to determine whether the plant is covered by the generic review or whether the issue must be assessed for that plant. The proposed amendment provided guidance on the application of these findings at the site-specific license renewal stage. For the two remaining issues, it was found that the issue was not generically addressed for any plant, and thus a plant-specific review would have been required for all plants.

Other major features of the proposed amendment included a conditional finding of a favorable cost-benefit balance for license renewal and a provision for the use of an environmental assessment that would address only those issues requiring plant-specific review. A finding of no significant impact would have resulted in a favorable cost-benefit balance for that plant. If a finding of no significant impact could not be made for the plant, there would have to have been a determination as to whether the impacts found in the environmental assessment were sufficient to overturn the conditional cost-benefit balance found in the rule.

Although the final amendments to 10 CFR part 51 maintain the same generic approach used in the proposed rule, there are several modifications.The final amendments to 10 CFR part 51 now contain 92 issues. The reduction of the number of issues from 104 in the proposed rule to 92 in the final rule is due to (1) the elimination from the review of the consideration of the need for electric power and associated generating capacity and of the direct economic benefits and costs associated with electric power, (2) removing alternatives as an issue from Table B–1 and addressing review requirements only in the text of the rule, (3) combining the five severe accident issues used in the proposed rule into one issue, (4) eliminating several regional economic issues under socioeconomics that are not directly related to environmental impacts, (5) making minor changes to the grouping of issues under aquatic ecology and groundwater, (6) identifying collective offsite radiological impacts associated with the fuel cycle and all impacts of high level waste and spent fuel disposal as separate issues, and (7) adding environmental justice as an issue for consideration.

Of the 92 issues in the final rule, 68 issues were found to be adequately addressed in the GEIS, and therefore, additional assessment will not be required in a plant-specific review. Twenty-four issues were found to require additional assessment for at least some plants at the time of the license renewal review. In the final rule, the 2 issues in the proposed rule that would have required review for all plants are now included in the set of 24 issues of the final rule.

Public comments on the adequacy of the analysis for each issue were considered by the NRC staff. Any changes to the analyses and findings that were determined to be warranted were made in the final GEIS and incorporated in the rule. Several changes were made to the procedural features of the proposed rule in response to comments by the Council on Environmental Quality, the Environmental Protection Agency, and a number of State agencies. First, the NRC will prepare a supplemental site-specific environmental impact statement (SEIS), rather than an environmental assessment (as initially proposed), for each license renewal application. The SEIS will be issued for public comment as part of the individual plant review process. The NRC will delay any conclusions regarding the acceptability of the overall impacts of the license renewal until completion of the site-specific review. In addition, the SEIS will be prepared in accordance with existing public scoping requirements. The NRC will also review and consider any new and significant information presented during the review of individual license renewal applications. In addition, any person may challenge the validity of the conclusions codified in the rule by filing a petition for rulemaking pursuant to 10 CFR 2.802. Finally, the NRC will review the rule and the GEIS on a schedule that allows revisions, if required, every 10 years. This review will be initiated approximately 7 years after the completion of the previous revision cycle.

In addition to the changes involving public participation, this final rule also contains several changes regarding the scope of analysis and conclusions in the rule and GEIS. The conditional cost-benefit balance has been removed from the GEIS and the rule. In place of the cost-benefit balancing, the NRC will use a new standard that will require a determination of whether or not the adverse environmental impacts of license renewal are so great, compared with the set of alternatives, that preserving the option of license renewal for future decisionmakers would be unreasonable. The final amendment also eliminates NRC's consideration of the need for generating capacity and the preparation of power demand forecasts for license renewal applications. The NRC acknowledges the primacy of State regulators and utility officials in defining energy requirements and determining the energy mix within their jurisdictions. Therefore, the issue of need for power and generating capacity will no longer be considered in NRC's license renewal decisions. The final GEIS has been revised to include an explicit statement of purpose and need for license renewal consistent with this acknowledgment. Lastly, the final rule has eliminated the consideration of utility economics from license renewal reviews under the National Environmental Policy Act (NEPA) except when such benefits and costs are either essential for a determination regarding the inclusion of an alternative

in the range of alternatives considered or relevant to mitigation. These and other features of the final rule are explained in detail below.

The NRC is soliciting public comment on this rule for a period of 30 days. In developing any comment specific attention should be given to the treatment of low-level waste storage and disposal impacts, the cumulative radiological effects from the uranium fuel cycle, and the effects from the disposal of high-level waste and spent fuel. Absent a determination by the NRC that the rule should be modified, based on comments received, the final rule shall be effective on August 5, 1996.

II. Rulemaking History

In 1986, the NRC initiated a program to develop license renewal regulations and associated regulatory guidance in anticipation of applications for the renewal of nuclear power plant operating licenses. A solicitation for comments on the development of a policy statement was published in the Federal Register on November 6, 1986 (51 FR 40334). However, the Commission decided to forgo the development of a policy statement and to proceed directly to rulemaking. An advance notice of proposed rulemaking was published on August 29, 1988 (53 FR 32919). Subsequently, the NRC determined that, in addition to the development of license renewal regulations focused on the protection of health and safety, an amendment to its environmental protection regulations in 10 CFR part 51 was warranted.

On October 13, 1989 (54 FR 41980), the NRC published a notice of its intent to hold a public workshop on license renewal on November 13 and 14, 1989. One of the workshop sessions was devoted to the environmental issues associated with license renewal and the possible merit of amending 10 CFR part 51. The workshop is summarized in NUREG/CP–0108, ''Proceedings of the Public Workshop on Nuclear Power Plant License Renewal'' (April 1990). Responses to the public comments submitted after the workshop are summarized in NUREG–1411, ''Response to Public Comments Resulting from the Public Workshop on Nuclear Power Plant License Renewal'' (July 1990).

On July 23, 1990, the NRC published an advance notice of proposed rulemaking (55 FR 29964) and a notice of intent to prepare a generic environmental impact statement (55 FR 29967). The proposed rule was published on September 17, 1991 (56 FR 47016). The same Federal Register notice described the supporting documents that were available and announced a public workshop to be held on November 4–5, 1991. The supporting documents for the proposed rule included:

(1) NUREG–1437, ''Draft Generic Environmental Impact Statement for License Renewal of Nuclear Plants'' (August 1991);

(2) NUREG–1440, ''Regulatory Analysis of Proposed Amendments to Regulations Concerning the Environmental Review for Renewal of Nuclear Power Plant Operating Licenses: Draft Report for Comment'' (August 1991);

(3) Draft Regulatory Guide DG–4002, Proposed Supplement 1 to Regulatory Guide 4.2, ''Guidance for the Preparation of Supplemental Environmental Reports in Support of an Application To Renew a Nuclear Power Station Operating License'' (August 1991); and

(4) NUREG–1429, ''Environmental Standard Review Plan for the Review of License Renewal Applications for Nuclear Power Plants: Draft Report for Comment'' (August 1991).

After the comment period, the NRC exchanged letters with the Council on Environmental Quality (CEQ) and the Environmental Protection Agency (EPA) to address their concerns about procedural aspects of the proposed rule. The Commission also decided that the staff should discuss with the States the concerns raised in comments by a number of States that certain features of the proposed rule conflicted with State regulatory authority over the need for power and utility economics. To facilitate these discussions, the NRC staff developed an options paper entitled ''Addressing the Concerns of States and Others Regarding the Role of Need for Generating Capacity, Alternative Energy Sources, Utility Costs, and Cost-Benefit Analysis in NRC Environmental Reviews for Relicensing Nuclear Power Plants: An NRC Staff Discussion Paper.'' A Federal Register notice published on January 18, 1994 (59 FR 2542) announced the scheduling of three regional workshops during February 1994 and the availability of the options paper. A fourth public meeting on the State concerns was held in May 1994 in order for the NRC staff to better understand written proposals that had been submitted by two industry organizations after the regional workshops. After considering the comments from the workshops and the written comments, the NRC staff issued a proposed supplement to the proposed rule published on July 25, 1994 (59 FR 37724), that it believed would resolve the States' concerns regarding the Commission's consideration of need for power and utility economics. Comments were requested on this proposal. The discussion below contains an analysis of these comments and other comments submitted in response to the proposed rule.

III. Analysis of Public Comments

The analysis of public comments and the NRC's responses to these comments are documented in NUREG–1529, ''Public Comments on the Proposed 10 CFR part 51 Rule for Renewal of Nuclear Power Plant Operating Licenses and Supporting Documents: Review of Concerns and NRC Staff Response'' (May 1996). The extent of comments received during the various stages of the rulemaking process and the principal concerns raised by the commenters, along with the corresponding NRC responses to these concerns, are discussed below.

A. Commenters

In response to the Federal Register notice on the proposed rule published on September 17, 1991 (56 FR 47016), 68 organizations and 49 private citizens submitted written comments. The 68 organizations included 5 Federal agencies; 26 State, regional, and local agencies; 19 nuclear industry organizations and engineering firms; 3 law firms; and 15 public interest groups. Before the close of the initial comment period, the NRC conducted a 2-day workshop on November 4–5, 1991, in Arlington, Virginia, to discuss the proposed rule. Representatives from Federal agencies, State agencies, utilities, engineering firms, law firms, and public interest groups attended the workshop. Workshop panelists included the NRC staff as well as representatives from the Department of Energy (DOE), Department of Interior (DOI), Environmental Protection Agency (EPA), Council on Environmental Quality (CEQ), several State agencies, the nuclear industry, and public interest groups.

In February 1994, the NRC conducted three public meetings to solicit views on the NRC staff's options for addressing the need for generating capacity, alternative energy sources, economic costs, and cost-benefit analysis in the proposed rule. The intent to hold public meetings and the availability of the options paper was noticed in the Federal Register on January 12, 1994 (59 FR 2542). Written comments were also solicited on the options paper. The public meetings were held in Rockville, Maryland; Rosemont, Illinois; and Chicopee, Massachusetts.

Representatives from several States, the National Association of Regulatory Utility Commissioners (NARUC), the nuclear industry, and public interest groups actively participated. Nineteen separate written comments were also submitted, primarily by the States and the nuclear industry. In their submittals, the Nuclear Energy Institute (NEI), formerly known as the Nuclear Management and Resources Council (NUMARC), and Yankee Atomic Electric Company (YAEC) each proposed an approach to handling the issues of need for generating capacity and alternative energy sources in the rule. For the NRC staff to better understand these proposals, an additional public meeting was held with NEI and YAEC on May 16, 1994, in Rockville, Maryland.

After considering the public comments on the NRC staff's options paper, the NRC issued a proposed supplement to the proposed rule; it was published in the Federal Register on July 25, 1994 (59 FR 37724). The proposed supplement set forth the NRC staff's approach to the treatment of need for generating capacity and alternative energy sources, as well as the staff's revision to the purpose of and need for the proposed action (i.e., license renewal), which was intended to satisfy the States' concerns and to meet NEPA requirements. Twenty separate written comments were received in response to this solicitation from Federal and State agencies, the nuclear industry, a public interest group, and two private citizens.

B. Procedural Concerns

The commenters on the proposed rule raised significant concerns regarding the following procedural aspects of the rule:

(1) State and public participation in the license renewal process and the periodic assessment of the GEIS findings;

(2) The use of economic costs and cost-benefit balancing; and

(3) Consideration of the need for generating capacity and alternative energy sources in the environmental review of license renewal applications.

Each of these concerns and the NRC response is discussed below.

1. Public Participation and the Periodic Assessment of the Rule and the GEIS

Concern. Many commenters criticized the draft GEIS finding that 80 of 104 environmental issues could be generically applied to all plants and, therefore, would not be subject to plant-specific review at the time of license renewal. As a consequence, these commenters believe they are being denied the opportunity to participate in the license renewal process. Moreover, they pointed out that the site-specific nature of many important environmental issues does not justify a generic finding, particularly when the finding would have been made 20 years in advance of the decision to renew an operating license. The commenters believe that only a site-specific EIS to support a license renewal decision would satisfy NEPA requirements.

Federal and State agencies questioned how new scientific information could be folded into the GEIS findings because the GEIS would have been performed so far in advance of the actual renewal of an operating license. There were differing views on exactly how the NRC should address this question. A group of commenters, including CEQ and EPA, noted that the rigidity of the proposed rule hampers the NRC's ability to respond to new information or to different environmental issues not listed in the proposed rule. They believe that incorporation of new information can only be achieved through the process of amending the rules. One commenter recommended that, if the NRC decides to pursue the approach of making generic findings based on the GEIS, the frequency of review and update should be specifically stated in the rule. Recommendations on the frequency of the review ranged from 2 years to 5 years.

Response. In SECY–93–032, February 9, 1993, the NRC staff reported to the Commission their discussions with CEQ and EPA regarding the concerns these agencies raised, which were also raised by other commenters, about limiting public comment and the consideration of significant new information in individual license renewal environmental reviews. The focus of the commenters concerns is the limited nature of the site-specific reviews contemplated under the proposed rule. In response, the NRC has reviewed the generic conclusions in the draft rule, expanded the opportunity for site-specific review, and confirmed that what remains as generic is so. Also, the framework for consideration of significant new information has been revised and expanded.

The major changes adopted as a result of these discussions are as follows:

1. The NRC will prepare a supplemental site-specific EIS, rather than an environmental assessment (as initially proposed), for each license renewal application. This SEIS will be a supplement to the GEIS. Additionally, the NRC will review comments on the draft SEIS and determine whether such comments introduce new and significant information not considered in the GEIS analysis. All comments on the applicability of the analyses of impacts codified in the rule and the analysis contained in the draft supplemental EIS will be addressed by NRC in the final supplemental EIS in accordance with 40 CFR 1503.4, regardless of whether the comment is directed to impacts in Category 1 or 2. Such comments will be addressed in the following manner:

a. NRC's response to a comment regarding the applicability of the analysis of an impact codified in the rule to the plant in question may be a statement and explanation of its view that the analysis is adequate including, if applicable, consideration of the significance of new information. A commenter dissatisfied with such a response may file a petition for rulemaking under 10 CFR 2.802. If the commenter is successful in persuading the Commission that the new information does indicate that the analysis of an impact codified in the rule is incorrect in significant respects (either in general or with respect to the particular plant), a rulemaking proceeding will be initiated.

b. If a commenter provides new information which is relevant to the plant and is also relevant to other plants (i.e., generic information) and that information demonstrates that the analysis of an impact codified in the final rule is incorrect, the NRC staff will seek Commission approval to either suspend the application of the rule on a generic basis with respect to the analysis or delay granting the renewal application (and possibly other renewal applications) until the analysis in the GEIS is updated and the rule amended. If the rule is suspended for the analysis, each supplemental EIS would reflect the corrected analysis until such time as the rule is amended.

c. If a commenter provides new, site-specific information which demonstrates that the analysis of an impact codified in the rule is incorrect with respect to the particular plant, the NRC staff will seek Commission approval to waive the application of the rule with respect to that analysis in that specific renewal proceeding. The supplemental EIS would reflect the corrected analysis as appropriate.

2. The final rule and the GEIS will not include conditional cost-benefit conclusions or conclusions about alternatives. Conclusions relative to the overall environmental impacts including cumulative impacts will be left entirely to each site-specific SEIS.

3. After consideration of the changes from the proposed rule to the final rule and further review of the environmental issues, the NRC has concluded that it is

adequate to formally review the rule and the GEIS on a schedule that allows revisions, if required, every 10 years. The NRC believes that 10 years is a suitable period considering the extent of the review and the limited environmental impacts observed thus far, and given that the changes in the environment around nuclear power plants are gradual and predictable with respect to characteristics important to environmental impact analyses. This review will be initiated approximately 7 years after completion of the last cycle. The NRC will conduct this review to determine what, if anything, in the rule requires revision.

Concern. As part of their comments on the July 1994 Federal Register notice, NEI, several utilities, and the DOE asked that the NRC reconsider its understanding with CEQ and EPA regarding the preparation of a site-specific supplemental EIS for each license renewal action. These commenters supported an approach that would allow the preparation of an environmental assessment for reviewing the environmental impacts of license renewal.

Response. The NRC does not agree with this position. The NRC believes that it is reasonable to expect that an assessment of the full set of environmental impacts associated with an additional 20 years of operation of any plant would not result in a ''finding of no significant impact.'' Therefore, the review for any plant would involve an environmental impact statement.

2. Economic Costs and Cost-Benefit Balancing

Concern. State, Federal, and utility representatives expressed concern about the use of economic costs and cost-benefit balancing in the proposed rule and the draft GEIS. Commenters criticized the NRC's heavy emphasis on economic analysis and the use of economic decision criteria. They argued that the regulatory authority over utility economics falls within the States' jurisdiction and to some extent within the jurisdiction of the Federal Energy Regulatory Commission. Commenters also believe that the cost-benefit balancing used in the proposed rule and the draft GEIS went beyond NEPA requirements and CEQ regulations (40 CFR Parts 1500 to 1508). They noted that CEQ regulations interpret NEPA to require only an assessment of the cumulative effects of a proposed Federal action on the natural and man-made environment.

Response. In response to these concerns, the NRC has eliminated the use of cost-benefit analysis and consideration of utility economics in its NEPA review of a license renewal application except when such benefits and costs are either essential for a determination regarding the inclusion of an alternative in the range of alternatives considered or relevant to mitigation. As discussed in more detail in the following section, the NRC recognizes that the determination of the economic viability of continuing the operation of a nuclear power plant is an issue that should be left to appropriate State regulatory and utility officials.

3. Need for Generating Capacity and Alternative Energy Sources

Concern. In their comments on the proposed rule and the draft GEIS, several States expressed concern that the NRC's analysis of need for generating capacity would preempt or prejudice State energy planning decisions. They argued that the determination of need for generating capacity has always been the States' responsibility. Recommendations on how to address this issue ranged from withdrawing the proposed rule to changing the categorization of the issue so that a site-specific review can be performed, thus allowing for meaningful State and public participation. Almost all the concerned States called on the NRC to modify the rule to state explicitly that NRC's analysis does not preempt a State's jurisdiction over the determination of need for generating capacity.

Regarding the issue of alternative energy sources, several commenters contended that the site-specific nature of the alternatives to license renewal did not justify the generic finding in the GEIS. One significant concern about this finding is the States' perception that a generic finding, in effect, preempts the States' responsibility to decide on the appropriate mix of energy alternatives in their respective jurisdictions.

Three regional public meetings were held during the February 1994 to discuss the concerns of the States. At these meetings, and later in written comments, the State of New York proposed an approach to resolve the problem. The approach was endorsed by several other States. This approach had three major conditions:

(1) A statement in the rule that the NRC's findings on need and alternatives are only intended to satisfy the NEPA requirements and do not preclude the States from making their own determination with respect to these issues;

(2) The designation of the need for generating capacity and alternative energy sources as Category 3 (i.e., requiring site-specific evaluation); and

(3) A requirement that all site-specific EISs and relicensing decisions reference State determinations of need for generating capacity and alternative energy sources, and that they defer to those State determinations to the maximum extent possible.

Response. After consideration, the NRC staff did not accept all elements of the States' approach because the approach would have continued to require the NRC to consider the need for generating capacity and utility economics as part of its environmental analysis. In addition, the approach would have required the NRC to develop guidelines for determining the acceptability of State economic analyses, which some States may have viewed as an intrusion on their planning process.

The NRC staff developed and recommended another approach, which was published on July 25, 1994 (59 FR 37724), after consideration of information gathered at the regional meetings and from the written comments. This approach, which borrows some elements from NEI and YAEC proposals, has five major features:

(1) Neither the rule nor the GEIS would contain a consideration of the need for generating capacity or other issues involving the economic costs and benefits of license renewal and of the associated alternatives;

(2) The purpose and need for the proposed action (i.e., license renewal) would be defined as preserving the continued operation of a nuclear power plant as a safe option that State regulators and utility officials may consider in their future planning actions;

(3) The only alternative to the proposed action would be the ''no-action'' alternative, and the environmental consequences of this alternative are the impacts of a range of energy sources that might be used if a nuclear power plant operating license were not renewed;

(4) The environmental review for license renewal would include a comparison of the environmental impacts of license renewal with impacts of the range of energy sources that may be chosen in the case of ''no action''; and

(5) The NRC's NEPA decision standard for license renewal would require the NRC to determine whether the environmental impacts of license renewal are so great that preserving the option of license renewal for future decisionmakers would be unreasonable.

The statement that the use of economic costs will be eliminated in this approach refers to the ultimate NEPA decision regarding the comparison of alternatives and the proposed action. This approach does not preclude a consideration of economic costs if these costs are essential to a determination regarding the inclusion of an alternative in the range of alternatives considered (i.e., an alternative's exorbitant cost could render it nonviable and unworthy of further consideration) or relevant to mitigation of environmental impacts. Also, the two local tax issues and the two economic structure issues under socioeconomics in the table would be removed from consideration when applying the decision standard.

Concern. Comments received from several States on the NRC staff's July 1994 recommended approach ranged from rejection to endorsement. Some States supported the three conditions proposed by the State of New York. Several States were still concerned about whether a meaningful analysis of need for generating capacity and alternative energy sources could be undertaken 20 years ahead of time. One State asked that the proposed rule be withdrawn. Another State wanted the proposed rule to be reissued for public comment. CEQ supported the approach proposed by the State of New York. CEQ believed that the NRC's recommended approach was in conflict with the NEPA process because the proposed statement of purpose and need for the proposed action was too narrow and did not provide for an appropriate range of alternatives to the underlying need for the proposed action. CEQ wanted the NRC to address other energy sources as separate alternatives, rather than as consequences of the no-action alternative. Moreover, CEQ stated that the proposed decision standard places a ''weighty and improper burden of proof'' on consideration of the alternative. The EPA endorsed CEQ's comments. In general, the nuclear industry was supportive of the recommended approach. However, NEI and the utilities strongly expressed the opinion that, with the redefined statement of purpose and need, alternative energy sources would no longer be alternatives to the proposed action and, therefore, need not be considered.

Response. After consideration of the comments received on the Commission's July 1994 proposal, the Commission has modified and clarified its approach in order to address the concerns of CEQ relative to consideration of appropriate alternatives and the narrow definition of purpose and need. These modifications and clarifications addressed the States' concerns relative to treatment of need for generating capacity and alternatives. Specifically, the Commission has clarified the purpose and need for license renewal in the GEIS as follows:

> The purpose and need for the proposed action (renewal of an operating license) is to provide an option that allows for power generation capability beyond the term of a current nuclear power plant operating license to meet future system generating needs, as such needs may be determined by State, utility, and, where authorized, Federal (other than NRC) decisionmakers.

Using this definition of the purpose of and need for the proposed action, which stresses options for the generation of power, the environmental review will include a characterization of alternative energy sources as being the alternatives to license renewal and not merely the consequences of the no-action alternative and, thus, it addresses CEQ's concern that the scope of the alternatives analysis is unacceptably restricted.

With respect to the States' concerns regarding need for generating capacity analysis, the NRC will neither perform analyses of the need for power nor draw any conclusions about the need for generating capacity in a license renewal review. This definition of purpose and need reflects the Commission's recognition that, absent findings in the safety review required by the Atomic Energy Act of 1954, as amended, or in the NEPA environmental analysis that would lead the NRC to reject a license renewal application, the NRC has no role in the energy planning decisions of State regulators and utility officials. From the perspective of the licensee and the State regulatory authority, the purpose of renewing an operating license is to maintain the availability of the nuclear plant to meet system energy requirements beyond the term of the plant's current license. The underlying need that will be met by the continued availability of the nuclear plant is defined by various operational and investment objectives of the licensee. Each of these objectives may be dictated by State regulatory requirements or strongly influenced by State energy policy and programs. In cases of interstate generation or other special circumstances, Federal agencies such as the Federal Energy Regulatory Commission (FERC) or the Tennessee Valley Authority (TVA) may be involved in making these decisions. The objectives of the various entities involved may include lower energy cost, increased efficiency of energy production and use, reliability in the generation and distribution of electric power, improved fuel diversity within the State, and environmental objectives such as improved air quality and minimized land use.

The consideration of alternatives has been shifted to the site-specific review. The rule contains no information or conclusions regarding the environmental impacts of alternative energy sources, it only indicates that the environmental impact of alternatives will be considered during the individual plant review. However, the GEIS contains a discussion of the environmental impacts of alternative energy sources based on currently available information. The information in the GEIS is available for use by the NRC and the licensee in performing the site-specific analysis of alternatives and will be updated as appropriate. For individual plant reviews, information codified in the rule, information developed in the GEIS, and any significant new information introduced during the plant-specific review, including any information received from the State, will be considered in reaching conclusions in the supplemental EIS. The NRC's site-specific comparison of the impacts of license renewal with impacts of alternative energy sources will involve consideration of information provided by State agencies and other members of the public. This approach should satisfy the States' concerns relative to a meaningful analysis of alternative energy sources.

The Commission disagrees with CEQ's assertion that the new decision standard is inappropriate. Under this decision standard, the NRC must determine if the adverse environmental impacts of license renewal are so great that preserving the option of license renewal for energy planning decisionmakers would be unreasonable. The Commission expects that license renewal would be denied only if the expected environmental effects of license renewal significantly exceed all or almost all alternatives. The Commission believes that this is a reasonable approach to addressing the issue of environmental impacts of license renewal, given NRC's limited role in the area of energy systems planning. The operation of a nuclear power plant beyond its initial license term involves separate regulatory actions, one taken by the utility and the NRC, and the other taken by the utility and the State regulatory authorities. The decision standard would be used by NRC to determine whether, from an environmental perspective, it is

reasonable to renew the operating license and allow State and utility decisionmakers the option of considering a currently operating nuclear power plant as an alternative for meeting future energy needs. The test of reasonableness focuses on an analysis of whether the environmental impacts anticipated for continued operation during the term of the renewed license reasonably compare with the impacts that are expected from the set of alternatives considered for meeting generating requirements. The NRC would reject a license renewal application if the analysis demonstrated that the adverse environmental impacts of the individual license renewal were so great that preserving the option of license renewal for energy planning decisionmakers would be unreasonable.

After the NRC makes its decision based on the safety and environmental considerations, the final decision on whether or not to continue operating the nuclear plant will be made by the utility, State, and Federal (non-NRC) decisionmakers. This final decision will be based on economics, energy reliability goals, and other objectives over which the other entities may have jurisdiction. The NRC has no authority or regulatory control over the ultimate selection of future energy alternatives. Likewise, the NRC has no regulatory power to ensure that environmentally superior energy alternatives are used in the future. Given the absence of the NRC's authority in the general area of energy planning, the NRC's rejection of a license renewal application based on the existence of a single superior alternative does not guarantee that such an alternative will be used. In fact, it is conceivable that the rejection of a license renewal application by the NRC in favor of an individual alternative may lead to the implementation of another alternative that has even greater environmental impacts than the proposed action, license renewal.

Given the uncertainties involved and the lack of control that the NRC has in the choice of energy alternatives in the future, the Commission believes that it is reasonable to exercise its NEPA authority to reject license renewal applications only when it has determined that the impacts of license renewal sufficiently exceed the impacts of all or almost all of the alternatives that preserving the option of license renewal for future decision makers would be unreasonable. Because the objectives of the utility and State decisionmakers will ultimately be the determining factors in whether a nuclear power plant will continue to operate, NRC's proposed decision standard is appropriate. The decision standard will not affect the scope or rigor of NRC's analyses, including the consideration of the environmental impacts relevant to the license renewal decision and associated alternatives. The NRC staff believes that, under the circumstances, the decision standard does not place ''a weighty and improper burden of proof'' on other alternatives as CEQ claims.

With respect to the industry's desire to eliminate consideration of alternative energy sources, the Commission does not agree. The Commission does not support the views of NEI and others that alternative energy sources need not be considered in the environmental review for license renewal. The Commission is not prepared to state that no nuclear power plant will fall well outside the range of other reasonably available alternatives far in advance of an actual relicensing decision. Following NEI's suggestion would not lead to a meaningful set of alternatives with which to compare a proposed action. The Commission has always held the view that alternative sources of energy should be compared with license renewal and continued operation of a nuclear power plant.

Lastly, the Commission does not believe it is necessary to reissue this rule for public comment as a State commenter requested. The Commission has taken many measures to involve the public concerning the resolution of public comments on the proposed rule. The Commission has conducted a number of public meetings and published for public comment its recommended procedural revisions to the proposed rule. The Commission believes that modifications made to the proposed rule reflect the logical outgrowth of the proposed rule based on the public comments received by the Commission.

C. Technical Concerns

1. Category and Impact Magnitude Definitions

Concerns. Many commenters expressed concern that the category definitions and the impact-significance definitions were ambiguous and appeared somewhat interconnected. The EPA expressed concern that mitigation of adverse impacts was not addressed adequately.

Commenters expressed a number of concerns about the use of the applicability categories and the magnitude-level categories. With respect to the applicability categories, concerns ranged from a general concern that Category 1 precludes or hinders public involvement in an issue at the time of the plant-specific review to specific concerns about the technical adequacy of the analysis supporting a Category 1 finding for an issue. Several commenters believed that the definitions create confusion, especially as to whether the finding of small impact and Category 1 are interdependent. The GEIS appears to use Category 1 and ''small'' interchangeably. Concern was also expressed that the requirement to consider mitigative actions was inadequately addressed in the draft GEIS and proposed rule.

Response. To reduce potential confusion over the definitions, the use of the categories, and the treatment of mitigation within the context of the categorization scheme, the NRC has revised the definitions to eliminate any ambiguity as to how they are used. Further, the GEIS has been modified to clearly state the reasons behind the category and magnitude findings.

In order to facilitate understanding of the modifications to the GEIS, the previous approach is discussed as follows. In the proposed rule and the draft GEIS, findings about the environmental impact associated with each issue were divided into three categories of applicability to individual plant reviews. These categories were:

- Category 1: A generic conclusion on the impact has been reached for all affected nuclear power plants.
- Category 2: A generic conclusion on the impact has been reached for affected nuclear power plants that fall within defined bounds.
- Category 3: A generic conclusion on the impact was not reached for any affected nuclear power plants.

The significance of the magnitude of the impact for each issue was expressed as one of the three following levels.

- *Small* impacts are so minor that they warrant neither detailed investigation nor consideration of mitigative actions when such impacts are negative.
- *Moderate* impacts are likely to be clearly evident and usually warrant consideration of mitigation alternatives when such impacts are negative.
- *Large* impacts involve either a severe penalty or a major benefit, and mitigation alternatives are always considered when such impacts are negative.

With respect to the categories of applicability, under the proposed rule applicants would have:

(1) Not provided additional analyses of Category 1 issues;

(2) Not provided additional analyses if their plant falls within the bounds

defined in the rule for a Category 2 issue;

(3) Provided additional plant-specific analyses if their plant does not fall within the bounds defined in the rule for a Category 2 issue; and

(4) Provided plant-specific analyses of Category 3 issues.

In order to address the comments on these magnitude and category definitions, the GEIS has been modified to clearly state the reasons behind the category and magnitude findings.

The revised definitions are listed below.

• Category 1: For the issue, the analysis reported in the Generic Environmental Impact Statement has shown:

(1) The environmental impacts associated with the issue have been determined to apply either to all plants or, for some issues, to plants having a specific type of cooling system or other specified plant or site characteristic;

(2) A single significance level (i.e., small, moderate, or large) has been assigned to the impacts (except for collective off site radiological impacts from the fuel cycle and from high level waste and spent fuel disposal); and

(3) Mitigation of adverse impacts associated with the issue has been considered in the analysis and it has been determined that additional plant-specific mitigation measures are likely not to be sufficiently beneficial to warrant implementation.

The generic analysis of the issue may be adopted in each plant-specific review. Issues for which the impact was found to be favorable were also defined to be Category 1 issues.

• Category 2: For the issue, the analysis reported in the GEIS has shown that one or more of the criteria of Category 1 cannot be met and, therefore, additional plant-specific review is required.

If, for an environmental issue, the three Category 1 criteria apply to all plants, that issue is Category 1 and the generic analysis should be used in a license renewal review for all plant applications. If the three Category 1 criteria apply to a subset of plants that are readily defined by a common plant characteristic, notably the type of cooling system, the population of plants is partitioned into the set of plants with the characteristic and the set without the characteristic. For the set of plants with the characteristic, the issue is Category 1 and the generic analysis should be used in the license renewal review for those plants. For the set of plants without the characteristic, the issue is Category 2 and a site-specific analysis for that issue will be performed as part of the license renewal review. The review of a Category 2 issue may focus on the particular aspect of the issue that causes the Category 1 criteria not to be met. For example, severe accident mitigation under the issue ''severe accidents'' is the focus for a plant-specific review because the other aspects of the issue, specifically the offsite consequences, have been adequately addressed in the GEIS. With the revised definitions, the two issues previously designated as Category 3 are now designated Category 2. For an issue to be a Category 1, current mitigation practices and the nature of the impact were considered and a determination was made that it is unlikely that additional measures will be sufficiently beneficial. In the GEIS, in discussing the impacts for each issue, consideration was given to what is known about current mitigation practices.

The definitions of the significance level of an environmental impact have been revised to make the consideration of the potential for mitigating an impact separate from the analysis leading to a conclusion about the significance level of the impact. Further, the significance level of an impact is now more clearly tied to sustaining specific attributes of the affected resource that are important to its viability, health or usefulness. General definitions of small, moderate and large significance levels are given below. These definitions are adapted to accommodate the resource attributes of importance for each of the environmental issues in the GEIS. The definition of ''small'' clarifies the meaning of the term as it applies to radiological impacts. The definition of ''small'' in the proposed rule did not logically apply to such impacts.

The general definitions of significance level are:

• Small: For the issue, environmental effects are not detectable or are so minor that they will neither destabilize nor noticeably alter any important attribute of the resource. For the purposes of assessing radiological impacts, the Commission has concluded that those impacts that do not exceed permissible levels in the Commission's regulations are considered small.

• Moderate: For the issue, environmental effects are sufficient to alter noticeably but not to destabilize important attributes of the resource.

• Large: For the issue, environmental effects are clearly noticeable and are sufficient to destabilize important attributes of the resource.

The discussion of each environmental issue in the GEIS includes an explanation of how the significance category was determined. For issues in which probability of occurrence is a key consideration (i.e., accident consequences), the probability of occurrence has been factored into the determination of significance. The determination of the significance category was made independently of the consideration of the potential benefit of additional mitigation.

The major concerns (organized by topical areas) about the environmental issues examined in the draft GEIS and the NRC staff's response to those concerns are summarized next.

2. Surface Water Quality

Concern. Several commenters expressed concerns related to the National Pollutant Discharge Elimination System (NPDES) permitting process for surface water discharge. They believe that the NRC may have overlooked its legal obligation to comply with Section 401 of the Clean Water Act (CWA). Their recommendations included withholding approval for license renewal until a facility has complied with Section 401 and treating license renewal as an opportunity for a new NEPA review. On the other hand, other commenters recommended decoupling the NRC relicensing process from the NPDES permitting process.

Response. In issuing individual license renewals, the Commission will comply, as has been its practice, with the provisions of Section 401 of the Federal Water Pollution Control Act (see 10 CFR 51.45(d) and 51.71(c)). In addition, pursuant to Section 511(c) of the Federal Water Pollution Control Act of 1972, the Commission cannot question or reexamine the effluent limitations or other requirements in permits issued by the relevant permitting authorities. Nevertheless, compliance with the environmental quality standards and requirements of these permits does not negate the requirement for the Commission to consider all environmental effects of the proposed action. Accordingly, the Commission has not only taken existing permits into account in its analysis of the water quality impacts of license renewal but has also considered information on actual operating impacts collected from individual plants, State and Federal regulatory agencies, and published literature. As a result of this analysis, the Commission has concluded that the environmental impacts on surface water quality are small for those effluents subject to existing permit or certification requirements. A total decoupling of the license renewal process and the NPDES permitting process is not appropriate because, for

issues with incomplete Clean Water Act determinations, the NRC cannot complete its weighing and balancing of impacts without independently addressing the issues.

Concern. Several commenters raised concerns that various issues within the Surface Water Quality topic should be Category 2 or 3 issues. These included water use conflicts as experienced in Arizona and the Midwest, thermal stratification and salinity gradients associated with once-through cooling systems, and the toxicity of biofouling compounds.

Response. Regarding the water use conflicts, the NRC has considered the impacts of water use during the renewal period and has concluded that these impacts are small for plants with a once-through cooling system and that this is a Category 1 issue for those plants. However, this issue is designated Category 2 for plants with cooling towers and cooling ponds because, for those plants, the impacts might be moderate (they could also be small). In either case, pursuant to 10 CFR 51.45(d), an applicant for license renewal must identify and indicate in its environmental report the status of State and local approvals regarding water use issues. For those reactor sites where thermal stratification or salinity gradient was found to be the most pronounced, the issues were reviewed during preparation of the GEIS and found to be acceptable by the States within the NPDES process. No change in the categorization in the GEIS would be required. Similarly, the NPDES permit for a facility establishes allowable discharges, including biocides. The NRC has no indication that residual environmental impacts would occur as a result of license renewal activities at any nuclear plant site other than perhaps water use conflicts arising at plants with cooling ponds or cooling towers using make-up water from a small river with low flow. For those plants, this issue is Category 2.

3. Aquatic Ecology

Concern. A number of comments regarding the ecological impact of cooling water withdrawal from aquatic bodies were received. Specific concerns included fish kills associated with the entrainment and impingement of fish within once-through and cooling pond cooling systems, the use of chlorine and molluscicides to control mussel and clam growth, and the long-term effects of heavy metal discharges from plants with copper-nickel condenser tubes. Another commenter noted that license extension affords the opportunity to review the intake and discharge configuration of plant cooling water systems, since the best available technology that is economically available may be different given the additional 20 years of plant operating life.

Response. The Commission has considered the impacts of license renewal on aquatic ecology and, in doing so, has reviewed existing NPDES permits and other information. Based on this analysis, the Commission has concluded that these impacts are small with the exception that plants with once-through cooling and cooling ponds may have larger effects associated with entrainment of fish and shellfish in early life stages, impingement, and heat shock. Agencies responsible for existing permits are not constrained from reexamining the permit issues if they have reason to believe that the basis for their issuance is no longer valid. The Commission does not have authority under NEPA to impose an effluent limitation other than those established in permits issued pursuant to the Clean Water Act. The problem of the long-term effects of heavy metal discharges from plants with copper-nickel condenser tubes has been found at only one plant. The affected condenser tubes have been replaced with tubing of a more corrosion-resistant material.

Concern. A commenter pointed out that the issue of riparian zones should be addressed in the GEIS because the vegetation region along a water course can be affected by water withdrawal and is important in maintaining the habitat.

Response. The NRC agrees with the importance of addressing the impacts of license renewal on the riparian habitat. The final GEIS provides a discussion of the riparian habitat as an important resource and the potential effects of consumptive water use on riparian zones.

4. Groundwater Use and Quality

Concern. Several commenters indicated that groundwater issues should be reviewed on a site-specific basis because of groundwater use conflicts (in particular, the effect on aquifer recharge of using surface water for cooling water), opportunities for saltwater intrusion, and concerns over tritium found in wells at one site. On the other hand, a commenter requested that the issue of groundwater use for cooling tower makeup water be changed from Category 2 to Category 1 because the issue is based solely on data from Ranney wells at the Grand Gulf Nuclear Station, where tests have shown that the elevation of the water plain around Grand Gulf is not dropping.

Response. Based on consideration of comments, the issue of groundwater use conflicts resulting from surface water withdrawals for cooling tower makeup water or cooling ponds is now Category 2 for plants withdrawing surface water from small water bodies during low flow conditions. The GEIS has identified a potential reduction in aquifer recharge as a result of competing water use. These conflicts are already a concern at two closed-cycle nuclear power plants. The NRC does not agree that saltwater intrusion should be considered a Category 2 issue. When saltwater intrusion has been a problem, the major cause has been the large consumption of groundwater by agricultural and municipal users. Groundwater consumption by nuclear power plants is small by comparison and does not contribute significantly to the saltwater intrusion problem. With regard to traces of tritium found in the groundwater at one nuclear power plant, the tritium was attributed to a modification in the plant's inlet and discharge canal that did not take into consideration a unique situation in topology and groundwater flow. The releases were minor and the situation has been corrected.

Regarding the issue of the use of groundwater for cooling water makeup, the NRC has designated this issue as Category 2 even though only the Grand Gulf Nuclear Station is currently using Ranney wells to withdraw groundwater. This water intake does not conflict with other groundwater uses in the area. It is not possible to predict whether or not water use conflicts will occur at the Grand Gulf facility in the future. It is also not possible to determine the significance of the environmental impacts associated with Ranney well use at other nuclear plants that may choose to adopt this method in the future.

5. Terrestrial Ecology

Concern. Several commenters recommended that the issue of bird mortality resulting from collisions with transmission lines, towers, or cooling towers be characterized as a Category 2 issue. Such a characterization would provide for a review of mitigation at those plants with cooling towers that do not have illumination and for power plant transmission lines that transect major flyways or that cross wetlands used by large concentrations of birds.

Response. The NRC does not agree with this recommendation. The GEIS cites several studies that conclude that bird mortalities resulting from collision with transmission lines, towers, or cooling towers are not significantly

reducing bird populations. Mitigation measures in place, such as safety lights, were found adequate and additional measures were not warranted. Therefore, the issue remains a Category 1 issue because refurbishment will not involve construction of any additional transmission lines or natural draft cooling towers.

Concern. One commenter expressed concern that the GEIS analysis of land use did not adequately encompass the impact of onsite spent fuel storage on land use and that the Category 1 finding is questionable. A specific concern was the potential need for the construction of additional spent fuel storage facilities associated with the license renewal term, along with their associated impacts on the terrestrial environment.

Response. The NRC does not agree that there is a need to change the Category 1 determination for onsite land use. Waste management operations could require the construction of additional storage facilities and thus adversely affect land use and terrestrial ecology. However, experience has shown that the land requirements would be relatively small (less than 9 acres), impacts to land use and terrestrial ecology would also be relatively small, and the land that may be used is already possessed by the applicant; thus, its basic use would not be altered. Onsite land use is Category 1. Terrestrial ecology with disturbance of sensitive habitat is treated as a separate issue and is Category 2.

6. Human Health

Concern. In the human health section of the GEIS, the radiological impacts of plant refurbishment and continued operations during the license renewal term to workers and the general public were examined. Several commenters indicated that it was inappropriate to compare the radiation exposures associated with license renewal to natural background levels. These commenters believed that the appropriate argument should be that the risks associated with the additional exposures are so small that no additional mitigative measures are required.

Response. The NRC agrees that the assessment of radiation exposure should not be simply a comparison with background radiation. In response to comments on the draft generic environmental impact statement and the proposed rule, the standard defining a small radiological impact has changed from a comparison with background radiation to sustained compliance with the dose and release limits applicable to the various stages of the fuel cycle. This change is appropriate and strengthens the criterion used to define a small environmental impact for the reasons that follow. The Atomic Energy Act requires the Nuclear Regulatory Commission to promulgate, inspect and enforce standards that provide an adequate level of protection of the public health and safety and the environment. The implementation of these regulatory programs provides a margin of safety. A review of the regulatory requirements and the performance of facilities provides the bases to project continuation of performance within regulatory standards. For the purposes of assessing radiological impacts, the Commission has concluded that impacts are of small significance if doses to individuals and releases do not exceed the permissible levels in the Commission's regulations.

With respect to whether additional mitigative measures are required, it should be noted that in 10 CFR parts 20 and 50 there are provisions that radiological impacts associated with plant operation be reduced to levels as low as reasonably achievable (ALARA).

Concern. Several commenters indicated that the GEIS needs a broader treatment of uncertainty as it relates to human health issues.

Response. The NRC agrees that there is considerable uncertainty associated with health effects, especially at low occupational and public dose levels, and particularly with respect to electromagnetic fields. Health effect estimates from radiation exposures are based on the best scientific evidence available and are considered to be conservative estimates. Several sections of the GEIS have been expanded to more thoroughly explain how predicted impacts could be affected by changes in scientific information or standards.

Concern. One commenter indicated that, in the GEIS and the proposed rule, risk coefficients should have been used for chemicals and radiation to obtain upper bound risk estimates of cancer incidence.

Response. The NRC does not agree with this comment. In making comparisons of alternatives, comparisons of the central or best estimates of impacts are consistent with NEPA requirements because they provide the fairest determination. The GEIS is written using current, Commission-approved risk estimators.

Concern. Two commenters expressed concern regarding the GEIS conclusion that the impact of radiation exposure to the public is small, citing a study done by the Massachusetts Department of Public Health (MDPH). This study concluded that adults who live within 10 miles of the Pilgrim Nuclear Power Plant have a risk of contracting leukemia four times greater than other individuals.

Response. The NRC staff reviewed the MDHP study and compared it with various other studies. The results of the study have been contradicted by a National Cancer Institute (NCI) study entitled ''Cancer in Populations Living Near Nuclear Facilities'' (July 1990). The NCI study, which included the Pilgrim plant in its analysis, found no reason to suggest that nuclear facilities may be linked causally with excess deaths from leukemia or from other cancers. The findings of the NCI study are consistent with the findings of several similar epidemiological studies in foreign countries and with the latest conclusions of expert bodies such as the National Research Council's Committee on the Biological Effects of Ionizing Radiation. The NRC continues to base its assessment of the health effects of ionizing radiation on the overall body of scientific knowledge and on the recommendations of expert groups.

7. Socioeconomics

Concern. A commenter concerned with historic preservation pointed out that this issue must be addressed through compliance with the National Historic Preservation Act (NHPA) and cannot be resolved generically.

Response. The NRC agrees with this comment. Historical and archaeological impacts have been changed from a Category 1 to a Category 2 issue (that is, it must be evaluated site-specifically). Consultation with State historical preservation offices and other Government agencies, as required by NHPA, must be undertaken to determine whether protected historical or archaeological resources are in areas that might be disturbed during refurbishment activities and operation during the renewal period.

Concern. Several commenters indicated that transportation issues associated with refurbishment activities should be changed from Category 3 to Category 2 because the impacts will be insignificant in the majority of cases. One recommendation was to use a level of service (LOS) determination for specific plants as the bounding criterion. The analysis would require that LOS be determined for that part of the refurbishment period during which traffic not related to the plant is expected to be the heaviest. Another recommendation was to establish bounding criteria based on past major routine outages.

Response. The NRC agrees that use of the LOS approach may prove to be

acceptable. Transportation still must be reviewed on a plant-specific basis, that is, it is a Category 2 issue (based on the revised definition).

Concern. There were recommendations to make the housing impacts during refurbishment a Category 1 issue instead of Category 2. One commenter noted that the construction period data used in the analysis appears to overestimate the impact on housing.

Response. The NRC does not agree that this should be a Category 1 issue. Although negligible housing impacts are anticipated for most license renewals, significant housing impacts have occurred during a periodic plant outage at one of the case plants studied for the analysis. This issue is now a Category 2 issue because moderate and large impacts on housing are possible depending on local conditions (e.g., areas with extremely slow population growth or areas with growth control measures that limit housing development).

8. The Uranium Fuel Cycle and Solid Waste Management

Concern. Wide-ranging concerns were expressed in the comments on the proposed rule and the draft GEIS about the treatment of storage and disposal of low-level waste (LLW), mixed waste, spent fuel, nonradiological waste, and the transportation of fuel and waste to and from nuclear power plants as a consequence of license renewal. Concern was expressed about the uncertain availability of disposal facilities for LLW, mixed waste, and spent fuel; the prospect of generation and onsite storage of an additional 20 years output of waste; and the resulting pressure that would be put on the States to provide LLW disposal facilities. Various commenters expressed concern about the adequacy of the treatment of the cost of waste management and the implications for the economic viability of license renewal. Numerous comments were provided on updating and clarifying data on waste management presented in the draft GEIS. Finally, various questions were raised about the applicability of Table S–3 (10 CFR 51.51 Uranium fuel cycle environmental data—Table S–3, Table of Uranium Fuel Cycle Environmental Data) to the management of waste generated as a result of license renewal.

With regard to spent fuel, several commenters expressed concern that dry cask storage is not a proven technology and that onsite storage of spent fuel from an additional 20 years of plant operation will present environmental and safety problems. Therefore, onsite storage of spent fuel should be considered on a site-specific basis within a plant license renewal review.

Response. The Commission acknowledges that there is uncertainty in the schedule of availability of disposal facilities for LLW, mixed waste, and spent fuel. However, the Commission believes that there is sufficient understanding of and experience with the storage of LLW, mixed waste, and spent fuel to conclude that the waste generated at any plant as a result of license renewal can be stored safely and without significant environmental impacts before permanent disposal. In addition, the Commission concluded that the classification of storage and ultimate disposal as a Category 1 issue is appropriate because States are proceeding, albeit slowly, with the development of new disposal facilities; LLW and mixed waste have been and can be safely stored at reactor sites until new disposal capacity becomes available. Analyses to support this conclusion are presented in Chapter 6 of the final GEIS (NUREG–1437). The following summary of the responses to comments emphasizes the main features of these analyses.

In the draft GEIS, the environmental data in Table S–3 were discussed with respect to applicability during the license renewal period and supplemented with an analysis of the radiological release and dose commitment data for radon-222 and technetium-99. The proposed rule would have had this discussion apply to each plant at the time of its review for license renewal.

Further, in the draft GEIS, Chapter 6, ''Solid Waste Management,'' covered the generation of LLW, mixed waste, spent fuel, and nonradiological waste as a result of license renewal; the transportation of the radiological waste; and the environmental impacts of waste management, including storage and disposal. The findings that were to have been codified in the rule were that, for nonradiological waste, mixed waste, spent fuel, and transportation, the environmental impacts are of small significance and that the analysis in the GEIS applies to each plant (Category 1). For LLW, the finding that would have been codified in the rule was that, if an applicant does not have access to a low-level radioactive waste disposal facility through a low-level waste compact or an unaffiliated State, the applicant must present plans for interim waste storage with an assessment of potential ecological habitat destruction caused by construction activities (Category 2).

In response to the questions about the applicability of Table S–3 to the management of waste associated with license renewal and to the various comments challenging the treatment of the several forms of waste in the draft GEIS and in the proposed rule, the discussion of Table S–3 has been moved from Section 4.8 of the draft GEIS to Chapter 6 of the final GEIS in order to provide a more integrated assessment of the environmental impacts associated with waste management as a consequence of license renewal. Also in response to various comments, the discussion of Table S–3 and of each of the types of waste has been expanded.

Supplemental data are presented in Chapter 6 of the final GEIS in order to extend the coverage of the environmental impacts of the uranium fuel cycle presented in the current Table S–3 and of transportation of radioactive waste presented in the current Table S–4 to radon-222, technetium-99, higher fuel enrichment, and higher fuel burnup. In part, the current Table S–3 and the data supplementing it cover environmental impacts of:

(1) Onsite storage of spent fuel assemblies in pools for 10 years, packaging and transportation to a Federal repository, and permanent disposal; and

(2) Short-term storage onsite of LLW, packaging and transportation to a land-burial facility, and permanent disposal.

The following conclusions have been drawn with regard to the environmental impacts associated with the uranium fuel cycle.

The radiological and nonradiological environmental impacts of the uranium fuel cycle have been reviewed. The review included a discussion of the values presented in Table S–3, an assessment of the release and impact of ^{222}Rn and of ^{99}Tc, and a review of the regulatory standards and experience of fuel cycle facilities. For the purpose of assessing the radiological impacts of license renewal the Commission uses the standard that the impacts are of small significance if doses and releases do not exceed permissible levels in the Commission's regulations. Given the available information regarding the compliance of fuel cycle facilities with applicable regulatory requirements, the Commission has concluded that, other than for the disposal of spent fuel and high-level waste, these impacts on individuals from radioactive gaseous and liquid releases will remain at or below the Commission's regulatory limits. Accordingly, the Commission concludes that offsite radiological impacts of the fuel cycle (individual effects from other than the disposal of

spent fuel and high-level waste) are small. ALARA efforts will continue to apply to fuel cycle activities. This is a Category 1 issue.

The radiological impacts of the uranium fuel cycle on human populations over time (collective effects) have been considered within the framework of Table S–3. The 100 year environmental dose commitment to the U.S. population from the fuel cycle, high level waste and spent fuel disposal excepted, is calculated to be about 14,800 man-rem, or 12 cancer fatalities, for each additional 20 year power reactor operating term. Much of this, especially the contribution of radon releases from mines and tailing piles, consists of tiny doses summed over large populations. This same dose calculation can theoretically be extended to include many tiny doses over additional thousands of years as well as doses outside the U.S. The result of such a calculation would be thousands of cancer fatalities from the fuel cycle, but this result assumes that even tiny doses have some statistical adverse health effect which will not ever be mitigated (for example no cancer cure in the next thousand years), and that these dose projections over thousands of years are meaningful. However these assumptions are questionable. In particular, science cannot rule out the possibility that there will be no cancer fatalities from these tiny doses. For perspective, the doses are very small fractions of regulatory limits, and even smaller fractions of natural background exposure to the same populations. No standards exist that can be used to reach a conclusion as to the significance of the magnitude of the collective radiological effects. Nevertheless, some judgement as to the regulatory NEPA implication of this issue should be made and it makes no sense to repeat the same judgement in every case. The Commission concludes that these impacts are acceptable in that these impacts would not be sufficiently large to require the NEPA conclusion, for any plant, that the option of extended operation under 10 CFR part 54 should be eliminated. Accordingly, while the Commission has not assigned a single level of significance for the collective effects of the fuel cycle, this issue is considered Category 1. For other Category 1 issues, the impacts will be considered at the individual renewal stage as a means of judging the total impact of an individual license renewal decision. However, the Commission has already judged the impact of collective effects of the fuel cycle as part of this rule.

There are no current regulatory limits for off-site releases of radionuclides for the current candidate repository site. However if we assume that limits are developed along the lines of the 1995 National Academy of Sciences (NAS) report, and that in accordance with the Commission's Waste Confidence Decision, a repository can and likely will be developed at some site which will comply with such limits, peak doses to virtually all individuals will be 100 millirem per year or less. However, while the Commission has reasonable confidence that these assumptions will prove correct there is considerable uncertainty since the limits are yet to be developed, no repository application has been completed or reviewed, and uncertainty is inherent in the models used to evaluate possible pathways to the human environment. The National Academy report indicated that 100 millirem per year should be considered as a starting point for limits for individual doses, but notes that some measure of consensus exists among national and international bodies that the limits should be a fraction of the 100 millirem per year. The lifetime individual risk from 100 millirem per year dose limit is about 3×10^{-3}. Doses to populations from disposal cannot now (or possibly ever) be estimated without very great uncertainty. Estimating cumulative doses to populations over thousands of years is more problematic. The likelihood and consequences of events that could seriously compromise the integrity of a deep geologic repository were evaluated by the Department of Energy in the ''Final Environmental Impact Statement: Management of Commercially Generated Radioactive Waste,'' October 1980. The evaluation estimated the 70-year whole-body dose commitment to the maximum individual and to the regional population resulting from several modes of breaching a reference repository in the year of closure, after 1,000 years, after 100,000 years, and after 100,000,000 years. The release scenarios covered a wide range of consequences from the limited consequences of humans accidentally drilling into a waste package in the repository to the catastrophic release of the repository inventory by a direct meteor strike. Subsequently, the NRC and other Federal agencies have expended considerable effort to develop models for the design and for the licensing of a high level waste repository, especially for the candidate repository at Yucca Mountain. More meaningful estimates of doses to population may be possible in the future as more is understood about the performance of the proposed Yucca Mountain repository. Such estimates would involve very great uncertainty, especially with respect to cumulative population doses over thousands of years. The standard proposed by the NAS is a limit on maximum individual dose. The relationship of potential new regulatory requirements, based on the NAS report, and cumulative population impacts has not been determined, although the report articulates the view that protection of individuals will adequately protect the population for a repository at Yucca Mountain. However, EPA's generic repository standards in 40 CFR part 191 generally provide an indication of the order of magnitude of cumulative risk to population that could result from the licensing of a Yucca Mountain repository, assuming the ultimate standards will be within the range of standards now under consideration. The standard in 40 CFR part 191 protects the population by imposing ''containment requirements'' that limit the cumulative amount of radioactive material released over 10,000 years. The cumulative release limits are based on EPA's population impact goal of 1,000 premature cancer deaths world-wide for a 100,000 metric tonne (MTHM) repository.

Nevertheless, despite all the uncertainty surrounding the effects of the disposal of spent fuel and high-level waste, some judgement as to the regulatory NEPA implications of these matters should be made and it makes no sense to repeat the same judgement in every case. Even taking the uncertainties into account, the Commission concludes that these impacts are acceptable in that these impacts would not be sufficiently large to require the NEPA conclusion, for any plant, that the option of extended operation under 10 CFR part 54 should be eliminated. Accordingly, while the Commission has not assigned a single level of significance for the impacts of spent fuel and high-level waste disposal, this issue is considered Category 1. Excepting the collective effects previously discussed, for other Category 1 issues, the impacts will be considered at the individual renewal stage as a means of judging the total impact of an individual license renewal decision. However, the Commission has already judged the impacts of high level waste disposal as part of this rule.

With respect to the nonradiological impact of the uranium fuel cycle, data concerning land requirements, water requirements, the use of fossil fuel, gaseous effluent, liquid effluent, and tailings solutions and solids, all listed in Table S–3, have been reviewed to

determine the significance of the environmental impacts of a power reactor operating an additional 20 years. The nonradiological impacts attributable to the relicensing of an individual power reactor are found to be of small significance. License renewal of an individual plant is so indirectly connected to the operation of fuel cycle facilities that it is meaningless to address the mitigation of impacts identified above. This is a Category 1 issue.

Table S–3 does not take into account long-term onsite storage of LLW, mixed waste, and storage of spent fuel assemblies onsite for longer than 10 years, nor does it take into account impacts from mixed waste disposal. The environmental impacts of these aspects of onsite storage are also addressed in Chapter 6 of the final GEIS and the findings are included in the final rule in Table B–1 of appendix B to 10 CFR part 51.

Chapter 6 of the GEIS discusses the impacts of offsite disposal of LLW and mixed waste and concludes that impacts will be small. The conclusion that impacts will be small is based on the regulations and regulatory programs in place (e.g., 10 CFR part 61 for LLW and 40 CFR parts 261, 264, and 268 for hazardous waste), experience with existing sites, and the expectation that NRC, EPA, and the States will ensure that disposal will occur in compliance with the applicable regulations.

The Low-Level Radioactive Waste Policy Act of 1980 (LLRWPA) made the States responsible for the disposal of commercially generated LLW. At present, 9 compacts have been formed, representing 42 States. The Texas Compact (Texas, Maine, and Vermont) is pending before the U.S. Congress.

New LLW disposal facilities in the host States of California, North Carolina, and Texas are forecast to be operational between 1997 and 1998. Facilities in the host States of Connecticut, Illinois, Massachusetts, Nebraska, New Jersey, Pennsylvania, and New York are scheduled for operation between 1999 and 2002. Envirocare, in Utah, takes limited types of waste from certain generators.

There are uncertainties in the licensing process and in the length of time needed to resolve technical issues, but in NRC's view there are no unsolvable technical issues that will inevitably preclude successful development of new sites or other off-site disposal capacity for LLW by the time they will be needed. For example, in California, the proposed Ward Valley LLW disposal facility was unexpectedly delayed by the need to resolve technical issues raised by several scientists independent of the project after the license was issued. These issues were recently reviewed and largely resolved by an independent review group. In North Carolina, Texas, and Nebraska, the license application review period has been longer than is required by the LLRWPA, but progress continues to be made.

The State's LLW responsibilities include providing disposal capacity for mixed LLW. Mixed waste disposal facility developers face the same types of challenges as LLW site developers plus difficulties with dual regulation and small volumes. However, in NRC's view there are no technical reasons why offsite disposal capacity for all types of mixed waste should not become available when needed. NRC and EPA have developed guidance on the siting of mixed waste disposal facilities as well as a conceptual design for a mixed waste disposal facility. A disposal facility for certain types of mixed waste is operated by Envirocare in Utah. States have begun discussions with DOE about accepting commercial mixed waste for treatment and disposal at DOE facilities. Although these discussions have yet to result in DOE accepting commercial mixed waste at DOE facilities, it appears that progress is being made toward DOE's eventual acceptance of some portion of commercial mixed waste at its facilities.

While the NRC understands that there have been delays and that uncertainties exist such as those just discussed, the Commission concludes that there is reasonable assurance that sufficient LLW and mixed LLW disposal capacity will be made available when needed so that facilities can be decommissioned consistent with NRC decommissioning requirements. This conclusion, coupled with the expected small impacts from both storage and disposal justify classification of LLW and mixed waste disposal as Category 1 issues.

The GEIS addresses the matter of extended onsite storage of both LLW and mixed waste from refurbishment and operations for a renewal period of up to 20 years. Summary data are provided and radiological and nonradiological environmental impacts are addressed. The analysis considers:

(1) The volumes of LLW and mixed waste that may be generated from license renewal;

(2) Specific requirements under the existing regulatory framework;

(3) The effectiveness of the regulations in maintaining low average doses to members of the public and to workers; and

(4) Nonradiological impacts, including land use, fugitive dust, air quality, erosion, sedimentation, and disturbance of ecosystems.

In addition, under 10 CFR 50.59, licensees are allowed to make changes to their facilities as discussed in the final safety analysis report without NRC permission if the evaluation indicates that a change in the technical specifications is not required or that an unreviewed safety question does not exist. Licensees would have to ensure that any new LLW activities would not represent an unreviewed safety question for routine operations or for conditions that might arise from potential accidents. Both onsite and offsite impacts would have to be considered. If a LLW or mixed waste activity fails either of the two tests in 10 CFR 50.59, a license amendment is required. Subject to the two possible review requirements just noted, the Commission finds that continued onsite storage of both LLW and mixed waste resulting from license renewal will have small environmental impacts and will require no further review within the license renewal proceeding.

The GEIS addresses extended onsite storage of spent fuel during a renewal period of up to 20 years. The Commission has studied the safety and environmental effects of the temporary storage of spent fuel after cessation of reactor operation and has published a generic determination of no significant environmental impact (10 CFR 51.23). The environmental data on storing spent fuel onsite in a fuel pool for 10 years before shipping for offsite disposal have been assessed and reported in NUREG–0116, ''The Environmental Survey of the Reprocessing and Waste Management Portions of the LWR Fuel Cycle'' (October 1976), and published in the Commission's regulations (10 CFR 51.51). Environmental assessments (EA) for expanding the fuel pool storage capacity have been conducted for numerous plants. In each case, a finding of no significant environmental impact was reached.

Radioactive exposures, waste generation, and releases were evaluated and found to be small. The only nonradiological effluent from waste storage is additional heat from the plant that was found to have a negligible effect on the environment. Accidents were evaluated and were found to have insignificant effects on the environment. Dry cask storage at an independent spent fuel storage installation (ISFSI) is another technology used to store under a general license. The environmental impacts of allowing onsite dry cask storage under a general license were

assessed in an EA and found to be insignificant. Further, the Commission has conducted EAs for seven specific licensed ISFSIs and has reached a finding of no significant environmental impact for each site. Each EA addressed the impacts of construction, use, and decommissioning. Potential impacts that were assessed include radiological impacts, land use, terrestrial resources, water use, aquatic resources, noise, air quality, socioeconomics, radiological impacts during construction and routine operation, and radiological impacts of off-normal events and accidents. Trends in onsite spent fuel storage capacity and the volume of spent fuel that will be generated during an additional 20 years of operation are considered in the GEIS. Spent fuel storage capacity requirements can be adequately met by ISFSIs without significant environmental impacts. The environmental impacts of onsite storage of spent fuel at all plants have been adequately assessed in the GEIS for the purposes of an environmental review and agency decision on renewal of an operating license; thus, no further review within the license renewal proceeding is required. This provision is relative to the license renewal decision and does not alter existing Commission licensing requirements specific to on-site storage of spent fuel.

The environmental impacts from the transportation of fuel and waste attributable to license renewal are found to be small when they are within the range of impacts of parameters identified in Table S–4. The estimated radiological effects are within regulatory standards. The nonradiological impacts are those from periodic shipments of fuel and waste by individual trucks or rail cars and thus would result in infrequent and localized minor contributions to traffic density. Programs designed to further reduce risk, which are already in place, provide for adequate mitigation. Recent, ongoing efforts by the Department of Energy to study the impacts of waste transportation in the context of the multi-purpose canister (see, 60 FR 45147, August 30, 1995) suggest that there may be unresolved issues regarding the magnitude of cumulative impacts from the use of a single rail line or truck route in the vicinity of the repository to carry all spent fuel from all plants. Accordingly, NRC declines to reach a Category 1 conclusion on this issue at this time. Table S–4 should continue to be the basis for case-by-case evaluation of transportation impacts of fuel and waste until such time as a detailed analysis of the environmental impacts of transportation to the proposed repository at Yucca Mountain becomes available.

9. Accidents

Concern. Several commenters expressed concerns regarding the appropriateness of the severe accident determination in the GEIS and with the treatment of severe accident mitigation design alternatives (SAMDAs) for license renewal. A group of commenters identified areas of concern that they believe justify severe accidents being classified as a Category 3 issue. The areas included seismic risks to nuclear power plants and site-specific evacuation risks. Several commenters questioned whether the analyses of the environmental impacts of accidents were adequate to make a Category 1 determination for the issue of severe accidents. The contention is that a bounding analysis would be established only if plant-specific analyses were performed for every plant, which was not the case. Instead, the GEIS analysis made use of a single generic source term for each of the two plant types.

Response. The Commission believes that its analysis of the impacts of severe accidents is appropriate. The GEIS provides an analysis of the consequences of severe accidents for each site in the country. The analysis adopts standard assumptions about each site for parameters such as evacuation speeds and distances traveled, and uses site-specific estimates for parameters such as population distribution and meteorological conditions. These latter two factors were used to evaluate the exposure indices for these analyses. The methods used result in predictions of risk that are adequate to illustrate the general magnitude and types of risks that may occur from reactor accidents. Regarding site-evacuation risk, the radiological risk to persons as they evacuate is taken into account within the individual plant risk assessments that form the basis for the GEIS. In addition, 10 CFR Part 50 requires that licensees maintain up-to-date emergency plans. This requirement will apply in the license renewal term as well as in the current licensing term.

As was done in the GEIS analysis, the use of generic source terms (one set for PWRs and another for BWRs) is consistent with the past practice that has been used and accepted by the NRC for individual plant Final Environmental Impact Statements (FEISs). The purpose of the source term discussion in the GEIS is to describe whether or not new information on source terms developed after the completion of the most recent FEISs indicates that the source terms used in the past under-predict environmental consequences. The NRC has concluded that analysis of the new source term information developed over the past 10 years indicates that the expected frequency and amounts of radioactive release under severe accident conditions are less than that predicted using the generic source terms. A summary of the evolution of this research is provided in NUREG–1150, ''Severe Accident Risks: An Assessment for Five U.S. Nuclear Power Plants'' (December 1990), and its supporting documentation. Thus, the analyses performed for the GEIS represent adequate, plant-specific estimates of the impacts from severe accidents that would generally over-predict, rather than under-predict, environmental consequences. Therefore, the GEIS analysis of the impacts of severe accidents for license renewal is retained and is considered applicable to all plants.

Based on an evaluation of the comments, the Commission has reconsidered its previous conclusion in the draft GEIS concerning site-specific consideration of severe accident mitigation. The Commission has determined that a site-specific consideration of alternatives to mitigate severe accidents will be required at the time of license renewal unless a previous consideration of such alternatives regarding plant operation has been included in a final environmental impact statement or a related supplement. Because the third criterion required to make a Category 1 designation for an issue requires a generic consideration of mitigation, the issue of severe accidents must be reclassified as a Category 2 issue that requires a consideration of severe accident mitigation alternatives, provided this consideration has not already been completed. The Commission's reconsideration of the issue of severe accident mitigation for license renewal is based on the Commission's NEPA regulations that require a consideration of mitigation alternatives in its environmental impact statements (EISs) and supplements to EISs, as well as a previous court decision that required a review of severe mitigation alternatives (referred to as SAMDAs) at the operating license stage. See, *Limerick Ecology Action* v. *NRC*, 869 F.2d 719 (3d Cir. 1989).

Although the Commission has considered containment improvements for all plants pursuant to its Containment Performance Improvement (CPI) program, which identified potential containment improvements for site-specific consideration by licensees,

and the Commission has additional ongoing regulatory programs whereby licensees search for individual plant vulnerabilities to severe accidents and consider cost-beneficial improvements, these programs have not yet been completed. Therefore, a conclusion that severe accident mitigation has been generically considered for license renewal is premature.

The Commission believes it unlikely that any site-specific consideration of severe accident mitigation alternatives for license renewal will identify major plant design changes or modifications that will prove to be cost-beneficial for reducing severe accident frequency or consequences. This Commission expectation regarding severe accident mitigation improvements is based on the analyses performed to date that are discussed below.

The Commission's CPI program examined each of the five U.S. containment types to determine potential failure modes, potential plant improvements, and the cost-effectivenesses of such improvements. As a result of this program, only a few containment improvements were found to be potentially beneficial and were either identified for further NRC research or for individual licensee evaluation.

In response to the *Limerick* decision, an NRC staff consideration of SAMDAs was specifically included in the Final Environmental Impact Statement for the Limerick 1 and 2 and Comanche Peak 1 and 2 operating license reviews, and in the Watts Bar Supplemental Final Environmental Statement for an operating license. The alternatives evaluated in these analyses included the items previously evaluated as part of the CPI Program, as well as improvements identified through other risk studies and analyses. No physical plant modifications were found to be cost-beneficial in any of these severe accident mitigation considerations. Only plant procedural changes were identified as being cost-beneficial. Furthermore, the Limerick analysis was for a high-population site. Because risk is generally proportional to the population around a plant, this analysis suggests that other sites are unlikely to identify significant plant modifications that are cost-beneficial.

Additionally, each licensee is performing an individual plant examination (IPE) to look for plant vulnerabilities to internally initiated events and a separate IPE for externally initiated events (IPEEE). The licensees were requested to report their results to the Commission. Seventy-eight IPE submittals were received and seventy-five IPEEE submittals will be received, covering all operating plants in the United States. These examinations consider potential improvements to reduce the frequency or consequences of severe accidents on a plant-specific basis and essentially constitute a broad search for severe accident mitigation alternatives. The NRC staff is conducting a process review of each plant-specific IPE submittal and IPEEE submittal. To date, all IPE submittals have received a preliminary review by the NRC with 46 out of 78 completed; for the IPEEE submittals, 24 of the 75 are under review. These IPEs have resulted in a number of plant procedural or programmatic improvements and some plant modifications that will further reduce the risk of severe accidents.

In conclusion, the GEIS analysis of severe accident consequences and risk is adequate, and additional plant-specific analysis of these impacts is not required. However, because the ongoing regulatory program related to severe accident mitigation (i.e., IPE and IPEEE) has not been completed for all plants and consideration of severe accident mitigation alternatives has not been included in an EIS or supplemental EIS related to plant operations for all plants, a site-specific consideration of severe accident mitigation alternatives is required at license renewal for those plants for which this consideration has not been performed. The Commission expects that if these reviews identify any changes as being cost beneficial, such changes generally would be procedural and programmatic fixes, with any hardware changes being only minor in nature and few in number. NRC staff considerations of severe accident mitigation alternatives have already been completed and included in an EIS or supplemental EIS for Limerick, Comanche Peak, and Watts Bar. Therefore, severe accident mitigation alternatives need not be reconsidered for these plants for license renewal.

Based on the fact that a generic consideration of mitigation is not performed in the GEIS, a Category 1 designation for severe accidents cannot be made. Therefore, the Commission has reclassified severe accidents as a Category 2 issue, requiring only that alternatives to mitigate severe accidents be considered for those plants that have not included such a consideration in a previous EIS or supplemental EIS. The Commission notes that upon completion of its IPE/IPEEE program, it may review the issue of severe accident mitigation for license renewal and consider, by separate rulemaking, reclassifying severe accidents as a Category 1 issue.

The Commission does not intend to prescribe by rule the scope of an acceptable consideration of severe accident mitigation alternatives for license renewal nor does it intend to mandate consideration of alternatives identical to those evaluated previously. In general, the Commission expects that significant efficiency can be gained by using site-specific IPE and IPEEE results in the consideration of severe accident mitigation alternatives. The IPEs and IPEEEs are essentially site-specific PRAs that identify probabilities of core damage (Level 1 PRA) and include assessments of containment performance under severe accident conditions that identify probabilities of fission product releases (Level 2). As discussed in Generic Letter 88–20, ''Individual Plant Examination for Severe Accident Vulnerabilities'' (November 23, 1988), one of the important goals of the IPE and IPEEE was to reduce the overall probabilities of core damage and fission product releases as necessary by modifying hardware and procedures to help prevent or mitigate severe accidents.

Although Level 3 PRAs have been used in SAMDA analyses to generate site-specific offsite dose estimates so that the cost-benefit of mitigation alternatives could be determined, the Commission does not believe that site-specific Level 3 PRAs are required to determine whether an alternative under consideration will provide sufficient benefit to justify its cost. Licensees can use other quantitative approaches for assigning site-specific risk significance to IPE results and judging whether a mitigation alternative provides a sufficient reduction in core damage frequency (CDF) or release frequency to warrant implementation. For example, a licensee could use information provided in the GEIS analysis (exposure indices, wind frequencies, and demographics) to translate the dominant contributors to CDF and the large release frequencies from the IPE/IPEEE results into dose estimates so that a cost-benefit determination can be performed. In some instances, a consideration of the magnitude of reduction in the site-specific CDF and release frequencies alone (i.e., no conversion to a dose estimate) may be sufficient to conclude that no significant reduction in off-site risk will be provided and, therefore, implementation of a mitigation alternative is not warranted. The Commission will review each severe accident mitigation consideration provided by a license renewal applicant on its merits and determine whether it

constitutes a reasonable consideration of severe accident mitigation alternatives.

10. Decommissioning

Concern. Several commenters requested further clarification of the NRC's position regarding decommissioning requirements, especially whether the total impacts address returning the site to green field conditions.

Response. The decommissioning chapter of the GEIS analyzes the impact that an additional 20 years of plant operation would have on ultimate plant decommissioning; it neither serves as the generic analysis of the environmental impacts associated with decommissioning nor establishes decommissioning requirements. An analysis of the expected impacts from plant decommissioning was previously provided in NUREG–0586, ''Final Generic Environmental Impact Statement on Decommissioning of Nuclear Facilities'' (August 1988). The analysis in the GEIS for license renewal examines the physical requirements and attendant effects of decommissioning after a 20-year license renewal compared with decommissioning at the end of 40 years of operation and finds little difference in effects.

With respect to returning a site to green field condition, the Commission defines decommissioning as the safe removal of a nuclear facility from service, the reduction of residual contamination to a level that permits release of the property for unrestricted use, and termination of the license. Therefore, the question of restoring the land to a green field condition, which would require additional demolition and site restoration beyond addressing residual contamination and radiological effects, is outside the current scope of the decommissioning requirements. Moreover, consistent with the Commission's conclusion that license renewal is not expected to affect future decommissioning, any requirement relative to returning a site to a green field and the attendant effects of such a requirement would also not be affected by an additional 20 years of operation. Therefore, the issue of returning a site to pre-construction conditions is beyond the scope of license renewal review.

Concern. Several commenters expressed concern that, because a residual radioactivity rule is still not in place, the LLW estimates should be reexamined.

Response. The NRC does have criteria in place for the release of reactor facilities to unrestricted access following decommissioning. These include the guidance in Regulatory Guide 1.86, ''Termination of Operating Licenses for Nuclear Reactors'' (which provides guidance for surface contamination), dose rate limits from gamma-emitting radionuclides included in plant technical specifications, and requirements for keeping residual contamination as low as reasonably achievable (ALARA) as included in 10 CFR part 20. These criteria were used in developing NUREG–0586, the final GEIS on decommissioning of nuclear facilities, which was published in August of 1988. One conclusion from the analysis conducted for NUREG–0586 was that waste volumes from decommissioning of reactors are not highly sensitive to the radiological criteria. A proposed rule dated August 22, 1994, would codify radiological criteria for unrestricted release of reactors and other nuclear facilities and for termination of a facility license following decommissioning. NUREG–1496, the draft GEIS for the proposed rule on radiological criteria, included analyses of a range of radiological release criteria and confirmed the earlier conclusions that waste volumes from decommissioning of reactors are not sensitive to the residual radiological criteria within the range likely to be selected. This range included residual dose levels comparable to the radiological criteria currently being used for reactor decommissioning. Based on the insensitivity of the waste volume from reactor decommissioning to the radiological criteria, the Commission continues to believe, as concluded in the decommissioning section of the GEIS, that the contribution to environmental impacts of decommissioning from license renewal are small. The Commission further concludes that these impacts are not expected to change significantly as a result of the ongoing rulemaking. Therefore, the determinations in the GEIS remain appropriate.

11. Need for Generating Capacity

Concern. In addition to the major procedural concern discussed earlier about the treatment of need for generating capacity, several commenters raised concerns about the power demand projections used in the GEIS. Some commenters noted that any determination of need quickly becomes dated and, therefore, the demand for and the source of electrical power at the time of license renewal cannot be accurately predicted at this time. Moreover, they believe that the NRC's analysis is not definitive enough to remain unchallenged for 40 years. Another commenter criticized the analysis because it focused only on energy requirements without making appropriate distinctions between energy and peak capacity requirements, plant availability, and capacity factors.

Response. The NRC has determined that a detailed consideration of the need for generating capacity is inappropriate in the context of consideration of the environmental impacts of license renewal. Thus, the NRC will limit its NEPA review of license renewal applications to the consideration of the environmental impacts of license renewal compared with those of other available generating sources. Hence, the concerns regarding demand projections used in the draft GEIS are no longer an issue and they have been removed from the GEIS.

12. Alternatives to License Renewal

Concern. In addition to the procedural concern discussed earlier about the treatment of alternative energy sources as a Category 1 issue, several commenters expressed concerns about the comparison and analysis of alternative energy sources, as well as the economic analysis approach used in the draft GEIS. Consistent with their arguments against the Category 1 designation of alternatives, the commenters questioned the approach adopted in the GEIS of comparing only single alternative energy sources to license renewal. They believe that the NRC's failure to consider a mix of alternatives ignores the potential for other alternative sources of power that are available to different regions of the nation, such as demand-side management, cogeneration, purchased power from Canada, biomass, natural gas, solar energy, and wind power. They also indicated that this approach neglects a utility's ability to serve its customers with a portfolio of supply that is based on load characteristics, cost, geography, and other considerations, and fails to consider the collective impact of the alternatives. Furthermore, the possible technological advances in renewable energy sources over the next 40 years are not addressed.

One commenter argued that designating the issue of alternative energy sources as Category 1 allows a license renewal applicant not to consider the additional requirement of economic threshold analysis. Relative to the economic analysis of the alternatives to license renewal, another commenter questioned the proposed requirement for the license renewal applicant to demonstrate that the ''replacement of equivalent generating capacity by a coal-fired plant has no demonstrated cost advantage over the individual nuclear power plant license renewal.''

According to the commenter, this requirement would force the applicant to perform an economic analysis of an alternative to license renewal. The commenter further argued that NEPA does not require an economic consideration.

Response. In response to these concerns, the final rule no longer requires a cost comparison of alternative energy sources relative to license renewal. Furthermore, the alternative energy sources discussed in the final GEIS include energy conservation and energy imports as well as the other sources discussed by the commenters. An analysis of the environmental impacts of alternative energy sources is included in the GEIS but is not codified in 10 CFR part 51.

The NRC believes that its consideration of alternatives in the GEIS is representative of the technologies available and the associated environmental impacts. With regard to consideration of a mix of alternative sources, the Commission recognizes that combinations of various alternatives may be used to replace power generation from license renewal.

13. License Renewal Scenario

Concern. Several commenters raised concerns related to the license renewal scenario evaluation methodology as implemented in the GEIS. The fundamental issues were the degree of conservatism built into the scenario and the appropriateness of an upper bound type approach in characterizing the refurbishment activities (and associated costs) in light of NEPA requirements to determine reasonable estimates of the environmental impacts of Federal actions.

Regarding the concerns that the refurbishment schedules and scenarios developed for the GEIS were too conservative, several commenters indicated that many of the activities slated for completion during the extended refurbishment before license renewal would actually be completed by many facilities during the course of the current licensing term. The effect of having only one major outage instead of leveling work over three or four outages could lead to an over-estimate of the refurbishment activities and costs that any particular plant would expect to see.

Response. In response to this concern, the NRC has revised the GEIS to include two license renewal program scenarios. The first scenario refers to a ''typical'' license renewal program and is intended to be representative of the type of programs that many plants seeking license renewal might implement. The second scenario retains the original objective of establishing an upper bound of the impacts likely to be generated at any particular plant. The typical scenario is useful for estimating impacts at plants that have been well maintained and have already undertaken most major refurbishment activities necessary for operation beyond the current licensing term. The conservative scenario estimates continue to be useful for estimating the maximum impacts likely to result from license renewal.

The revised approach of providing two separate license renewal scenarios also alleviates the concern about the use of a bounding scenario for license renewal activities. The NRC acknowledges that some applicants for license renewal may not be required to perform certain major refurbishment or replacement activities and, therefore, may have fewer or shorter outages. However, the two scenarios described in the GEIS are neither unrealistic nor overconservative in representing the range of activities that could be expected for license renewal and the possible schedule for performing these activities.

14. Environmental Justice

On February 11, 1994, the President issued Executive Order (E.O.) 12898, ''Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations'' (59 FR 7629, February 16, 1994). This order requires each Federal agency to make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority and low income populations. The Commission will endeavor to carry out the measures set forth in the executive order by integrating environmental justice into NRC's compliance with the National Environmental Policy of 1969 (NEPA), as amended. E.O. 12898 was issued after publication of the proposed rule and the receipt of comments on the proposed rule. As a result, no comments were received regarding environmental justice reviews for license renewal. Therefore, a brief discussion of this issue relative to license renewal is warranted.

As called for in Section 1–102 of E.O. 12898, the EPA established a Federal interagency working group to, among other things, ''* * * provide guidance to Federal agencies or criteria for identifying disproportionately high and adverse human health or environmental effects on minority populations and low-income populations * * *.'' The CEQ was assigned to provide this guidance to enable agencies to better comply with E.O. 12898. Until the CEQ guidance is received, the Commission intends to consider environmental justice in its evaluations of individual license renewal applications. Greater emphasis will be placed on discussing impacts on minority and low-income populations when preparing NEPA documents such as EISs, supplemental EISs, and, where appropriate, EAs. Commission requirements regarding environmental justice reviews will be reevaluated and may be revised after receipt of the CEQ guidance.

IV. Discussion of Regulatory Requirements

A. General Requirements

In this final rule, the regulatory requirements for performing a NEPA review for a license renewal application are similar to the NEPA review requirements for other major plant licensing actions. Consistent with the current NEPA practice for major plant licensing actions, this amendment to 10 CFR Part 51 requires the applicant to submit an environmental report that analyzes the environmental impacts associated with the proposed action, considers alternatives to the proposed action, and evaluates any alternatives for reducing adverse environmental effects. Additionally, the amendment requires the NRC staff to prepare a supplemental environmental impact statement for the proposed action, issue the statement in draft for public comment, and issue a final statement after considering public comments on the draft.

The amendment deviates from NRC's current NEPA review practice in some areas. First, the amendment codifies certain environmental impacts associated with license renewal that were analyzed in NUREG–1437, ''Generic Environmental Impact Statement for License Renewal at Nuclear Plants'' (xxxx 1996). Accordingly, absent new and significant information, the analyses for certain impacts codified by this rulemaking need only be incorporated by reference in an applicant's environmental report for license renewal and in the Commission's (including NRC staff, adjudicatory officers, and the Commission itself) draft and final SEIS and other environmental documents developed for the proceeding. Secondly, the amendment reflects the Commission's decision to limit its NEPA review for license renewal to a consideration of the environmental

effects of the proposed action and alternatives to the proposed action. Finally, the amendment contains the decision standard that the Commission will use in determining the acceptability of the environmental impacts of individual license renewals.

The Commission and the applicant will consider severe accident mitigation alternatives to reduce or mitigate environmental impacts for any plant for which severe accident mitigation alternatives have not been previously considered in an environmental impact statement or related supplement or in an environmental assessment. The Commission has concluded that, for license renewal, the issues of need for power and utility economics should be reserved for State and utility officials to decide. Accordingly, the NRC will not conduct an analysis of these issues in the context of license renewal or perform traditional cost-benefit balancing in license renewal NEPA reviews. Finally, in a departure from the approach presented in the proposed rule, this final rule does not codify any conclusions regarding the subject of alternatives. Consideration of and decisions regarding alternatives will occur at the site-specific stage. The discussion below addresses the specific regulatory requirements of this amendment and any conforming changes to 10 CFR part 51 to implement the Commission's decision to eliminate cost-benefit balancing from license renewal NEPA reviews.

B. The Environmental Report

1. Environmental Impacts of License Renewal

Through this final rule, the NRC has amended 10 CFR 51.53 to require an applicant for license renewal to submit an environmental report with its application. This environmental report must contain an analysis of the environmental impacts of renewing a license, the environmental impacts of alternatives, and mitigation alternatives. In preparing the analysis of environmental impacts contained in the environmental report, the applicant should refer to the data provided in appendix B to 10 CFR part 51, which has been added to NRC's regulations as part of this rulemaking. The applicant is not required to provide an analysis in the environmental report of those issues identified as Category 1 issues in Table B–1 in Appendix B. For those issues identified as Category 2 in Table B–1, the applicant must provide a specified additional analysis beyond that contained in Table B–1. In this final rule, 10 CFR 51.53(c)(3)(ii) specifies the subject areas of the analysis that must be addressed for the Category 2 issues.

Pursuant to 10 CFR 51.45(c), 10 CFR 51.53(c)(2) requires the applicant to consider possible actions to mitigate the adverse impacts associated with the proposed action. This consideration is limited to designated Category 2 matters. Pursuant to 10 CFR 51.45(d), the environmental report must include a discussion of the status of compliance with applicable Federal, State, and local environmental standards. Also, 10 CFR 51.53(c)(2) specifically excludes from consideration in the environmental report the issues of need for power, the economic costs and benefits of the proposed action, economic costs and benefits of alternatives to the proposed action, or other issues not related to environmental effects of the proposed action and associated alternatives. In addition, the requirements in 10 CFR 51.45 are consistent with the exclusion of economic issues in 10 CFR 51.53(c)(2).

2. Consideration of Alternatives

Pursuant to 10 CFR 51.45(c), 10 CFR 51.53(c)(2) requires the applicant to consider the environmental impacts of alternatives to license renewal in the environmental report. The treatment of alternatives in the environmental report should be limited to the environmental impacts of such alternatives.

The amended regulations do not require a discussion of the economic costs and benefits of these alternatives in the environmental report for the operating license renewal stage except as necessary to determine whether an alternative should be included in the range of alternatives considered or whether certain mitigative actions are appropriate. The analysis should demonstrate consideration of a reasonable set of alternatives to license renewal. In preparing the alternatives analysis, the applicant may consider information regarding alternatives in NUREG–1437, ''Generic Environmental Impact Statement for License Renewal of Nuclear Plants'' (xxxx 1996).

The Commission has developed a new decision standard to be applied in environmental impact statements for license renewal as discussed in Section IV.C.2. The amended regulations for license renewal do not require applicants to apply this decision standard to the information generated in their environmental report (although the applicant is not prohibited from doing so if it desires). However, the NRC staff will use the information contained in the environmental report in preparing the environmental impact statement upon which the Commission will base its final decision.

3. Consideration of Mitigation Alternatives

Consistent with the NRC's current NEPA practice, an applicant must include a consideration of alternatives to mitigate adverse environmental impacts in its environmental report. However, for license renewal, the Commission has generically considered mitigation for environmental issues associated with renewal and has concluded that no additional site-specific consideration of mitigation is necessary for many issues. The Commission's consideration of mitigation for each issue included identification of current activities that adequately mitigate impacts and evaluation of other mitigation techniques that might or might not be warranted, depending on such factors as the size of the impact and the cost of the technique. The Commission has considered mitigation for all impacts designated as Category 1 in Table B–1. Therefore, a license renewal applicant need not address mitigation for issues so designated.

C. Supplemental Environmental Impact Statement

This amendment also requires that the Commission prepare a supplemental environmental impact statement (SEIS), consistent with 10 CFR 51.20(b)(2). This statement will serve as the Commission's independent analysis of the environmental impacts of license renewal as well as a comparison of these impacts to the environmental impacts of alternatives. This document will also present the preliminary recommendation by the NRC staff regarding the proposed action. Consistent with the revisions to 10 CFR 51.45 and 51.53 discussed above in regard to the applicant's environmental report, this rulemaking revises portions of 10 CFR 51.71 and 51.95 to reflect the Commission's approach to addressing the environmental impacts of license renewal.

The issues of need for power, the economic costs and benefits of the proposed action, and economic costs and benefits of alternatives to the proposed action are specifically excluded from consideration in the supplemental environmental impact statement for license renewal by 10 CFR 51.95(c), except as these costs and benefits are either essential for a determination regarding the inclusion of an alternative in the range of alternatives considered or relevant to mitigation. The supplemental

environmental impact statement does not need to discuss issues other than environmental effects of the proposed action and associated alternatives. This rule amends the requirements in 10 CFR 51.71 (d) and (e) so that they are consistent with the exclusion of economic issues in 10 CFR 51.95(c). Additionally, 10 CFR 51.95 has been amended to allow information from previous NRC site-specific environmental reviews, as well as NRC final generic environmental impact statements, to be referenced in supplemental environmental impact statements.

1. Public Scoping and Public Comments on the SEIS

Consistent with NRC's current NEPA practice, the Commission will hold a public meeting in order to inform the local public of the proposed action and receive comments. In addition, the SEIS will be issued in draft for public comment in accordance with 10 CFR 51.91 and 51.93. In both the public scoping process and the public comment process, the Commission will accept comments on all previously analyzed issues and information codified in Table B–1 of appendix B to 10 CFR part 51 and will determine whether these comments provide any information that is new and significant compared with that previously considered in the GEIS. If the comments are determined to provide new and significant information bearing on the previous analysis in the GEIS, these comments will be considered and appropriately factored into the Commission's analysis in the SEIS. Public comments on the site-specific additional information provided by the applicant regarding Category 2 issues will be considered in the SEIS.

2. Commission's Analysis and Preliminary Recommendation

The Commission's draft SEIS will include its analysis of the environmental impacts of the proposed license renewal action and the environmental impacts of the alternatives to the proposed action. With the exception of offsite radiological impacts for collective effects and the disposal of spent fuel and high level waste, the Commission will integrate the codified environmental impacts of license renewal as provided in Table B–1 of appendix B to 10 CFR part 51 (supplemented by the underlying analyses in the GEIS), the appropriate site-specific analyses of Category 2 issues, and any new issues identified during the scoping and public comment process. The results of this integration process will be utilized to arrive at a conclusion regarding the sum of the environmental impacts associated with license renewal. These impacts will then be compared, quantitatively or qualitatively as appropriate, with the environmental impacts of the considered alternatives. The analysis of alternatives in the SEIS will be limited to the environmental impacts of these alternatives and will be prepared in accordance with 10 CFR 51.71 and subpart A of appendix A to 10 CFR part 51. The analysis of impacts of alternatives provided in the GEIS may be referenced in the SEIS as appropriate. The alternatives discussed in the GEIS include a reasonable range of different methods for power generation. The analysis in the draft SEIS will consider mitigation actions for designated Category 2 matters and will consider the status of compliance with Federal, State, and local environmental requirements as required by 10 CFR 51.71(d). Consistent with 10 CFR 51.71(e), the draft supplemental environmental impact statement must contain a preliminary recommendation regarding license renewal based on consideration of the information on the environmental impacts of license renewal and of alternatives contained in the SEIS. In order to reach its recommendation, the NRC staff must determine whether the adverse environmental impacts of license renewal are so great that preserving the option of license renewal for energy planning decisionmakers would be unreasonable. This decision standard is contained in 10 CFR 51.95(c)(4).

3. Final Supplemental Environmental Impact Statement

The Commission will issue a final supplemental environmental impact statement for a license renewal application in accordance with 10 CFR 51.91 and 51.93 after considering the public comments related to new issues identified from the scoping and public comment process, Category 2 issues, and any new and significant information regarding previously analyzed and codified Category 1 issues. Pursuant to 10 CFR 51.102 and 51.103, the Commission will provide a record of its decision regarding the environmental impacts of the proposed action. In making a final decision, the Commission must determine whether the adverse environmental impacts of license renewal (when compared with the environmental impacts of other energy generating alternatives) are so great that preserving the option of license renewal for energy planning decisionmakers would be unreasonable.

D. NEPA Review for Activities Outside NRC License Renewal Approval Scope

The Commission wishes to clarify that any activity that requires NRC approval and is not specifically required for NRC's action regarding management of the effects of aging on certain passive long-lived structures and components in the period of extended operation must be subject to a separate NEPA review. The actions subject to NRC approval for license renewal are limited to continued operation consistent with the plant design and operating conditions for the current operating license and to the performance of specific activities and programs necessary to manage the effects of aging on the passive, long-lived structures and components identified in accordance with 10 CFR part 54. Accordingly, the GEIS does not serve as the NEPA review for other activities or programs outside the scope of NRC's part 54 license renewal review. The separate NEPA review must be prepared regardless of whether the action is necessary as a consequence of receiving a renewed license, even if the activity were specifically addressed in the GEIS. For example, the environmental impacts of spent fuel pool expansion are addressed in the GEIS in the context of the environmental consequences of approving a renewed operating license, rather than in the context of a specific application to expand spent fuel pool capacity, which would require a separate NEPA review.

These separate NEPA reviews may reference and otherwise use applicable environmental information contained in the GEIS. For example, an EA prepared for a separate spent fuel pool expansion request may use the information in the GEIS to support a finding of no significant impact.

V. Availability of Documents

The principal documents supporting this supplementary information are as follows:

(1) NUREG–1437, ''Generic Environmental Impact Statement for License Renewal of Nuclear Plants'' (May 1996).

(2) NUREG–1529, ''Public Comments on the Proposed 10 CFR part 51 Rule for Renewal of Nuclear Power Plant Operating Licenses and Supporting Documents; Review of Concerns and NRC Staff Response'' (May 1996).

(3) NUREG–1440, ''Regulatory Analysis of Amendments to Regulations Concerning the Environmental Review

for Renewal of Nuclear Power Plant Operating Licenses'' (May 1996).

Copies of all documents cited in the supplementary information are available for inspection and for copying for a fee in the NRC Public Document Room, 2120 L Street NW. (Lower Level), Washington, DC. In addition, copies of NRC final documents cited here may be purchased from the Superintendent of Documents, U.S. Government Printing Office, PO Box 37082, Washington, DC 20013–7082. Copies are also available for purchase from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161.

VI. Submittal of Comments in an Electronic Format

Commenters are encouraged to submit, in addition to the original paper copy, a copy of their letter in an electronic format on IBM PC DOS-compatible 3.5- or 5.25-inch, double-sided, double-density (DS/DD) diskettes. Data files should be provided in Wordperfect 5.1 or later version of Wordperfect. ASCII code is also acceptable or, if formatted text is required, data files should be provided in IBM Revisable-Form Text Document Content Architecture (RFT/DCA) format.

VII. Finding of No Significant Environmental Impact: Availability

The NRC has determined that this final rule is the type of action described as a categorical exclusion in 10 CFR 51.22(c)(3). Therefore, neither an environmental impact statement nor an environmental assessment has been prepared for this regulation. This action is procedural in nature and pertains only to the type of environmental information to be reviewed.

VIII. Paperwork Reduction Act Statement

This final rule amends information collection requirements that are subject to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*). These requirements were approved by the Office of Management and Budget, approval number 3150–0021.

The public reporting burden for this collection of information is estimated to average 4,200 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to the Information and Records Management Branch (T–6F33), U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001, or by Internet electronic mail at BJS1@nrc.gov; and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB–10202 (3150–0021), Office of Management and Budget, Washington, DC 20503.

Public Protection Notification

The NRC may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

IX. Regulatory Analysis

The Commission has prepared a regulatory analysis for this final rule. The analysis examines the costs and benefits of the alternatives considered by the Commission. The two alternatives considered were:

(A) Retaining the existing 10 CFR part 51 review process for license renewal, which requires that all reviews be on a plant-specific basis; and

(B) Amending 10 CFR part 51 to allow a portion of the environmental review to be conducted on a generic basis.

The conclusions of the regulatory analysis show substantial cost savings of alternative (B) over alternative (A). The analysis, NUREG–1440, is available for inspection in the NRC Public Document Room, 2120 L Street NW. (Lower Level), Washington, DC. Copies of the analysis are available as described in Section V.

X. Regulatory Flexibility Act Certification

As required by the Regulatory Flexibility Act of 1980, 5 U.S.C. 605(b), the Commission certifies that this final rule will not have a significant impact on a substantial number of small entities. The final rule states the application procedures and environmental information to be submitted by nuclear power plant licensees to facilitate NRC's obligations under NEPA. Nuclear power plant licensees do not fall within the definition of small businesses as defined in Section 3 of the Small Business Act, 15 U.S.C. 632, or the Commission's Size Standards, April 11, 1995 (60 FR 18344).

XI. Small Business Regulatory Enforcement Fairness Act

In accordance with the Small Business Regulatory Enforcement Fairness Act of 1996, the NRC has determined that this action is not a major rule and has verified this determination with the Office of Information and Regulatory Affairs of OMB.

XII. Backfit Analysis

The NRC has determined that these amendments do not involve any provisions which would impose backfits as defined in 10 CFR 50.109(a)(1); therefore, a backfit analysis need not be prepared.

List of Subjects in 10 CFR Part 51

Administrative practice and procedure, Environmental impact statement, Nuclear materials, Nuclear power plants and reactors, Reporting and recordkeeping requirements.

For the reasons set out in the preamble and under the authority of the Atomic Energy Act of 1954, as amended; the Energy Reorganization Act of 1974, as amended; the National Environmental Policy Act of 1969, as amended; and 5 U.S.C. 552 and 553, the NRC is adopting the following amendments to 10 CFR part 51.

PART 51—ENVIRONMENTAL PROTECTION REGULATIONS FOR DOMESTIC LICENSING AND RELATED REGULATORY FUNCTIONS

1. The authority citation for part 51 continues to read as follows:

Authority: Sec. 161, 68 Stat. 948, as amended, Sec. 1701, 106 Stat. 2951, 2952, 2953 (42 U.S.C. 2201, 2297f); secs. 201, as amended, 202, 88 Stat. 1242, as amended, 1244 (42 U.S.C. 5841, 5842).

Subpart A also issued under National Environmental Policy Act of 1969, secs. 102, 104, 105, 83 Stat. 853–854, as amended (42 U.S.C. 4332, 4334, 4335); and Pub. L. 95–604, Title II, 92 Stat. 3033–3041. Sections 51.20, 51.30, 51.60, 51.61, 51.80, and 51.97 also issued under secs. 135, 141, Pub. L. 97–425, 96 Stat. 2232, 2241, and sec. 148, Pub. L. 100–203, 101 Stat. 1330–223 (42 U.S.C. 10155, 10161, 10168). Section 51.22 also issued under sec. 274, 73 Stat. 688, as amended by 92 Stat. 3036–3038 (42 U.S.C. 2021) and under Nuclear Waste Policy Act of 1982, sec. 121, 96 Stat. 2228 (42 U.S.C. 10141). Sections 51.43, 51.67, and 51.109 also issued under Nuclear Waste Policy Act of 1982, sec. 114(f), 96 Stat. 2216, as amended (42 U.S.C. 10134(f)).

2. Section 51.45 is amended by revising paragraph (c) to read as follows:

§ 51.45 Environmental report.

* * * * *

(c) *Analysis.* The environmental report shall include an analysis that considers and balances the environmental effects of the proposed action, the environmental impacts of alternatives to the proposed action, and alternatives available for reducing or avoiding adverse environmental effects. Except for environmental reports prepared at the license renewal stage pursuant to § 51.53(c), the analysis in the environmental report should also

include consideration of the economic, technical, and other benefits and costs of the proposed action and of alternatives. Environmental reports prepared at the license renewal stage pursuant to § 51.53(c) need not discuss the economic or technical benefits and costs of either the proposed action or alternatives except insofar as such benefits and costs are either essential for a determination regarding the inclusion of an alternative in the range of alternatives considered or relevant to mitigation. In addition, environmental reports prepared pursuant to § 51.53(c) need not discuss other issues not related to the environmental effects of the proposed action and alternatives. The analyses for environmental reports shall, to the fullest extent practicable, quantify the various factors considered. To the extent that there are important qualitative considerations or factors that cannot be quantified, those considerations or factors shall be discussed in qualitative terms. The environmental report should contain sufficient data to aid the Commission in its development of an independent analysis.

* * * * *

3. Section 51.53 is revised to read as follows:

§ 51.53 Postconstruction environmental reports.

(a) *General.* Any environmental report prepared under the provisions of this section may incorporate by reference any information contained in a prior environmental report or supplement thereto that relates to the production or utilization facility or any information contained in a final environmental document previously prepared by the NRC staff that relates to the production or utilization facility. Documents that may be referenced include, but are not limited to, the final environmental impact statement; supplements to the final environmental impact statement, including supplements prepared at the license renewal stage; NRC staff-prepared final generic environmental impact statements; and environmental assessments and records of decisions prepared in connection with the construction permit, the operating license, and any license amendment for that facility.

(b) *Operating license stage.* Each applicant for a license to operate a production or utilization facility covered by § 51.20 shall submit with its application the number of copies specified in § 51.55 of a separate document entitled ''Supplement to Applicant's Environmental Report—Operating License Stage,'' which will update ''Applicant's Environmental Report—Construction Permit Stage.'' Unless otherwise required by the Commission, the applicant for an operating license for a nuclear power reactor shall submit this report only in connection with the first licensing action authorizing full-power operation. In this report, the applicant shall discuss the same matters described in §§ 51.45, 51.51, and 51.52, but only to the extent that they differ from those discussed or reflect new information in addition to that discussed in the final environmental impact statement prepared by the Commission in connection with the construction permit. No discussion of need for power, or of alternative energy sources, or of alternative sites for the facility, or of any aspect of the storage of spent fuel for the facility within the scope of the generic determination in § 51.23(a) and in accordance with § 51.23(b) is required in this report.

(c) *Operating license renewal stage.* (1) Each applicant for renewal of a license to operate a nuclear power plant under part 54 of this chapter shall submit with its application the number of copies specified in § 51.55 of a separate document entitled ''Applicant's Environmental Report—Operating License Renewal Stage.''

(2) The report must contain a description of the proposed action, including the applicant's plans to modify the facility or its administrative control procedures as described in accordance with § 54.21 of this chapter. This report must describe in detail the modifications directly affecting the environment or affecting plant effluents that affect the environment. In addition, the applicant shall discuss in this report the environmental impacts of alternatives and any other matters described in § 51.45. The report is not required to include discussion of need for power or the economic costs and economic benefits of the proposed action or of alternatives to the proposed action except insofar as such costs and benefits are either essential for a determination regarding the inclusion of an alternative in the range of alternatives considered or relevant to mitigation. The environmental report need not discuss other issues not related to the environmental effects of the proposed action and the alternatives. In addition, the environmental report need not discuss any aspect of the storage of spent fuel for the facility within the scope of the generic determination in § 51.23(a) and in accordance with § 51.23(b).

(3) For those applicants seeking an initial renewal license and holding either an operating license or construction permit as of June 30, 1995, the environmental report shall include the information required in paragraph (c)(2) of this section subject to the following conditions and considerations:

(i) The environmental report for the operating license renewal stage is not required to contain analyses of the environmental impacts of the license renewal issues identified as Category 1 issues in appendix B to subpart A of this part.

(ii) The environmental report must contain analyses of the environmental impacts of the proposed action, including the impacts of refurbishment activities, if any, associated with license renewal and the impacts of operation during the renewal term, for those issues identified as Category 2 issues in appendix B to subpart A of this part. The required analyses are as follows:

(A) If the applicant's plant utilizes cooling towers or cooling ponds and withdraws make-up water from a river whose annual flow rate is less than 3.15×10^{12} ft^3/year (9×10^{10} m^3/year), an assessment of the impact of the proposed action on the flow of the river and related impacts on instream and riparian ecological communities must be provided. The applicant shall also provide an assessment of the impacts of the withdrawal of water from the river on alluvial aquifers during low flow.

(B) If the applicant's plant utilizes once-through cooling or cooling pond heat dissipation systems, the applicant shall provide a copy of current Clean Water Act 316(b) determinations and, if necessary, a 316(a) variance in accordance with 40 CFR part 125, or equivalent State permits and supporting documentation. If the applicant can not provide these documents, it shall assess the impact of the proposed action on fish and shellfish resources resulting from heat shock and impingement and entrainment.

(C) If the applicant's plant uses Ranney wells or pumps more than 100 gallons of ground water per minute, an assessment of the impact of the proposed action on ground-water use must be provided.

(D) If the applicant's plant is located at an inland site and utilizes cooling ponds, an assessment of the impact of the proposed action on groundwater quality must be provided.

(E) All license renewal applicants shall assess the impact of refurbishment and other license-renewal-related construction activities on important plant and animal habitats. Additionally, the applicant shall assess the impact of the proposed action on threatened or

endangered species in accordance with the Endangered Species Act.

(F) If the applicant's plant is located in or near a nonattainment or maintenance area, an assessment of vehicle exhaust emissions anticipated at the time of peak refurbishment workforce must be provided in accordance with the Clean Air Act as amended.

(G) If the applicant's plant uses a cooling pond, lake, or canal or discharges into a river having an annual average flow rate of less than 3.15×10^{12} ft^3/year (9×10^{10} m^3/year), an assessment of the impact of the proposed action on public health from thermophilic organisms in the affected water must be provided.

(H) If the applicant's transmission lines that were constructed for the specific purpose of connecting the plant to the transmission system do not meet the recommendations of the National Electric Safety Code for preventing electric shock from induced currents, an assessment of the impact of the proposed action on the potential shock hazard from the transmission lines must be provided.

(I) An assessment of the impact of the proposed action on housing availability, land-use, and public schools (impacts from refurbishment activities only) within the vicinity of the plant must be provided. Additionally, the applicant shall provide an assessment of the impact of population increases attributable to the proposed project on the public water supply.

(J) All applicants shall assess the impact of the proposed project on local transportation during periods of license renewal refurbishment activities.

(K) All applicants shall assess whether any historic or archaeological properties will be affected by the proposed project.

(L) If the staff has not previously considered severe accident mitigation alternatives for the applicant's plant in an environmental impact statement or related supplement or in an environmental assessment, a consideration of alternatives to mitigate severe accidents must be provided.

(M) The environmental effects of transportation of fuel and waste shall be reviewed in accordance with § 51.52.

(iii) The report must contain a consideration of alternatives for reducing adverse impacts, as required by § 51.45(c), for all Category 2 license renewal issues in Appendix B to Subpart A of this part. No such consideration is required for Category 1 issues in Appendix B to Subpart A of this part.

(iv) The environmental report must contain any new and significant information regarding the environmental impacts of license renewal of which the applicant is aware.

(d) *Postoperating license stage.* Each applicant for a license amendment authorizing the decommissioning of a production or utilization facility covered by § 51.20 and each applicant for a license or license amendment to store spent fuel at a nuclear power plant after expiration of the operating license for the nuclear power plant shall submit with its application the number of copies specified in § 51.55 of a separate document entitled ''Supplement to Applicant's Environmental Report—Post Operating License Stage.'' This supplement will update ''Supplement to Applicant's Environmental Report—Operating License Stage'' and ''Applicant's Environmental Report—Operating License Renewal Stage,'' as appropriate, to reflect any new information or significant environmental change associated with the applicant's proposed decommissioning activities or with the applicant's proposed activities with respect to the planned storage of spent fuel. Unless otherwise required by the Commission, in accordance with the generic determination in § 51.23(a) and the provisions in § 51.23(b), the applicant shall address only the environmental impact of spent fuel storage for the term of the license.

4. In § 51.55, paragraph (a) is revised to read as follows:

§ 51.55 Environmental report—number of copies; distribution.

(a) Each applicant for a license to construct and operate a production or utilization facility covered by paragraphs (b)(1), (b)(2), (b)(3), or (b)(4) of § 51.20, each applicant for renewal of an operating license for a nuclear power plant, each applicant for a license amendment authorizing the decommissioning of a production or utilization facility covered by § 51.20, and each applicant for a license or license amendment to store spent fuel at a nuclear power plant after expiration of the operating license for the nuclear power plant shall submit to the Director of the Office of Nuclear Reactor Regulation or the Director of the Office of Nuclear Material Safety and Safeguards, as appropriate, 41 copies of an environmental report or any supplement to an environmental report. The applicant shall retain an additional 109 copies of the environmental report or any supplement to the environmental report for distribution to parties and Boards in the NRC proceedings; Federal, State, and local officials; and any affected Indian tribes, in accordance with written instructions issued by the Director of the Office of Nuclear Reactor Regulation or the Director of the Office Nuclear Material Safety and Safeguards, as appropriate.

* * * * *

5. In § 51.71, paragraphs (d) and (e) are revised to read as follows:

§ 51.71 Draft environmental impact statement—contents.

* * * * *

(d) *Analysis.* The draft environmental impact statement will include a preliminary analysis that considers and weighs the environmental effects of the proposed action; the environmental impacts of alternatives to the proposed action; and alternatives available for reducing or avoiding adverse environmental effects. Except for supplemental environmental impact statements for the operating license renewal stage prepared pursuant to § 51.95(c), draft environmental impact statements should also include consideration of the economic, technical, and other benefits and costs of the proposed action and alternatives and indicate what other interests and considerations of Federal policy, including factors not related to environmental quality if applicable, are relevant to the consideration of environmental effects of the proposed action identified pursuant to paragraph (a) of this section. Supplemental environmental impact statements prepared at the license renewal stage pursuant to § 51.95(c) need not discuss the economic or technical benefits and costs of either the proposed action or alternatives except insofar as such benefits and costs are either essential for a determination regarding the inclusion of an alternative in the range of alternatives considered or relevant to mitigation. In addition, the supplemental environmental impact statement prepared at the license renewal stage need not discuss other issues not related to the environmental effects of the proposed action and associated alternatives. The draft supplemental environmental impact statement for license renewal prepared pursuant to § 51.95(c) will rely on conclusions as amplified by the supporting information in the GEIS for issues designated as Category 1 in appendix B to subpart A of this part. The draft supplemental environmental impact statement must contain an analysis of those issues identified as Category 2 in appendix B to subpart A of this part that are open for the proposed action. The analysis for all

draft environmental impact statements will, to the fullest extent practicable, quantify the various factors considered. To the extent that there are important qualitative considerations or factors that cannot be quantified, these considerations or factors will be discussed in qualitative terms. Due consideration will be given to compliance with environmental quality standards and requirements that have been imposed by Federal, State, regional, and local agencies having responsibility for environmental protection, including applicable zoning and land-use regulations and water pollution limitations or requirements promulgated or imposed pursuant to the Federal Water Pollution Control Act. The environmental impact of the proposed action will be considered in the analysis with respect to matters covered by such standards and requirements irrespective of whether a certification or license from the appropriate authority has been obtained.[3] While satisfaction of Commission standards and criteria pertaining to radiological effects will be necessary to meet the licensing requirements of the Atomic Energy Act, the analysis will, for the purposes of NEPA, consider the radiological effects of the proposed action and alternatives.

(e) *Preliminary recommendation.* The draft environmental impact statement normally will include a preliminary recommendation by the NRC staff respecting the proposed action. This preliminary recommendation will be based on the information and analysis described in paragraphs (a) through (d) of this section and §§ 51.75, 51.76, 51.80, 51.85, and 51.95, as appropriate, and will be reached after considering the environmental effects of the proposed action and reasonable alternatives,[4] and, except for supplemental environmental impact statements for the operating license renewal stage prepared pursuant to § 51.95(c), after weighing the costs and benefits of the proposed action. In lieu of a recommendation, the NRC staff may indicate in the draft statement that two or more alternatives remain under consideration.

§ 51.75 [Amended]

6. In Section 51.75, redesignate footnote 4 as footnote 5.

7. Section 51.95 is revised to read as follows:

§ 51.95 Postconstruction environmental impact statements.

(a) *General.* Any supplement to a final environmental impact statement or any environmental assessment prepared under the provisions of this section may incorporate by reference any information contained in a final environmental document previously prepared by the NRC staff that relates to the same production or utilization facility. Documents that may be referenced include, but are not limited to, the final environmental impact statement; supplements to the final environmental impact statement, including supplements prepared at the operating license stage; NRC staff-prepared final generic environmental impact statements; environmental assessments and records of decisions prepared in connection with the construction permit, the operating license, and any license amendment for that facility. A supplement to a final environmental impact statement will include a request for comments as provided in § 51.73.

(b) *Initial operating license stage.* In connection with the issuance of an operating license for a production or utilization facility, the NRC staff will prepare a supplement to the final environmental impact statement on the construction permit for that facility, which will update the prior environmental review. The supplement will only cover matters that differ from the final environmental impact statement or that reflect significant new information concerning matters discussed in the final environmental impact statement. Unless otherwise determined by the Commission, a supplement on the operation of a nuclear power plant will not include a discussion of need for power, or of alternative energy sources, or of alternative sites, or of any aspect of the storage of spent fuel for the nuclear power plant within the scope of the generic determination in § 51.23(a) and in accordance with § 51.23(b), and will only be prepared in connection with the first licensing action authorizing full-power operation.

(c) *Operating license renewal stage.* In connection with the renewal of an operating license for a nuclear power plant under part 54 of this chapter, the Commission shall prepare a supplement to the Commission's NUREG–1437, ''Generic Environmental Impact Statement for License Renewal of Nuclear Plants'' (xxxx 1996).

(1) The supplemental environmental impact statement for the operating license renewal stage shall address those issues as required by § 51.71. In addition, the NRC staff must comply with 40 CFR 1506.6(b)(3) in conducting the additional scoping process as required by § 51.71(a).

(2) The supplemental environmental impact statement for license renewal is not required to include discussion of need for power or the economic costs and economic benefits of the proposed action or of alternatives to the proposed action except insofar as such benefits and costs are either essential for a determination regarding the inclusion of an alternative in the range of alternatives considered or relevant to mitigation. In addition, the supplemental environmental impact statement prepared at the license renewal stage need not discuss other issues not related to the environmental effects of the proposed action and the alternatives, or any aspect of the storage of spent fuel for the facility within the scope of the generic determination in § 51.23(a) and in accordance with § 51.23(b). The analysis of alternatives in the supplemental environmental impact statement should be limited to the environmental impacts of such alternatives and should otherwise be prepared in accordance with § 51.71 and appendix A to subpart A of this part.

(3) The supplemental environmental impact statement shall be issued as a final impact statement in accordance with §§ 51.91 and 51.93 after considering any significant new information relevant to the proposed

[3] Compliance with the environmental quality standards and requirements of the Federal Water Pollution Control Act (imposed by EPA or designated permitting states) is not a substitute for and does not negate the requirement for NRC to weigh all environmental effects of the proposed action, including the degradation, if any, of water quality, and to consider alternatives to the proposed action that are available for reducing adverse effects. Where an environmental assessment of aquatic impact from plant discharges is available from the permitting authority, the NRC will consider the assessment in its determination of the magnitude of environmental impacts for striking an overall cost-benefit balance at the construction permit and operating license stages, and in its determination of whether the adverse environmental impacts of license renewal are so great that preserving the option of license renewal for energy planning decisionmakers would be unreasonable at the license renewal stage. When no such assessment of aquatic impacts is available from the permitting authority, NRC will establish on its own or in conjunction with the permitting authority and other agencies having relevant expertise the magnitude of potential impacts for striking an overall cost-benefit balance for the facility at the construction permit and operating license stages, and in its determination of whether the adverse environmental impacts of license renewal are so great that preserving the option of license renewal for energy planning decisionmakers would be unreasonable at the license renewal stage.

[4] The consideration of reasonable alternatives to a proposed action involving nuclear power reactors (e.g., alternative energy sources) is intended to assist the NRC in meeting its NEPA obligations and does not preclude any State authority from making separate determinations with respect to these alternatives and in no way preempts, displaces, or affects the authority of States or other Federal agencies to address these issues.

action contained in the supplement or incorporated by reference.

(4) The supplemental environmental impact statement must contain the NRC staff's recommendation regarding the environmental acceptability of the license renewal action. In order to make its recommendation and final conclusion on the proposed action, the NRC staff, adjudicatory officers, and Commission shall integrate the conclusions, as amplified by the supporting information in the generic environmental impact statement for issues designated Category 1 (with the exception of offsite radiological impacts for collective effects and the disposal of spent fuel and high level waste) or resolved Category 2, information developed for those open Category 2 issues applicable to the plant in accordance with § 51.53(c)(3)(ii), and any significant new information. Given this information, the NRC staff, adjudicatory officers, and Commission shall determine whether or not the adverse environmental impacts of license renewal are so great that preserving the option of license renewal for energy planning decisionmakers would be unreasonable.

(d) *Postoperating license stage.* In connection with an amendment to an operating license authorizing the decommissioning of a production or utilization facility covered by § 51.20 or with the issuance, amendment, or renewal of a license to store spent fuel at a nuclear power plant after expiration of the operating license for the nuclear power plant, the NRC staff will prepare a supplemental environmental impact statement for the postoperating license stage or an environmental assessment, as appropriate, which will update the prior environmental review. Unless otherwise required by the Commission, in accordance with the generic determination in § 51.23(a) and the provisions of § 51.23(b), a supplemental environmental impact statement for the postoperating license stage or an environmental assessment, as appropriate, will address the environmental impacts of spent fuel storage only for the term of the license, license amendment, or license renewal applied for.

8. In § 51.103, paragraph (a)(3) is revised and paragraph (a)(5) is added to read as follows:

§ 51.103 Record of decision—General.

(a) * * *

(3) Discuss preferences among alternatives based on relevant factors, including economic and technical considerations where appropriate, the NRC's statutory mission, and any essential considerations of national policy, which were balanced by the Commission in making the decision and state how these considerations entered into the decision.

* * * * *

(5) In making a final decision on a license renewal action pursuant to part 54 of this chapter, the Commission shall determine whether or not the adverse environmental impacts of license renewal are so great that preserving the option of license renewal for energy planning decisionmakers would be unreasonable.

* * * * *

9. Paragraph 4 of appendix A to subpart A of 10 CFR part 51 is revised as follows:

Appendix A to Subpart A—Format for Presentation of Material in Environmental Impact Statements

* * * * *

4. *Purpose of and need for action.* The statement will briefly describe and specify the need for the proposed action. The alternative of no action will be discussed. In the case of nuclear power plant construction or siting, consideration will be given to the potential impact of conservation measures in determining the demand for power and consequent need for additional generating capacity.

* * * * *

10. A new appendix B is added to subpart A of 10 CFR part 51 to read as follows:

Appendix B to Subpart A—Environmental Effect of Renewing the Operating License of a Nuclear Power Plant

The Commission has assessed the environmental impacts associated with granting a renewed operating license for a nuclear power plant to a licensee who holds either an operating license or construction permit as of June 30, 1995. Table B–1 summarizes the Commission's findings on the scope and magnitude of environmental impacts of renewing the operating license for a nuclear power plant as required by section 102(2) of the National Environmental Policy Act of 1969, as amended. Table B–1, subject to an evaluation of those issues identified in Category 2 as requiring further analysis and possible significant new information, represents the analysis of the environmental impacts associated with renewal of any operating license and is to be used in accordance with § 51.95(c). On a 10-year cycle, the Commission intends to review the material in this appendix and update it if necessary. A scoping notice must be published in the Federal Register indicating the results of the NRC's review and inviting public comments and proposals for other areas that should be updated.

TABLE B–1.—SUMMARY OF FINDINGS ON NEPA ISSUES FOR LICENSE RENEWAL OF NUCLEAR POWER PLANTS [1]

Issue	Category [2]	Findings [3]
Surface Water Quality, Hydrology, and Use (for all plants)		
Impacts of refurbishment on surface water quality.	1	SMALL. Impacts are expected to be negligible during refurbishment because best management practices are expected to be employed to control soil erosion and spills.
Impacts of refurbishment on surface water use.	1	SMALL. Water use during refurbishment will not increase appreciably or will be reduced during plant outage.
Altered current patterns at intake and discharge structures.	1	SMALL. Altered current patterns have not been found to be a problem at operating nuclear power plants and are not expected to be a problem during the license renewal term.
Altered salinity gradients	1	SMALL. Salinity gradients have not been found to be a problem at operating nuclear power plants and are not expected to be a problem during the license renewal term.
Altered thermal stratification of lakes.	1	SMALL. Generally, lake stratification has not been found to be a problem at operating nuclear power plants and is not expected to be a problem during the license renewal term.
Temperature effects on sediment transport capacity.	1	SMALL. These effects have not been found to be a problem at operating nuclear power plants and are not expected to be a problem during the license renewal term.
Scouring caused by discharged cooling water.	1	SMALL. Scouring has not been found to be a problem at most operating nuclear power plants and has caused only localized effects at a few plants. It is not expected to be a problem during the license renewal term.
Eutrophication	1	SMALL. Eutrophication has not been found to be a problem at operating nuclear power plants and is not expected to be a problem during the license renewal term.

TABLE B–1.—SUMMARY OF FINDINGS ON NEPA ISSUES FOR LICENSE RENEWAL OF NUCLEAR POWER PLANTS [1]—Continued

Issue	Category [2]	Findings [3]
Discharge of chlorine or other biocides.	1	SMALL. Effects are not a concern among regulatory and resource agencies, and are not expected to be a problem during the license renewal term.
Discharge of sanitary wastes and minor chemical spills.	1	SMALL. Effects are readily controlled through NPDES permit and periodic modifications, if needed, and are not expected to be a problem during the license renewal term.
Discharge of other metals in waste water.	1	SMALL. These discharges have not been found to be a problem at operating nuclear power plants with cooling-tower-based heat dissipation systems and have been satisfactorily mitigated at other plants. They are not expected to be a problem during the license renewal term.
Water use conflicts (plants with once-through cooling systems).	1	SMALL. These conflicts have not been found to be a problem at operating nuclear power plants with once-through heat dissipation systems.
Water use conflicts (plants with cooling ponds or cooling towers using make-up water from a small river with low flow).	2	SMALL OR MODERATE. The issue has been a concern at nuclear power plants with cooling ponds and at plants with cooling towers. Impacts on instream and riparian communities near these plants could be of moderate significance in some situations. See § 51.53(c)(3)(ii)(A).
Aquatic Ecology (for all plants)		
Refurbishment	1	SMALL. During plant shutdown and refurbishment there will be negligible effects on aquatic biota because of a reduction of entrainment and impingement of organisms or a reduced release of chemicals.
Accumulation of contaminants in sediments or biota.	1	SMALL. Accumulation of contaminants has been a concern at a few nuclear power plants but has been satisfactorily mitigated by replacing copper alloy condenser tubes with those of another metal. It is not expected to be a problem during the license renewal term.
Entrainment of phytoplankton and zooplankton.	1	SMALL. Entrainment of phytoplankton and zooplankton has not been found to be a problem at operating nuclear power plants and is not expected to be a problem during the license renewal term.
Cold shock	1	SMALL. Cold shock has been satisfactorily mitigated at operating nuclear plants with once-through cooling systems, has not endangered fish populations or been found to be a problem at operating nuclear power plants with cooling towers or cooling ponds, and is not expected to be a problem during the license renewal term.
Thermal plume barrier to migrating fish.	1	SMALL. Thermal plumes have not been found to be a problem at operating nuclear power plants and are not expected to be a problem during the license renewal term.
Distribution of aquatic organisms	1	SMALL. Thermal discharge may have localized effects but is not expected to affect the larger geographical distribution of aquatic organisms.
Premature emergence of aquatic insects.	1	SMALL. Premature emergence has been found to be a localized effect at some operating nuclear power plants but has not been a problem and is not expected to be a problem during the license renewal term.
Gas supersaturation (gas bubble disease).	1	SMALL. Gas supersaturation was a concern at a small number of operating nuclear power plants with once-through cooling systems but has been satisfactorily mitigated. It has not been found to be a problem at operating nuclear power plants with cooling towers or cooling ponds and is not expected to be a problem during the license renewal term.
Low dissolved oxygen in the discharge.	1	SMALL. Low dissolved oxygen has been a concern at one nuclear power plant with a once-through cooling system but has been effectively mitigated. It has not been found to be a problem at operating nuclear power plants with cooling towers or cooling ponds and is not expected to be a problem during the license renewal term.
Losses from predation, parasitism, and disease among organisms exposed to sublethal stresses.	1	SMALL. These types of losses have not been found to be a problem at operating nuclear power plants and are not expected to be a problem during the license renewal term.
Stimulation of nuisance organisms (e.g., shipworms).	1	SMALL. Stimulation of nuisance organisms has been satisfactorily mitigated at the single nuclear power plant with a once-through cooling system where previously it was a problem. It has not been found to be a problem at operating nuclear power plants with cooling towers or cooling ponds and is not expected to be a problem during the license renewal term.
Aquatic Ecology (for plants with once-through and cooling pond heat dissipation systems)		
Entrainment of fish and shellfish in early life stages.	2	SMALL, MODERATE, OR LARGE. The impacts of entrainment are small at many plants but may be moderate or even large at a few plants with once-through and cooling-pond cooling systems. Further, ongoing efforts in the vicinity of these plants to restore fish populations may increase the numbers of fish susceptible to intake effects during the license renewal period, such that entrainment studies conducted in support of the original license may no longer be valid. See § 51.53(c)(3)(ii)(B).
Impingement of fish and shellfish	2	SMALL, MODERATE, OR LARGE. The impacts of impingement are small at many plants but may be moderate or even large at a few plants with once-through and cooling-pond cooling systems. See § 51.53(c)(3)(ii)(B).
Heat shock	2	SMALL, MODERATE, OR LARGE. Because of continuing concerns about heat shock and the possible need to modify thermal discharges in response to changing environmental conditions, the impacts may be of moderate or large significance at some plants. See § 51.53(c)(3)(ii)(B).

TABLE B–1.—SUMMARY OF FINDINGS ON NEPA ISSUES FOR LICENSE RENEWAL OF NUCLEAR POWER PLANTS [1]—Continued

Issue	Category [2]	Findings [3]
Aquatic Ecology (for plants with cooling-tower-based heat dissipation systems)		
Entrainment of fish and shellfish in early life stages.	1	SMALL. Entrainment of fish has not been found to be a problem at operating nuclear power plants with this type of cooling system and is not expected to be a problem during the license renewal term.
Impingement of fish and shellfish	1	SMALL. The impingement has not been found to be a problem at operating nuclear power plants with this type of cooling system and is not expected to be a problem during the license renewal term.
Heat shock	1	SMALL. Heat shock has not been found to be a problem at operating nuclear power plants with this type of cooling system and is not expected to be a problem during the license renewal term.
Ground-water Use and Quality		
Impacts of refurbishment on ground-water use and quality.	1	SMALL. Extensive dewatering during the original construction on some sites will not be repeated during refurbishment on any sites. Any plant wastes produced during refurbishment will be handled in the same manner as in current operating practices and are not expected to be a problem during the license renewal term.
Ground-water use conflicts (potable and service water; plants that use <100 gpm).	1	SMALL. Plants using less than 100 gpm are not expected to cause any ground-water use conflicts.
Ground-water use conflicts (potable and service water, and dewatering; plants that use >100 gpm).	2	SMALL, MODERATE, OR LARGE. Plants that use more than 100 gpm may cause ground-water use conflicts with nearby ground-water users. See § 51.53(c)(3)(ii)(C).
Ground-water use conflicts (plants using cooling towers withdrawing make-up water from a small river).	2	SMALL, MODERATE, OR LARGE. Water use conflicts may result from surface water withdrawals from small water bodies during low flow conditions which may affect aquifer recharge, especially if other ground-water or upstream surface water users come on line before the time of license renewal. See § 51.53(c)(3)(ii)(A).
Terrestrial Resources		
Refurbishment impacts	2	SMALL, MODERATE, OR LARGE. Refurbishment impacts are insignificant if no loss of important plant and animal habitat occurs. However, it cannot be known whether important plant and animal communities may be affected until the specific proposal is presented with the license renewal application. See § 51.53(c)(3)(ii)(E).
Cooling tower impacts on crops and ornamental vegetation.	1	SMALL. Impacts from salt drift, icing, fogging, or increased humidity associated with cooling tower operation have not been found to be a problem at operating nuclear power plants and are not expected to be a problem during the license renewal term.
Cooling tower impacts on native plants.	1	SMALL. Impacts from salt drift, icing, fogging, or increased humidity associated with cooling tower operation have not been found to be a problem at operating nuclear power plants and are not expected to be a problem during the license renewal term.
Bird collisions with cooling towers.	1	SMALL. These collisions have not been found to be a problem at operating nuclear power plants and are not expected to be a problem during the license renewal term.
Cooling pond impacts on terrestrial resources.	1	SMALL. Impacts of cooling ponds on terrestrial ecological resources are considered to be of small significance at all sites.
Power line right-of-way management (cutting and herbicide application).	1	SMALL. The impacts of right-of-way maintenance on wildlife are expected to be of small significance at all sites.
Bird collision with power lines	1	SMALL. Impacts are expected to be of small significance at all sites.
Impacts of electromagnetic fields on flora and fauna (plants, agricultural crops, honeybees, wildlife, livestock).	1	SMALL. No significant impacts of electromagnetic fields on terrestrial flora and fauna have been identified. Such effects are not expected to be a problem during the license renewal term.
Floodplains and wetland on power line right of way.	1	SMALL. Periodic vegetation control is necessary in forested wetlands underneath power lines and can be achieved with minimal damage to the wetland. No significant impact is expected at any nuclear power plant during the license renewal term.
Threatened or Endangered Species (for all plants)		
Threatened or endangered species.	2	SMALL, MODERATE, OR LARGE. Generally, plant refurbishment and continued operation are not expected to adversely affect threatened or endangered species. However, consultation with appropriate agencies would be needed at the time of license renewal to determine whether threatened or endangered species are present and whether they would be adversely affected. See § 51.53(c)(3)(ii)(E).

TABLE B–1.—SUMMARY OF FINDINGS ON NEPA ISSUES FOR LICENSE RENEWAL OF NUCLEAR POWER PLANTS [1]—Continued

Issue	Category [2]	Findings [3]
Air Quality		
Air quality during refurbishment (nonattainment and maintenance areas).	2	SMALL, MODERATE, OR LARGE. Air quality impacts from plant refurbishment associated with license renewal are expected to be small. However, vehicle exhaust emissions could be cause for concern at locations in or near nonattainment or maintenance areas. The significance of the potential impact cannot be determined without considering the compliance status of each site and the numbers of workers expected to be employed during the outage. See § 51.53(c)(3)(ii)(F).
Air quality effects of transmission lines.	1	SMALL. Production of ozone and oxides of nitrogen is insignificant and does not contribute measurably to ambient levels of these gases.
Land Use		
Onsite land use	1	SMALL. Projected onsite land use changes required during refurbishment and the renewal period would be a small fraction of any nuclear power plant site and would involve land that is controlled by the applicant.
Power line right of way	1	SMALL. Ongoing use of power line right of ways would continue with no change in restrictions. The effects of these restrictions are of small significance.
Human Health		
Radiation exposures to the public during refurbishment.	1	SMALL. During refurbishment, the gaseous effluents would result in doses that are similar to those from current operation. Applicable regulatory dose limits to the public are not expected to be exceeded.
Occupational radiation exposures during refurbishment.	1	SMALL. Occupational doses from refurbishment are expected to be within the range of annual average collective doses experienced for pressurized-water reactors and boiling-water reactors. Occupational mortality risk from all causes including radiation is in the mid-range for industrial settings.
Microbiological organisms (occupational health).	1	SMALL. Occupational health impacts are expected to be controlled by continued application of accepted industrial hygiene practices to minimize worker exposures.
Microbiological organisms (public health) (plants using lakes or canals, or cooling towers or cooling ponds that discharge to a small river).	2	SMALL, MODERATE, OR LARGE. These organisms are not expected to be a problem at most operating plants except possibly at plants using cooling ponds, lakes, or canals that discharge to small rivers. Without site-specific data, it is not possible to predict the effects generically. See § 51.53(c)(3)(ii)(G).
Noise	1	SMALL. Noise has not been found to be a problem at operating plants and is not expected to be a problem at any plant during the license renewal term.
Electromagnetic fields, acute effects (electric shock).	2	SMALL, MODERATE, OR LARGE. Electrical shock resulting from direct access to energized conductors or from induced charges in metallic structures have not been found to be a problem at most operating plants and generally are not expected to be a problem during the license renewal term. However, site-specific review is required to determine the significance of the electric shock potential at the site. See § 51.53(c)(3)(ii)(H).
Electromagnetic fields, chronic effects [5].	NA [4]	UNCERTAIN. Biological and physical studies of 60–Hz electromagnetic fields have not found consistent evidence linking harmful effects with field exposures. However, because the state of the science is currently inadequate, no generic conclusion on human health impacts is possible.[5]
Radiation exposures to public (license renewal term).	1	SMALL. Radiation doses to the public will continue at current levels associated with normal operations.
Occupational radiation exposures (license renewal term).	1	SMALL. Projected maximum occupational doses during the license renewal term are within the range of doses experienced during normal operations and normal maintenance outages, and would be well below regulatory limits.
Socioeconomics		
Housing impacts	2	SMALL, MODERATE, OR LARGE. Housing impacts are expected to be of small significance at plants located in a medium or high population area and not in an area where growth control measures that limit housing development are in effect. Moderate or large housing impacts of the workforce associated with refurbishment may be associated with plants located in sparsely populated areas or in areas with growth control measures that limit housing development. See § 51.53(c)(3)(ii)(I).
Public services: public safety, social services, and tourism and recreation.	1	SMALL. Impacts to public safety, social services, and tourism and recreation are expected to be of small significance at all sites.
Public services: public utilities	2	SMALL OR MODERATE. An increased problem with water shortages at some sites may lead to impacts of moderate significance on public water supply availability. See § 51.53(c)(3)(ii)(I).
Public services, education (refurbishment).	2	SMALL, MODERATE, OR LARGE. Most sites would experience impacts of small significance but larger impacts are possible depending on site- and project-specific factors. See § 51.53(c)(3)(ii)(I).

TABLE B–1.—SUMMARY OF FINDINGS ON NEPA ISSUES FOR LICENSE RENEWAL OF NUCLEAR POWER PLANTS [1]—Continued

Issue	Category [2]	Findings [3]
Public services, education (license renewal term).	1	SMALL. Only impacts of small significance are expected.
Offsite land use (refurbishment)	2	SMALL OR MODERATE. Impacts may be of moderate significance at plants in low population areas. See § 51.53(c)(3)(ii)(I).
Offsite land use (license renewal term).	2	SMALL, MODERATE, OR LARGE. Significant changes in land use may be associated with population and tax revenue changes resulting from license renewal. See § 51.53(c)(3)(ii)(I).
Public services, Transportation	2	SMALL, MODERATE, OR LARGE. Transportation impacts are generally expected to be of small significance. However, the increase in traffic associated with the additional workers and the local road and traffic control conditions may lead to impacts of moderate or large significance at some sites. See § 51.53(c)(3)(ii)(J).
Historic and archaeological resources.	2	SMALL, MODERATE, OR LARGE. Generally, plant refurbishment and continued operation are expected to have no more than small adverse impacts on historic and archaeological resources. However, the National Historic Preservation Act requires the Federal agency to consult with the State Historic Preservation Officer to determine whether there are properties present that require protection. See § 51.53(c)(3)(ii)(K).
Aesthetic impacts (refurbishment).	1	SMALL. No significant impacts are expected during refurbishment.
Aesthetic impacts (license renewal term).	1	SMALL. No significant impacts are expected during the license renewal term.
Aesthetic impacts of transmission lines (license renewal term).	1	SMALL. No significant impacts are expected during the license renewal term.
Postulated Accidents		
Design basis accidents	1	SMALL. The NRC staff has concluded that the environmental impacts of design basis accidents are of small significance for all plants.
Severe accidents	2	SMALL. The probability weighted consequences of atmospheric releases, fallout onto open bodies of water, releases to ground water, and societal and economic impacts from severe accidents are small for all plants. However, alternatives to mitigate severe accidents must be considered for all plants that have not considered such alternatives. See § 51.53(c)(3)(ii)(L).
Uranium Fuel Cycle and Waste Management		
Offsite radiological impacts (individual effects from other than the disposal of spent fuel and high level waste).	1	SMALL. Off-site impacts of the uranium fuel cycle have been considered by the Commission in Table S–3 of this part. Based on information in the GEIS, impacts on individuals from radioactive gaseous and liquid releases including radon-222 and technetium-99 are small.
Offsite radiological impacts (collective effects).	1	The 100 year environmental dose commitment to the U.S. population from the fuel cycle, high level waste and spent fuel disposal is calculated to be about 14,800 person rem, or 12 cancer fatalities, for each additional 20 year power reactor operating term. Much of this, especially the contribution of radon releases from mines and tailing piles, consists of tiny doses summed over large populations. This same dose calculation can theoretically be extended to include many tiny doses over additional thousands of years as well as doses outside the U.S. The result of such a calculation would be thousands of cancer fatalities from the fuel cycle, but this result assumes that even tiny doses have some statistical adverse health effect which will not ever be mitigated (for example, no cancer cure in the next thousand years), and that these does projection over thousands of years are meaningful. However these assumptions are questionable. In particular, science cannot rule out the possibility that there will be no cancer fatalities from these tiny doses. For perspective, the doses are very small fractions of regulatory limits, and even smaller fractions of natural background exposure to the same populations. Nevertheless, despite all the uncertainty, some judgement as to the regulatory NEPA implications of these matters should be made and it makes no sense to repeat the same judgement in every case. Even taking the uncertainties into account, the Commission concludes that these impacts are acceptable in that these impacts would not be sufficiently large to require the NEPA conclusion, for any plant, that the option of extended operation under 10 CFR Part 54 should be eliminated. Accordingly, while the Commission has not assigned a single level of significance for the collective effects of the fuel cycle, this issue is considered Category 1.

TABLE B–1.—SUMMARY OF FINDINGS ON NEPA ISSUES FOR LICENSE RENEWAL OF NUCLEAR POWER PLANTS [1]—Continued

Issue	Category [2]	Findings [3]
Offsite radiological impacts (spent fuel and high level waste disposal).	1	For the high level waste and spent fuel disposal component of the fuel cycle, there are no current regulatory limits for offsite releases of radionuclides for the current candidate repository site. However, if we assume that limits are developed along the lines of the 1995 National Academy of Sciences (NAS) report, ''Technical Bases for Yucca Mountain Standards,'' and that in accordance with the Commission's Waste Confidence Decision, 10 CFR 51.23, a repository can and likely will be developed at some site which will comply with such limits, peak doses to virtually all individuals will be 100 millirem per year or less. However, while the Commission has reasonable confidence that these assumptions will prove correct, there is considerable uncertainty since the limits are yet to be developed, no repository application has been completed or reviewed, and uncertainty is inherent in the models used to evaluate possible pathways to the human environment. The NAS report indicated that 100 millirem per year should be considered as a starting point for limits for individual doses, but notes that some measure of consensus exists among national and international bodies that the limits should be a fraction of the 100 millirem per year. The lifetime individual risk from 100 millirem annual dose limit is about 3×10^{-3}. Estimating cumulative doses to populations over thousands of years is more problematic. The likelihood and consequences of events that could seriously compromise the integrity of a deep geologic repository were evaluated by the Department of Energy in the ''Final Environmental Impact Statement: Management of Commercially Generated Radioactive Waste,'' October 1980. The evaluation estimated the 70-year whole-body dose commitment to the maximum individual and to the regional population resulting from several modes of breaching a reference repository in the year of closure, after 1,000 years, after 100,000 years, and after 100,000,000 years. Subsequently, the NRC and other federal agencies have expended considerable effort to develop models for the design and for the licensing of a high level waste repository, especially for the candidate repository at Yucca Mountain. More meaningful estimates of doses to population may be possible in the future as more is understood about the performance of the proposed Yucca Mountain repository. Such estimates would involve very great uncertainty, especially with respect to cumulative population doses over thousands of years. The standard proposed by the NAS is a limit on maximum individual dose. The relationship of potential new regulatory requirements, based on the NAS report, and cumulative population impacts has not been determined, although the report articulates the view that protection of individuals will adequately protect the population for a repository at Yucca Mountain. However, EPA's generic repository standards in 40 CFR part 191 generally provide an indication of the order of magnitude of cumulative risk to population that could result from the licensing of a Yucca Mountain repository, assuming the ultimate standards will be within the range of standards now under consideration. The standards in 40 CFR part 191 protect the population by imposing ''containment requirements'' that limit the cumulative amount of radioactive material released over 10,000 years. The cumulative release limits are based on EPA's population impact goal of 1,000 premature cancer deaths world-wide for a 100,000 metric tonne (MTHM) repository. Nevertheless, despite all the uncertainty, some judgement as to the regulatory NEPA implications of these matters should be made and it makes no sense to repeat the same judgement in every case. Even taking the uncertainties into account, the Commission concludes that these impacts are acceptable in that these impacts would not be sufficiently large to require the NEPA conclusion, for any plant, that the option of extended operation under 10 CFR part 54 should be eliminated. Accordingly, while the Commission has not assigned a single level of significance for the impacts of spent fuel and high level waste disposal, this issue is considered Category 1.
Nonradiological impacts of the uranium fuel cycle.	1	SMALL. The nonradiological impacts of the uranium fuel cycle resulting from the renewal of an operating license for any plant are found to be small.
Low-level waste storage and disposal.	1	SMALL. The comprehensive regulatory controls that are in place and the low public doses being achieved at reactors ensure that the radiological impacts to the environment will remain small during the term of a renewed license. The maximum additional on-site land that may be required for low-level waste storage during the term of a renewed license and associated impacts will be small. Nonradiological impacts on air and water will be negligible. The radiological and nonradiological environmental impacts of long-term disposal of low-level waste from any individual plant at licensed sites are small. In addition, the Commission concludes that there is reasonable assurance that sufficient low-level waste disposal capacity will be made available when needed for facilities to be decommissioned consistent with NRC decommissioning requirements.
Mixed waste storage and disposal.	1	SMALL. The comprehensive regulatory controls and the facilities and procedures that are in place ensure proper handling and storage, as well as negligible doses and exposure to toxic materials for the public and the environment at all plants. License renewal will not increase the small, continuing risk to human health and the environment posed by mixed waste at all plants. The radiological and nonradiological environmental impacts of long-term disposal of mixed waste from any individual plant at licensed sites are small. In addition, the Commission concludes that there is reasonable assurance that sufficient mixed waste disposal capacity will be made available when needed for facilities to be decommissioned consistent with NRC decommissioning requirements.

TABLE B–1.—SUMMARY OF FINDINGS ON NEPA ISSUES FOR LICENSE RENEWAL OF NUCLEAR POWER PLANTS [1]—Continued

Issue	Category [2]	Findings [3]
On-site spent fuel	1	SMALL. The expected increase in the volume of spent fuel from an additional 20 years of operation can be safely accommodated on site with small environmental effects through dry or pool storage at all plants if a permanent repository or monitored retrievable storage is not available.
Nonradiological waste	1	SMALL. No changes to generating systems are anticipated for license renewal. Facilities and procedures are in place to ensure continued proper handling and disposal at all plants.
Transportation	2	Table S–4 of this part contains an assessment of impact parameters to be used in evaluating transportation effects in each case. See § 51.53(c)(3)(ii)(M).
Decommissioning		
Radiation doses	1	SMALL. Doses to the public will be well below applicable regulatory standards regardless of which decommissioning method is used. Occupational doses would increase no more than 1 man-rem caused by buildup of long-lived radionuclides during the license renewal term.
Waste management	1	SMALL. Decommissioning at the end of a 20-year license renewal period would generate no more solid wastes than at the end of the current license term. No increase in the quantities of Class C or greater than Class C wastes would be expected.
Air quality	1	SMALL. Air quality impacts of decommissioning are expected to be negligible either at the end of the current operating term or at the end of the license renewal term.
Water quality	1	SMALL. The potential for significant water quality impacts from erosion or spills is no greater whether decommissioning occurs after a 20-year license renewal period or after the original 40-year operation period, and measures are readily available to avoid such impacts.
Ecological resources	1	SMALL. Decommissioning after either the initial operating period or after a 20-year license renewal period is not expected to have any direct ecological impacts.
Socioeconomic impacts	1	SMALL. Decommissioning would have some short-term socioeconomic impacts. The impacts would not be increased by delaying decommissioning until the end of a 20-year relicense period, but they might be decreased by population and economic growth.
Environmental Justice		
Environmental justice [6]	NA [4]	NONE. The need for and the content of an analysis of environmental justice will be addressed in plant-specific reviews. [6]

[1] Data supporting this table are contained in NUREG–1437, ''Generic Environmental Impact Statement for License Renewal of Nuclear Plants'' (xxxx 1996).

[2] The numerical entries in this column are based on the following category definitions:

Category 1: For the issue, the analysis reported in the Generic Environmental Impact Statement has shown:

(1) The environmental impacts associated with the issue have been determined to apply either to all plants or, for some issues, to plants having a specific type of cooling system or other specified plant or site characteristic;

(2) A single significance level (i.e., small, moderate, or large) has been assigned to the impacts (except for collective off site radiological impacts from the fuel cycle and from high level waste and spent fuel disposal); and

(3) Mitigation of adverse impacts associated with the issue has been considered in the analysis, and it has been determined that additional plant-specific mitigation measures are likely not to be sufficiently beneficial to warrant implementation.

The generic analysis of the issue may be adopted in each plant-specific review.

Category 2: For the issue, the analysis reported in the Generic Environmental Impact Statement has shown that one or more of the criteria of Category 1 can not be met, and therefore additional plant-specific review is required.

[3] The impact findings in this column are based on the definitions of three significance levels. Unless the significance level is identified as beneficial, the impact is adverse, or in the case of ''small,'' may be negligible. The definitions of significance follow:

SMALL—For the issue, environmental effects are not detectable or are so minor that they will neither destabilize nor noticeably alter any important attribute of the resource. For the purposes of assessing radiological impacts, the Commission has concluded that those impacts that do not exceed permissible levels in the Commission's regulations are considered small as the term is used in this table.

MODERATE—For the issue, environmental effects are sufficient to alter noticeably, but not to destabilize, important attributes of the resource.

LARGE—For the issue, environmental effects are clearly noticeable and are sufficient to destabilize important attributes of the resource.

For issues where probability is a key consideration (i.e. accident consequences), probability was a factor in determining significance.

[4] NA (not applicable). The categorization and impact finding definitions do not apply to these issues.

[5] Scientific evidence about a chronic biological effect on humans from exposure to transmission line electric and magnetic fields is inconclusive. If the Commission finds that a consensus has been reached by appropriate Federal health agencies that there are adverse health effects, the Commission will require applicants to submit plant-specific reviews of these health effects. Until such time, applicants for license renewal are not required to submit information on this issue.

[6] Environmental Justice was not addressed in NUREG–1437, ''Generic Environmental Impact Statement for License Renewal of Nuclear Plants,'' because guidance for implementing Executive Order 12898 issued on February 11, 1994, was not available prior to completion of NUREG–1437. This issue will be addressed in individual license renewal reviews.

Dated at Rockville, MD, this 29th day of May, 1996.

For the Nuclear Regulatory Commission.

John C. Hoyle,

Secretary of the Commission.

[FR Doc. 96–13874 Filed 6–4–96; 8:45 am]

BILLING CODE 7590–01–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 95–NM–161–AD; Amendment 39–9644; AD 96–12–02]

RIN 2120–AA64

Airworthiness Directives; Airbus Model A300 B2 and B4 Series Airplanes, Excluding Model A300–600 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD), applicable to certain Airbus Model A300 B2 and B4 series airplanes, that requires measurements of the thickness of the inner skin of the longitudinal lap joint from the inside of the fuselage at certain stringers. This amendment also requires inspections to detect stress corrosion cracking in the subject area, and repair, if necessary. This amendment is prompted by reports of stress corrosion cracking found in the skin at the longitudinal lap joint at certain stringers of the fuselage, which was caused by the increased stress level in the subject area when it was reworked beyond certain limits. The actions specified by this AD are intended to prevent such stress corrosion cracking which, if not detected and corrected in a timely manner, could result in rapid depressurization of the airplane.

DATES: Effective July 10, 1996.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of July 10, 1996.

ADDRESSES: The service information referenced in this AD may be obtained from Airbus Industrie, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France. This information may be examined at the Federal Aviation Administration (FAA), Transport Airplane Directorate, Rules Docket, 1601 Lind Avenue SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street NW., suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Tim Backman, Aerospace Engineer, Standardization Branch, ANM–113, FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington 98055–4056; telephone (206) 227–2797; fax (206) 227–1149.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an airworthiness directive (AD) that is applicable to certain Airbus Model A300 B2 and B4 series airplanes was published in the Federal Register on February 28, 1996 (61 FR 7444). That action proposed to require measurements of the thickness of the inner skin of the longitudinal lap joint from the inside of the fuselage at certain stringers using the ultrasonic thickness measurement method. That action also proposed to require high frequency eddy current (HFEC) inspections to detect cracking in the subject area, and repair, if necessary.

Interested persons have been afforded an opportunity to participate in the making of this amendment. Due consideration has been given to the two comments received.

Support for the Proposal

Both commenters support the proposed rule.

Conclusion

After careful review of the available data, including the comments noted above, the FAA has determined that air safety and the public interest require the adoption of the rule as proposed.

Cost Impact

The FAA estimates that 17 airplanes of U.S. registry will be affected by this AD, that it will take approximately 32 work hours per airplane to accomplish the required actions, and that the average labor rate is $60 per work hour. Based on these figures, the cost impact of the AD on U.S. operators is estimated to be $32,640, or $1,920 per airplane.

The cost impact figure discussed above is based on assumptions that no operator has yet accomplished any of the requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted.

Regulatory Impact

The regulations adopted herein will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612, it is determined that this final rule does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

For the reasons discussed above, I certify that this action (1) is not a ''significant regulatory action'' under Executive Order 12866; (2) is not a ''significant rule'' under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption **ADDRESSES.**

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. Section 39.13 is amended by adding the following new airworthiness directive:

96–12–02 Airbus Industrie: Amendment 39–9644. Docket 95–NM–161–AD.

Applicability: Model A300 B2 and B4 series airplanes, manufacturer serial numbers 003 through 156 inclusive; on which Airbus Modification 2611 has not been installed; certificated in any category.

Note 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (c) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not

p.m. Eastern Standard Time on Tuesday, July 23, 2002. They should be addressed to Director, National Institute of Corrections, 320 First Street, NW., Room 5007, Washington, DC 20534. The NIC application number should be written on the outside of the mail or courier envelope. Applicants are encouraged to use Federal Express, UPS, or similar service to ensure delivery by due date as the mail at the National Institute of Corrections is still being delayed due to recent decontamination procedures implemented after recent events. Applications mailed or express delivery should be sent to: National Institute of Corrections, 320 First Street, NW, Room 5007, Washington, DC 20534, Attn: Director. Hand delivered applications can be brought to 500 First Street, NW, Washington, DC 20534. The security officer will call our front desk at 307–3106 to come to the security desk for pickup. Faxed or e-mailed applications will not be accepted.

Addresses and Further Information: A copy of this announcement and applications forms may be obtained through the NIC web site: http://www.nicic.org (under ''Additional Opportunities'' click on the title of this cooperative agreement.) Requests for a hard copy of the application forms, and announcement should be directed to Judy Evens, Cooperative Agreement Control Office, National Institute of Corrections, 320 First Street, NW., Room 5007, Washington, DC 20534 or by calling (800) 995–6423, extension 44222 or (202) 307–3106, extension 44222. She can also be contacted by E-mail via *jevens@bop.gov.*

All technical and or programmatic questions concerning this announcement should be directed to BeLinda P. Watson at the above address or by calling (800) 995–6423, extension 30483 or (202) 353–0483, or by E-mail via *bpwatson@bop.gov.*

Eligible Applicants: An eligible applicant is any state or general unit of local government, private agency, educational institution, organization, individuals or team with expertise in requested areas.

Review Considerations: Applications received under this announcement will be subjected to a 3 to 5 person Peer Review Process.

Number of Awards: One (1).

NIC Application Number: 021P11. This number should appear as a reference line in the cover letter and also in box 11 of Standard Form 424 and outside the envelope in which the application is sent.

Executive Order 12372: This program is not subject to the provisions of Executive Order 12372.

The Catalog of Federal Domestic Assistance number is 16.601: Corrections—Training and Staff Development.

Dated: June 7, 2002.

Larry Solomon,

Deputy Director, National Institute of Corrections.

[FR Doc. 02–14852 Filed 6–12–02; 8:45 am]

BILLING CODE 4410–36–M

DEPARTMENT OF LABOR

Occupational Safety and Health Administration

Susan Harwood Training Grant Program, FY 2002 Budget; Revised Notice

AGENCY: Occupational Safety and Health Administration (OSHA), Labor.

ACTION: Extension of grant application deadline.

SUMMARY: This notice extends the Susan Harwood Training Grant Program application deadline from June 21, 2002, to July 5, 2002.

The notice of availability of funds and request for grant applications was originally published in the **Federal Register**, 67 FR 36024, May 22, 2002. Organizations interested in submitting a grant application should refer to the May 22 **Federal Register** notice which describes the scope of the grant program and provides information about how to get detailed grant application instructions. Applications should not be submitted without the applicant first obtaining detailed grant application instructions.

DATES: Grant application deadline is Friday, July 5, 2002. Grant applications must be received in the Des Plaines, Illinois, office by 4:30 p.m. Central Time, Friday, July 5, 2002.

ADDRESSES: Submit one signed original and three copies of each grant application to the attention of Grants Officer, U. S. Department of Labor, OSHA Office of Training and Education, Division of Training and Educational Programs, 1555 Times Drive, Des Plaines, Illinois 60018.

FOR FURTHER INFORMATION CONTACT: Ernest Thompson, Chief, Division of Training and Educational Programs, or Cynthia Bencheck, Program Analyst, OSHA Office of Training and Education, 1555 Times Drive, Des Plaines, Illinois 60018, telephone (847) 297–4810. This is not a toll-free number. E-mail *cindy.bencheck@osha.gov.*

The Occupational Safety and Health Act of 1970 and the Departments of Labor, Health and Human Services, and Education, and Related Agencies Appropriation Act, Pub. L. 107–116, authorize this program.

Signed at Washington, DC, this 7th day of June 2002.

John L. Henshaw,

Assistant Secretary of Labor.

[FR Doc. 02–14953 Filed 6–12–02; 8:45 am]

BILLING CODE 4510–26–P

NUCLEAR REGULATORY COMMISSION

[Docket Nos. 50–250 and 50–251]

Florida Power and Light Company, Turkey Point Nuclear Generating Units Nos. 3 and 4; Notice of Issuance of Renewed Facility Operating Licenses Nos. DPR–31 and DPR–41 for an Additional 20-Year Period

Notice is hereby given that the U.S. Nuclear Regulatory Commission (the Commission) has issued Renewed Facility Operating Licenses Nos. DPR–31 and DPR–41 to Florida Power and Light Company (the licensee), the operator of the Turkey Point Nuclear Generating Units Nos. 3 and 4 (Turkey Point Units 3 and 4). Renewed Facility Operating License No. DPR–31 authorizes operation of the Turkey Point Unit 3, by the licensee at reactor core power levels not in excess of 2300 megawatts thermal in accordance with the provisions of the Unit 3 renewed license and its Technical Specifications. Renewed Facility Operating License No. DPR–41 authorizes operation of the Turkey Point Unit 4, by the licensee at reactor core power levels not in excess of 2300 megawatts thermal in accordance with the provisions of the Unit 4 renewed license and its Technical Specifications.

The Turkey Point Units 3 and 4 are pressurized water nuclear reactors located in Miami-Dade County east of Florida City, Florida.

The application for the renewed licenses complied with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations. The Commission has made appropriate findings as required by the Act and the Commission's regulations in 10 CFR chapter I, which are set forth in each license. Prior public notice of the action involving the proposed issuance of these renewed licenses and of an opportunity for a hearing regarding the proposed issuance of these renewed licenses was published in the **Federal Register** on October 12, 2000 (65 FR 60693).

For further details with respect to this action, see (1) the Florida Power and Light Company's License Renewal Application for Turkey Point, Units 3 and 4, dated September 8, 2000, as supplemented by letters dated January 19, February 8, February 16, February 26, March 22 (two letters), March 30 (four letters), April 19 (three letters), May 3, May 11 (two letters), May 29 (two letters), June 25, July 18, August 13, November 1, November 7, and December 17, 2001, and April 19, 2002; (2) the Commission's Safety Evaluation Report, dated February 27, 2001, and April 2002 (NUREG–1759), and Supplement 1 thereto, dated May 2002; (3) the licensee's updated final safety analysis report; and (4) the Commission's Final Environmental Impact Statement (NUREG–1437, Supplement 5), dated January 2002. These documents are available at the NRC's Public Document Room, at One White Flint North, 11555 Rockville Pike, first floor, Rockville, Maryland 20852, and can be viewed from the NRC Public Electronic Reading Room at *http://www.nrc.gov/NRC/ADAMS/index.html.*

Copies of Renewed Facility Operating Licenses Nos. DPR–31 and DPR–41 may be obtained by writing to U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001, Attention: Director, Division of Regulatory Improvement Programs. Copies of the Safety Evaluation Report (NUREG–1759), and Supplement 1 thereto, and the Final Environmental Impact Statement (NUREG–1437, Supplement 5) may be purchased from the National Technical Information Service, Springfield, Virginia 22161–0002 at 1–800–553–6847, (*http://www.ntis.gov*), or the Superintendent of Documents, U.S. Government Printing Office, P.O. Box 371954, Pittsburgh, PA 15250–7954 at 202–512–1800, (*http://www.access.gpo.gov/su_docs*). All orders should clearly identify the NRC publication number and the requestor's Government Printing Office deposit account number or VISA or MasterCard number and expiration date.

Dated at Rockville, Maryland, this 6th day of June, 2002.

For the Nuclear Regulatory Commission.

Rajendar Auluck,

Senior Project Manager, License Renewal and Environmental Impacts Program, Division of Regulatory Improvement Programs, Office of Nuclear Reactor Regulation.

[FR Doc. 02–14907 Filed 6–12–02; 8:45 am]

BILLING CODE 7590–01–P

OFFICE OF MANAGEMENT AND BUDGET

Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by the Office of Management and Budget

AGENCY: Office of Management and Budget.

ACTION: Notice of guidelines and request for comments.

SUMMARY: The Office of Management and Budget (OMB) is extending the comment period regarding its draft Information Quality Guidelines from June 14, 2002, to July 1, 2002. OMB is also announcing an extension of the date by which agencies have to submit their draft final information quality guidelines to OMB from no later than July 1, 2002, to no later than August 1, 2002. OMB encourages agencies to use thus extra time to provide the public with additional time to comment on their draft guidelines.

DATES: Written comments regarding OMB's draft Information Quality Guidelines are due by July 1, 2002.

ADDRESSES: Please submit comments to Jefferson B. Hill of the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503. Comments can also be e-mailed to *informationquality@omb.eop.gov.*

FOR FURTHER INFORMATION CONTACT: Jefferson B. Hill, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503. Telephone: (202) 395–3176.

SUPPLEMENTARY INFORMATION: On May 1, 2002 (67 FR 21779), OMB announced it was seeking comments on its draft Information Quality Guidelines by June 14, 2002. OMB is now extending that comment period to July 1, 2002. These Information Quality Guidelines describe OMB's pre-dissemination information quality control and an administrative mechanism for requests for correction of information publicly disseminated by OMB. The draft Information Quality Guidelines are posted on OMB's Web site, *http://www.whitehouse.gov/omb/inforeg/index.html.*

On January 3, 2002 (67 FR 369), with a correction published on February 22, 2002 (67 FR 8452), OMB published government-wide Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies. Paragraph IV.5 of these Guidelines calls upon each agency Ano later than July 1, 2002,'' to submit the agency's draft final information quality guidelines to OMB for review regarding the consistency of its guidelines with OMB's January 3 government-wide Guidelines. OMB is extending this deadline to no later than August 1, 2002.

This extension of the July 1 deadline to August 1 provides agencies additional time to seek public comment on their proposed information quality guidelines, and to reconsider their draft guidelines in light of the public comments they do receive.

Dated: June 6, 2002.

John D. Graham,

Administrator, Office of Information and Regulatory Affairs.

[FR Doc. 02–14843 Filed 6–12–02; 8:45 am]

BILLING CODE 3110–01–P

SECURITIES AND EXCHANGE COMMISSION

[Rel. No. IC–25606 ; 812–12766]

Touchstone Investment Trust, et al.; Notice of Application

June 6, 2002.

AGENCY: Securities and Exchange Commission (''Commission'').

ACTION: Notice of application for an order under section 6(c) of the Investment Company Act of 1940 (the ''Act'') for an exemption from section 15(a) of the Act and rule 18f-2 under the Act.

Summary of Application: Applicants request an order that would permit them to enter into and materially amend subadvisory agreements without shareholder approval. *Applicants:* Touchstone Investment Trust (''TINT''), Touchstone Strategic Trust (''TST''), Touchstone Tax-Free Trust (''TTFT'') and Touchstone Variable Series Trust (''TVST'') (TINT, TST, TTFT and TVST each a ''Trust'', and collectively, the ''Trusts'') and Touchstone Advisors, Inc. (the ''Adviser'').

Filing Dates: The application was filed on January 29, 2002 and amended on June 5, 2002.

Hearing or Notification of Hearing: An order granting the requested relief will be issued unless the Commission orders a hearing. Interested persons may request a hearing by writing to the Commission's Secretary and serving applicants with a copy of the request, personally or by mail. Hearing requests should be received by the Commission by 5:30 p.m. on July 1, 2002 and should be accompanied by proof of service on applicants, in the form of an affidavit or, for lawyers, a certificate of service.

Proposed Rules

Federal Register
Vol. 74, No. 146
Friday, July 31, 2009

This section of the FEDERAL REGISTER contains notices to the public of the proposed issuance of rules and regulations. The purpose of these notices is to give interested persons an opportunity to participate in the rule making prior to the adoption of the final rules.

NUCLEAR REGULATORY COMMISSION

10 CFR Part 51

RIN 3150–AI42

[NRC–2008–0608]

Revisions to Environmental Review for Renewal of Nuclear Power Plant Operating Licenses

AGENCY: Nuclear Regulatory Commission.

ACTION: Proposed rule.

SUMMARY: The Nuclear Regulatory Commission (NRC) is proposing to amend its environmental protection regulations by updating the Commission's 1996 findings on the environmental impacts related to the renewal of a nuclear power plant's operating license. The Commission stated that it intends to review the assessment of impacts and update it on a 10-year cycle, if necessary. The proposed rule redefines the number and scope of the environmental impact issues which must be addressed by the Commission in conjunction with the review of applications for license renewal. As part of this 10-year update, the NRC revised the 1996 *Generic Environmental Impact Statement (GEIS) for License Renewal of Nuclear Plants.* Concurrent with the amendments described in this proposed rule, the NRC is publishing for comment the revised GEIS, a revised Regulatory Guide 4.2, Supplement 1, *Preparation of Environmental Reports for Nuclear Power Plant License Renewal Applications,* and a revised Environmental Standard Review Plan, *Standard Review Plans for Environmental Reviews for Nuclear Power Plants, Supplement 1: Operating License Renewal.*

DATES: Comments on this proposed rule, its information collection aspects and its draft regulatory analysis should be submitted by October 14, 2009. Comments on the revised GEIS (NUREG–1437, Revision 1); Regulatory Guide (RG) 4.2, Supplement 1, Revision 1; and Environmental Standard Review Plan (ESRP), Supplement 1, Revision 1 (NUREG–1555), should be submitted by October 14, 2009.

ADDRESSES: Comments may be submitted by letter or electronic mail and will be made available for public inspection. Because comments will not be edited to remove any identification or contact information, such as name, addresses, telephone number, e-mail address, *etc.,* the NRC cautions against including any personal information in your submissions that you do not want to be publicly disclosed. The NRC requests that any party soliciting or aggregating comments received from other persons for submission to the NRC inform these persons that the NRC will not edit their comments to remove any identifying or comment information, and therefore, they should not include any information in their comments that they do not want publicly disclosed.

Federal eRulemaking Portal: Go to *http://www.regulations.gov* and search for documents filed under Docket ID [NRC–2008–0608]. Address questions about NRC dockets to Carol Gallagher, (301) 492–3668; e-mail *Carol.Gallagher@nrc.gov*.

Mail comments to: Secretary, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001, ATTN: Rulemakings and Adjudications Staff.

E-mail comments to: Rulemaking.Comments@nrc.gov. If you do not receive a reply e-mail confirming that we have received your comments, contact us directly at (301) 415–1677.

Fax comments to: Secretary, U.S. Nuclear Regulatory Commission at (301) 415–1101.

Publicly available documents related to this rulemaking may be accessed using the following methods:

NRC's Public Document Room (PDR): Publicly available documents may be examined at the NRC's PDR, Public File Area O1–F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland. The PDR reproduction contractor will copy documents for a fee.

NRC's Agencywide Document Access and Management System (ADAMS): Publicly available documents created or received at the NRC are available electronically at the NRC's Electronic Reading Room at *http://www.nrc.gov/reading-rm/adams.html*. From this link, the public can gain entry into ADAMS, which provides text and image files of NRC's public documents. If problems are encountered accessing documents in ADAMS, contact the NRC's PDR reference staff at (800) 397–4209, or (301) 415–4737, or by e-mail to *PDR.resource@nrc.gov*.

FOR FURTHER INFORMATION CONTACT: Mr. Jason Lising, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001; telephone (301) 415–3220; e-mail: *Jason.Lising@nrc.gov*; or Ms. Jennifer Davis, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001; telephone (301) 415–3835; e-mail: *Jennifer.Davis@nrc.gov*.

SUPPLEMENTARY INFORMATION:

I. Introduction

The NRC is proposing to amend Title 10, Part 51, ''Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions,'' of the *Code of Federal Regulations* (10 CFR Part 51) by updating Table B–1 in Appendix B to Subpart A of ''Summary of Findings on NEPA Issues for License Renewal of Nuclear Power Plants,'' and other related provisions in Part 51 (*e.g.,* § 51.53(c)(3)), which describes the requirements for the license renewal applicant's environmental report. These amendments are based on comments received from the public on NUREG–1437, ''Generic Environmental Impact Statement for License Renewal of Nuclear Plants'' (May 1996), referred to as the ''1996 GEIS,'' and its Addendum 1 (August 1999), a review of plant-specific supplemental environmental impact statements (SEISs) completed

since the GEIS was issued in 1996, lessons learned, and knowledge gained from the preparation of these SEISs. The NRC staff has prepared a draft revision to the 1996 GEIS, referred to as the ''revised GEIS,'' which updates the 1996 GEIS based upon consideration of the above described factors. The revised GEIS provides the technical basis for this proposed rule.

In the 1996 GEIS and final rule (61 FR 28467, June 5, 1996), which promulgated Table B–1 and related provisions in Part 51, the Commission determined that certain environmental impacts associated with the renewal of a nuclear power plant operating license were the same or similar for all plants and as such, could be treated on a generic basis. In this way, repetitive reviews of these environmental impacts could be avoided. The Commission based its generic assessment of certain environmental impacts on the following factors:

(1) License renewal will involve nuclear power plants for which the environmental impacts of operation are well understood as a result of lessons learned and knowledge gained from operating experience and completed license renewals.

(2) Activities associated with license renewal are expected to be within this range of operating experience; thus, environmental impacts can be reasonably predicted.

(3) Changes in the environment around nuclear power plants are gradual and predictable.

The 1996 GEIS improved the efficiency of the license renewal process by (1) providing an evaluation of the types of environmental impacts that may occur from renewing commercial nuclear power plant operating licenses; (2) identifying and assessing impacts that are expected to be generic (*i.e.,* the same or similar) at all nuclear plants or plants with specified plant or site characteristics; and (3) defining the number and scope of environmental impacts that need to be addressed in plant-specific SEISs.

As stated in the 1996 final rule that incorporated the findings of the GEIS in Part 51, the NRC recognized that the assessment of the environmental impact issues might change over time, and that additional issues may be identified for consideration. This proposed rule is the result of the 10-year review conducted by the NRC on the information and findings currently presented in Table B–1 of Appendix B to Part 51.

II. Background

Rulemaking History

In 1986, the NRC initiated a program to develop license renewal regulations and associated regulatory guidance in anticipation of applications for the renewal of nuclear power plant operating licenses. A solicitation for comments on the development of a policy statement was published in the **Federal Register** on November 6, 1986 (51 FR 40334). However, the Commission decided to forgo the development of a policy statement and to proceed directly to rulemaking. An advance notice of proposed rulemaking was published on August 29, 1988 (53 FR 32919). Subsequently, in addition to a decision to proceed with the development of license renewal regulations focused on the protection of health and safety, the NRC decided to amend its environmental protection regulations in Part 51.

On October 13, 1989 (54 FR 41980), the NRC published a notice of its intent to hold a public workshop on license renewal on November 13 and 14, 1989. One of the workshop sessions was devoted to the environmental issues associated with license renewal and the possible merit of amending 10 CFR Part 51. The workshop is summarized in NUREG/CP–0108, ''Proceedings of the Public Workshop on Nuclear Power Plant License Renewal'' (April 1990). Responses to the public comments submitted after the workshop are summarized in NUREG–1411, ''Response to Public Comments Resulting from the Public Workshop on Nuclear Power Plant License Renewal'' (July 1990).

On July 23, 1990, the NRC published an advance notice of proposed rulemaking (55 FR 29964) and a notice of intent to prepare a generic environmental impact statement (55 FR 29967). The proposed rule published on September 17, 1991 (56 FR 47016), described the supporting documents that were available and announced a public workshop to be held on November 4 and 5, 1991. The supporting documents for the proposed rule included:

(1) NUREG–1437, ''Draft Generic Environmental Impact Statement for License Renewal of Nuclear Plants'' (August 1991);

(2) NUREG–1440, ''Regulatory Analysis of Proposed Amendments to Regulations Concerning the Environmental Review for Renewal of Nuclear Power Plant Operating Licenses: Draft Report for Comment'' (August 1991);

(3) Draft Regulatory Guide DG–4002, Proposed Supplement 1 to Regulatory Guide 4.2, ''Guidance for the Preparation of Supplemental Environmental Reports in Support of an Application To Renew a Nuclear Power Station Operating License'' (August 1991); and

(4) NUREG–1429, ''Environmental Standard Review Plan for the Review of License Renewal Applications for Nuclear Power Plants: Draft Report for Comment'' (August 1991).

After the comment period, the Commission directed the NRC staff to discuss concerns raised by a number of States that certain features of the proposed rule conflicted with State regulatory authority over the need for power and utility economics. To facilitate these discussions, the NRC developed an options paper entitled, ''Addressing the Concerns of States and Others Regarding the Role of Need for Generating Capacity, Alternative Energy Sources, Utility Costs, and Cost-Benefit Analysis in NRC Environmental Reviews for Relicensing Nuclear Power Plants: An NRC Staff Discussion Paper.'' A **Federal Register** document published on January 18, 1994 (59 FR 2542), announced the scheduling of three regional workshops in February 1994 and the availability of the options paper. A fourth public meeting was held in May 1994 to address proposals that had been submitted after the regional workshops. After consideration of all comments, the NRC issued a supplement to the proposed rule on July 25, 1994 (59 FR 37724), to resolve concerns about the need for power and utility economics.

The NRC published the final rule, ''Environmental Review for Renewal of Nuclear Power Plant Operating Licenses,'' on June 5, 1996 (61 FR 28467). The final rule identified and assessed license renewal environmental impact issues for which a generic analysis had been performed and therefore, did not have to be addressed by a licensee in its environmental report or by the NRC staff in its SEIS. Similarly, the final rule identified and assessed those environmental impacts for which a site-specific analysis was required, both by the licensee in its environmental report and by the NRC staff in its SEIS. The final rule, amongst other amendments to Part 51, added Appendix B to Subpart A of Part 51. Appendix B included Table B–1, which summarizes the findings of NUREG–1437, ''Generic Environmental Impact Statement for License Renewal of Nuclear Plants,'' May 1996 (1996 GEIS).

On December 18, 1996 (61 FR 66537), the NRC amended the final rule

published in June 1996 to incorporate minor clarifying and conforming changes and add language omitted from Table B–1. This amendment also analyzed comments received specific to the treatment of low-level waste storage and disposal impacts, the cumulative radiological effects from the uranium fuel cycle, and the effects from the disposal of high-level waste and spent fuel requested in the June 1996 final rule.

On September 3, 1999 (64 FR 48496), the NRC amended the December 1996 final rule to expand the generic findings about the environmental impacts resulting from transportation of fuel and waste to and from a single nuclear power plant. This amendment permitted the NRC to make a generic finding regarding these environmental impacts so that an analysis would not have to be repeated for each license renewal application. The amendment also incorporated rule language consistent with the findings in the 1996 GEIS, which addressed local traffic impacts attributable to continued operations of the nuclear power plant during the license renewal term. The *Generic Environmental Impact Statement for License Renewal of Nuclear Plants: Main Report Section 6.3—''Transportation,'' Table 9.1, ''Summary of Findings on NEPA Issues for License Renewal of Nuclear Power Plants,'' Final Report* (NUREG–1437, Volume 1, Addendum 1), published in August 1999, provides the analysis supporting the amendment.

The current proposed rulemaking began in June 2003 when the NRC issued a notice of intent to update the 1996 GEIS in the **Federal Register** (68 FR 33209). The original comment period began in June 2003 and ended in September 2003. In October 2005 the scoping period was reopened until December 30, 2005 (70 FR 57628).

III. Public Comments

Scoping Process

On June 3, 2003 (68 FR 33209), the NRC solicited public comments which provided the public with an opportunity to participate in the environmental scoping process, as defined in § 51.26. In this notice, the NRC announced the intent to update the 1996 GEIS. The NRC conducted scoping meetings in each of the four NRC regions for the GEIS update. The scoping meetings were held in Atlanta, Georgia (July 8, 2003), Oak Lawn, Illinois (July 10, 2003), Anaheim, California (July 15, 2003), and Boston, Massachusetts (July 17, 2003). The public comment period closed in September 2003 and the project was inactive for the next two years due to limited staff resources and competing demands. On October 3, 2005 (70 FR 57628), the NRC reopened the public comment period and extended it until December 30, 2005. All comments submitted in response to the 2003 scoping request have been considered in preparing the revised GEIS and are publicly available. No comments were received during the 2005 public comment period.

The official transcripts, written comments, and meeting summaries are available electronically for public inspection in the NRC Public Document Room (PDR) or from the Publicly Available Records (PARS) component of NRC's document system under ADAMS Accession Nos. ML032170942, ML032260339, ML032260715, and ML032170934. All comments and suggestions received orally or in writing during the scoping process were considered.

The NRC has prepared a scoping summary report that is available electronically for public inspection in the NRC PDR or from the PARS component of ADAMS under Accession No. ML073450750. Additionally, the scoping summary is located in Appendix A in the revised GEIS.

IV. Discussion

1996 GEIS

Under the NRC's environmental protection regulations in Part 51, which implements Section 102(2) of the National Environmental Policy Act of 1969 (NEPA), renewal of a nuclear power plant operating license requires the preparation of an environmental impact statement (EIS). To help in the preparation of individual operating license renewal EISs, the NRC prepared the 1996 GEIS.

In 1996 and 1999, the Commission amended its environmental protection regulations in Part 51, to improve the efficiency of the environmental review process for applicants seeking to renew a nuclear power plant operating license for up to an additional 20 years. These amendments were based on the analyses reported in the 1996 GEIS.

The 1996 GEIS summarizes the findings of a systematic inquiry into the environmental impacts of continued operations and refurbishment activities associated with license renewal. The NRC identified 92 environmental impact issues. Of the 92 environmental issues analyzed, 69 issues were resolved generically (*i.e.*, Category 1), 21 would require a further plant-specific analysis (*i.e.*, Category 2), and 2 would require a site-specific assessment by the NRC prior to issuance of a renewed license (*i.e.*, uncategorized). As part of a license renewal application, an applicant submits an environmental report to the NRC, and the NRC prepares a plant-specific SEIS to the 1996 GEIS.

The GEIS assigns one of three impact levels (small, moderate, or large) to a given environmental resource (*e.g.,* air, water, or soil). A small impact means that the environmental effects are not detectable, or are so minor that they will neither destabilize, nor noticeably alter, any important attribute of the resource. A moderate impact means that the environmental effects are sufficient to alter noticeably, but not to destabilize, important attributes of the resource. A large impact means that the environmental effects are clearly noticeable, and are sufficient to destabilize important attributes of the resource.

Table B–1 in Appendix B to Part 51, summarizes the findings of the analyses conducted for the 1996 GEIS. Issues and processes common to all nuclear power plants having generic (*i.e.*, the same or similar) environmental impacts are considered Category 1 issues. Category 2 issues are those issues that cannot be generically dispositioned and would require a plant-specific analysis to determine the level of impact.

The 1996 GEIS has been effective in focusing NRC resources on important environmental issues and increased the efficiency of the environmental review process. Currently, 51 nuclear units at 29 plant sites have received renewed licenses.

Revised GEIS

The GEIS revision evaluates the environmental issues and findings of the 1996 GEIS. Lessons learned and knowledge gained during previous license renewal reviews provided a significant source of new information for this assessment. Public comments on previous plant-specific license renewal reviews were analyzed to assess the existing environmental issues and identify new ones. The purpose of this evaluation was to determine if the findings presented in the 1996 GEIS remain valid. In doing so, the NRC considered the need to modify, add to, or delete any of the 92 environmental issues in the 1996 GEIS. After this evaluation, the staff carried forward 78 impact issues for detailed consideration in this GEIS revision. Fifty-eight of these issues were determined to be Category 1 and would not require additional plant-specific analysis. Of the remaining twenty issues, nineteen were determined to be Category 2 and one remained uncategorized. No

environmental issues identified in Table B–1 and in the 1996 GEIS were eliminated, but several were combined or regrouped according to similarities.

Environmental issues in the revised GEIS are arranged by resource area. This perspective is a change from the 1996 GEIS in which environmental issues were arranged by power plant systems (*e.g.*, cooling systems, transmission lines) and activities (*e.g.*, refurbishment). The structure of the revised GEIS adopts the NRC's standard format for EISs as established in Part 51, Appendix A to Subpart A of Part 51—''Format for Presentation of Material in Environmental Impact Statements.'' The environmental impacts of license renewal activities, including plant operations and refurbishment along with replacement power alternatives, are addressed in each resource area. The revised GEIS summarizes environmental impact issues under the following resource areas: (1) Land use and visual resources; (2) meteorology, air quality, and noise; (3) geology, seismology, and soils; (4) hydrology (surface water and groundwater); (5) ecology (terrestrial ecology, aquatic ecology, threatened, endangered, and protected species and essential fish habitat); (6) historic and cultural resources; (7) socioeconomics; (8) human health (radiological and nonradiological hazards); (9) environmental justice; and (10) waste management and pollution prevention. The proposed rule revises Table B–1 in Appendix B to Subpart A of Part 51 to follow the organizational format of the revised GEIS.

Environmental impacts of license renewal and the resources that could be affected were identified in the revised GEIS. The general analytical approach for identifying environmental impacts was to (1) describe the nuclear power plant activity that could affect the resource, (2) identify the resource that is affected, (3) evaluate past license renewal reviews and other available information, (4) assess the nature and magnitude of the environmental impact on the affected resource, (5) characterize the significance of the effects, (6) determine whether the results of the analysis apply to all nuclear power plants (whether the impact issue is Category 1 or Category 2), and (7) consider additional mitigation measures for adverse impacts. Identification of environmental impacts (or issues) was conducted in an iterative rather than a stepwise manner. For example, after information was collected and levels of significance were reviewed, impacts were reexamined to determine if any should be removed, added, recombined, or divided.

The Commission would like to emphasize that in complying with the NRC's environmental regulations under § 51.53(c)(3)(iv) applicants are required to provide any new and significant information regarding the environmental impacts of license renewal of which the applicant is aware, even on Category 1 issues. The proposed amendments would not change this requirement.

The revised GEIS retains the 1996 GEIS definitions of a Category 1 and Category 2 issue. The revised GEIS discusses four major types of changes:

(1) *New Category 1 Issue:* These issues would include Category 1 issues not previously listed in the 1996 GEIS or multiple Category 1 issues from the 1996 GEIS that have been combined into a Category 1 issue in the revised GEIS. The applicant does not need to assess this issue in its environmental report. Under § 51.53(c)(3)(iv), however, the applicant is responsible for reporting in the environmental report any ''new and significant information'' of which the applicant is aware. If the applicant is not aware of any new and significant information that would change the conclusion in the revised GEIS, the applicant would be required to state this determination in the environmental report. The NRC has addressed the environmental impacts of these Category 1 issues generically for all plants in the revised GEIS.

(2) *New Category 2 Issue:* These issues would include Category 2 issues not previously listed in the 1996 GEIS or multiple Category 2 issues from the 1996 GEIS that have been combined into a Category 2 issue in the revised GEIS. For each new Category 2 issue, the applicant would have to conduct an assessment of the potential environmental impacts related to that issue and include it in the environmental report. The assessment must include a discussion of (i) the possible actions to mitigate any adverse impacts associated with license renewal and (ii) the environmental impacts of alternatives to license renewal.

(3) *Existing Issue Category Change from Category 2 to Category 1:* These would include issues that were considered as Category 2 in the 1996 GEIS and would now be considered as Category 1 in the revised GEIS. An applicant would no longer be required to conduct an assessment on the environmental impacts associated with these issues. Consistent with the requirements of § 51.53(c)(3)(iv), an applicant would only be required to describe in its environmental report any ''new and significant information'' of which it is aware.

(4) *Existing Issue Category Change from Category 1 to Category 2:* These would include issues that were considered as Category 1 in the 1996 GEIS and would now be considered as Category 2 in the revised GEIS. An applicant that previously did not have to provide an analysis on the environmental impacts associated with these issues would now be required to conduct an assessment of the environmental impacts and include it in the environmental report.

V. Proposed Actions and Basis for Changes to Table B–1

The revised GEIS which is concurrently issued for public comment and publicly available (ADAMS Accession No. ML090220654) provides a summary change table comparing the ninety-two environmental issues in the 1996 GEIS with the seventy-eight environmental issues in the revised GEIS. The proposed rule amends Table B–1 in Appendix B to Subpart A, ''Summary of Findings on NEPA Issues for License Renewal of Nuclear Power Plants,'' to reflect the changes made in the revised GEIS. The changes to Table B–1 are described below:

(i) Land Use

(1) *Onsite Land Use*—''Onsite land use'' remains a Category 1 issue. The proposed rule makes minor clarifying changes to the finding column of Table B–1 for this issue.

(2) *Offsite Land Use*—The proposed rule language combines two Category 2 issues, ''Offsite land use (refurbishment)'' and ''Offsite land use (license renewal term)'' reclassifies this combined issue as a Category 1 issue, and names it, ''Offsite land use.'' The finding column of the current Table B–1 for ''Offsite land use (refurbishment)'' indicates that impacts may be of moderate significance at plants in low population areas. The finding column of the current Table B–1 for ''Offsite land use (license renewal term)'' indicates that significant changes in land use may be associated with population and tax revenue changes resulting from license renewal. As described in the 1996 GEIS, environmental impacts are considered to be small if refurbishment activities were to occur at plants located in high population areas and if population and tax revenues would not change.

Significant impacts on offsite land use are not anticipated. Previous plant-specific license renewal reviews conducted by the NRC have shown no requirement for a substantial number of additional workers during the license renewal term and that refurbishment

activities, such as steam generator and vessel head replacement, have not required the large numbers of workers and the months of time that was conservatively estimated in the 1996 GEIS. These reviews support a finding that offsite land use impacts during the license renewal term would be small for all nuclear power plants.

(3) *Offsite Land Use in Transmission Line Rights-of-Way (ROWs)*—The proposed rule renames ''Powerline right of way'' as ''Offsite land use in transmission line rights-of-way (ROWs);'' it remains a Category 1 issue. The proposed rule makes minor clarifying changes to the finding column of Table B–1 for this issue.

(ii) Visual Resources

(4) *Aesthetic Impacts*—The proposed rule language combines three Category 1 issues, ''Aesthetic impacts (refurbishment),'' ''aesthetic impacts (license renewal term),'' and ''aesthetic impacts of transmission lines (license renewal term)'' into one new Category 1 issue, ''Aesthetic impacts.'' The 1996 GEIS concluded that renewal of operating licenses and the refurbishment activities would have no significant aesthetic impact during the license renewal term. Impacts are considered to be small if the visual appearance of plant and transmission line structures would not change. Previous license renewal reviews conducted by the NRC show that the appearance of nuclear plants and transmission line structures do not change significantly over time or because of refurbishment activities. Therefore, aesthetic impacts are not anticipated and the combined issue remains a Category 1 issue.

These three issues are combined into one Category 1 issue as they are similar and combining them would streamline the license renewal process.

(iii) Air Quality

(5) *Air Quality (Non-Attainment and Maintenance Areas)*—The proposed language renames ''Air quality during refurbishment (non-attainment and maintenance areas)'' as ''Air quality (non-attainment and maintenance areas)'' and expands it to include emissions from testing emergency diesel generators, boilers used for facility heating, and particulate emissions from cooling towers. The issue remains a Category 2 issue.

(6) *Air Quality Effects of Transmission Lines*—''Air quality effects of transmission lines'' remains a Category 1 issue. There are no changes for this issue.

(iv) Noise

(7) *Noise Impacts*—The proposed rule renames ''Noise'' as ''Noise impacts''; it remains a Category 1 issue. The proposed rule makes minor clarifying changes to the finding column of Table B–1 for this issue.

(v) Geology and Soils

(8) *Impacts of Nuclear Plants on Geology and Soils*—The proposed language adds a new Category 1 issue, ''Impacts of nuclear plants on geology and soils,'' to the impacts of continued power plant operations and refurbishment activities on geology and soils (*i.e.*, prime farmland) and to determine if there is new or significant information in regard to regional or local seismology. New seismological conditions are limited to the identification of previously unknown geologic faults and are expected to be rare. Geology and soil conditions at all nuclear power plants and associated transmission lines have been well established during the current licensing term and are expected to remain unchanged during the 20-year license renewal term. The impact of continued operations and refurbishment activities during the license renewal term on geologic and soil resources would consist of soil disturbance for construction or renovation projects. Implementing best management practices would reduce soil erosion and subsequent impacts on surface water quality. Best management practices include: (1) Minimizing the amount of disturbed land, (2) stockpiling topsoil before ground disturbance, (3) mulching and seeding in disturbed areas, (4) covering loose materials with geotextiles, (5) using silt fences to reduce sediment loading to surface water, (6) using check dams to minimize the erosive power of drainages, and (7) installing proper culvert outlets to direct flows in streams or drainages.

No information in any plant-specific SEIS prepared to date, or in the referenced documents, has identified these impacts as being significant.

(vi) Surface Water

(9) *Surface-Water Use and Quality*—The proposed rule combines two Category 1 issues, ''Impacts of refurbishment on surface water quality'' and ''Impacts of refurbishment on surface water use,'' and names the combined issue ''Surface-water use and quality.'' These two issues were combined because the impacts of refurbishment on both surface water use and quality are negligible and the effects are closely related.

The NRC expects licensees to use best management practices during the license renewal term for both continuing operations and refurbishment activities. Use of best management practices will minimize soil erosion. In addition, implementation of spill prevention and control plans will reduce the likelihood of any liquid chemical spills. If refurbishment activities take place during a reactor shutdown, the overall water use by the facility will be reduced. Based on this conclusion, the impact on surface water use and quality during a license renewal term will continue to be small for all plants. The combined issue remains a Category 1 issue. The proposed rule makes minor clarifying changes to the finding column of Table B–1 for this issue.

(10) *Altered Current Patterns at Intake and Discharge Structures*, (11) *Altered Salinity Gradients*, (12) *Altered Thermal Stratification of Lakes*, and (13) *Scouring Caused by Discharged Cooling Water*—''Altered current patterns at intake and discharge structures,'' ''Altered salinity gradients,'' ''Altered thermal stratification of lakes,'' and ''Scouring caused by discharged cooling water'' remain Category 1 issues. The proposed rule makes minor clarifying changes to the finding column of Table B–1 for each of these issues.

(14) *Discharge of Metals in Cooling System Effluent*—The proposed language renames ''Discharge of other metals in waste water'' as ''Discharge of metals in cooling system effluent''; it remains a Category 1 issue. The proposed rule makes minor clarifying changes to the finding column of Table B–1 for this issue.

(15) *Discharge of Biocides, Sanitary Wastes, and Minor Chemical Spills*—The proposed rule combines two Category 1 issues, ''Discharge of chlorine or other biocides'' and ''Discharge of sanitary wastes and minor chemical spills'' as ''Discharge of biocides, sanitary wastes, and minor chemical spills.'' The combined issue remains a Category 1 issue. The proposed rule makes minor clarifying changes to the finding column of Table B–1 for this issue.

(16) *Water Use Conflicts (plants with once-through cooling systems)*—''Water use conflicts (plants with once-through cooling systems)'' remains a Category 1 issue. The proposed rule makes a minor clarifying change to the finding column of Table B–1 for this issue.

(17) *Water Use Conflicts (plants with cooling ponds or cooling towers using make-up water from a river with low flow)*—''Water use conflicts (plants with cooling ponds or cooling towers using

make-up water from a river with low flow)'' remains a Category 2 issue. The proposed rule makes minor clarifying changes to the finding column of Table B–1 for this issue.

(18) *Effects of Dredging on Water Quality*—The proposed rule adds a new Category 1 issue, ''Effects of dredging on water quality,'' that evaluates the impacts of dredging to maintain intake and discharge structures at nuclear power plant facilities. The impact of dredging on surface water quality was not considered in the 1996 GEIS and is not listed in the current Table B–1. Most plants have intake and discharge structures that must be maintained by periodic dredging of sediment accumulated in or on the structures.

This dredging, while temporarily increasing turbidity in the source water body, has been shown to have little effect on water quality. In addition to maintaining intake and discharge structures, dredging is often done to keep barge slips and channels open to service the plant. Dredged material is most often disposed on property owned by the applicant and usually contains no hazardous materials. Dredging is performed under a permit issued by the U.S. Army Corps of Engineers and consequently, each dredging action would be subject to a site-specific environmental review conducted by the Corps.

Temporary impacts of dredging are measurable in general water quality terms, but the impacts have been shown to be small.

(19) *Temperature Effects on Sediment Transport Capacity*—''Temperature effects on sediment transport capacity'' remains a Category 1 issue. There are no changes to this issue.

(vii) Groundwater

(20) *Groundwater Use and Quality*—The proposed rule renames ''Impacts of refurbishment on groundwater use and quality'' as ''Groundwater use and quality.'' The issue remains a Category 1 issue. The NRC has concluded that use of best management practices would address any wastes or spills that could affect groundwater quality. The proposed rule updates the finding column of Table B–1 for this issue to include a statement identifying best management practices and makes other minor clarifying changes to the finding column.

(21) *Groundwater Use Conflicts (Plants that Withdraw Less Than 100 Gallons per Minute [gpm])*—The proposed rule renames ''Ground-water use conflicts (potable and service water; plants that use <100 gpm)'' as ''Groundwater use conflicts (plants that withdraw less than 100 gallons per minute [gpm]).'' The issue remains a Category 1 issue. The proposed rule makes minor clarifying changes to the finding column of Table B–1 for this issue.

(22) *Groundwater use conflicts (plants that withdraw more than 100 gpm including those using Ranney Wells)*—The proposed rule combines two Category 2 issues, ''Groundwater use conflicts (potable and service water, and dewatering; plants that use >100 gpm)'' and ''Ground-water use conflicts (Ranney wells)'' and names the combined issue ''Groundwater use conflicts (plants that withdraw more than 100 gpm including those using Ranney wells).'' The combined issue remains a Category 2 issue. Because Ranney wells produce significantly more than 100 gpm, the Ranney wells issue was combined with the general issue of groundwater use conflicts for plants using more than 100 gpm of groundwater. The proposed rule makes clarifying changes to the finding column of Table B–1 for this combined issue.

(23) *Groundwater Use Conflicts (Plants With Closed-Cycle Cooling Systems that Withdraw Makeup Water from a River)*—The proposed rule renames ''Ground-water use conflicts (plants using cooling tower withdrawing make-up water from a small river'' as ''Groundwater use conflicts (plants with closed-cycle cooling systems that withdraw makeup water from a river).'' The combined issue remains a Category 2 issue. The proposed rule makes minor clarifying changes to the finding column of Table B–1 for this issue.

(24) *Groundwater Quality Degradation Resulting from Water Withdrawals*—The proposed rule combines two Category 1 issues, ''Ground-water quality degradation (Ranney wells)'' and ''Ground-water quality degradation (saltwater intrusion)'' and names the combined issue ''Groundwater quality degradation resulting from water withdrawals.'' The combined issue remains a Category 1 issue. The two issues were combined as they both consider the possibility of groundwater quality becoming degraded as a result of the plant drawing water of potentially lower quality into the aquifer. The proposed rule makes clarifying changes to the finding column of Table B–1 for this combined issue.

(25) *Groundwater Quality Degradation (Plants with Cooling Ponds in Salt Marshes)* and (26) *Groundwater Quality Degradation (Plants with Cooling Ponds at Inland Sites)*—''Groundwater quality degradation (plants with cooling ponds in salt marshes)'' and ''Groundwater quality degradation (plants with cooling ponds at inland sites)'' remain, respectively, Category 1 and Category 2 issues. The proposed rule makes clarifying changes to the finding column of Table B–1 for each of these issues.

(27) *Groundwater and Soil Contamination*—The proposed rule adds a new Category 2 issue, ''Groundwater and Soil Contamination,'' to evaluate the impacts of the industrial use of solvents, hydrocarbons, heavy metals, or other chemicals on groundwater, soil, and subsoil at nuclear power plant sites during the license renewal term. Review of license renewal applications has shown the existence of these non-radionuclide contaminants at some plants. This contamination is usually regulated by State environmental regulatory authorities or the Environmental Protection Agency (EPA). In addition, this new Category 2 issue has been added because each specific site has its own program for handling waste and hazardous materials, and no generic evaluation would apply to all nuclear power plants.

Industrial practices at all plants have the potential to contaminate site groundwater and soil through the use and spillage of solvents, hydrocarbons, heavy metals, or other chemicals, especially on sites with unlined wastewater lagoons and storm water lagoons. Any contamination by these substances is subject to characterization and clean-up by State and EPA regulated remediation and monitoring programs.

(28) *Radionuclides Released to Groundwater*—The proposed rule adds a new Category 2 issue, ''Radionuclides released to groundwater,'' to evaluate the potential impact of discharges of radionuclides, such as tritium, from plant systems into groundwater. The issue is relevant to license renewal because virtually all commercial nuclear power plants routinely release radioactive gaseous and liquid materials into the environment. A September 2006 NRC report, ''Liquid Radioactive Release Lessons Learned Task Force Report,'' documented instances of inadvertent releases of radionuclides into groundwater from nuclear power plants (ADAMS Accession No. ML062650312).

NRC regulations in Parts 20 and 50 limit the amount of radioactivity released into the environment to be ''As Low As is Reasonably Achievable'' (ALARA) to ensure that the impact on public health is very low. Most of the inadvertent liquid release events involved tritium, which is a radioactive isotope of hydrogen. However, other

radioactive isotopes have been inadvertently released into the environment. An example is leakage from spent fuel pools, where leakage from the stored fuel would allow fission products to be released into the pool water.

The most significant conclusion of the NRC report regards public health impacts. Although there have been a number of events where radionuclides were released inadvertently into groundwater, based on the data available, the NRC did not identify any instances where the health of the public was impacted. The NRC did identify that under the existing regulatory requirements, the potential exists for inadvertent radionuclide releases to migrate offsite into groundwater.

Another factor in adding this new Category 2 issue is the level of public concern associated with such inadvertent releases of radionuclides into groundwater. The NRC concludes that the impact of radionuclide releases to groundwater quality could be small or moderate, depending on the occurrence and frequency of leaks and the ability to respond to leaks in a timely fashion.

(viii) Terrestrial Resources

(29) *Impacts of Continued Plant Operations on Terrestrial Ecosystems*—The proposed rule renames ''Refurbishment impacts'' as ''Impacts of continued plant operations on terrestrial ecosystems;'' it remains a Category 2 issue. The analysis in the revised GEIS expands the scope of this issue to include the environmental impacts associated with continued plant operations and maintenance activities in addition to refurbishment. The proposed rule revises the finding column of Table B–1 for this issue accordingly.

(30) *Exposure of Terrestrial Organisms to Radionuclides*—The proposed rule adds a new Category 1 issue, ''Exposure of terrestrial organisms to radionuclides,'' to evaluate the issue of the potential impact of radionuclides on terrestrial organisms resulting from normal operations of a nuclear power plant during the license renewal term. This issue was not evaluated in the 1996 GEIS. However, the impact of radionuclides on terrestrial organisms has been raised by members of the public as well as Federal and State agencies during previous license renewal reviews.

The revised GEIS evaluates the potential impact of radionuclides on terrestrial biota at nuclear power plants from continued operations during the license renewal term. Site-specific radionuclide concentrations in water, sediment, and soils were obtained from Radiological Environmental Monitoring Operating Reports from 15 nuclear power plants. These 15 plants were selected to represent sites with a range of radionuclide concentrations in the media, including plants with high annual worker dose exposure values for both boiling water reactors and pressurized water reactors. The calculated radiation dose rates to terrestrial biota were compared against radiation-acceptable radiation safety guidelines issued by the U.S. Department of Energy, the International Atomic Energy Agency, the National Council of Radiation Protection and Measurement, and the International Commission on Radiological Protection. The NRC concludes that the impact of radionuclides on terrestrial biota from past and current operations would be small for all nuclear power plants and would not be expected to change appreciably during the license renewal term.

(31) *Cooling System Impacts on Terrestrial Resources (Plants with Once-Through Cooling Systems or Cooling Ponds)*—The proposed rule renames ''Cooling pond impacts on terrestrial resources'' as ''Cooling system impacts on terrestrial resources (plants with once-through cooling systems or cooling ponds).'' This issue remains a Category 1 issue. The analysis in the revised GEIS expands the scope of this issue to include plants with once-through cooling systems. This analysis concludes that the impacts on terrestrial resources from once-through cooling systems, as well as from cooling ponds, is of small significance at all plants. The proposed rule revises the finding column of Table B–1 for this issue accordingly.

(32) *Cooling Tower Impacts on Vegetation (Plants with Cooling Towers)*—The proposed rule combines two Category 1 issues, ''Cooling tower impacts on crops and ornamental vegetation'' and ''Cooling tower impacts on native plants'' and names the combined issue ''Cooling tower impacts on vegetation (plants with cooling towers).'' The combined issue remains a Category 1 issue. The two issues were combined to conform to the resource-based approach used in the revised GEIS and to simplify and streamline the analysis. With the recent trend of replacing lawns with native vegetation, some ornamental plants and crops are native plants, and the original separation into two issues is unnecessary and cumbersome. The proposed rule makes clarifying changes to the finding column of Table B–1 for this combined issue.

(33) *Bird Collisions with Cooling Towers and Transmission Lines*—The proposed rule combines two Category 1 issues, ''Bird collisions with cooling towers'' and ''Bird collision with power lines'' and names the combined issue ''Bird collisions with cooling towers and transmission lines.'' The combined issue remains a Category 1 issue. The two issues were combined to conform to the resource-based approach used in the revised GEIS and to simplify and streamline the analysis. The proposed rule makes clarifying changes to the finding column of Table B–1 for this combined issue.

(34) *Water Use Conflicts with Terrestrial Resources (Plants with Cooling Ponds or Cooling Towers Using Makeup Water from a River with Low Flow)*—The proposed rule adds a new Category 2 issue, ''Water use conflicts with terrestrial resources (plants with cooling ponds or cooling towers using make-up water from a river with low flow)'' to evaluate water use conflict impacts with terrestrial resources in riparian communities. Such impacts could occur when water that supports these resources is diminished either because of decreased availability due to droughts; increased water demand for agricultural, municipal, or industrial usage; or a combination of these factors. The potential range of impact levels at plants, subject to license renewal, with cooling ponds or cooling towers using makeup water from a small river with low flow cannot be generically determined at this time.

(35) *Transmission Line ROW Management Impacts on Terrestrial Resources*—The proposed rule combines two Category 1 issues, ''Power line right-of-way management (cutting and herbicide application)'' and ''Floodplains and wetland on power line right-of-way'' and names the combined issue ''Transmission line ROW management impacts on terrestrial resources.'' The combined issue remains a Category 1 issue. The two issues were combined to simplify and streamline the analysis.

The scope of the evaluation of transmission lines in the revised GEIS is reduced from that of the 1996 GEIS—only those transmission lines currently needed to connect the nuclear power plants to the regional electrical distribution grid are considered within the scope of license renewal. Thus, the number of and length of transmission lines being evaluated are greatly reduced. The revised GEIS analysis indicates that proper management of transmission line ROW areas does not

have significant adverse impacts on current wildlife populations, and ROW management can provide valuable wildlife habitats. The proposed rule makes clarifying changes to the finding column of Table B–1 for this combined issue.

(36) *Electromagnetic Fields on Flora and Fauna (Plants, Agricultural Crops, Honeybees, Wildlife, Livestock)*—''Electromagnetic fields on flora and fauna (plants, agricultural crops, honeybees, wildlife, livestock)'' remains a Category 1 issue. There are no changes to this issue.

(ix) Aquatic Resources

(37) *Impingement and Entrainment of Aquatic Organisms (Plants with Once-Through Cooling Systems or Cooling Ponds)*—The proposed rule combines two Category 2 issues, ''Entrainment of fish and shellfish in early life stages (for plants with once-through cooling and cooling pond heat dissipation systems)'' and ''Impingement of fish and shellfish (for plants with once-through cooling and cooling pond heat dissipation systems)'' and one Category 1 issue, ''Entrainment of phytoplankton and zooplankton (for all plants)'' and names the combined issue ''Impingement and entrainment of aquatic organisms (plants with once-through cooling systems or cooling ponds).'' The combined issue is a Category 2 issue.

For the revised GEIS, these issues were combined to simplify the review process in keeping with the resource-based approach and to allow for a more complete analysis of the environmental impact. Nuclear power plants typically conduct separate sampling programs to estimate the numbers of organisms entrained and impinged, which explains the original separation of these issues. However, it is the combined effects of entrainment and impingement that reflect the total impact of the cooling system intake on the resource. Environmental conditions are different to each nuclear plant site and impacts cannot be determined generically. The proposed rule revises the finding column of Table B–1 for this issue accordingly.

(38) *Impingement and Entrainment of Aquatic Organisms (Plants with Cooling Towers)*—The proposed rule combines three Category 1 issues, ''Entrainment of fish and shellfish in early life stages (for plants with cooling tower-based heat dissipation systems),'' ''Impingement of fish and shellfish (for plants with cooling tower-based heat dissipation systems),'' and ''Entrainment of phytoplankton and zooplankton (for all plants)'' and names the combined issue ''Impingement and entrainment of aquatic organisms (plants with cooling towers).'' The combined issue remains a Category 1 issue. The three issues are combined given their similar nature and to simplify and streamline the review process. The proposed rule revises the finding column of Table B–1 for this issue accordingly.

(39) *Thermal Impacts on Aquatic Organisms (Plants with Once-Through Cooling Systems or Cooling Ponds)*—The proposed rule combines four Category 1 issues, ''Cold shock (for all plants),'' ''Thermal plume barrier to migrating fish (for all plants),'' ''Distribution of aquatic organisms (for all plants),'' and ''Premature emergence of aquatic insects (for all plants),'' and one Category 2 issue ''Heat shock (for plants with once-through and cooling pond heat dissipation systems)'' and names the combined issue ''Thermal impacts on aquatic organisms (plants with once-through cooling systems or cooling ponds).'' The combined issue is a Category 2 issue.

The five issues are combined given their similar nature and to simplify and streamline the review process. With the exception of heat shock, previous license renewal reviews conducted by the NRC have shown that the thermal effects of once-through cooling and cooling pond systems have not been a problem at operating nuclear power plants and would not change during the license renewal term, so future impacts are not anticipated. However, it is difficult to differentiate the various thermal effects of once-through cooling and cooling pond systems in the field. Different populations may react differently due to changes in water temperature. For example, if a resident population avoided a heated effluent, the 1996 GEIS would have identified this issue as ''distribution of aquatic organisms;'' however, had this population been migrating, the issue would have been considered under ''thermal plume barrier to migrating fish.'' If individuals had remained in the heated effluent too long, the issue would have been considered under ''heat shock;'' or, if the individuals then left the warm water, the issue would have been considered under ''cold shock.'' Using the resource-based approach in the revised GEIS, each of these issues would be considered a thermal impact from once-through and cooling pond systems. Environmental conditions are different at each nuclear plant site and impacts cannot be determined generically. The proposed rule revises the finding column of Table B–1 for this issue accordingly.

(40) *Thermal Impacts on Aquatic Organisms (Plants with Cooling Towers)*—The proposed rule combines five Category 1 issues, ''Cold shock (for all plants),'' ''Thermal plume barrier to migrating fish (for all plants),'' ''Distribution of aquatic organisms (for all plants),'' ''Premature emergence of aquatic insects (for all plants),'' and ''Heat shock (for plants with cooling-tower-based heat dissipation systems)'' and names the combined issue ''Thermal impacts on aquatic organisms (plants with cooling towers).'' The combined issue is a Category 1 issue.

The five issues are combined given their similar nature and to simplify and streamline the review process. The proposed rule revises the finding column of Table B–1 for this issue accordingly.

(41) *Effects of Cooling Water Discharge on Dissolved Oxygen, Gas Supersaturation, and Eutrophication*—The proposed rule combines three Category 1 issues, ''Eutrophication,'' ''Gas supersaturation (gas bubble disease),'' and ''Low dissolved oxygen in the discharge,'' and names the combined issue ''Effects of cooling water discharge on dissolved oxygen, gas supersaturation, and eutrophication.'' The combined issue is a Category 1 issue.

The three issues are combined given their similar nature and to simplify and streamline the review process. The proposed rule revises the finding column of Table B–1 for this issue accordingly.

(42) *Effects of Non-Radiological Contaminants on Aquatic Organisms*—The proposed rule renames ''Accumulation of contaminants in sediments or biota'' as ''Effects of non-radiological contaminants on aquatic organisms;'' it remains a Category 1 issue. The proposed rule makes clarifying changes to the finding column of Table B–1 for this issue.

(43) *Exposure of Aquatic Organisms to Radionuclides*—The proposed rule adds a new Category 1 issue, ''Exposure of Aquatic Organisms to Radionuclides,'' to evaluate the potential impact of radionuclide discharges upon aquatic organisms. This issue has been raised by members of the public as well as Federal and State agencies during the license renewal process for various plants.

The revised GEIS evaluates the potential impact of radionuclides on aquatic organisms at nuclear power plants from continued operations during the license renewal term. A radiological assessment was performed using effluent release data from 15 NRC-licensed nuclear power plants chosen based on having a range of radionuclide concentrations in environmental media.

Site-specific radionuclide concentrations in water and sediments, as reported in the plant's radioactive effluent and environmental monitoring reports, were used in the calculations. The data is representative of boiling water reactors and pressurized water reactors. The calculated radiation dose rates to aquatic biota were compared against radiation acceptable radiation safety guidelines issued by the U.S. Department of Energy, the International Atomic Energy Agency, the National Council of Radiation Protection and Measurement, and the International Commission on Radiological Protection. The NRC concludes that the impact of radionuclides on aquatic biota from past and current operations would be small for all nuclear power plants, and would not be expected to change appreciably during the license renewal term.

(44) *Effects of Dredging on Aquatic Organisms*—The proposed rule adds a new Category 1 issue, ''Effects of dredging on aquatic organisms,'' to evaluate the impacts of dredging on aquatic organisms. Licensees conduct dredging to maintain intake and discharge structures at nuclear power plant facilities and in some cases, to maintain barge slips. Dredging may disturb or remove benthic communities. In general, maintenance dredging for nuclear power plant operations would occur infrequently, would be of relatively short duration, and would affect relatively small areas. Dredging is performed under a permit issued by the U.S. Army Corps of Engineers and consequently, each dredging action would be subject to a site-specific environmental review conducted by the Corps.

(45) *Water Use Conflicts with Aquatic Resources (Plants with Cooling Ponds or Cooling Towers using Make-Up Water from a River with Low Flow)*—The proposed rule adds a new Category 2 issue, ''Water use conflicts with aquatic resources (plants with cooling ponds or cooling towers using make-up water from a river with low flow)'' to evaluate water use conflict impacts with aquatic resources in instream communities. Such impacts could occur when water that supports these resources is diminished either because of decreased availability due to droughts; increased water demand for agricultural, municipal, or industrial usage; or a combination of these factors. The potential range of impact levels at plants, subject to license renewal, with cooling ponds or cooling towers using makeup water from a small river with low flow cannot be generically determined at this time.

(46) *Refurbishment Impacts on Aquatic Resources*—The proposed rule language renames ''Refurbishment'' as ''Refurbishment impacts on aquatic resources;'' it remains a Category 1 issue. The proposed rule makes minor clarifying changes to the finding column of Table B–1 for this issue.

(47) *Impacts of Transmission Line ROW Management on Aquatic Resources*—The proposed rule adds a new Category 1 issue, ''Impacts of transmission line ROW management on aquatic resources,'' to evaluate the impact of transmission line ROW management on aquatic resources. Impacts on aquatic resources from transmission line ROW maintenance could occur as a result of the direct disturbance of aquatic habitats, soil erosion, changes in water quality (from sedimentation and thermal effects), or inadvertent releases of chemical contaminants from herbicide use. As described in the revised GEIS, any impact on aquatic resources resulting from transmission line ROW management is expected to be small, short term, and localized for all plants.

(48) *Losses from Predation, Parasitism, and Disease Among Organisms Exposed to Sublethal Stresses* and (49) *Stimulation of Aquatic Nuisance Species (e.g., Shipworms)*—''Losses from predation, parasitism, and disease among organisms exposed to sublethal stresses'' and ''Stimulation of aquatic nuisance species (*e.g.,* shipworms)'' remain Category 1 issues. The proposed rule does not change the finding column entries of Table B–1 for these issues.

(x) Threatened, Endangered, and Protected Species and Essential Fish Habitat

(50) *Threatened, Endangered, and Protected Species and Essential Fish Habitat*—The proposed rule renames ''Threatened or endangered species'' as ''Threatened, endangered, and protected species and essential fish habitat'' and expands the scope of the issue to include essential fish habitats protected under the Magnuson-Stevens Fishery Conservation and Management Act. The issue remains a Category 2 issue. The proposed rule makes clarifying changes to the finding column entry of table B–1 for this issue.

(xi) Historic and Cultural Resources

(51) *Historic and Cultural Resources*—The proposed rule language renames ''Historic and archaeological resources'' as ''Historic and cultural resources;'' it remains a Category 2 issue. The proposed rule language more accurately reflects the National Historic Preservation Act requirements that Federal agencies consult with State Historic Preservation Officer and appropriate Native American Tribes to determine the potential impacts and mitigation.

(xii) Socioeconomics

(52) *Employment and Income, Recreation and Tourism*—The proposed rule adds a new Category 1 issue, ''Employment and income,'' and combines it with the ''tourism and recreation'' portion of a current Table B–1 Category 1 issue, ''Public services: public safety, social services, and tourism and recreation.'' These issues are combined given the similar nature and to streamline the review process. The revised GEIS provides an analysis of this issue and concludes that the impacts are generic to all plants undergoing license renewal.

(53) *Tax Revenues*—The proposed rule adds a new Category 1 issue, ''Tax revenues,'' to evaluate the impacts of license renewal on tax revenues. Refurbishment activities, such as steam generator and vessel head replacement, have not had a noticeable effect on the value of nuclear plants, thus changes in tax revenues are not anticipated from future refurbishment activities. Refurbishment activities involve the one-for-one replacement of existing components and are generally not considered a taxable improvement. Also, new property tax assessments; proprietary payments in lieu of tax stipulations, settlements, and agreements; and State tax laws are continually changing the amounts paid to taxing jurisdictions by nuclear plant owners, and these occur independent of license renewal and refurbishment activities.

(54) *Community Services and Education*—The proposed rule language reclassifies two Category 2 issues, ''Public services: Public utilities'' and ''Public services, education (refurbishment)'' as Category 1 issues, and combines them with the Category 1 issue, ''Public services, education (license renewal term),'' and the ''Public safety and social service'' portion of the Category 1 issue, ''Public services: Public safety, social services, and tourism and recreation.'' The combined issue, ''Community services and education,'' is a Category 1 issue.

The four issues are combined as all public services are equally affected by changes in plant operations and refurbishment at nuclear plants. Any changes in the number of workers at a nuclear plant will affect demand for public services from local communities. Nevertheless, past environmental

reviews conducted by NRC have shown that the number of workers at relicensed nuclear plants has not changed significantly because of license renewal, so impacts on community services are not anticipated from future license renewals. In addition, refurbishment activities, such as steam generator and vessel head replacement, have not required the large numbers of workers and the months of time that was conservatively analyzed in the 1996 GEIS, so significant impacts on community services are no longer anticipated. Combining the four issues also simplifies and streamlines the NRC review process. The proposed rule revises the finding column of Table B–1 accordingly.

(55) *Population and Housing*—The proposed rule language combines a new Category 1 issue, ''Population,'' and a Category 2 issue, ''Housing impacts,'' and names the combined issue, ''Population and housing.'' The combined issue is a Category 1 issue. The two issues are combined as the availability and value of housing are directly affected by changes in population and to simplify and streamline the NRC review process.

As described in the revised GEIS, the NRC has determined that the impacts of continued operations and refurbishment activities on population and housing, during the license renewal term, would be small, are not dependent on the socioeconomic setting of the nuclear plant, and are generic to all plants. The proposed rule revises the finding column of Table B–1 accordingly.

(56) *Transportation*—The proposed rule reclassifies the Category 2 issue, ''Public services, transportation,'' as a Category 1 issue and renames it ''Transportation.'' As described in the revised GEIS, the NRC has determined that the numbers of workers have not changed significantly due to license renewal, so transportation impacts are no longer anticipated from future license renewals. The proposed rule revises the finding column entry of table B–1 for this issue accordingly.

(xiii) Human Health

(57) *Radiation Exposures to the Public*—The proposed rule combines two Category 1 issues, ''Radiation exposures to the public during refurbishment'' and ''Radiation exposure to public (license renewal term)'' and names the combined issue, ''Radiation exposures to the public.'' The combined issue is a Category 1 issue. These issues are combined given the similar nature and to streamline the review process. The proposed rule revises the finding column of Table B–1 accordingly.

(58) *Radiation Exposures to Occupational Workers*—The proposed rule combines two Category 1 issues, ''Occupational radiation exposures during refurbishment'' and ''Occupational radiation exposures (license renewal term)'' and names the combined issue, ''Radiation exposures to occupational workers.'' The combined issue is a Category 1 issue. These issues are combined given their similar nature and to streamline the review process. The proposed rule revises the finding column of Table B–1 accordingly.

(59) *Human Health Impact from Chemicals*—The proposed rule adds a new Category 1 issue, ''Human health impact from chemicals,'' to evaluate the potential impacts of chemical hazards to workers and chemical releases to the environment.

The evaluation addresses the potential impact of chemicals on human health resulting from normal operations of a nuclear power plant during the license renewal term. Impacts of chemical discharges to human health are considered to be small if the discharges of chemicals to water bodies are within effluent limitations designed to ensure protection of water quality and if ongoing discharges have not resulted in adverse effects on aquatic biota.

The disposal of essentially all of the hazardous chemicals used at nuclear power plants is regulated by Resource Conservation and Recovery Act or National Pollutant Discharge Elimination System (NPDES) permits, thereby minimizing adverse impacts to the environment and on workers and the public. It is anticipated that all plants would continue to operate in compliance with all applicable permits and that no mitigation measures beyond those implemented during the current license term would be warranted as a result of license renewal.

A review of the documents, as referenced in the GEIS; operating monitoring reports; and consultations with utilities and regulatory agencies that were performed for the 1996 GEIS, indicated that the effects of the discharge of chlorine and other biocides on water quality would be of small significance for all power plants. Small quantities of biocides are readily dissipated and/or chemically altered in the body of water receiving them, so significant cumulative impacts to water quality would not be expected. Major changes in the operation of the cooling system are not expected during the license renewal term, so no change in the effects of biocide discharges on the quality of the receiving water is anticipated. Discharges of sanitary wastes and heavy metals are regulated by NPDES. Discharges that do not violate the permit limits are considered to be of small significance. The effects of minor chemical discharges and spills on water quality would be of small significance and mitigated as needed.

(60) *Microbiological Hazards to the Public (Plants with Cooling Ponds or Canals or Cooling Towers that Discharge to a River)*—The proposed rule renames ''Microbiological organisms (public health) (plants using lakes or canals, or cooling towers or cooling ponds that discharge to a small river)'' as ''Microbiological hazards to the public (plants with cooling ponds or canals or cooling towers that discharge to a river);'' it remains a Category 2 issue. The proposed rule makes minor clarifying changes to the Table B–1 finding column entry for this issue.

(61) *Microbiological Hazards to Plant Workers*—The proposed rule renames ''Microbiological organisms (occupational health)'' as ''Microbiological hazards to plant workers;'' it remains a Category 1 issue. There are no changes to the Table B–1 finding column entry for this issue.

(62) *Chronic Effects of Electromagnetic Fields (EMFs)*—The proposed rule renames ''Electromagnetic fields, chronic effects'' as ''Chronic effects of electromagnetic fields (EMFs);'' it remains an uncategorized issue. The proposed rule revises the Table B–1 finding column entry for this issue.

(63) *Physical Occupational Hazards*—The proposed rule adds a new Category 1 issue, ''Physical occupational hazards,'' to evaluate the potential impact of physical occupational hazards on human health resulting from normal nuclear power plant operations during the license renewal term. The impact of physical occupational hazards on human health has been raised by members of the public as well as Federal and State agencies during the license renewal process. Occupational hazards can be minimized when workers adhere to safety standards and use appropriate protective equipment; however, fatalities and injuries from accidents can still occur. Data for occupational injuries in 2005 obtained from the U.S. Bureau of Labor Statistics indicate that the rate of fatal injuries in the utility sector is less than the rate for many sectors (*e.g.*, construction, transportation and warehousing, agriculture, forestry, fishing and hunting, wholesale trade, and mining) and that the incidence rate for nonfatal

occupational injuries and illnesses is the least for electric power generation, followed by electric power transmission control and distribution. It is expected that over the license renewal term, workers would continue to adhere to safety standards and use protective equipment, so adverse occupational impacts would be of small significance at all sites. No mitigation measures beyond those implemented during the current license term would be warranted.

(64) *Electric Shock Hazards*—The proposed rule renames ''Electromagnetic fields, acute effects (electric shock)'' as ''Electric shock hazards;'' it remains a Category 2 issue. The proposed rule revises the Table B–1 finding column entry for this issue by more accurately summarizing the discussion in the GEIS which focuses attention on the potential of electrical shock from transmission lines.

(xiv) Postulated Accidents

(65) *Design-Basis Accidents and (66) Severe Accidents*—''Design-basis accidents'' and ''Severe accidents'' remain Category 1 and 2 issues, respectively. The proposed rule makes minor clarifying changes to the Table B–1 finding column entries for these issues.

(xv) Environmental Justice

(67) *Minority and Low-Income Populations*—The proposed rule adds a new Category 2 issue, ''Minority and low-income populations,'' to evaluate the impacts of nuclear plant operations and refurbishment during the license renewal term on minority and low-income populations living in the vicinity of the plant. This issue is listed in the current Table B–1, but it was not evaluated in the 1996 GEIS. The current Table B–1 finding column entry states that ''[t]he need for and the content of an analysis of environmental justice will be addressed in plant-specific reviews.''

Executive Order 12898 (59 FR 7629; February 16, 1994) initiated the Federal government's environmental justice program. The NRC's ''Policy Statement on the Treatment of Environmental Justice Matters in NRC Regulatory and Licensing Actions'' (69 FR 52040, August 24, 2004) states ''the NRC is committed to the general goals of E.O. 12898, it will strive to meet those goals through its normal and traditional NEPA review process.'' Guidance for implementing Executive Order 12898 was not available prior to the completion of the 1996 GEIS. To accomplish these goals, NRC requires the assistance of applicants in identifying minority and low-income populations and communities residing in the vicinity of the nuclear power plant and determining whether there would be any disproportionately high and adverse human health and environmental impacts on these populations from continued power plant operations and refurbishment activities during the license renewal term.

(xvi) Solid Waste Management

(68) *Low-Level Waste Storage and Disposal*—''Low-level waste storage and disposal'' remains a Category 1 issue. The proposed rule makes clarifying changes to the Table B–1 finding column entry for this issue.

(69) *Onsite Storage of Spent Nuclear Fuel*—The proposed rule renames ''On-site spent fuel'' as ''Onsite storage of spent nuclear fuel;'' it remains a Category 1 issue. The proposed rule does not change the finding column entry of Table B–1 for this issue.

(70) *Offsite Radiological Impacts of Spent Nuclear Fuel and High-Level Waste Disposal*—The proposed rule renames ''Offsite radiological impacts (spent fuel and high level waste disposal)'' as ''Offsite radiological impacts of spent nuclear fuel and high-level waste disposal.'' It remains a Category 1 issue. The proposed rule summarizes the lengthy discussion in the finding column of Table B–1 for this issue, and incorporates specific dose limits obtained from the recent docketing by the NRC of the application for the proposed repository at Yucca Mountain, Nevada.

(71) *Mixed-Waste Storage and Disposal*—''Mixed-waste storage and disposal'' remains a Category 1 issue. The proposed rule revises the Table B–1 finding column entry for this issue by more accurately summarizing the discussion in the GEIS.

(72) *Nonradioactive Waste Storage and Disposal*—The proposed language renames ''Nonradiological waste'' as ''Nonradiological waste storage and disposal;'' it remains a Category 1 issue. The proposed rule makes minor clarifying changes to the finding column of Table B–1 for this issue.

(xvii) Cumulative Impacts

(73) *Cumulative Impacts*—The proposed rule adds a new Category 2 issue, ''Cumulative impacts,'' to evaluate the potential cumulative impacts of license renewal. The term ''cumulative impacts'' is defined in § 51.14(b) by reference to the Council on Environmental Quality (CEQ) regulations, 40 CFR 1508.7, as ''the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions.''

For the purposes of analysis, past actions are considered to be when the nuclear power plant was licensed and constructed, present actions are related to current plant operations, and future actions are those that are reasonably foreseeable through the end of plant operations including the license renewal term. The geographic area over which past, present, and future actions are assessed depends on the affected resource.

The NRC requires the assistance of applicants in identifying other past, present, and reasonably foreseeable future actions, such as the construction and operation of other power plants and other industrial and commercial facilities in the vicinity of the nuclear power plant. Therefore, this environmental impact is considered a Category 2 issue.

(xviii) Uranium Fuel Cycle

(74) *Offsite Radiological Impacts—Individual Impacts from Other than the Disposal of Spent Fuel and High-Level Waste*—''Offsite radiological impacts—individual impacts from other than the disposal of spent fuel and high-level waste'' remains a Category 1 issue. The proposed rule makes minor clarifying changes to the findings column of Table B–1 for this issue.

(75) *Offsite Radiological Impacts—Collective Impacts from Other than the Disposal of Spent Fuel and High-Level Waste*—The proposed rule renames ''Offsite radiological impacts (collective effects)'' as ''Offsite radiological impacts—collective impacts from other than the disposal of spent fuel and high-level waste''; it remains a Category 1 issue. The proposed rule summarizes the discussion in the Table B–1 finding column entry for this issue.

(76) *Nonradiological Impacts of the Uranium Fuel Cycle*—Nonradiological impacts of the uranium fuel cycle'' remains a Category 1 issue. The proposed rule makes minor clarifying changes to the finding column of Table B–1 for this issue.

(77) *Transportation*—''Transportation'' remains a Category 1 issue. The proposed rule revises the Table B–1 finding column entry for this issue by retaining the significance level assigned to this environmental issue as applicable to the uranium fuel cycle. The specific technical discussion supporting these findings is retained in the GEIS.

(xiv) Termination of Nuclear Power Plant Operations and Decommissioning

(78) *Termination of Nuclear Power Plant Operations and Decommissioning*—The proposed rule combines one new Category 1 issue, ''Termination of nuclear power plant operations'' with six other Category 1 issues, ''Radiation doses,'' ''Waste management,'' ''Air quality,'' ''Water quality,'' ''Ecological resources,'' and ''Socioeconomic impacts,'' listed in the 1996 GEIS under the resource area, ''Decommissioning'' and names the combined issue, ''Termination of plant operations and decommissioning.'' This combined issue is a Category 1 issue.

The 1996 GEIS analysis indicates that the six decommissioning issues are expected to be small at all nuclear power plant sites. The new issue addresses the impacts from terminating nuclear power plant operations prior to plant decommissioning. Termination of nuclear power plant operations results in the cessation of activities necessary to maintain the reactor, as well as a significant reduction in plant workforce. It is assumed that termination of plant operations would not lead to the immediate decommissioning and dismantlement of the reactor or other power plant infrastructure.

These environmental issues and the termination of nuclear power plant operations issue would be combined into one Category 1 issue to simplify and streamline the NRC review process. These issues are also addressed in the ''2002 Generic Environmental Impact Statement on Decommissioning of Nuclear Facilities: Regarding the Decommissioning of Nuclear Power Reactors,'' NUREG–0586, which is incorporated by reference in the revised GEIS. The proposed rule revises the findings column of Table B–1 accordingly.

VI. Section-by-Section Analysis

The following section-by-section analysis discusses the proposed modifications to the Part 51 provisions.

Proposed § 51.14(a)

The proposed rule adds to § 51.14(a) a definition for the term ''historic properties.'' The term is intended to be an overarching term that includes those historic, archaeological, and Native American traditional religious and cultural properties (districts, sites, buildings, structures, objects, artifacts) that are covered by the various Federal preservation laws, including the National Historic Preservation Act, and where applicable, the Archaeological Resources Protection Act and the Native American Graves Protection and Repatriation Act.

Proposed § 51.53(c)(2)

The NRC proposes to clarify the required contents of the license renewal environmental report which applicants must submit in accordance with § 54.21 by revising the second sentence in this subparagraph to read, ''This report must describe in detail the affected environment around the plant, the modifications directly affecting the environment or any plant effluents, and any planned refurbishment activities.''

Proposed §§ 51.53(c)(3)(ii)(A), (B), and (E)

For those applicants seeking an initial license renewal and holding either an operating license, construction permit, or combined license as of June 30, 1995, the environmental report shall include the information required in § 51.53(c)(2), but is not required to contain analyses of the environmental impacts of certain license renewal issues identified as Category 1 (generically analyzed) issues in Appendix B to Subpart A of Part 51. The environmental report must contain analyses of the environmental impacts of the proposed action, including the impacts of refurbishment activities, if any, associated with license renewal and the impacts of operation during the renewal term, for those issues identified as Category 2 (plant specific analysis required) issues in Appendix B to Subpart A of Part 51 and must include consideration of alternatives for reducing adverse impacts of Category 2 issues. In addition, the environmental report must contain any new and significant information regarding the environmental impacts of license renewal of which the applicant is aware. The required analyses are listed in §§ 51.53(c)(3)(ii)(A)–(P).

The proposed language for §§ 51.53(c)(3)(ii)(A), (B), and (E) consists of changes to conform to the proposed changes in Table B–1, which in turn, reflects the revised GEIS. The NRC proposes to modify these paragraphs to more accurately reflect the specific information needed in the environmental report that will help the NRC conduct the environmental review of the proposed action.

Section 51.53(c)(3)(ii)(A) is revised to incorporate the findings of the revised GEIS and to require applicants to provide information in their environmental reports regarding water availability and competing water demands and related impacts on instream (aquatic) and riparian (terrestrial) communities.

Section 51.53(c)(3)(ii)(B) is revised to replace ''heat shock'' with ''thermal changes'' to reflect the proposed changes made in the revised Table B–1 as described earlier in this document under ''(ix) Aquatic Resources,'' environmental impact issue, ''(39) Thermal Impacts on Aquatic Organisms (Plants with Once-Through Cooling Systems or Cooling Ponds).''

Section 51.53(c)(3)(ii)(E) is revised to expressly include power plant continued operations within the scope of the impacts to be assessed by license renewal applicants. The paragraph is further revised to expand the scope of the provision to include all Federal wildlife protection laws and essential fish habitat under the Magnuson-Stevens Fishery Conservation and Management Act.

Proposed § 51.53(c)(3)(ii)(I)

The NRC proposes to remove the language in § 51.53(c)(3)(ii)(I) to conform with the proposed changes made in the revised Table B–1 and to reserve the paragraph. These Category 2 issues were changed to Category 1 because significant changes in housing availability, land-use, and increased population demand attributable to the proposed project on the public water supply have not occurred at relicensed nuclear plants. Therefore, impacts to these resources are no longer anticipated from future license renewals. In addition, refurbishment activities, such as steam generator and vessel head replacement, have not required the large numbers of workers and the months of time that was conservatively analyzed in the 1996 GEIS. As such, significant impacts on public schools are no longer anticipated from future refurbishment activities. Applicants would no longer need to assess the impacts of the proposed action on housing availability, land-use, and public schools (impacts from refurbishment activities only) within the vicinity of the plant. Additionally, applicants would no longer need to assess the impact of population increases attributable to the proposed action on the public water supply.

Proposed § 51.53(c)(3)(ii)(J)

The NRC proposes to remove the language in § 51.53(c)(3)(ii)(J) to conform with the proposed changes made in the revised Table B–1 and to reserve the paragraph. This Category 2 issue, ''Public service, Transportation'' was changed to Category 1, ''Transportation,'' and remains under resource area, ''Socioeconomic'' because refurbishment activities, such as steam generator and vessel head replacement,

have not required the large numbers of workers and the months of time that was conservatively analyzed in the 1996 GEIS; therefore significant transportation impacts are not anticipated from future refurbishment activities. Applicants would no longer need to assess the impact of the proposed action on local transportation during periods of license renewal refurbishment activities.

Proposed § 51.53(c)(3)(ii)(K)

The proposed language for § 51.53(c)(3)(ii)(K) deletes the phrase, ''or archaeological.'' This term is encompassed by the use of the term ''historical,'' as defined in the proposed rule language under § 51.14, ''Definitions.''

Proposed § 51.53(c)(3)(ii)(N)

The NRC proposes to add a new paragraph (c)(3)(ii)(N) in § 51.53 to conform with the proposed changes made in the revised Table B–1. A new Category 2 issue, ''Minority and low-income populations'' under resource area, ''Environmental Justice'' addresses the issue of determining the effects of nuclear plant operations and refurbishment on minority and low-income populations living in the vicinity of the plant. This issue is listed in the current Table B–1, but was not evaluated in the 1996 GEIS. The finding stated that: ''The need for and the content of an analysis of environmental justice will be addressed in plant-specific reviews.'' Guidance for implementing E.O. No. 12898, ''Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,'' (Section 1–101) (59 FR 7629) and dated February 16, 1994 was not available before the completion of the 1996 GEIS.

In August 2004, the Commission issued a policy statement on implementation of E.O. 12898: NRC's Policy Statement on the Treatment of Environmental Justice Matters in NRC Regulatory and Licensing Actions (69 FR 52040). As stated therein, ''the NRC is committed to the general goals of E.O. 12898, it will strive to meet those goals through its normal and traditional NEPA review process.'' To accomplish these goals, NRC requires the assistance of applicants in identifying minority and low-income populations and communities residing in the vicinity of the nuclear power plant and determining if there would be any disproportionate and adverse human health and environmental impacts on these populations. The NRC will then assess the information provided by the applicant.

Proposed § 51.53(c)(3)(ii)(O)

The NRC proposes to add a new paragraph (c)(3)(ii)(O) in § 51.53 to conform with the proposed changes made in the revised Table B–1. A new Category 2 issue has been added to the GEIS to evaluate the potential contamination of soil and groundwater from industrial practices at nuclear plants. Industrial practices at all plants have the potential to contaminate site groundwater and soil through the use and spillage of solvents, hydrocarbons, heavy metals, or other chemicals, especially on sites with unlined wastewater lagoons and storm water lagoons. Any contamination by these substances is subject to characterization and clean-up by EPA and State remediation and monitoring programs. NRC requires the assistance of applicants to assess the impact of the industrial practices involving the use of solvents, hydrocarbons, heavy metals, or other chemicals where there is a potential for contamination of site groundwater, soil, and subsoil.

Proposed § 51.53(c)(3)(ii)(P)

The NRC proposes to add a new paragraph (c)(3)(ii)(P) in § 51.53 to conform with the proposed changes made in the revised Table B–1. A new Category 2 issue has been added to the GEIS to evaluate the potential cumulative effects of license renewal and refurbishment at nuclear plants. Cumulative impacts was not addressed in the 1996 GEIS, but is currently being evaluated by the NRC in plant-specific supplements to the GEIS. The Council on Environmental Quality (CEQ), in 40 CFR 1508.7, defines cumulative effects as ''the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions.'' The NRC considers potential cumulative impacts on the environment resulting from the incremental impact of license renewal when added to other past, present, and reasonably foreseeable future actions.

The NRC requires the assistance of applicants in identifying other past, present, and reasonably foreseeable future actions, such as the construction and operation of other power plants and other industrial and commercial facilities in the vicinity of the nuclear power plant.

Proposed § 51.53(c)(3)(ii)(Q)

The NRC proposes to add a new paragraph (c)(3)(ii)(Q) in § 51.53 to conform with the proposed changes made in the revised Table B–1. A new Category 2 issue has been added to the GEIS to evaluate the potential impact of discharges of radionuclides, such as tritium, from plant systems into groundwater. The issue is relevant to license renewal because virtually all commercial nuclear power plants have spent fuel pools, liquid storage tanks, and buried piping that contain liquids with radioactive material that have a potential over time to degrade and release radioactive liquid into the groundwater. The NRC has investigated several cases where radioactive liquids have been inadvertently released into the groundwater in an uncontrolled manner. Any residual activity from these inadvertent releases of radioactive material is subject to characterization and possible remediation by the licensee in order to comply with NRC requirements. NRC requires the assistance of applicants in assessing the impact of any inadvertent releases of radioactive liquids into the groundwater.

Proposed § 51.71(c)

The proposed language for § 51.71(c) deletes the term ''entitlement'' and ''entitlements.'' These terms are not applicable in a license renewal context.

Proposed § 51.71(d)

The proposed language for § 51.71(d) consists of minor conforming word changes to clarify the readability and to include the analysis of cumulative effects. Cumulative impacts were not addressed in the 1996 GEIS, but are currently being evaluated by the NRC in plant-specific supplements to the GEIS. The NRC proposes to modify this paragraph to more accurately reflect the cumulative impacts analysis conducted for environmental reviews of the proposed action.

Proposed § 51.95(c)

The proposed language changes for § 51.95(c) is administrative in nature, and replaces the reference to the 1996 GEIS for license renewal of nuclear plants with a reference to the revised GEIS.

Proposed § 51.95(c)(4)

The proposed language for § 51.95(c)(4) consists of minor grammatical word changes to enhance the readability of the regulation.

VII. Specific Request for Comments

The NRC seeks comments on the proposed Part 51 provisions described in this document and on the regulatory

analysis and the information collection aspects of this proposed rule.

The NRC also seeks voluntary information from industry about refurbishment activities and employment trends at nuclear power plants. Information on refurbishment would be used to evaluate the significance of impacts from this type of activity. Information on employment trends would be used to assess the significance of socioeconomic effects of ongoing plant operations on local economies.

Refurbishment

Table B.2 in the 1996 GEIS lists major refurbishment or replacement activities that the NRC used to estimate environmental impacts. The NRC recognizes that the refurbishment impact analysis in the 1996 GEIS may not accurately reflect industry experience performing the activities identified in Table B.2. Please provide (1) the estimated frequency for each activity (*e.g.*, annually, once in the lifetime of a power reactor, as-needed based on inspections, *etc.*), (2) the duration (in weeks), (3) the peak number of project workers in full-time equivalents (FTEs), (4) the timing of these activities (*e.g.*, during planned refueling or maintenance outages), and (5) whether the period of extended operation (*i.e.*, license renewal term) has triggered a need for these activities.

Employment Trends

Please provide data on the annual average number of permanent operations workers (in FTEs by year) after commencement of nuclear plant operations. If possible, the information should include a short non-proprietary discussion about general employment trends and include reasons for any significant changes in employment.

VIII. Guidance Documents

In addition to issuing the revised GEIS for public comment, the NRC is also issuing a revised RG 4.2, Supplement 1, Revision 1 and a revised ESRP, Supplement 1, Revision 1. Both documents are being published concurrently with these proposed amendments. Revised RG 4.2, Supplement 1, Revision 1, provides general procedures for the preparation of environmental reports, which are submitted as part of an application for the renewal of a nuclear power plant operating license in accordance with Title 10, Part 54, ''Requirements for Renewal of Operating Licenses for Nuclear Power Plants,'' of the Code of Federal Regulations (10 CFR Part 54). More specifically, this revised regulatory guide explains the criteria on how Category 2 issues are to be addressed in the environmental report, as specified in the proposed amendments to Part 51.

The revised ESRP, Supplement 1, Revision 1 provides guidance for NRC staff on how to conduct a license renewal environmental review. The ESRP parallels the format in RG 4.2, Supplement 1, Revision 1. The primary purpose of the ESRP is to ensure that these reviews focus on those environmental concerns associated with license renewal as described in Part 51. Additionally, in order to enhance public openness, the NRC committed to issuing for public comment with the proposed rule, the RG 4.2, Supplement 1, Revision 1 and ESRP, Supplement 1, Revision 1.

IX. Agreement State Compatibility

Under the ''Policy Statement on Adequacy and Compatibility of Agreement States Programs,'' approved by the Commission on June 20, 1997, and published in the **Federal Register** (62 FR 46517; September 3, 1997), this rule is classified as compatibility category ''NRC.'' Agreement State Compatibility is not required for Category ''NRC'' regulations. The NRC program elements in this category are those that relate directly to areas of regulation reserved to the NRC by the Atomic Energy Act or the provisions of 10 CFR. Although an Agreement State may not adopt program elements reserved to NRC, it may wish to inform its licensees of certain requirements via a mechanism that is consistent with the particular State's administrative procedure laws, but does not confer regulatory authority on the State.

X. Availability of Documents

The NRC is making the documents identified below available to interested persons through one or more of the following methods, as indicated.

Public Document Room (PDR). The NRC Public Document Room is located at 11555 Rockville Pike, Rockville, Maryland 20852.

Regulations.gov (Web). These documents may be viewed and downloaded electronically through the Federal eRulemaking Portal *http://www.regulations.gov* Docket number NRC–2008–0608.

NRC's Electronic Reading Room (ERR). The NRC's public electronic reading room is located at *http://www.nrc.gov/reading-rm.html.*

Document	PDR	Regs.gov	Web	ERR (ADAMS)	NRC staff
Draft NUREG–1437, Vols. 1 and 2, Revision 1—''Generic Environmental Impact Statement for License Renewal of Nuclear Plants''	X	X	X	ML090220654	X
Draft Regulatory Guide (RG) 4.2 Supplement 1, Revision 1—''Preparation of Environmental Reports for Nuclear Power Plant License Renewal Applications''	X	X	X	ML091620409	X
Draft NUREG–1555, Supplement 1, Revision 1—''Standard Review Plans for Environmental Reviews for Nuclear Power Plants, Supplement 1: Operating License Renewal''	X	X	X	ML090230497	X
Draft Regulatory Analysis for RIN 3150–AI42 Proposed Rulemaking Revisions to Environmental Review for Renewal of Nuclear Power Plant Operating Licenses	X	X	X	ML083460087	X
Draft OMB Supporting Statement for RIN 3150–AI42 Proposed Rulemaking Revisions to Environmental Review for Renewal of Nuclear Power Plant Operating Licenses	X	X	X	ML090260568	X
Summary of Public Scoping Meeting to Discuss Update to the Generic Environmental Impact Statement for License Renewal of Nuclear Plants, Atlanta, GA	X	X	X	ML032170942	X
Summary of Public Scoping Meeting to Discuss Update to the Generic Environmental Impact Statement for License Renewal of Nuclear Plants (NUREG–1437), Oak Lawn, IL	X	X	X	ML032260339	X
Summary of Public Scoping Meeting To Discuss Update to the Generic Environmental Impact Statement for License Renewal of Nuclear Plants (NUREG–1437), Anaheim, CA	X	X	X	ML032260715	X

Document	PDR	Regs.gov	Web	ERR (ADAMS)	NRC staff
Summary of Public Scoping Meeting to Discuss Update to the Generic Environmental Impact Statement for License Renewal of Nuclear Plants (NUREG–1437), Boston, MA	X	X	X	ML032170934	X
Liquid Radiation Release Lessons Learned Task	X	X	X	ML062650312	X
NUREG/CP–0108, ''Proceedings of the Public Workshop on Nuclear Power Plant License Renewal'' (April 1990)	X				X
NUREG–1411, ''Response to Public Comments Resulting from the Public Workshop on Nuclear Power Plant License Renewal'' (July 1990)	X				X
''Addressing the Concerns of States and Others Regarding the Role of Need for Generating Capacity, Alternate Energy Sources, Utility Costs, and Cost-Benefit Analysis in NRC Environmental Reviews for Relicensing Nuclear Power Plants: An NRC Staff Discussion Paper''	X				X
NUREG–0586, ''2002 Generic Environmental Impact Statement on Decommissioning of Nuclear Facilities: Regarding the Decommissioning of Nuclear Power Reactors''	X				X

XI. Plain Language

The Presidential memorandum dated June 1, 1998, entitled ''Plain Language in Government Writing'' directed that the Government's writing be in clear and accessible language. This memorandum was published on June 10, 1998 (63 FR 31883). The NRC requests comments on the proposed rule specifically with respect to the clarity and effectiveness of the language used. Comments should be sent to the NRC as explained in the **ADDRESSES** heading of this document.

XII. Voluntary Consensus Standards

The National Technology Transfer and Advancement Act of 1995, Public Law 104–113, requires that Federal agencies use technical standards that are developed or adopted by voluntary consensus standards bodies unless using such a standard is inconsistent with applicable law or is otherwise impractical. The NRC is not aware of any voluntary consensus standard that could be used instead of the proposed Government standards. The NRC will consider using a voluntary consensus standard if an appropriate standard is identified.

XIII. Finding of No Significant Environmental Impact

The NRC has determined that this proposed regulation is the type of action described in categorical exclusion § 51.22(c)(3). Therefore, neither an environmental impact statement nor an environmental assessment has been prepared for this proposed regulation. This action is procedural in nature in that it pertains to the type of environmental information to be reviewed.

XIV. Paperwork Reduction Act Statement

This proposed rule would contain new or amended information collection requirements that are subject to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501, *et seq*). This proposed rule has been submitted to the Office of Management and Budget (OMB) for review and approval of the information collection requirements.

Type of submission, new or revision: Revision.

The title of the information collection: 10 CFR Part 51 Environmental Review for Renewal of Nuclear Power Plant Operating Licenses, Proposed Rule.

The form number if applicable: Not applicable.

How often the collection is required: Once per license renewal.

Who will be required or asked to report: Applicants for license renewal.

An estimate of the number of annual responses: Six.

The estimated number of annual respondents: Six.

An estimate of the total number of hours needed annually to complete the requirement or request (net one-time reporting): 1,944.00 hours

Abstract: 10 CFR Part 51 specifies information to be provided by applicants and licensees so that the NRC can make determinations necessary to adhere to the policies, regulations, and public laws of the United States, which are to be interpreted and administered in accordance with the policies set forth in the National Environmental Policy Act of 1969, as amended.

The NRC is seeking public comment on the potential impact of the information collections contained in this proposed rule and on the following issues:

1. Is the proposed information collection necessary for the NRC to properly perform its functions? Does the information have practical utility?
2. Is the burden estimate accurate?
3. Is there a way to enhance the quality, utility, and clarity of the information to be collected?
4. How can the burden of the information collection be minimized, including the use of automated collection techniques or other forms of information technology?

A copy of the OMB clearance package may be viewed free of charge at the NRC Public Document Room, One White Flint North, 11555 Rockville Pike, Room O–1F21, Rockville, MD 20852. The OMB clearance package and rule are available at the NRC worldwide Web site: *http://www.nrc.gov/public-involve/doc-comment/omb/index.htm* for 60 days after the signature date of this notice.

Send comments on any aspect of these proposed information collections, including suggestions for reducing the burden and on the above issues, by October 14, 2009. Comments received after this date will be considered if it is practical to do so, but assurance of consideration cannot be given to comments received after this date. Comments submitted in writing or in electronic form will be made available for public inspection. Because your comments will not be edited to remove any identifying or contact information, the NRC cautions you against including any information in your submission that you do not want to be publicly disclosed. Comments submitted should reference Docket No. NRC–2008–0608. Comments can be submitted in electronic form via the Federal e-Rulemaking Portal at *http://www.regulations.gov* by search for Docket No. NRC–2008–0608. Comments can be mailed to NRC Clearance Officer, Tremaine Donnell (T–5F52), U.S. Nuclear Regulatory Commission,

Washington, DC 20555–0001. Questions about the information collection requirements may be directed to the NRC Clearance Officer, Tremaine Donnell (T–5 F52), U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001, by telephone at (301) 415–5258, or by e-mail to *INFOCOLLECTS.Resource@nrc.gov*. Comments can be mailed to the Desk Officer, Office of Information and Regulatory Affairs, NEOB–10202, (3150–0021), Office of Management and Budget, Washington, DC 20503, or by e-mail to *Christine_J._Kyma@omb.eop.gov* or by telephone at (202) 395–4638.

XV. Regulatory Analysis

The Commission has prepared a regulatory analysis on this proposed regulation. The analysis examines the costs and benefits of the alternatives considered by the NRC. The two alternatives considered (a) No Action—no change to applicable license renewal portions of Part 51 regulations, including Table B–1, which would require applicants seeking license renewal to comply with the existing provisions; or (b) review and update the environmental impact issues and findings and amend applicable license renewal portions of Part 51 and Table B–1. The conclusions of the regulatory analysis show substantial cost savings of alternative (b) over alternative (a).

The NRC requests public comments on this regulatory analysis. Information on availability of the regulatory analysis is provided in Section X of this document. Comments on the regulatory analysis may be submitted to the NRC as indicated under the **ADDRESSES** heading of this document.

XVI. Regulatory Flexibility Act Certification

Under the Regulatory Flexibility Act (5 U.S.C. 605(b)), the Commission certifies that this rule would not, if promulgated, have a significant economic impact on a substantial number of small entities. This proposed rule would only affect nuclear power plant licensees filing license renewal applications. The companies that own these plants do not fall within the scope of the definition of ''small entities'' set forth in the Regulatory Flexibility Act or the size standards established by the NRC (§ 2.810).

XVII. Backfit Analysis

The NRC has determined that the requirements in this proposed rule do not constitute backfitting as defined in § 50.109(a)(1). Therefore, a backfit analysis has not been prepared for this proposed rule.

List of Subjects in 10 CFR Part 51

Administrative practice and procedure, Environmental impact statement, Nuclear materials, Nuclear power plants and reactors, Reporting and recordkeeping requirements.

For the reasons set out in the preamble and under the authority of the Atomic Energy Act of 1954, as amended; the Energy Reorganization Act of 1974, as amended; and 5 U.S.C. 553; the NRC is proposing to adopt the following amendments to 10 CFR Part 51.

PART 51—ENVIRONMENTAL PROTECTION REGULATIONS FOR DOMESTIC LICENSING AND RELATED REGULTORY FUNCTIONS

1. The authority citation for Part 51 continues to read as follows:

Authority: Sec. 161, 68 Stat. 948, as amended, sec. 1701, 106 Stat. 2951, 2952, 2953 (42 U.S.C. 2201, 2297f); secs. 201, as amended, 202, 88 Stat. 1242, as amended, 1244 (42 U.S.C. 5841, 5842); sec. 1704, 112 Stat. 2750 (44 U.S.C. 3504 note). Subpart A also issued under National Environmental Policy Act of 1969, secs. 102, 104, 105, 83 Stat. 853–854, as amended (42 U.S.C. 4332, 4334, 4335); and Pub. L. 95–604, Title II, 92 Stat. 3033–3041; and sec. 193, Pub. L. 101–575, 104 Stat. 2835 (42 U.S.C. 2243). Sections 51.20, 51.30, 51.60, 51.80, and 51.97 also issued under secs. 135, 141, Pub. L. 97–425, 96 Stat. 2232, 2241, and sec. 148, Pub. L. 100–203, 101 Stat. 1330–223 (42 U.S.C. 10155, 10161, 10168). Section 51.22 also issued under sec. 274, 73 Stat. 688, as amended by 92 Stat. 3036–3038 (42 U.S.C. 2021) and under Nuclear Waste Policy Act of 1982, sec. 121, 96 Stat. 2228 (42 U.S.C. 10141). Sections 51.43, 51.67, and 51.109 also issued under Nuclear Waste Policy Act of 1982, sec. 114(f), 96 Stat. 2216, as amended (42 U.S.C. 10134(f)).

2. Section 51.14(a) is amended by adding the term *Historic properties* in alphabetical order to read as follows:

§ 51.14 Definitions.

(a) * * *

Historic properties means any prehistoric or historic districts, sites, buildings, structures, or objects included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes properties of traditional religious and cultural importance to an Indian Tribe or Native Hawaiian organization and that meet the National Register criteria. The term also includes archaeological resources, such as artifacts, records, and remains, that are related to and located within such prehistoric or historic districts, sites, buildings, or structures.

* * * * *

3. Amend § 51.53 to revise the second sentence of paragraph (c)(2), revise the first sentence of paragraph (c)(3)(ii)(A), revise the second sentence of paragraph (c)(3)(ii)(B), revise paragraph (c)(3)(ii)(E), to remove and reserve paragraphs (c)(3)(ii)(I) and (J), to revise paragraph (c)(3)(ii)(K) and to add paragraphs (c)(3)(ii)(N), (O), (P), and (Q) to read as follows:

§ 51.53 Postconstruction environmental reports.

* * * * *

(c) * * *

(2) * * * This report must describe in detail the affected environment around the plant, the modifications directly affecting the environment or any plant effluents, and any planned refurbishment activities. * * *

(3) * * *

(ii) * * *

(A) If the applicant's plant utilizes cooling towers or cooling ponds and withdraws make-up water from a river whose annual flow rate is less than 3.15×10^{12} ft^3/year ($9\times10^{10}m^3$/year), an assessment of the impact of the proposed action on water availability and competing water demands, the flow of the river, and related impacts on instream (aquatic) and riparian (terrestrial) ecological communities must be provided. * * *

(B) * * * If the applicant can not provide these documents, it shall assess the impact of the proposed action on fish and shellfish resources resulting from thermal changes and impingement and entrainment.

* * * * *

(E) All license renewal applicants shall assess the impact of refurbishment, continued operations, and other license-renewal-related construction activities on important plant and animal habitats. Additionally, the applicant shall assess the impact of the proposed action on threatened or endangered species in accordance with Federal laws protecting wildlife, including but not limited to the Endangered Species Act, and essential fish habitat in accordance with the Magnuson-Stevens Fishery Conservation and Management Act.

* * * * *

(I) [Reserved]

(J) [Reserved]

(K) All applicants shall assess whether any historic properties will be affected by the proposed project.

* * * * *

(N) Applicants shall provide information on the general demographic composition of minority- and low-income populations and communities (by race and ethnicity) residing in the immediate vicinity of the plant that could be affected by the renewal of the

plant's operating license, including any planned refurbishment activities, and ongoing and future plant operations.

(O) If the applicant's plant conducts industrial practices involving the use of solvents, hydrocarbons, heavy metals, or other chemicals and has unlined wastewater lagoons, the applicant shall assess the potential for contamination of site groundwater, soil, and subsoil. The applicant shall provide an assessment of dissolved chemical and suspended sediment discharge to the plant's wastewater lagoons in addition to National Pollutant Discharge Elimination System (NPDES) compliance data collected for submittal to the U.S. Environmental Protection Agency (EPA) or designated State agency. A summary of existing reports describing site groundwater and soil contamination should also be included.

(P) Applicants shall provide information about past, present, and reasonably foreseeable future actions occurring in the vicinity of the nuclear plant that may result in a cumulative effect. For example, the applicant should include information about the construction and operation of other power plants and other industrial and commercial facilities in the vicinity of the nuclear plant.

(Q) An applicant shall assess the impact of any inadvertent releases of radionuclides into groundwater. The applicant shall include in its assessment a description of any groundwater protection program for the site, including a description of any monitoring wells, leak detection equipment, or procedures for the surveillance of accessible piping and components containing radioactive materials. The assessment shall also include a description of any past inadvertent releases, including information on the source of the release, the location of the release within the plant site, the types of radionuclides involved, including the quantities, forms, and concentrations of such radionuclides, and the projected impact to the environment during the license renewal term, including the projected transport pathways, concentrations of the radionuclides, and potential receptors (*e.g.*, aquifers, rivers, lakes, ponds, ocean).

* * * * *

4. Amend § 51.71 to revise paragraphs (c) and (d) to read as follows:

§ 51.71 Draft environmental impact statement—contents.

* * * * *

(c) *Status of compliance.* The draft environmental impact statement will list all Federal permits, licenses, and approvals which must be obtained in implementing the proposed action and will describe the status of compliance with those requirements. If it is uncertain whether a Federal permit, license, or approval is necessary, the draft environmental impact statement will so indicate.

(d) *Analysis.* Unless excepted in this paragraph or § 51.75, the draft environmental impact statement will include a preliminary analysis that considers and weighs the environmental effects, including any cumulative effects, of the proposed action; the environmental impacts of alternatives to the proposed action; and alternatives available for reducing or avoiding adverse environmental effects. Additionally, the draft environmental impact statement will include a consideration of the economic, technical, and other benefits and costs of the proposed action and alternatives. The draft environmental impact statement will indicate what other interests and considerations of Federal policy, including factors not related to environmental quality, if applicable, are relevant to the consideration of environmental effects of the proposed action identified under paragraph (a) of this section. The draft supplemental environmental impact statement prepared at the license renewal stage under § 51.95(c) need not discuss the economic or technical benefits and costs of either the proposed action or alternatives except if benefits and costs are either essential for a determination regarding the inclusion of an alternative in the range of alternatives considered or relevant to mitigation. In addition, the supplemental environmental impact statement prepared at the license renewal stage need not discuss other issues not related to the environmental effects of the proposed action and associated alternatives. The draft supplemental environmental impact statement for license renewal prepared under § 51.95(c) will rely on conclusions as amplified by the supporting information in the GEIS for issues designated as Category 1 in appendix B to subpart A of this part. The draft supplemental environmental impact statement must contain an analysis of those issues identified as Category 2 in appendix B to subpart A of this part that are open for the proposed action. The analysis for all draft environmental impact statements will, to the fullest extent practicable, quantify the various factors considered. To the extent that there are important qualitative considerations or factors that cannot be quantified, these considerations or factors will be discussed in qualitative terms. Consideration will be given to compliance with environmental quality standards and requirements that have been imposed by Federal, State, regional, and local agencies having responsibility for environmental protection, including applicable zoning and land-use regulations and water pollution limitations or requirements issued or imposed under the Federal Water Pollution Control Act. The environmental impact of the proposed action will be considered in the analysis with respect to matters covered by environmental quality standards and requirements irrespective of whether a certification or license from the appropriate authority has been obtained.[3] While satisfaction of Commission standards and criteria pertaining to radiological effects will be necessary to meet the licensing requirements of the Atomic Energy Act, the analysis will, for the purposes of NEPA, consider the radiological effects of the proposed action and alternatives.

* * * * *

5. Amend § 51.95 to revise the introductory text of paragraph (c), and the second sentence of paragraph (c)(4) to read as follows:

§ 51.95 Postconstruction environmental impact statements.

* * * * *

(c) *Operating license renewal stage.* In connection with the renewal of an operating license or combined license

[3] Compliance with the environmental quality standards and requirements of the Federal Water Pollution Control Act (imposed by EPA or designated permitting states) is not a substitute for, and does not negate the requirement for NRC to weigh all environmental effects of the proposed action, including the degradation, if any, of water quality, and to consider alternatives to the proposed action that are available for reducing adverse effects. Where an environmental assessment of aquatic impact from plant discharges is available from the permitting authority, the NRC will consider the assessment in its determination of the magnitude of environmental impacts for striking an overall cost-benefit balance at the construction permit and operating license and early site permit and combined license stages, and in its determination of whether the adverse environmental impacts of license renewal are so great that preserving the option of license renewal for energy planning decision-makers would be unreasonable at the license renewal stage. When no such assessment of aquatic impacts is available from the permitting authority, NRC will establish on its own, or in conjunction with the permitting authority and other agencies having relevant expertise, the magnitude of potential impacts for striking an overall cost-benefit balance for the facility at the construction permit and operating license and early site permit and combined license stages, and in its determination of whether the adverse environmental impacts of license renewal are so great that preserving the option of license renewal for energy planning decision-makers would be unreasonable at the license renewal stage.

for a nuclear power plant under parts 52 or 54 of this chapter, the Commission shall prepare an environmental impact statement, which is a supplement to the Commission's NUREG–1437, ''Generic Environmental Impact Statement for License Renewal of Nuclear Plants'' [(Month 20XX)], which is available in the NRC Public Document Room, 11555 Rockville Pike, Rockville, Maryland.

* * * * *

(4) * * * In order to make recommendations and reach a final decision on the proposed action, the NRC staff, adjudicatory officers, and Commission shall integrate the conclusions in the generic environmental impact statement for issues designated Category 1 (with the exception of offsite radiological impacts for collective effects and the disposal of spent fuel and high level waste) with information developed for those open Category 2 issues applicable to the plant under § 51.53(c)(3)(ii), and any new and significant information. * * *

* * * * *

6. In Appendix B to Subpart A of Part 51, Table B–1 is revised to read as follows:

Appendix B to Subpart A—Environmental Effect of Renewing the Operating License of a Nuclear Power Plant

* * * * *

TABLE B–1—SUMMARY OF FINDINGS ON NEPA ISSUES FOR LICENSE RENEWAL OF NUCLEAR POWER PLANTS [1]

Issue	Category [2]	Finding [3]
Land Use		
Onsite land use	1	SMALL. Changes in onsite land use from continued operations and refurbishment associated with the license renewal term would be a small fraction of any nuclear power plant site and would involve only land that is controlled by the licensee.
Offsite land use	1	SMALL. Offsite land use would not be affected from continued operations and refurbishment associated with the license renewal term.
Offsite land use in transmission line rights-of-way (ROWs).	1	SMALL. Use of transmission line ROWs from continued operations and refurbishment associated with the license renewal term would continue with no change in land use restrictions.
Visual Resources		
Aesthetic impacts	1	SMALL. No important changes to the visual appearance of plant structures or transmission lines are expected from continued operations and refurbishment associated with the license renewal term.
Air Quality		
Air quality (non-attainment and maintenance areas).	2	SMALL, MODERATE, or LARGE. Air quality impacts of continued operations and refurbishment activities associated with the license renewal term are expected to be small. However, emissions during these activities could be a cause for concern at locations in or near air quality nonattainment or maintenance areas. The significance of the impact cannot be determined without considering the compliance status of each site and the activities that could occur. These impacts would be short-lived and cease after projects were completed. Emissions from testing emergency diesel generators and fire pumps and from routine operations of boilers used for space heating would not be a concern, even for those plants located in or adjacent to nonattainment areas. Although particulate emissions from cooling towers may be a concern for a very limited number of plants located in States that regulate such emissions, the impacts in even these worst-case situations have been small.
Air quality effects of transmission lines	1	SMALL. Production of ozone and oxides of nitrogen is insignificant and does not contribute measurably to ambient levels of these gases.
Noise		
Noise impacts	1	SMALL. Noise levels would remain below regulatory guidelines for offsite receptors during continued operations and refurbishment associated with the license renewal term.
Geology and Soils		
Impacts of nuclear plants on geology and soils.	1	SMALL. Impacts on geology and soils would be small at all nuclear plants if best management practices were employed to reduce erosion associated with continued operations and refurbishment.
Surface Water		
Surface-water use and quality	1	SMALL. Impacts are expected to be negligible if best management practices are employed to control soil erosion and spills. Water use associated with continued operation and refurbishment projects for license renewal would not increase significantly or would be reduced if a plant outage is necessary to accomplish the action.
Altered current patterns at intake and discharge structures.	1	SMALL. Altered current patterns would be limited to the area in the vicinity of the intake and discharge structures. These impacts have been small at operating nuclear power plants.

TABLE B–1—SUMMARY OF FINDINGS ON NEPA ISSUES FOR LICENSE RENEWAL OF NUCLEAR POWER PLANTS [1]—Continued

Issue	Category [2]	Finding [3]
Altered salinity gradients	1	SMALL. Effects on salinity gradients would be limited to the area in the vicinity of the intake and discharge structures. These impacts have been small at operating nuclear power plants.
Altered thermal stratification of lakes	1	SMALL. Effects on thermal stratification would be limited to the area in the vicinity of the intake and discharge structures. These impacts have been small at operating nuclear power plants.
Scouring caused by discharged cooling water.	1	SMALL. Scouring effects would be limited to the area in the vicinity of the intake and discharge structures. These impacts have been small at operating nuclear power plants.
Discharge of metals in cooling system effluent.	1	SMALL. Discharges of metals have not been found to be a problem at operating nuclear power plants with cooling-tower-based heat dissipation systems and have been satisfactorily mitigated at other plants. Discharges are monitored as part of the National Pollutant Discharge Elimination System (NPDES) permit process.
Discharge of biocides, sanitary wastes, and minor chemical spills.	1	SMALL. The effects of these discharges are regulated by State and Federal environmental agencies. Discharges are monitored as part of the NPDES permit process. These impacts have been small at operating nuclear power plants.
Water use conflicts (plants with once-through cooling systems).	1	SMALL. These conflicts have not been found to be a problem at operating nuclear power plants with once-through heat dissipation systems.
Water use conflicts (plants with cooling ponds or cooling towers using make-up water from a river with low flow).	2	SMALL or MODERATE. Impacts could be of small or moderate significance, depending on makeup water requirements, water availability, and competing water demands.
Effects of dredging on water quality	1	SMALL. Dredging to remove accumulated sediments in the vicinity of intake and discharge structures and to maintain barge shipping has not been found to be a problem for surface water quality. Dredging is performed under permit from the U.S. Army Corps of Engineers.
Temperature effects on sediment transport capacity.	1	SMALL. These effects have not been found to be a problem at operating nuclear power plants and are not expected to be a problem during the license renewal term.
Groundwater		
Groundwater use and quality	1	SMALL. Extensive dewatering is not anticipated from continued operations and refurbishment activities associated with the license renewal term. The application of best management practices for handling any materials produced or used during activities would reduce impacts.
Groundwater use conflicts (plants that withdraw less than 100 gallons per minute [gpm]).	1	SMALL. Plants that withdraw less than 100 gpm are not expected to cause any groundwater use conflicts.
Groundwater use conflicts (plants that withdraw more than 100 gpm including those using Ranney wells).	2	SMALL, MODERATE, or LARGE. Plants that withdraw more than 100 gpm could cause groundwater use conflicts with nearby groundwater users.
Groundwater use conflicts (plants with closed-cycle cooling systems that withdraw makeup water from a river).	2	SMALL, MODERATE, or LARGE. Water use conflicts could result from water withdrawals from rivers during low-flow conditions, which may affect aquifer recharge. The significance of impacts would depend on makeup water requirements, water availability, and competing water demands.
Groundwater quality degradation resulting from water withdrawals.	1	SMALL. Groundwater withdrawals at operating nuclear power plants would not contribute significantly to groundwater quality degradation.
Groundwater quality degradation (plants with cooling ponds in salt marshes).	1	SMALL. Sites with closed-cycle cooling ponds could degrade groundwater quality; however, because groundwater in salt marshes is brackish, this is not a concern for plants located in salt marshes.
Groundwater quality degradation (plants with cooling ponds at inland sites).	2	SMALL, MODERATE, or LARGE. Sites with closed-cycle cooling ponds could degrade groundwater quality. For plants located inland, the quality of the groundwater in the vicinity of the ponds could be affected. The significance of the impact would depend on cooling pond water quality, site hydrogeologic conditions (including the interaction of surface water and groundwater), and the location, depth, and pump rate of water wells.
Groundwater and soil contamination	2	SMALL or MODERATE. Industrial practices involving the use of solvents, hydrocarbons, heavy metals, or other chemicals and unlined wastewater lagoons have the potential to contaminate site groundwater, soil, and subsoil. Contamination is subject to State and Environmental Protection Agency regulated cleanup and monitoring programs.
Radionuclides released to groundwater	2	SMALL or MODERATE. Underground system leaks of process water have been discovered in recent years at several plants. Groundwater protection programs have been established at all operating nuclear power plants.

TABLE B–1—SUMMARY OF FINDINGS ON NEPA ISSUES FOR LICENSE RENEWAL OF NUCLEAR POWER PLANTS [1]—Continued

Issue	Category [2]	Finding [3]
Terrestrial Resources		
Impacts of continued plant operations on terrestrial ecosystems.	2	SMALL, MODERATE, or LARGE. Continued operations, refurbishment, and maintenance activities are expected to keep terrestrial communities in their current condition. Application of best management practices would reduce the potential for impacts. The magnitude of impacts would depend on the nature of the activity, the status of the resources that could be affected, and the effectiveness of mitigation.
Exposure of terrestrial organisms to radionuclides.	1	SMALL. Doses to terrestrial organisms are expected to be well below exposure guidelines developed to protect these organisms.
Cooling system impacts on terrestrial resources (plants with once-through cooling systems or cooling ponds).	1	SMALL. No adverse effects to terrestrial plants or animals have been reported as a result of increased water temperatures, fogging, humidity, or reduced habitat quality. Due to the low concentrations of contaminants in cooling system effluents, uptake and accumulation of contaminants in the tissues of wildlife exposed to the contaminated water or aquatic food sources are not expected to be significant issues.
Cooling tower impacts on vegetation (plants with cooling towers).	1	SMALL. Impacts from salt drift, icing, fogging, or increased humidity associated with cooling tower operation have the potential to affect adjacent vegetation, but these impacts have been small at operating nuclear power plants and are not expected to change over the license renewal term.
Bird collisions with cooling towers and transmission lines.	1	SMALL. Bird collisions with cooling towers and transmission lines occur at rates that are unlikely to affect local or migratory populations.
Water use conflicts with terrestrial resources (plants with cooling ponds or cooling towers using make-up water from a river with low flow).	2	SMALL or MODERATE. Impacts on terrestrial resources in riparian communities affected by water use conflicts could be of moderate significance in some situations.
Transmission line ROW management impacts on terrestrial resources.	1	SMALL. Continued ROW management during the license renewal term is expected to keep terrestrial communities in their current condition. Application of best management practices would reduce the potential for impacts.
Electromagnetic fields on flora and fauna (plants, agricultural crops, honeybees, wildlife, livestock).	1	SMALL. No significant impacts of electromagnetic fields on terrestrial flora and fauna have been identified. Such effects are not expected to be a problem during the license renewal term.
Aquatic Resources		
Impingement and entrainment of aquatic organisms (plants with once-through cooling systems or cooling ponds).	2	SMALL, MODERATE, or LARGE. The impacts of impingement and entrainment are small at many plants but may be moderate or even large at a few plants with once-through and cooling-pond cooling systems, depending on cooling system withdrawal rates and volumes and the aquatic resources at the site.
Impingement and entrainment of aquatic organisms (plants with cooling towers).	1	SMALL. Impingement and entrainment rates are lower at plants that use closed-cycle cooling with cooling towers because the rates and volumes of water withdrawal needed for makeup are minimized.
Thermal impacts on aquatic organisms (plants with once-through cooling systems or cooling ponds).	2	SMALL, MODERATE, or LARGE. Most of the effects associated with thermal discharges are localized and are not expected to affect overall stability of populations or resources. The magnitude of impacts, however, would depend on site-specific thermal plume characteristics and the nature of aquatic resources in the area.
Thermal impacts on aquatic organisms (plants with cooling towers).	1	SMALL. Thermal effects associated with plants that use cooling towers are small because of the reduced amount of heated discharge.
Effects of cooling water discharge on dissolved oxygen, gas supersaturation, and eutrophication.	1	SMALL. Gas supersaturation was a concern at a small number of operating nuclear power plants with once-through cooling systems but has been satisfactorily mitigated. Low dissolved oxygen was a concern at one nuclear power plant with a once-through cooling system but has been effectively mitigated. Eutrophication (nutrient loading) and resulting effects on chemical and biological oxygen demands have not been found to be a problem at operating nuclear power plants.
Effects of non-radiological contaminants on aquatic organisms.	1	SMALL. Best management practices and discharge limitations of NPDES permits are expected to minimize the potential for impacts to aquatic resources. Accumulation of metal contaminants has been a concern at a few nuclear power plants but has been satisfactorily mitigated by replacing copper alloy condenser tubes with those of another metal.
Exposure of aquatic organisms to radionuclides.	1	SMALL. Doses to aquatic organisms are expected to be well below exposure guidelines developed to protect these aquatic organisms.
Effects of dredging on aquatic organisms	1	SMALL. Effects of dredging on aquatic resources tend to be of short duration (years or less) and localized. Dredging requires permits from the U.S. Army Corps of Engineers, State environmental agencies, and other regulatory agencies.
Water use conflicts with aquatic resources (plants with cooling ponds or cooling towers using make-up water from a river with low flow).	2	SMALL or MODERATE. Impacts on aquatic resources in instream communities affected by water use conflicts could be of moderate significance in some situations.
Refurbishment impacts on aquatic resources.	1	SMALL. Refurbishment impacts with appropriate mitigation are not expected to change aquatic communities from their current condition.

TABLE B–1—SUMMARY OF FINDINGS ON NEPA ISSUES FOR LICENSE RENEWAL OF NUCLEAR POWER PLANTS [1]—Continued

Issue	Category [2]	Finding [3]
Impacts of transmission line ROW management on aquatic resources.	1	SMALL. Application of best management practices to ROW near aquatic systems would reduce the potential for impacts.
Losses from predation, parasitism, and disease among organisms exposed to sublethal stresses.	1	SMALL. These types of losses have not been found to be a problem at operating nuclear power plants and are not expected to be a problem during the license renewal term.
Stimulation of aquatic nuisance species (*e.g.*, shipworms).	1	SMALL. Stimulation of nuisance organisms has been satisfactorily mitigated at the single nuclear power plant with a once-through cooling system where previously it was a problem. It has not been found to be a problem at operating nuclear power plants with cooling towers or cooling ponds and is not expected to be a problem during the license renewal term.
Threatened, Endangered, and Protected Species and Essential Fish Habitat		
Threatened, endangered, and protected species and essential fish habitat.	2	SMALL, MODERATE, or LARGE. The magnitude of impacts on threatened, endangered, and protected species and essential fish habitat would depend on the occurrence of listed species and habitats and the effects of power plant systems on them. Consultation with appropriate agencies would be needed to determine whether special status species or habitats are present and whether they would be adversely affected by activities associated with license renewal.
Historic and Cultural Resources		
Historic and cultural resources	2	SMALL, MODERATE, or LARGE. Continued operations and refurbishment associated with the license renewal term are expected to have no more than small impacts on historic and cultural resources located onsite and in the transmission line ROW because most impacts could be mitigated by avoiding those resources. The National Historic Preservation Act (NHPA) requires the Federal agency to consult with the State Historic Preservation Officer (SHPO) and appropriate Native American tribes to determine the potential impacts and mitigation. *See* § 51.14(a).
Socioeconomics		
Employment and income, recreation and tourism.	1	SMALL. Although most nuclear plants have large numbers of employees with higher than average wages and salaries, employment and income impacts from continued operations and refurbishment are expected to be small. Nuclear plant operations, employee spending, power plant expenditures, and tax payments have an effect on local economies. Changes in plant operations, employment and expenditures would have a greater effect on rural economies than on semi-urban economies.
Tax revenues	1	SMALL. Nuclear plants provide tax revenue to local jurisdictions in the form of property tax payments, payments in lieu of tax (PILOT), or tax payments on energy production. The amount of tax revenue paid during the license renewal term from continued operations and refurbishment is not expected to change, since the assessed value of the power plant, payments on energy production and PILOT payments are also not expected to change.
Community services and education	1	SMALL. Changes to local community and educational services would be small from continued operations and refurbishment associated with the license renewal term. With no increase in employment, value of the power plant, payments on energy production, and PILOT payments expected during the license renewal term, community and educational services would not be affected by continued power plant operations. Changes in employment and tax payments would have a greater effect on jurisdictions receiving a large portion of annual revenues from the power plant than on jurisdictions receiving the majority of their revenues from other sources.
Population and housing	1	SMALL. Changes to regional population and housing availability and value would be small from continued operations and refurbishment associated with the license renewal term. With no increase in employment expected during the license renewal term, population and housing availability and values would not be affected by continued power plant operations. Changes in housing availability and value would have a greater effect on sparsely populated areas than areas with higher density populations.
Transportation	1	SMALL. Changes to traffic volumes would be small from continued operations and refurbishment activities associated with the license renewal term. Changes in employment would have a greater effect on rural areas, with less developed local and regional networks. Impacts would be less noticeable in semi-urban areas depending on the quality and extent of local access roads and the timing of plant shift changes when compared to typical local usage.
Human Health		
Radiation exposures to the public	1	SMALL. Radiation doses to the public from continued operations and refurbishment associated with the license renewal term are expected to continue at current levels, and would be well below regulatory limits.

TABLE B–1—SUMMARY OF FINDINGS ON NEPA ISSUES FOR LICENSE RENEWAL OF NUCLEAR POWER PLANTS [1]—Continued

Issue	Category [2]	Finding [3]
Radiation exposures to occupational workers.	1	SMALL. Occupational doses from continued operations and refurbishment associated with the license renewal term are expected to be within the range of doses experienced during the current license term, and would continue to be well below regulatory limits.
Human health impact from chemicals	1	SMALL. Chemical hazards to workers would be minimized by observing good industrial hygiene practices. Chemical releases to the environment and the potential for impacts to the public are minimized by adherence to discharge limitations of NPDES permits.
Microbiological hazards to the public (plants with cooling ponds or canals or cooling towers that discharge to a river).	2	SMALL, MODERATE, or LARGE. These organisms are not expected to be a problem at most operating plants except possibly at plants using cooling ponds, lakes, or canals that discharge to rivers. Impacts would depend on site-specific characteristics.
Microbiological hazards to plant workers ...	1	SMALL. Occupational health impacts are expected to be controlled by continued application of accepted industrial hygiene practices to minimize worker exposures.
Chronic effects of electromagnetic fields (EMFs) [5].	N/A [4]	Uncertain impact. Studies of 60–Hz EMFs have not uncovered consistent evidence linking harmful effects with field exposures. EMFs are unlike other agents that have a toxic effect (*e.g.*, toxic chemicals and ionizing radiation) in that dramatic acute effects cannot be forced and longer-term effects, if real, are subtle. Because the state of the science is currently inadequate, no generic conclusion on human health impacts is possible.
Physical occupational hazards	1	SMALL. Occupational safety and health hazards are generic to all types of electrical generating stations, including nuclear power plants, and is of small significance if the workers adhere to safety standards and use protective equipment.
Electric shock hazards	2	SMALL, MODERATE, or LARGE. Electrical shock potential is of small significance for transmission lines that are operated in adherence with the National Electrical Safety Code (NESC). Without a review of each nuclear plant transmission line conformance with NESC criteria, it is not possible to determine the significance of the electrical shock potential.
Postulated Accidents		
Design-basis accidents	1	SMALL. The NRC staff has concluded that the environmental impacts of design-basis accidents are of small significance for all plants.
Severe accidents	2	SMALL. The probability-weighted consequences of atmospheric releases, fallout onto open bodies of water, releases to groundwater, and societal and economic impacts from severe accidents are small for all plants. However, alternatives to mitigate severe accidents must be considered for all plants that have not considered such alternatives.
Environmental Justice		
Minority and low-income populations	2	SMALL or MODERATE. Impacts to minority and low-income populations and subsistence consumption will be addressed in plant-specific reviews. *See* NRC Policy Statement on the Treatment of Environmental Justice Matters in NRC Regulatory and Licensing Actions (69 FR 52040).
Solid Waste Management		
Low-level waste storage and disposal	1	SMALL. The comprehensive regulatory controls that are in place and the low public doses being achieved at reactors ensure that the radiological impacts to the environment would remain small during the term of a renewed license.
Onsite storage of spent nuclear fuel	1	SMALL. The expected increase in the volume of spent fuel from an additional 20 years of operation can be safely accommodated onsite with small environmental effects through dry or pool storage at all plants, if a permanent repository or monitored retrievable storage is not available.
Offsite radiological impacts of spent nuclear fuel and high-level waste disposal.	1	For the high-level waste and spent-fuel disposal component of the fuel cycle, the EPA established a dose limit of 15 millirem (0.15 mSv) per year for the first 10,000 years and 100 millirem (1.0 mSv) per year between 10,000 years and 1 million years for offsite releases of radionuclides at the proposed repository at Yucca Mountain, Nevada. The Commission concludes that the impacts would not be sufficiently large to require the NEPA conclusion, for any plant, that the option of extended operation under 10 CFR Part 54 should be eliminated. Accordingly, while the Commission has not assigned a single level of significance for the impacts of spent fuel and high level waste disposal, this issue is considered Category 1.

TABLE B–1—SUMMARY OF FINDINGS ON NEPA ISSUES FOR LICENSE RENEWAL OF NUCLEAR POWER PLANTS [1]—Continued

Issue	Category [2]	Finding [3]
Mixed-waste storage and disposal	1	SMALL. The comprehensive regulatory controls and the facilities and procedures that are in place ensure proper handling and storage, as well as negligible doses and exposure to toxic materials for the public and the environment at all plants. License renewal would not increase the small, continuing risk to human health and the environment posed by mixed waste at all plants. The radiological and nonradiological environmental impacts of long-term disposal of mixed waste from any individual plant at licensed sites are small.
Nonradioactive waste storage and disposal.	1	SMALL. No changes to systems that generate nonradioactive waste are anticipated during the license renewal term. Facilities and procedures are in place to ensure continued proper handling, storage, and disposal, as well as negligible exposure to toxic materials for the public and the environment at all plants.
Cumulative Impacts		
Cumulative impacts	2	Cumulative impacts of license renewal must be considered on a plant-specific basis. Impacts would depend on regional resource characteristics, the resource-specific impacts of license renewal, and the cumulative significance of other factors affecting the resource.
Uranium Fuel Cycle		
Offsite radiological impacts—individual impacts from other than the disposal of spent fuel and high-level waste.	1	SMALL. The impacts to the public from radiological exposures have been considered by the Commission in Table S–3 of this part. Based on information in the GEIS, impacts to individuals from radioactive gaseous and liquid releases, including radon-222 and technetium-99, would remain at or below the NRC's regulatory limits.
Offsite radiological impacts—collective impacts from other than the disposal of spent fuel and high-level waste.	1	There are no regulatory limits applicable to collective doses to the general public from fuel-cycle facilities. The practice of estimating health effects on the basis of collective doses may not be meaningful. All fuel-cycle facilities are designed and operated to meet the applicable regulatory limits and standards. The Commission concludes that the collective impacts are acceptable. The Commission concludes that the impacts would not be sufficiently large to require the NEPA conclusion, for any plant, that the option of extended operation under 10 CFR Part 54 should be eliminated. Accordingly, while the Commission has not assigned a single level of significance for the collective impacts of the uranium fuel cycle, this issue is considered Category 1.
Nonradiological impacts of the uranium fuel cycle.	1	SMALL. The nonradiological impacts of the uranium fuel cycle resulting from the renewal of an operating license for any plant would be small.
Transportation	1	SMALL. The impacts of transporting materials to and from uranium-fuel-cycle facilities on workers, the public, and the environment are expected to be small.
Termination of Nuclear Power Plant Operations and Decommissioning		
Termination of plant operations and decommissioning.	1	SMALL. License renewal is expected to have a negligible effect on the impacts of terminating operations and decommissioning on all resources.

[1] Data supporting this table are contained in NUREG–1437, Revision 1, ''Generic Environmental Impact Statement for License Renewal of Nuclear Plants'' (XX 20XX).

[2] The numerical entries in this column are based on the following category definitions:

Category 1: For the issue, the analysis reported in the Generic Environmental Impact Statement has shown:

(1) The environmental impacts associated with the issue have been determined to apply either to all plants or, for some issues, to plants having a specific type of cooling system or other specified plant or site characteristic;

(2) A single significance level (*i.e.*, small, moderate, or large) has been assigned to the impacts (except for collective off site radiological impacts from the fuel cycle and from high level waste and spent fuel disposal); and

(3) Mitigation of adverse impacts associated with the issue has been considered in the analysis, and it has been determined that additional plant-specific mitigation measures are likely not to be sufficiently beneficial to warrant implementation.

The generic analysis of the issue may be adopted in each plant-specific review.

Category 2: For the issue, the analysis reported in the Generic Environmental Impact Statement has shown that one or more of the criteria of Category 1 cannot be met, and therefore additional plant-specific review is required.

[3] The impact findings in this column are based on the definitions of three significance levels. Unless the significance level is identified as beneficial, the impact is adverse, or in the case of ''small,'' may be negligible. The definitions of significance follow:

SMALL—For the issue, environmental effects are not detectable or are so minor that they will neither destabilize nor noticeably alter any important attribute of the resource. For the purposes of assessing radiological impacts, the Commission has concluded that those impacts that do not exceed permissible levels in the Commission's regulations are considered small as the term is used in this table.

MODERATE—For the issue, environmental effects are sufficient to alter noticeably, but not to destabilize, important attributes of the resource.

LARGE—For the issue, environmental effects are clearly noticeable and are sufficient to destabilize important attributes of the resource.

For issues where probability is a key consideration (*i.e.*, accident consequences), probability was a factor in determining significance.

[4] NA (not applicable). The categorization and impact finding definitions do not apply to these issues.

[5] If, in the future, the Commission finds that, contrary to current indications, a consensus has been reached by appropriate Federal health agencies that there are adverse health effects from electromagnetic fields, the commission will require applicants to submit plant-specific reviews of these health effects as part of their license renewal applications. Until such time, applicants for license renewal are not required to submit information on this issue.

Dated at Rockville, Maryland, this 24th day of July 2009.

For the Nuclear Regulatory Commission.

Annette L. Vietti-Cook,

Secretary of the Commission.

[FR Doc. E9–18284 Filed 7–30–09; 8:45 am]

BILLING CODE 7590–01–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2007–0115; Directorate Identifier 2007–CE–080–AD]

RIN 2120–AA64

Airworthiness Directives; Reims Aviation S.A. Model F406 Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Notice of proposed rulemaking (NPRM); rescission.

SUMMARY: We propose to rescind an airworthiness directive (AD) for the products listed above. The existing AD resulted from mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as:

On several occasions, leaks of the landing gear emergency blowdown bottle have been reported. Investigations revealed that the leakage was located on the nut manometer because of a design deficiency in the bottle head.

If left uncorrected, the internal bottle pressure could not be maintained to an adequate level and could result in a malfunction, failing to extend landing gears during emergency situations.

Since issuance of that AD, we have determined that the condition is not unsafe. This proposed action to rescind the AD would allow the public the opportunity to comment on the FAA's determination of the condition being unsafe before it is officially rescinded.

DATES: We must receive comments on this proposed AD by September 14, 2009.

ADDRESSES: You may send comments by any of the following methods:

- *Federal eRulemaking Portal:* Go to *http://www.regulations.gov.* Follow the instructions for submitting comments.
- *Fax:* (202) 493–2251.
- *Mail:* U.S. Department of Transportation, Docket Operations, M–30, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue, SE., Washington, DC 20590.
- *Hand Delivery:* U.S. Department of Transportation, Docket Operations, M–30, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue, SE., Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

Examining the AD Docket

You may examine the AD docket on the Internet at *http://www.regulations.gov*; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD rescission, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (telephone (800) 647–5527) is in the **ADDRESSES** section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Mike Kiesov, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329–4144; fax: (816) 329–4090.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD rescission. Send your comments to an address listed under the **ADDRESSES** section. Include ''Docket No. FAA–2007–0115; Directorate Identifier 2007–CE–080–AD'' at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD rescission. We will consider all comments received by the closing date and may amend this proposed AD rescission because of those comments.

We will post all comments we receive, without change, to *http://www.regulations.gov,* including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD rescission.

Discussion

On December 13, 2007, we issued AD 2007–26–08, Amendment 39–15310 (72 FR 73258, December 27, 2007). That AD required actions intended to address an unsafe condition on the products listed above.

Since we issued AD 2007–26–08, we have reconsidered this AD with respect to the determination of an unsafe condition.

We issued AD 2007–26–08 in consideration of the MCAI from an aviation authority of another country to identify and correct an unsafe condition on an airplane. At that time, we were not aware that there were several Cessna Aircraft Company (Cessna) model airplanes equipped with the same blowdown bottle part number (P/N) 9910154–4.

Before issuing an AD on domestic products, we prepare a risk assessment of the unsafe condition. A risk assessment was done for the Cessna model airplanes. The result of that assessment was not high enough to support AD action since the system is a backup system to the primary landing gear extension system.

Based on this risk assessment, we reevaluated the existing AD against Reims Aviation Model 406 airplanes (AD 2007–28–08) and determined the condition identified in the AD is not an unsafe condition.

FAA's Determination and Requirements of the Proposed AD Rescission

We are proposing this AD rescission because we evaluated all information and determined the condition identified in the existing AD is not unsafe and the AD is not necessary.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. ''Subtitle VII: Aviation Programs,'' describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in ''Subtitle VII, Part A, Subpart III, Section 44701: General requirements.'' Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses rescinding the determination of an unsafe condition that is likely to exst or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this proposed AD rescission would not have federalism implications under Executive Order 13132. This proposed AD rescission would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of

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Part II

Nuclear Regulatory Commission

10 CFR Part 51, 54
Revisions to Environmental Review for Renewal of Nuclear Power Plant Operating Licenses; Preparation of Environmental Reports for Nuclear Power Plant License Renewal Applications; License Renewal of Nuclear Power Plants; Generic Environmental Impact Statement and Standard Review Plans for Environmental Reviews; Final Rules

NUCLEAR REGULATORY COMMISSION

10 CFR Part 51

RIN 3150–AI42

[NRC–2008–0608]

Revisions to Environmental Review for Renewal of Nuclear Power Plant Operating Licenses

AGENCY: Nuclear Regulatory Commission.

ACTION: Final rule.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) is amending its environmental protection regulations by updating the Commission's 1996 findings on the environmental effect of renewing the operating license of a nuclear power plant. The final rule redefines the number and scope of the environmental impact issues that must be addressed by the NRC during license renewal environmental reviews. This final rule also incorporates lessons learned and knowledge gained from license renewal environmental reviews conducted by the NRC since 1996.

DATES: This rule is effective on July 22, 2013. However, compliance is not required until June 20, 2014.

ADDRESSES: Please refer to Docket ID NRC–2008–0608 when contacting the NRC about the availability of information for this final rule. You may access information and comment submittals related to this final rulemaking, which the NRC possesses and is publicly available, by the following methods:

• *Federal Rulemaking Web site:* Go to *http://www.regulations.gov* and search for Docket ID NRC–2008–0608. Address questions about NRC dockets to Carol Gallagher; telephone: 301–492–3668; email: *Carol.Gallagher@nrc.gov.* For technical questions, contact the individuals listed in the **FOR FURTHER INFORMATION CONTACT** section of this final rule.

• *NRC's Agencywide Documents Access and Management System (ADAMS*): You may access publicly available documents online in the NRC Library at *http://www.nrc.gov/reading-rm/adams.html.* To begin the search, select ''*ADAMS Public Documents*'' and then select ''*Begin Web-based ADAMS Search.*'' For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1–800–397–4209, 301–415–4737, or by email to *pdr.resource@nrc.gov.* The ADAMS accession number for each document referenced in this notice (if that document is available in ADAMS) is provided the first time that a document is referenced. In addition, for the convenience of the reader, the ADAMS accession numbers are provided in a table in Section XII, ''Availability of Documents,'' of this document.

• *NRC's PDR:* You may examine and purchase copies of public documents at the NRC's PDR, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

FOR FURTHER INFORMATION CONTACT: Mr. Stewart Schneider, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001; telephone: 301–415–4123; email: *Stewart.Schneider@nrc.gov;* or Mr. Jeffrey Rikhoff, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001; telephone: 301–415–1090; email: *Jeffrey.Rikhoff@nrc.gov.*

Executive Summary

Purpose of the Regulatory Action

The Atomic Energy Act of 1954 authorizes the NRC to issue commercial nuclear power plant operating licenses for up to 40 years. The NRC's regulations allow for the renewal of these operating licenses for up to an additional 20 years. The license renewal process includes reviewing a license renewal application, conducting the assessment, and then, if all applicable safety standards are met, renewing the license. The NRC's review of a license renewal application proceeds along two independent regulatory tracks: one for safety issues and another for environmental issues. The license renewal process is defined by a clear set of regulations that are designed to ensure safe operation and protection of the environment during the license renewal term. The NRC's regulations for the license renewal safety review are set forth in Part 54 of Title 10 of the *Code of Federal Regulations* (10 CFR). The NRC's environmental protection regulations are set forth in 10 CFR part 51.

The renewal application is the principal document that an applicant provides to both request and support renewal for a nuclear power reactor's operating license. The license renewal application includes both general and technical information that demonstrates that an applicant is in compliance with the NRC's regulations in 10 CFR part 54. During the renewal process, the license renewal applicant must confirm whether the design assumptions used for the original licensing basis will continue to be valid throughout the period of extended operation and that the aging effects will be adequately managed. The applicant must demonstrate that the effects of aging will be managed in such a way that the intended functions of ''passive'' or ''long-lived'' structures and components (such as the reactor vessel, reactor coolant system, piping, steam generators, pressurizer, pump casings, and valves) will be maintained during the license renewal term (also known as the period of extended operation). For active components, such as motors, diesel generators, cooling fans, batteries, relays, and switches, the Commission's ongoing regulatory oversight programs already ensure that the components continue to perform their intended function during the period of license renewal. This information must be sufficiently detailed in the application to permit the NRC staff to determine if the applicant's management of these issues is adequate to allow operation during the extended period of operation without undue risk to the public and workers' health and safety.

In addition to the safety assessment, the applicant must also prepare an evaluation of the potential impacts to the environment of facility operation for an additional 20 years. Under the NRC's environmental protection regulations in 10 CFR part 51, which implement the National Environmental Policy Act (NEPA), renewal of a nuclear power plant operating license requires the preparation of an environmental impact statement (EIS). To support the preparation of these EISs, the NRC issued a rule in 1996 to define which impacts would essentially be the same at all nuclear power plants (Category 1 issues) and which ones could be different at different plants and would require a plant-specific analysis to determine the impacts (Category 2 issues). For each license renewal application, those impacts that require a plant-specific analysis must be analyzed by the applicant in its environmental report and by the NRC in its associated EIS. The final rule amends those regulations by updating the Commission's 1996 rule. The final rule redefines the number and scope of the environmental impact issues that must be addressed by the NRC and applicants during license renewal environmental reviews. These changes are based primarily on lessons learned and knowledge gained from license renewal environmental reviews conducted by the NRC since 1996.

The NRC prepared a regulatory analysis to determine the expected quantitative and qualitative costs and benefits of the final rule. The analysis concluded that the final rule will result

in net savings to the industry and the NRC. For more information, please see the regulatory analysis (ADAMS Accession No. ML110760321).

Summary of the Major Rule Changes

In the 1996 rule, there were 92 environmental impact issues, 23 of which required a plant-specific analysis (Category 2 issues) during license renewal environmental reviews. In the final rule, there are 78 environmental impact issues, 17 of which require a plant-specific analysis. The following bullets summarize the major changes to the rule:

- Based on the related nature of the issues, several Category 1 issues were consolidated with other Category 1 issues. This includes some issues that were changed from Category 2 to Category 1 and subsequently combined with other, related Category 1 issues. Similarly, several Category 2 issues were combined with related Category 2 issues.
- New Category 1 issues were added: geology and soils; effects of dredging on surface water quality; groundwater use and quality; exposure of terrestrial organisms to radionuclides; exposure of aquatic organisms to radionuclides; effects of dredging on aquatic organisms; impacts of transmission line right-of-way management on aquatic resources; employment and income; tax revenues; human health impacts from chemicals; and physical occupational hazards.
- Several issues were changed from Category 2 to Category 1: Offsite land use, air quality, public services (several issues), and population and housing.
- New Category 2 issues were added: Radionuclides released to groundwater, water use conflicts with terrestrial resources, water use conflicts with aquatic resources, and cumulative impacts.
- One uncharacterized issue was reclassified as Category 2: Environmental justice/minority and low-income populations.
- One Category 1 issue was revised to narrow the scope of its finding due to the United States Court of Appeals for the District of Columbia Circuit (D.C. Circuit) decision in *New York* v. *NRC,* 681 F.3d 471 (D.C. Cir. 2012), which vacated the NRC's 2010 Waste Confidence Decision and Rule (75 FR 81032 and 81037; December 23, 2010): Onsite storage of spent nuclear fuel.
- One Category 1 issue was reclassified as uncategorized due to the *New York* v. *NRC* decision: Offsite radiological impacts of spent nuclear fuel and high-level waste disposal.

SUPPLEMENTARY INFORMATION:

I. Background

Rulemaking History

In 1986, the NRC initiated a program to develop license renewal regulations and associated regulatory guidance in anticipation of receiving applications for the renewal of nuclear power plant operating licenses. In 1996, the NRC published a final rule that amended the environmental protection regulations in 10 CFR part 51 for applicants seeking to renew an operating license for up to an additional 20 years.[1] The 1996 final rule was based upon the analyses and findings of a May 1996 NRC environmental impact statement, ''Generic Environmental Impact Statement for License Renewal of Nuclear Plants,'' NUREG–1437 (the ''1996 GEIS'') (Vol. 1, ''Main Report,'' ADAMS Accession No. ML040690705; Vol. 2, ''Appendices,'' ADAMS Accession No. ML040690738).

Based upon the findings of the 1996 GEIS, the 1996 final rule identified those license renewal environmental impact issues for which a generic analysis had been determined to be appropriate and therefore, did not have to be addressed by a license renewal applicant in its plant-specific environmental report or by the NRC in its plant-specific supplemental environmental impact statements (SEISs) to the 1996 GEIS. Similarly, based upon the findings of the 1996 GEIS, the 1996 final rule identified those environmental impacts for which a site- or plant-specific analysis was required, both by the applicant in its environmental report and by the NRC in its SEIS. The 1996 final rule, amongst other amendments to 10 CFR part 51, added Appendix B to Subpart A of 10 CFR part 51, ''Environmental Effect of Renewing the Operating License of a Nuclear Power Plant.'' Appendix B included Table B–1, ''Summary of Findings on NEPA Issues for License Renewal of Nuclear Power Plants,'' which summarized the findings of the 1996 GEIS.

In preparing the 1996 GEIS, the Commission determined that certain environmental impacts associated with the renewal of a nuclear power plant operating license were the same or similar for all plants and, as such, could be treated on a generic basis. In this way, repetitive reviews of these environmental impacts could be avoided. The Commission based its generic assessment of certain environmental impacts on the following factors:

(1) License renewal will involve nuclear power plants for which the environmental impacts of operation are well understood as a result of lessons learned and knowledge gained from operating experience and completed license renewals.

(2) Activities associated with license renewal are expected to be within this range of operating experience; thus, environmental impacts can be reasonably predicted.

(3) Changes in the environment around nuclear power plants are gradual and predictable.

The 1996 GEIS improved the efficiency of the license renewal process by: (1) Providing an evaluation of the types of environmental impacts that may occur from renewing commercial nuclear power plant operating licenses; (2) identifying and assessing impacts that are expected to be generic (i.e., the same or similar) at all nuclear power plants or plants with specified plant or site characteristics; and (3) defining the number and scope of environmental impacts that need to be addressed in plant-specific SEISs to the 1996 GEIS.

In short, the 1996 final rule identified environmental impact issues (i.e., Category 1 issues)[2] that do not have to

[1] 61 FR 28467 (June 5, 1996).

[2] A Category 1 issue is one that meets the following criteria: (1) The environmental impacts

Continued

be addressed by licensees in environmental reports for nuclear power plant license renewal applications or by the NRC in plant-specific SEISs because these issues have been addressed generically for all nuclear power plants in the 1996 GEIS. Similarly, the 1996 final rule also identified environmental impact issues (i.e., Category 2 issues) [3] that must be addressed in plant-specific reviews by licensees in their environmental reports and by the NRC in the SEISs.

On December 18, 1996 (61 FR 66537), the NRC amended the final rule published in 1996 to incorporate minor clarifying and conforming changes and to add language omitted from Table B–1 in Appendix B to Subpart A of 10 CFR part 51 (hereafter ''Table B–1 in Appendix B to Subpart A of 10 CFR Part 51'' is referred to as ''Table B–1'').

1999 Final Rule

The NRC amended 10 CFR part 51, including Table B–1, on September 3, 1999 (64 FR 48496). This amendment expanded the generic findings pertaining to the environmental impacts resulting from transportation of fuel and waste to and from a single nuclear power plant. This amendment also incorporated rule language consistent with the 1996 GEIS, which addressed local traffic impacts attributable to the continued operations of a nuclear power plant during the license renewal term.

Current Rulemaking

As stated in the 1996 final rule that incorporated the findings of the GEIS in 10 CFR part 51, the NRC recognized that environmental impact issues might change over time and that additional issues may need to be considered. As further stated in the preamble to Table B–1, the NRC indicated that it intended to review the material in Table B–1 on a 10-year basis.

The NRC began this review on June 3, 2003, by publishing a notice of intent to revise the 1996 GEIS (68 FR 33209). As part of this process and pursuant to 10 CFR 51.29, the NRC conducted scoping and held a series of public meetings (*see* 74 FR 38119 for more details). The original public comment period began in June 2003 and closed in September 2003. The project was inactive for the next 2 years due to limited NRC staff resources and competing demands. On October 3, 2005 (70 FR 57628), the NRC reopened the public comment period and extended it until December 30, 2005.

On July 31, 2009 (74 FR 38117), the NRC published the proposed rule, ''Revisions to Environmental Review for Renewal of Nuclear Power Plant Operating Licenses,'' for public comment in the **Federal Register**. The proposed rule would amend Table B–1 by updating the Commission's 1996 findings on the environmental impacts related to the renewal of nuclear power plant operating licenses and other NRC environmental protection regulations (e.g., 10 CFR 51.53, which sets forth the contents of the applicant's environmental report). Together with the proposed rule, the NRC also published a notice of availability of the draft revised GEIS (ADAMS Accession No. ML090220654); a proposed Revision 1 of Regulatory Guide (RG) 4.2, Supplement 1, ''Preparation of Environmental Reports for Nuclear Power Plant License Renewal Applications'' (ADAMS Accession No. ML091620409); and a proposed Revision 1 to NUREG–1555, Supplement 1, ''Standard Review Plans for Environmental Reviews for Nuclear Power Plants'' (ADAMS Accession No. ML090230497), in the **Federal Register** (74 FR 38238). All of the documents requested public comments.

The proposed amendments were based on consideration of (1) Comments received from the public during the public scoping period, (2) a review of comments received on plant-specific SEISs completed since the 1996 GEIS was issued, and (3) lessons learned and knowledge gained from previous and ongoing license renewal environmental reviews. The history of this rulemaking is discussed in more detail in the July 31, 2009 (74 FR 38117), proposed rule. The draft revised GEIS provided the regulatory basis for the July 2009 proposed rule.

The proposed rule provided a 75-day public comment period, which closed on October 14, 2009. The NRC received requests to extend the comment period to provide the public more time to analyze and review the legal, regulatory, and policy issues covered by the proposed rule and supporting documents. On October 7, 2009 (74 FR 51522), the NRC granted the requests, and the public comment period for the proposed rule and the proposed revisions to the GEIS, the regulatory guide, and standard review plan was extended to January 12, 2010.

II. Public Meetings

During the public comment period, the NRC conducted six public meetings to solicit comments on the proposed rule, draft revised GEIS, and related draft guidance documents. The official transcripts, written comments, and meeting summaries for the following public meetings are available electronically for public inspection at the NRC's PDR or online in the NRC Library at *http://www.nrc.gov/reading-rm/adams.html:*

(1) September 15, 2009, Atlanta, GA (ADAMS Accession No. ML092810007);

(2) September 17, 2009, Newton, MA (ADAMS Accession No. ML092931681);

(3) September 24, 2009, Oak Brook, IL (ADAMS Accession No. ML092931545);

(4) October 1, 2009, Rockville, MD (ADAMS Accession No. ML092931678);

(5) October 20, 2009, Pismo Beach, CA (ADAMS Accession No. ML093070174); and

(6) October 22, 2009, Dana Point, CA (ADAMS Accession No. ML093100505).

A summary of these meetings is publicly available under ADAMS Accession No. ML093070141.

On June 21, 2011, the NRC conducted another public meeting to discuss final rule implementation in Rockville, MD. No public comments were solicited at this meeting because the public comment period for the proposed rule had closed on January 12, 2010. A summary of this meeting is publicly available in ADAMS under Accession No. ML11182B535.

III. Discussion

1996 GEIS

Under the NRC's environmental protection regulations in 10 CFR part 51, which implements Section 102(2) of NEPA, renewal of a nuclear power plant operating license requires the preparation of an EIS (*see* 10 CFR 51.20(b)(2)). The 1996 GEIS summarized the findings of a systematic inquiry into the environmental impacts of continued operations and refurbishment activities associated with license renewal. Of the 92 environmental issues identified and analyzed by the NRC, 69 issues were determined to be generic (i.e., Category 1); 21 were determined to be plant-specific (i.e., Category 2); and two did not fit into either category (i.e., uncategorized). Category 1 issues concern those potential environmental impacts resulting from license renewal that are common or generic to all

associated with the issue have been determined to apply either to all plants or, for some issues, to plants having a specific type of cooling system or other specified plant or site characteristic; (2) a single significance level (i.e., small, moderate, or large) has been assigned to the impacts (except for collective offsite radiological impacts from the fuel cycle and from high-level waste and spent fuel disposal); and (3) mitigation of adverse impacts associated with the issue has been considered in the analysis, and it has been determined that additional plant-specific mitigation measures are not likely to be sufficiently beneficial to warrant implementation.

[3] A Category 2 issue is one where one or more of the Category 1 criteria cannot be met, and therefore additional plant-specific review is required.

nuclear power plants (or for some issues, to plants having a specific type of cooling system or other specified plant or site characteristic). Category 2 issues concern those potential environmental impacts resulting from license renewal that are not common or generic to all nuclear power plants and, as such, require a plant-specific analysis to determine the level of impact. The two uncategorized issues would be addressed by the NRC in each SEIS. Table B–1 summarizes the findings of the environmental impact analyses conducted for the 1996 GEIS and lists each issue and its category level.

Impact levels (small, moderate, or large) were determined for most NEPA issues (e.g., land use, air, water) evaluated in the 1996 GEIS. A small impact means that the environmental effects are not detectable, or are so minor that they would neither destabilize nor noticeably alter any important attribute of the resource. A moderate impact means that the environmental effects are sufficient to alter noticeably, but not destabilize, important attributes of the resource. A large impact means that the environmental effects would be clearly noticeable and would be sufficient to destabilize important attributes of the resource.

The 1996 GEIS has been effective in focusing the NRC's resources on important license renewal environmental impact issues and has increased the efficiency of the environmental review process. Currently, 73 nuclear units at 43 plant sites have received renewed operating licenses.

Revised GEIS

The revised GEIS (Vol. 1, ''Main Report,'' ADAMS Accession No. ML13106A241; Vol. 2, ''Public Comments,'' ADAMS Accession No. ML13106A242; and Vol. 3, ''Appendices,'' ADAMS Accession No. ML13106A244) is both an update and a re-evaluation of the potential environmental impacts arising from the renewal of an operating license for a nuclear power reactor for an additional 20 years. Lessons learned and knowledge gained during previous license renewal environmental reviews provided a significant source of new information for the revised GEIS. In addition, public comments received during previous license renewal environmental reviews were re-examined to validate existing environmental issues and identify new ones. In preparing the revised GEIS, the NRC considered the need to modify, add to, consolidate, or delete any of the 92 environmental issues evaluated in the 1996 GEIS.

In the proposed rule and draft revised GEIS, the NRC carried forward 78 environmental impact issues for detailed consideration. Fifty-eight of these issues were determined to be Category 1. Of the remaining 20 issues, 19 were determined to be Category 2 and one issue, ''Electromagnetic fields, chronic effects,'' remained uncategorized.[4] These issues were summarized in the July 31, 2009 (74 FR 38117), proposed rule.

Based on public comments received on the proposed rule and draft revised GEIS, a number of the environmental impact issues identified in the proposed rule were re-evaluated for detailed consideration in the final revised GEIS and are reflected in the changes made by the final rule. These changes are discussed in detail in Section VIII, ''Final Actions and Basis for Changes to Table B–1,'' of this document and are briefly summarized as follows:

(1) ''Air quality during refurbishment (nonattainment and maintenance areas)'' issue was changed from a Category 2 to a Category 1 issue and renamed, ''Air quality impacts (all plants).''

(2) ''Groundwater and soil contamination'' issue was changed from a Category 2 to a Category 1 issue and consolidated with the ''Groundwater use and quality'' issue into a single renamed Category 1 issue, ''Groundwater contamination and use (non-cooling system impacts).''

(3) ''Thermal impacts on aquatic organisms'' issue was changed to remove several Category 1 thermal impacts issues (these Category 1 issues were consolidated together with a Category 2 thermal impact issue in the proposed rule) to create a new separate combined Category 1 issue, ''Infrequently reported thermal impacts (all plants),'' which also includes the previously separate ''Stimulation of aquatic nuisance species (e.g., shipworms),'' Category 1 thermal impact issue.

(4) ''Impingement and entrainment of aquatic organisms'' issue was changed to remove a single impingement and entrainment Category 1 issue (consolidated with other impingement and entrainment issues in the proposed rule) to create a new, separate Category 1 issue, ''Entrainment of phytoplankton and zooplankton (all plants).''

In addition to the changes previously discussed, the NRC has made changes to the ''Onsite storage of spent nuclear fuel'' issue and the ''Offsite radiological impacts of spent nuclear fuel and high-level waste disposal'' issue as a result of the United States Court of Appeals decision in *New York* v. *NRC,* 681 F.3d 471 (D.C. Cir. 2012), which vacated the NRC's 2010 Waste Confidence Decision and Rule (75 FR 81032 and 81037; December 23, 2010). The Category 1 ''Onsite storage of spent nuclear fuel'' issue was revised to limit the period of time covered by the issue to the license renewal term. Similarly, the NRC revised the Category 1 issue, ''Offsite radiological impacts of spent nuclear fuel and high-level waste disposal'' by reclassifying the issue from a Category 1 issue with an impact level of small to an uncategorized issue with an impact level of uncertain. Section V of this document, ''Related Issues of Importance,'' provides further details on the NRC's revisions to these issues in response to the *New York* v. *NRC* decision.

Ultimately, 59 environmental impact issues were determined to be Category 1 and would not require additional plant-specific analysis unless new and significant information is identified during the license renewal environmental review. Of the remaining 19 issues, 17 were determined to be Category 2, one remained uncategorized with respect to determining the impact level (''Chronic effects of electromagnetic fields (EMFs)''), and one was reclassified from Category 1 to uncategorized (''Offsite radiological impacts of spent nuclear fuel and high-level waste disposal''). These 78 issues were evaluated in the revised GEIS and are summarized in the final rule. No environmental issues identified in Table B–1 and evaluated in the 1996 GEIS were eliminated, but certain issues were consolidated or grouped according to similarities.

Environmental issues in the revised GEIS are arranged by resource area. This perspective is a change from the 1996 GEIS in which environmental issues are arranged by power plant systems (e.g., cooling systems, transmission lines) and activities (e.g., refurbishment). The structure of the revised GEIS conforms to the NRC's standard format for EISs found in Appendix A to Subpart A of 10 CFR part 51, ''Format for Presentation of Material in Environmental Impact Statements.'' The environmental impacts of license renewal activities, including plant operations, maintenance, and

[4] ''Electromagnetic fields, chronic effects'' remains an uncategorized issue. Due to the lack of a scientific consensus on the impacts of chronic exposure to electromagnetic fields, the NRC has not categorized this issue and did not perform a plant-specific analysis. Once a scientific consensus is reached, the NRC will categorize the issue for license renewal.

refurbishment activities, along with replacement power alternatives, are addressed in each resource area. The revised GEIS evaluated environmental impact issues under the following resource areas: (1) Land use and visual resources, (2) air quality and noise, (3) geologic environment, (4) water resources (surface water resources and groundwater resources), (5) ecological resources (terrestrial resources, aquatic resources, special status species and habitats), (6) historic and cultural resources, (7) socioeconomics, (8) human health, (9) environmental justice, and (10) waste management and pollution prevention. The final rule revises Table B–1 to follow the organizational format of the revised GEIS.

In the 1996 GEIS, the NRC assumed that licensees would need to conduct major refurbishment activities to ensure the safe and economic operation of nuclear power plants beyond the current license term. Activities included replacement and repair of major components and systems, upgrades, and equipment. Replacement of many systems, structures, and components included steam generators and pressurizers for pressurized water reactors (PWRs) and recirculation piping systems for boiling water reactors (BWRs). It was assumed that many nuclear power plants would also undertake construction projects to replace or improve infrastructure. Such projects could include construction of new parking lots, roads, storage buildings, structures, and other facilities.

Licensee practice since publication of the 1996 GEIS has shown that many refurbishment activities have already taken place (e.g., steam generator and vessel head replacement). Most license renewal applicants have not identified any refurbishment activities associated with license renewal. Therefore, the revised GEIS assumes that impacts from refurbishment activities outside of license renewal have been accounted for in annual site evaluation reports, environmental operating reports, and radiological environmental monitoring program reports. Detailed analyses have not been performed for refurbishment actions in the revised GEIS. Instead, the impacts of typical activities during the license renewal term, including any refurbishment activities, are addressed for each resource area.

Environmental impacts of license renewal and the resources that could be affected are identified in the revised GEIS. The general analytical approach for identifying environmental impacts was to: (1) Describe the nuclear power plant activity that could result in an environmental impact, (2) identify the resource that may be affected, (3) evaluate past license renewal reviews and other available information, (4) assess the nature and magnitude of the environmental impact on the affected resource, (5) characterize the significance of the effects, and (6) determine whether the results of the analysis apply to all nuclear power plants (i.e., whether the impact issue is Category 1 or Category 2).

The revised GEIS, and therefore the final rule, retains the 1996 GEIS definitions of a Category 1 and Category 2 issue. While some Category 2 issues have been changed to Category 1, no Category 1 issue has been changed to Category 2. The final rule makes four major types of changes:

(1) *New Category 1 Issues:* New Category 1 issues are either new Category 1 issues (i.e., not previously evaluated in the 1996 GEIS and listed in Table B–1) or multiple Category 1 issues from the 1996 GEIS (and listed as multiple Category 1 issues in Table B–1 of the current rule) that have been consolidated into a single Category 1 issue in the revised GEIS and in Table B–1. An applicant for license renewal does not need to assess the potential environmental impacts from these issues in its environmental report. However, under 10 CFR 51.53(c)(3)(iv), the applicant is still responsible for reporting in the environmental report any ''new and significant information'' of which the applicant is aware. If the applicant is not aware of any new and significant information that changes the conclusion in the revised GEIS, the applicant must state this determination in the environmental report. The NRC has addressed the environmental impacts of these Category 1 issues generically for all plants in the revised GEIS.

(2) *New Category 2 Issues:* New Category 2 issues are either new Category 2 issues (i.e., not previously evaluated in the 1996 GEIS and listed in Table B–1) or multiple Category 2 issues from the 1996 GEIS (and listed as multiple Category 2 issues in Table B–1 of the current rule) that have been consolidated into a single Category 2 issue in the revised GEIS and in Table B–1. For each new Category 2 issue, an applicant must conduct a plant-specific assessment of the potential environmental impacts related to that issue and include it in its environmental report. The NRC will then analyze the potential environmental impacts related to that issue in the SEIS.

(3) *Existing Issue Category Changes from Category 2 to Category 1:* These are issues that were determined to be Category 2 in the 1996 GEIS and have been re-evaluated and determined to be Category 1 in the revised GEIS. Table B–1 has been amended by the final rule. An applicant is no longer required to conduct a plant-specific assessment of the environmental impacts associated with these issues in its environmental report. Similarly, the NRC is no longer required to analyze the potential environmental impacts related to that issue in the SEIS. However, consistent with the requirements of 10 CFR 51.53(c)(3)(iv), an applicant is still required to describe in its environmental report any ''new and significant information'' of which it is aware.

(4) Existing Issue Changes from Category 1 to Uncategorized: The ''Offsite radiological impacts of spent nuclear fuel and high-level waste disposal'' issue [5] was determined to be a Category 1 issue in the 1996 GEIS, but given the DC Circuit decision in *New York* v. *NRC,* the NRC reclassified the issue to uncategorized in the revised GEIS. Table B–1 has been amended by the final rule. Because the issue is uncategorized in this final rule, pending further action by the Commission, an applicant is not required to conduct a plant-specific assessment of the environmental impacts associated with this issue in its environmental report.

IV. Response to Public Comments

A. Overview

The public comment period for the proposed rule, draft revised GEIS, and draft guidance documents associated with this rulemaking, ended on January 12, 2010. The NRC received 32 document submissions containing comments from industry stakeholders, representatives of Federal and State agencies, and other interested parties. The NRC also received verbal comments at the six public meetings held during the public comment period. A detailed description of all public comments submitted on the proposed rule, draft revised GEIS, and draft guidance documents, and the NRC's responses to those comments, are contained in separate documents (*see* Section XII, ''Availability of Documents,'' of this document). The following section summarizes the major issues raised during the public comment period resulting in substantive changes to the rule and other issues raised for which no changes were made to the rule.

[5] The issue was named ''Offsite radiological impacts (spent fuel and high waste disposal)'' in the 1996 rule and GEIS.

B. Summary of Comments Resulting in Substantive Changes to the Rule

Several issues were raised during the public comment period that resulted in substantive changes to the proposed rule, which are briefly discussed in the following paragraphs.

Seismic issues. Many commenters wanted seismic issues to be included in the rule and pointed out the importance of reassessing seismic conditions in determining the safety of operating nuclear power plants. Industry commenters disagreed and argued that seismology should not be considered as part of the issue of ''Impacts of nuclear plants on geology and soils'' in the proposed rule because it is an ongoing safety issue that is being addressed at all plants.

NRC Response. The NRC agrees with the industry commenters that consideration of seismic conditions is an ongoing safety issue. Although seismic conditions at nuclear power plants were generically discussed in the revised GEIS as part of the geologic environment, seismology was not identified as a separate issue in the revised GEIS because the NRC considered historical earthquake data for each nuclear power plant when that plant was first licensed. The NRC requires all licensees to take seismic hazards into account in order to maintain safe operating conditions at all nuclear power plants. When new seismic hazard information becomes available, the NRC evaluates the new data and models to determine if any changes are needed at existing plants. This continuous oversight process, which includes seismic safety, remains separate from license renewal and takes place on an ongoing basis at all licensed nuclear facilities.

Sections 3.4 and 4.4.1 of the revised GEIS explain that geologic and seismic conditions were considered in the original design of nuclear power plants and are part of the license bases for operating plants. Seismic conditions are attributes of the geologic environment that are not affected by continued plant operations and refurbishment and are not expected to change appreciably during the license renewal term for all nuclear power plants. The findings relative to geologic and soil conditions were re-evaluated in the revised GEIS and as such, the issue has been renamed, ''Geology and soils,'' in Table B–1, and the findings have been revised for clarity.

Air quality impacts. Several commenters objected to the issue, ''Air quality (nonattainment and maintenance areas),'' being listed as a Category 2 issue in the proposed rule. These commenters argued that air quality impacts would be small even in worst-case situations, because licensees are required to operate within State air permit requirements.

NRC Response. The NRC agrees with the commenters. The final rule revises Table B–1 by reclassifying the issue as a Category 1 issue. Operating experience has shown that the potential impact from emergency generators and boilers on air quality would be small for all plants and, given the infrequency and short duration of maintenance testing, would not be an air quality concern even at plants located in or adjacent to nonattainment areas.

In addition, the analysis presented in the revised GEIS has shown that the worst-case emissions from cooling tower drift and particulate emissions at operating plants were also small. Air quality impacts from vehicle, equipment, and fugitive dust emissions associated with refurbishment would also be small for most plants but could be a cause for concern for plants located in or near air quality nonattainment or maintenance areas. However, the impacts are expected to be temporary and would cease once projects were completed. In addition, operating experience has shown that refurbishment activities have not required the large numbers of workers and extended durations conservatively predicted and analyzed in the 1996 GEIS, nor have such activities resulted in exceedances in the *de minimis* thresholds for criteria pollutants in nonattainment and maintenance areas. Consequently, the NRC agrees with these commenters' arguments that air quality impacts would be small for all plants and, therefore, a Category 1 issue.

Groundwater and soil contamination. Several commenters objected to the new Category 2 issue, ''Groundwater and soil contamination,'' in the proposed rule and asserted that contamination from industrial practices is addressed by the U.S. Environmental Protection Agency (EPA) and State regulations that monitor and address these impacts. Specifically, the use, storage, disposal, release, and/or cleanup of spilled or leaked solvents, hydrocarbons, and other potentially hazardous materials are governed by the Resource Conservation and Recovery Act (RCRA); Comprehensive Environmental Response, Compensation, and Liability Act; Toxic Substances Control Act; Federal Insecticide, Fungicide, and Rodenticide Act; and the Federal Water Pollution Control Act (also known as the Clean Water Act (CWA)).

NRC Response. While classified as a Category 2 issue in the proposed rule, further consideration of the ''Groundwater and soil contamination'' issue and public comments revealed that the potential impacts on groundwater and soil quality from common industrial practices (e.g., the use, handling, storage, and disposal of chemicals, petroleum products, waste, and hazardous material) can be addressed generically because industrial practices employed by nuclear power plants are not unique, but common to all industrial facilities. The NRC concludes that the overall impact of industrial practices on groundwater use and quality from past and current operations is small for all nuclear power plants and not expected to change appreciably during the license renewal term. The NRC agrees with the commenters to the extent that clarification was needed and that common industrial practices that can cause groundwater or soil contamination can be addressed generically as a Category 1 issue.

Further, the final rule combines the reclassified ''Groundwater and soil contamination'' issue with the Category 1 proposed rule issue, ''Groundwater use and quality,'' and renames the consolidated Category 1 issue as ''Groundwater contamination and use (non-cooling system impacts).'' These issues were consolidated because they both consider the impact of industrial activities associated with the continued operations of a nuclear power plant (not directly related to cooling system effects) on groundwater use and quality. Consolidating these issues also conforms to the resource-based approach used in the revised GEIS and serves to facilitate the license renewal environmental review process.

The finding column of Table B–1 for ''Impacts of refurbishment on groundwater use and quality'' prior to the final rule, as analyzed in the 1996 GEIS, indicated that impacts of continued operations and refurbishment on groundwater use and quality would be small, as extensive dewatering is not anticipated, and the application of best management practices for handling any materials produced or used during activities would reduce impacts. These findings were re-evaluated in the revised GEIS and are retained in the finding column of Table B–1 for the consolidated issue.

This new consolidated issue also considers the impacts on groundwater, soil, and subsoil from the industrial use of solvents, hydrocarbons, heavy metals, or other chemicals at nuclear power plant sites during the license renewal

term, including the impacts resulting from the use of wastewater disposal ponds or lagoons (both lined or unlined). Industrial practices at all nuclear power plants have the potential to contaminate groundwater and soil, especially on sites with unlined wastewater and storm water lagoons. Contaminants have been found in groundwater and soil samples at some nuclear power plants during previous license renewal environmental reviews.

Any groundwater and soil contamination at operating nuclear power plants is subject to characterization and clean-up under EPA- and State-regulated remediation and monitoring programs. In addition, wastewater disposal ponds and lagoons are subject to discharge authorizations under the National Pollutant Discharge Elimination System (NPDES) and related State wastewater discharge permit programs. Each operating nuclear power plant must comply with these EPA and State regulatory requirements. As such, each site has an established program for handling chemicals, waste, and other hazardous materials. Moreover, nuclear power plant licensees are expected to employ best management practices, both in minimizing effluents and in remediation. Thus, this new consolidated issue, as set forth in the final revised GEIS and the final rule, is listed as a Category 1 issue.

C. Summary of Other Comments

Radionuclides in groundwater. Several commenters expressed opposition to the inclusion of a new Category 2 issue, ''Radionuclides released to groundwater,'' with an impact estimate of small to moderate in the proposed rule. Some commenters indicated that the issue category should be changed to Category 1; others suggested that the levels of significance should range to large. The argument for changing the issue to Category 1 was based on the voluntary industry-wide initiative, Nuclear Energy Institute (NEI) 07–07, ''Industry Ground Water Protection Initiative—Final Guidance Document'' (ADAMS Accession No. ML072610036), designed to protect groundwater.

NRC Response. This new, Category 2 issue evaluates the potential contamination and degradation of groundwater resources resulting from inadvertent discharges of radionuclides into groundwater from nuclear power plants. Within the past several years, there have been numerous events at power reactor sites that involved unknown, uncontrolled, and unmonitored releases of radionuclides into the groundwater. The number of these events and the high level of public controversy have made this an issue that the NRC believes needs a ''hard look,'' as required by NEPA.

As a voluntary action, NEI 07–07 cannot be enforced by the NRC. As such, no violations can be issued against a licensee who fails to comply with the guidance in NEI 07–07. Furthermore, the NRC cannot rely on a voluntary initiative as a basis to ensure that the nuclear power industry will monitor and have adequate information available for the NRC to determine whether the issue does or does not have an adverse impact on groundwater resources.

Regarding the magnitude of impact, the NRC bases its determination of small to moderate impact on a review of existing plants that have had inadvertent releases of radioactive liquids. Even though the NRC expects impacts for all plants to be within this range, a conclusion of large impact would not be precluded for a future license renewal review based on new and significant information, if the data supports such a conclusion. As reflected in the revised final GEIS and the final rule, ''Radionuclides released to groundwater,'' remains a Category 2 issue.

Radiation exposures to the public. Several commenters identified recent studies that claim an association between cancer risk and proximity to nuclear power facilities.

NRC Response. The NRC's regulatory limits for radiological protection are set to protect workers and the public from the harmful health effects (i.e., cancer and other biological impacts) of radiation to humans. The limits are based on the recommendations of scientific standards-setting organizations. These radiation standards reflect extensive scientific study by national and international organizations. The NRC actively participates in and monitors the work of these organizations to remain current on the latest trends in radiation protection. If the NRC determines that there is a need to revise its radiation protection regulations, it will initiate a separate rulemaking. The models recognized by the NRC for use by licensees to calculate dose incorporate conservative assumptions to ensure that workers and members of the public are adequately protected from radiation.

On April 7, 2010, the NRC announced that it asked the National Academy of Sciences (NAS) to perform a state-of-the-art study on cancer risk for populations surrounding nuclear power facilities (ADAMS Accession No. ML100970142). The NAS has a broad range of medical and scientific experts who can provide the best available analysis of the complex issues involved in discussing cancer risk and commercial nuclear power plants. The NAS is a nongovernmental organization chartered by the U.S. Congress to advise the nation on issues of science, technology, and medicine. Through the National Research Council and Institute of Medicine, it carries out studies independently of the Government, using processes designed to promote transparency, objectivity, and technical rigor. More information on its methods for performing studies is available at *http://www.nationalacademies.org/studycommitteprocess.pdf.*

The NAS study will update the 1990 U.S. National Institutes of Health National Cancer Institute (NCI) report, ''Cancer in Populations Living Near Nuclear Facilities'' (NCI 1990), which concluded there was no evidence that nuclear facilities may be linked causally with excess death from leukemia or from other cancers in populations living nearby.[6] The study's objectives are to: (1) Evaluate whether cancer risk is different for populations living near nuclear power facilities, (2) include cancer occurrence, (3) develop an approach to assess cancer risk in geographic areas that are smaller than the county level, and (4) evaluate the study results in the context of offsite doses from normal reactor operations. The study began in the summer of 2010 and is expected to be completed within 4 years. The final revised GEIS has added a discussion on the NRC's sponsorship of this follow-up to the 1990 NCI study.

Onsite storage of spent nuclear fuel, waste disposal, and Yucca Mountain. Several commenters expressed concern about the increasing volume of spent nuclear fuel at existing power plant sites and the availability of a geological repository at Yucca Mountain for future waste disposal.

NRC Response. The Commission is aware that geologic disposal, at Yucca Mountain or elsewhere, may not be available in the timeframe that was originally envisioned. As an alternative, the Commission has considered the storage of spent nuclear fuel on reactor sites where it is generated. The impacts associated with onsite storage of spent nuclear fuel at nuclear power plant sites during the license renewal term are discussed in Section 4.11.1.2 of the revised GEIS. The impacts associated with offsite radiological impacts from

[6] More information on this report is available at *http://www.cancer.gov/cancertopics/factsheet/Risk/nuclear-facilities.*

spent nuclear fuel and high-level waste disposal are discussed in Section 4.11.1.3 of the revised GEIS. In light of the DC Circuit's decision in *New York* v. *NRC,* 681 F.3d 471, the NRC has revised two Table B–1 issues, ''Onsite storage of spent nuclear fuel'' and ''Offsite radiological impacts of spent nuclear fuel and high-level waste disposal.'' Section V of this document, ''Related Issues of Importance,'' provides a discussion of the NRC's revisions to these two issues, as well as the actions the NRC has taken or will take in response to the *New York* v. *NRC* decision.

Postulated accidents. Numerous comments were received on the NRC's evaluation and classification of postulated accidents in the draft revised GEIS. One commenter disagreed with the GEIS' conclusion that environmental impact from design basis accidents (DBAs) is small. Also, several commenters disagreed with the GEIS conclusion that the environmental impact from severe accidents is small and further, that the evaluation is not adequate because of its use of probability-weighted risk assessments. Their position is that for severe accidents, the revised GEIS should also evaluate the consequences of reactor accidents and expand the evaluation to include spent fuel pool accidents and accidents due to age-related plant component degradation. In addition, some of the commenters stated that the NRC has gained enough information from the many plant licenses it has renewed to make a determination, on a generic basis, that the ''severe accidents'' issue should be reclassified as Category 1.

NRC Response.

Design Basis Accidents. The NRC does not agree that the GEIS' evaluation of DBAs is incorrect. The NRC evaluates and presents the potential consequences of DBAs in nuclear power plant licensing documents and considers them in the GEIS for license renewal.

In order to receive NRC approval for an initial operating license, an applicant must submit a final safety analysis report (FSAR) as part of its application. The FSAR presents the applicable design criteria and design information for the proposed reactor, as well as comprehensive data on the proposed site. The FSAR also discusses hypothetical reactor accident situations and addresses the safety features that prevent and mitigate those accidents. During the initial licensing process for a power reactor, the NRC reviews the FSAR to determine whether or not the plant design meets the NRC's regulations.

At initial licensing, the NRC also considered the environmental impact of DBAs at each operating nuclear power plant. The DBAs are those events that both the applicant and the NRC evaluate to ensure that the plant can withstand normal and abnormal transients (e.g., rapid changes in reactor power) without undue risk to the health and safety of the public. Although the NRC does not expect that all of these postulated events will occur during the life of the plant, the NRC evaluates them to establish the basis for the preventive and mitigative safety systems of the facility. The acceptance criteria for DBAs are described in 10 CFR part 50, ''Domestic Licensing of Production and Utilization Facilities,'' and 10 CFR part 100, ''Reactor Site Criteria.'' Compliance with these regulations provides reasonable assurance of adequate protection of public health and safety.

During operations, the NRC requires each power plant licensee to maintain acceptable design and performance criteria in accordance with the NRC's regulations, including during any license renewal period. Therefore, the calculated releases from DBAs will remain within the NRC's regulatory limits.

The 1996 GEIS, in Section 5.2, discusses the impacts of potential accidents. It contains a discussion of plant accidents and consequences. This discussion addresses general characteristics of design basis (and severe) accidents, characteristics of fission products, meteorological considerations, possible exposure pathways, potential adverse health effects, avoiding adverse health effects, accident experience and observed impacts, and emergency preparedness. The revised GEIS reexamined the information from the 1996 GEIS and concluded that it is still valid. Because the information on DBAs is valid and has not changed, the revised GEIS does not repeat the information from the 1996 GEIS.

Severe Accidents. The NRC does not agree with the comments that the revised GEIS evaluation is inadequate regarding the impacts from severe accidents because it uses probability-weighted risk assessments. Severe accidents (i.e., beyond design basis accidents) are those that could result in substantial damage to the reactor core, whether or not there are serious off-site consequences. The 1996 GEIS estimated and considered the potential impacts on human health and economic factors from full-power severe reactor accidents initiated by internal events at different types of nuclear facilities located in different types of settings. That evaluation included modeling the release of radioactive materials into the environment and modeling the pathways (i.e., exposure to the radioactive plume, inhalation of radioactivity, consumption of contaminated food) through which members of the public could potentially be exposed to doses of radiation. Based on the calculated doses, the GEIS reported the consequences (i.e., potential early and latent fatalities) from such accidents. In developing a potential impact level, however, the NRC took into account the very low probability of such events, as well as their potential consequences, and concluded that the likely impact from individual nuclear power plants is small.

In the revised GEIS, the NRC expanded the scope of the severe accident evaluations and used more recent technical information that included both internal and external event core-damage frequency, as well as improved severe accident source terms, spent fuel pool accidents, low power and reactor shutdown events, new radiation risk-coefficients from the National Academy of Sciences, ''Health Risks from Exposure to Low Levels of Ionizing Radiation: Biological Effects of Ionizing Radiation (BEIR) VII'' report,[7] and risk impacts of reactor power uprates and higher fuel burn-up levels. As a result, the revised GEIS considers updated information in determining the potential consequences of a reactor accident. Considering this updated information and that severe reactor accidents remain unlikely, the revised GEIS concludes that the environmental impacts of a severe accident remain small.

The NRC notes, however, that the GEIS is not the primary vehicle the NRC uses to address and regulate risks from severe accidents. The NRC's regulations and regulatory practices employ safety standards in the design, construction, and operation of nuclear power plants as well as risk models to ensure the public is adequately protected on an on-going basis. The NRC's ongoing oversight addresses the public's risk from nuclear power plant accidents, accounts for the effects of proposed changes that may be made as part of power plant operations, and considers new information about the facility or its environment when necessary.

[7] The BEIR VII report can be accessed at *http://search.nap.edu/napsearch.php?term=beir+vii.* The NRC staff reviewed this report in SECY–05–0202, ''Staff Review of the National Academies Study of the Health Risks from Exposure to Low Levels of Ionizing Radiation (BEIR VII),'' dated October 29, 2005 (ADAMS Accession No. ML052640532).

Although the NRC has determined that impacts from severe accidents are small for all facilities, the NRC continues to maintain that severe accidents cannot be a Category 1 issue because plant-specific mitigation measures vary greatly based on plant designs, safety systems, fuel type, operating procedures, local environment, population, and siting characteristics. Thus, severe accidents remain a Category 2 issue. Accordingly, the NRC has not changed the requirements in 10 CFR 51.53(c)(3)(ii)(L) that an applicant's environmental report must contain a discussion that considers alternatives to mitigate severe accidents if the NRC has not previously considered this issue in an environmental impact statement or environmental assessment for the facility.

Spent Fuel Pool Accidents. The 1996 GEIS included a quantitative analysis of a severe accident involving a reactor operating at full power. A qualitative evaluation of SFP accidents is presented in Appendix E of the revised GEIS. Based on this evaluation, the revised GEIS concludes that the environmental impacts from accidents involving SFPs are comparable to those from the reactor accidents at full power that were evaluated in the 1996 GEIS and as such, SFP accidents do not warrant separate evaluation. Based on the continued validity of conclusions from the 1996 GEIS, as affirmed by the Commission (*see* following paragraph), the revised GEIS does not contain a quantitative evaluation of SFP accidents.

The issue of an accident involving the spent fuel pool was specifically addressed by the NRC in its denial of two petitions for rulemaking (PRM): PRM–51–10 and PRM–51–12, submitted by the Attorney General of the Commonwealth of Massachusetts in 2006 and the Attorney General of California in 2007, respectively.[8] The petitioners requested that the NRC initiate a rulemaking concerning the environmental impacts of the high density storage of spent nuclear fuel in SFPs. The petitioners asserted that ''new and significant information'' shows that the NRC incorrectly characterized the environmental impacts of high-density spent fuel storage as ''insignificant'' in the 1996 GEIS for the renewal of nuclear power plant licenses. Specifically, the petitioners asserted that spent fuel stored in high-density SFPs is more vulnerable to a zirconium fire than the NRC concluded in its NEPA analysis. The NRC denied the two petitions, and the NRC denial was upheld by the United States Court of Appeals.

Aging-related Degradation. Issues related to age-related plant component degradation are addressed in the NRC's safety evaluation of the plant's license renewal application. The regulations covering the safety review for license renewal are in 10 CFR part 54, ''Requirements for Renewal of Operating Licenses for Nuclear Power Plants.''

The 1996 GEIS discusses the potential effects of age on the physical plant and notes that such deterioration could result in an increased likelihood of component or structure failure that could increase the rate of plant accidents. The GEIS notes that the NRC requires an applicant for license renewal to address the issue of age-related degradation by identifying, in an integrated plant assessment process, those passive, long-lived structures and components that are susceptible to age-related degradation and whose functions are necessary to ensure that the facility's current licensing basis is maintained. The GEIS found that the safety evaluation performed by the NRC as part of the license renewal process provides reasonable assurance that age-related degradation is managed and adequate protection of the health and safety of the public is maintained during the license renewal period. Therefore, the 1996 GEIS concluded, ''. . . the probability of any radioactive releases from accidents will not increase over the license renewal period.'' Based on nuclear power plants' continued compliance with 10 CFR part 54 to manage age-related degradation, the revised GEIS did not alter or revise this conclusion from the 1996 GEIS.

Greenhouse gas emissions and climate change. Several commenters discussed the need to include a discussion of the effects of climate change on plant operations and the effect of continued operations during the license renewal period on environmental resources affected by climate change.

NRC Response. The NRC acknowledges these concerns. The NRC has begun to evaluate the effects of greenhouse gas (GHG) emissions and its implications for global climate change in its environmental reviews for both new reactor and license renewal applications. Changes in climate have the potential to affect air and water resources, ecological resources, and human health, and should be taken into account when evaluating cumulative impacts over the license renewal term.

Subsequent to the publication of the proposed rule and during the public comment period, the Commission issued a memorandum and order concerning two combined operating license applications for new reactor units at the Tennessee Valley Authority Bellefonte site in Alabama and the Duke Energy Carolinas Lee site in South Carolina (CLI–09–21). The memorandum and order stated:

> because the Staff is currently addressing the emerging issues surrounding greenhouse gas emissions in environmental reviews required for the licensing of nuclear facilities, we believe it is prudent to provide the following guidance to the Staff. We expect the Staff to include consideration of carbon dioxide and other greenhouse gas emissions in its environmental reviews for major licensing actions under the National Environmental Policy Act. The Staff's analysis for reactor applications should encompass emissions from the uranium fuel cycle as well as from construction and operation of the facility to be licensed. The Staff should ensure that these issues are addressed consistently in agency NEPA evaluations and, as appropriate, update Staff guidance documents to address greenhouse gas emissions.[9]

Presently, insufficient data exists to support an impact level on a generic basis. The NRC only has direct emission data for a handful of facilities. Although some states have varying reporting requirements, GHG emissions reporting nationwide is in its infancy. The EPA promulgated its GHG emissions reporting rule on October 30, 2009 (74 FR 56260). In accordance with this rule, the first industry reporting date was March 31, 2011.[10] Moreover, the 25,000 annual metric ton reporting threshold EPA established in the final rule of October 30, 2009, is not an indication of what EPA considers to be a significant (or insignificant) level of GHG emissions on a scientific basis, but a threshold chosen by EPA for policy evaluation purposes.[11]

In order to comply with the Commission's direction in CLI–09–21 and in response to the comments received, a new section, ''Greenhouse Gas Emissions and Climate Change'' (Chapter 4, Section 4.12.3), summarizing the potential cumulative

[8] These PRMs were denied in the same **Federal Register** notice (73 FR 46204; August 8, 2008).

[9] In the matter of Duke Energy Carolinas, LLC (Combined License Application for William States Lee III Nuclear Station, Units 1 and 2); In the matter of Tennessee Valley Authority (Bellefonte Nuclear Power Plant, Units 3 and 4), CLI–09–21 (NRC November 3, 2009).

[10] 74 FR at 56267: October 30, 2009, codified at 40 CFR 98.3(b) (''The annual GHG report must be submitted no later than March 31 of each calendar year for GHG emissions in the previous calendar year'').

[11] The EPA concluded for policy evaluation purposes, that the 25,000 metric ton threshold more effectively targets large industrial emitters and suppliers, covers approximately 85 percent of the U.S. emissions, and minimizes the burden on smaller facilities (74 FR 56264; October 30, 2009).

impacts of GHG emissions and global climate change, has been added to the final revised GEIS. The NRC will also include within each SEIS a plant-specific analysis of any impacts caused by GHG emissions over the course of the license renewal term as well as any impacts caused by potential climate change upon the affected resources during the license renewal term. The final rule was not revised to include any reference to GHG emissions or climate change.

Recent advances in alternative energy technologies. Several commenters asserted that much of the information describing alternative energy technologies did not reflect the state-of-the-science. In some cases, commenters noted facts and events that occurred after the publication date of the draft revised GEIS.

NRC Response. The NRC has updated the final revised GEIS to incorporate the latest information on replacement power alternatives, but it is inevitable that rapidly evolving technologies will outpace the information presented in the final revised GEIS. Incorporation of this information is more appropriately made in the context of plant-specific license renewal reviews, rather than in the evaluations contained in the revised GEIS. As with renewable energy technologies, energy policies are evolving rapidly. While the NRC acknowledges that legislation, technological advancements, and public policy can underlie a fundamental paradigm shift in energy portfolios, the NRC cannot make decisions based on anticipated or speculative changes. Instead, the NRC considers the status of replacement power alternatives and energy policies when conducting plant-specific reviews. The final revised GEIS has been updated to clarify the NRC's approach to conducting replacement power alternative evaluations.

Emergency preparedness and security. Several commenters expressed concern with emergency preparedness, evacuation, and safety and security at nuclear power plants. Commenters stated that these topics were not addressed in the proposed rule and not adequately covered in the revised GEIS and should be included in the scope of the plant-specific SEISs.

NRC Response. Emergency preparedness and planning are part of the current licensing basis for each holder of a 10 CFR part 50 operating license and are outside the regulatory scope of license renewal. Before a plant is licensed to operate, the NRC must have ''reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency'' (10 CFR 50.47). The Commission's regulatory scheme provides continuing assurance that emergency planning for every operating nuclear power plant is adequate. The Commission has determined that there is no need for a special review of emergency planning issues in the context of an environmental review for license renewal because the ongoing decisions and findings concerning emergency preparedness at nuclear power plants address concerns as they arise.

The Commission considered the need for a review of emergency planning issues in the context of license renewal during its rulemaking proceedings on 10 CFR part 54, which included public notice and comment. As discussed in the Statement of Considerations for the 10 CFR part 54 rulemaking (56 FR 64966; December 13, 1991), the programs for emergency preparedness at nuclear power facilities apply to all nuclear power facility licensees and require the specified levels of protection from each licensee regardless of plant design, construction, or license date. The NRC requirements related to emergency planning are in the regulations at 10 CFR 50.47 and Appendix E to 10 CFR part 50, ''Emergency Planning and Preparedness for Production and Utilization Facilities.'' These requirements apply to all holders of operating licenses and will continue to apply to facilities with renewed licenses. Through its standards and required exercises, the Commission reviews existing emergency preparedness plans throughout the life of any facility, keeping up with changing demographics and other site-related factors.

Further, the NRC actively reviews its regulatory framework to ensure that the regulations are current and effective. The agency began a major review of its emergency preparedness framework in 2005, including a comprehensive review of the emergency preparedness regulations and guidance, the issuance of generic communications regarding the integration of emergency preparedness and security, and outreach efforts to interested persons to discuss emergency preparedness issues. These activities informed a rulemaking effort to enhance the NRC's emergency preparedness regulations and guidance. This effort culminated in a final rule, which was published in the **Federal Register** on November 23, 2011 (76 FR 72560).

Security issues are not tied to a license renewal action but are treated on an ongoing basis as a part of the current (and renewed) operating license. If issues related to security are discovered at a nuclear power plant, they are addressed immediately, and any necessary changes are reviewed and incorporated under the current operating license. For example, after the terrorist attacks of September 11, 2001, the NRC issued security-related orders and guidance to nuclear power plant licensees. These orders and guidance included interim measures for emergency planning. Nuclear industry groups and Federal, State, and local government agencies assisted in the prompt implementation of these measures and participated in drills and exercises to test these new planning elements. The NRC reviewed licensees' commitments to address these requirements and verified their implementation through inspections to ensure public health and safety.

In summary, the issue of security is not unique to nuclear power plants requesting license renewal. The NRC routinely assesses threats and other information provided by other Federal agencies and sources. The NRC also ensures that licensees meet their security requirements through its ongoing regulatory process (routine inspections) as a current and generic regulatory issue that affects all nuclear power plants. Therefore, as discussed in the Statement of Considerations for the 10 CFR part 54 rulemaking (56 FR 64966), the Commission determined that there is no need for an evaluation of security issues in the context of a license renewal review.

V. Related Issues of Importance

This section addresses five issues of related importance to the final rule: (1) Consideration of the recent events at the Fukushima Dai-ichi Nuclear Power Plant, (2) removal of those parts of the final rule that refer to and rely upon the NRC's Waste Confidence Decision and Rule, (3) a description of the final rule's effective and compliance dates, (4) clarification of the term ''best management practices,'' and (5) deletion of the proposed definition of the term ''historic properties.''

A. Fukushima Events

On March 11, 2011, a massive earthquake off the east coast of Honshu, Japan produced a devastating tsunami that struck the coastal town of Fukushima. The six-unit Fukushima Dai-ichi Nuclear Power Plant was directly impacted by these events. The resulting damage caused the failure of several of the units' safety systems needed to maintain cooling water flow to the reactors. As a result of the loss of cooling, the fuel overheated, and there

was a partial meltdown of the fuel contained in several of the reactors. Damage to the systems and structures containing reactor fuel resulted in the release of radioactive material to the surrounding environment.

In response to the earthquake, tsunami, and resulting reactor accidents at the Fukushima Dai-ichi Nuclear Power Plant (hereafter referred to as the ''Fukushima events''), the Commission directed the NRC staff to convene an agency task force of senior leaders and experts to conduct a methodical and systematic review of the relevant NRC regulatory requirements, programs, and processes, including their implementation, and to recommend whether the agency should make near-term improvements to its regulatory system. As part of the short-term review, the task force concluded that, while improvements are expected to be made as a result of the lessons learned from the Fukushima events, the continued operation of nuclear power plants and licensing activities for new plants do not pose an imminent risk to public health and safety.[12]

During the time that the task force was conducting its review, groups of individuals and non-governmental organizations petitioned the Commission to suspend all licensing decisions in order to conduct a separate, generic NEPA analysis to determine whether the Fukushima events constituted ''new and significant information'' under NEPA that must be analyzed as part of environmental reviews. The Commission found the request premature and noted, ''[i]n short, we do not know today the full implications of the [Fukushima] events for U.S. facilities.'' [13] However, the Commission found that if ''new and significant information comes to light that requires consideration as part of the ongoing preparation of application-specific NEPA documents, the agency will assess the significance of that information, as appropriate.'' [14] The Federal courts of appeal and the Commission have interpreted NEPA such that an EIS must be updated to include new information only when that new information provides ''a seriously different picture of the environmental impact of the proposed project from what was previously envisioned.'' [15]

In the context of the revised GEIS and this rulemaking, the Fukushima events are considered a severe accident (i.e., a type of accident that may challenge a plant's safety systems at a level much higher than expected) and more specifically, a severe accident initiated by an event external to the plant. The 1996 GEIS concluded that risks from severe accidents initiated by external events (such as an earthquake) could have potentially high consequences but found that external events are adequately addressed through a consideration of a severe accident initiated by an internal event (such as a loss of cooling water). Therefore, an applicant for license renewal need only analyze the environmental impacts from an internal event in order to adequately characterize the environmental impacts from either type of event. The revised GEIS examined more recent and up-to-date information regarding external events and concluded that the analysis in the 1996 GEIS remains valid. The Fukushima events are not considered in the revised GEIS because the analysis in the revised GEIS was completed prior to the Fukushima events.

The NRC's evaluation of the consequences of the Fukushima events is ongoing. As such, the NRC will continue to evaluate the need to make improvements to existing regulatory requirements based on the task force report and additional studies and analyses of the Fukushima events as more information is learned. To the extent that any revisions are made to the NRC's regulatory requirements, they would be made applicable to nuclear power reactors regardless of whether or not they have a renewed license. Therefore, no additional analyses have been performed in the revised GEIS as a result of the Fukushima events. In the event that the NRC identifies information from the Fukushima events that constitutes new and significant information with respect to the environmental impacts of license renewal, the NRC will discuss that information in its site-specific SEISs to the GEIS, as it does with all such new and significant information.

B. Removal of References to the Waste Confidence Decision and Rule

The Waste Confidence Decision and Rule represented the Commission's generic determination that spent nuclear fuel can continue to be stored safely and without significant environmental impacts for a period of time after the end of the licensed life for operation of a nuclear power plant.[16] This generic determination meant that the NRC did not need to consider the storage of spent nuclear fuel after the end of a reactor's licensed life for operation in the NEPA documents that support its reactor and spent-fuel storage license application reviews.

On December 23, 2010, the Commission published a revision of the Waste Confidence Decision and Rule to reflect information gained from experience in the storage of spent nuclear fuel and the increased uncertainty in the siting and construction of a permanent geologic repository for the disposal of spent nuclear fuel and high-level waste.[17] In response to the 2010 Waste Confidence Decision and Rule, the states of New York, New Jersey, Connecticut, and Vermont, along with several other parties, challenged the Commission's NEPA analysis in the decision, which provided the regulatory basis for the rule. On June 8, 2012, the United States Court of Appeals, District of Columbia Circuit, in *New York* v. *NRC,* 681 F.3d 471 (D.C. Cir. 2012), vacated the NRC's Waste Confidence Decision and Rule, after finding that it did not comply with NEPA.

The court concluded that the Waste Confidence Decision and Rule is a major federal action necessitating either an EIS or an environmental assessment that results in a ''finding of no significant impact.'' In vacating the 2010 decision and rule, the court identified three specific deficiencies in the analysis:

1. As to the Commission's conclusion that permanent disposal will be available ''when necessary,'' the court held that the Commission did not evaluate the environmental effects of failing to secure permanent disposal;

2. As to the storage of spent fuel on-site at nuclear plants after the expiration

[12] Recommendations for Enhancing Reactor Safety in the 21st Century, The Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident'' (July 12, 2011) (ADAMS Accession No. ML111861807).

[13] *Union Electric Co. d/b/a Ameren Missouri* (Callaway Plant, Unit 2), CLI–11–05, _ NRC _, _ (slip op. at 30) (Sept. 9, 2011).

[14] *Id.* at 30–31.

[15] *Id.* at 31 (quoting *Hydro Resources, Inc.* (2929 Coors Road, Suite 101, Albuquerque, NM 87120), CLI–99–22, 50 NRC 3, 14 (1999) (citing *Marsh* v. *Oregon Natural Resources Council,* 490 U.S. 360, 373 (1989))). The Commission also noted that it can modify a facility's operating license outside of a renewal proceeding and made clear that ''it will use the information from these activities to impose any requirement it deems necessary, irrespective of whether a plant is applying for or has been granted a renewed operating license.'' *Id.* at 26–27.

[16] The NRC first adopted the Waste Confidence Decision and Rule in 1984. The NRC amended the decision and rule in 1990, reviewed them in 1999, and amended them again in 2010. 49 FR 34694 (August 31, 1984); 55 FR 38474 (September 18, 1990); 64 FR 68005 (December 6, 1999); and 75 FR 81032 and 81037 (December 23, 2010). The NRC made a minor amendment to the rule in 2007 to clarify that it applies to combined licenses. 72 FR 49509 (August 28, 2007). The Waste Confidence Decision and Rule are codified in the NRC regulation 10 CFR 51.23.

[17] 75 FR 81032 and 81037.

of a plant's operating license, the court concluded that the Commission failed to properly examine the risk of spent fuel pool leaks in a forward-looking fashion; and

3. Also related to the post-license storage of spent fuel, the court concluded that the Commission failed to properly examine the consequences of spent fuel pool fires.

In response to the court's ruling, the Commission issued CLI–12–16 on August 7, 2012 (ADAMS Accession No. ML12220A212), in which the Commission determined that it would not issue licenses that rely upon the Waste Confidence Decision and Rule until the issues identified in the court's decision are appropriately addressed by the Commission. CLI–12–16 provided, however, that the decision not to issue licenses only applied to final license issuance; all licensing reviews and proceedings should continue to move forward. In SRM–COMSECY–12–0016, ''Approach for Addressing Policy Issues Resulting from Court Decision to Vacate Waste Confidence Decision and Rule,'' dated September 6, 2012 (ADAMS Accession No. 12250A032), the Commission directed the NRC staff to proceed with a rulemaking that includes the development of a generic EIS to support a revised Waste Confidence Decision and Rule and to publish both the EIS and the revised decision and rule in the **Federal Register** within 24 months. The Commission indicated that both the EIS and the revised Waste Confidence Decision and Rule should build on the information already documented in various NRC studies and reports, including the existing environmental assessment that the NRC developed as part of the 2010 Waste Confidence Decision and Rule. The Commission directed that any additional analyses should focus on the three deficiencies identified in the court's decision. The Commission also directed that the NRC staff provide ample opportunity for public comment on both the draft EIS and the proposed Waste Confidence Decision and Rule.

In accordance with CLI–12–16, the NRC will not approve any site-specific license renewal applications until the deficiencies identified in the court's decision have been resolved. Two Table B–1 license renewal issues that rely, wholly or in part, upon the Waste Confidence Decision and Rule are the ''Onsite storage of spent nuclear fuel'' and ''Offsite radiological impacts of spent nuclear fuel and high-level waste disposal.'' Both of these issues were classified as Category 1 in the 10 CFR part 51 rule that was promulgated in 1996; the 2009 proposed rule continued the Category 1 classification for both of these issues. As part of the NRC's response to the *New York* v. *NRC* decision, this final rule revises these two issues accordingly. Specifically, this final rule revises the Category 1 ''Onsite storage of spent nuclear fuel'' issue to narrow the period of onsite storage to the license renewal term. In both the 1996 rule [18] and the 2009 proposed rule, the NRC relied upon the Waste Confidence Decision and Rule to make a generic finding that spent nuclear fuel could be stored safely onsite with no more than a small environmental impact for the term of the extended license (from approval of the license renewal application to the expiration of the operating license) plus a 30-year period following the permanent shutdown of the power reactor and expiration of the operating license.[19]

The Waste Confidence Decision and Rule provided the basis for the 30-year period following the permanent shutdown of the reactor and expiration of the operating license. The 2010 Waste Confidence Decision and Rule extended this post-reactor shutdown onsite storage period from 30 years to 60 years. Given the *New York* v. *NRC* decision, and pending the issuance of a generic EIS and revised Waste Confidence Decision and Rule (as directed by SRM–COMSECY–12–0016), the final rule excludes from this issue the period of onsite storage of spent nuclear fuel following the permanent shutdown of the power reactor and expiration of the operating license. As revised by this final rule, this issue now covers the onsite storage of spent fuel for the term of the extended license only.

Similarly, this final rule revises the Category 1 issue ''Offsite radiological impacts of spent nuclear fuel and high level waste disposal.'' [20] In both the 1996 rule and the 2009 proposed rule, this issue pertained to the long-term disposal of spent nuclear fuel and high-level waste, including possible disposal in a deep geologic repository. Although the Waste Confidence Decision and Rule did not assess the impacts associated with disposal of spent nuclear fuel and high-level waste in a repository, it did reflect the Commission's confidence, at the time, in the technical feasibility of a repository and when that repository could have been expected to become available. Without the analysis in the Waste Confidence Decision, the NRC cannot assess how long the spent fuel will need to be stored onsite. Therefore, the final rule reclassifies this issue from a Category 1 issue with no assigned impact level to an uncategorized issue with an impact level of uncertain.

Upon issuance of the generic EIS and revised Waste Confidence Rule, the NRC will make any necessary conforming amendments to this rule. As referenced previously, the Commission will not approve any license renewal application for an operating nuclear power plant until the issues identified in the court's decision are appropriately addressed by the Commission.

C. Effective and Compliance Dates for Final Rule

The amendments made by the final rule shall be effective 30 days after the final rule's publication in the **Federal Register**. License renewal applicants are not required to comply with the amended rule until 1 year after the final rule's publication in the **Federal Register**. The Commission has decided on a 1-year compliance date given the long lead time required for preparation of license renewal applicant environmental reports.

D. Best Management Practices

''Best management practices'' is a term used to describe a type, method, or treatment technique for preventing pollution or reducing the quantities of pollutants released to the environment. The term, as used herein, includes the physical components used to control or minimize pollution (e.g., filters, barriers, mechanical devices, and retention ponds), as well as operational or procedural practices (e.g., minimizing use of a pollutant, spill control, and operator training). Best management practices are used in a variety of industrial sectors. In the nuclear power reactor sector, as in other industrial sectors, best management practices offer flexibility to achieve a balance between protecting the environment and the efficiency and economic limitations associated with the operations of a given plant. Both in the 1996 GEIS and in the revised GEIS, several issues have been determined to be a Category 1 issue with an impact level of small based upon the assumption that the license renewal applicant employs and will continue to employ best management practices

[18] The issue was named ''On-site spent fuel'' in the 1996 rule.

[19] Prior to the December 23, 2010, final rule, 10 CFR 51.23(a) read: ''The Commission has made a generic determination that, if necessary, spent fuel generated in any reactor can be stored safely and without significant environmental impacts for at least 30 years beyond the licensed life for operation (which may include the term of a revised or renewed license) of that reactor at its spent fuel storage basin or at either onsite or offsite independent spent fuel storage installations.''

[20] The issue was named ''Offsite radiological impacts (spent fuel and high level waste disposal)'' in the 1996 rule.

during the license renewal term. The NRC's regulatory experience has shown that licensees employ such best management practices.

The NRC's jurisdiction is limited to radiological health and safety and common defense and security. Therefore, the NRC does not generally impose a requirement that its licensees adopt those best management practices that concern non-radiological pollutants. The NRC nuclear power plant licensees, however, are subject to a host of regulatory requirements that are monitored and enforced by other Federal agencies (e.g., the EPA) or State or local regulatory agencies. The NRC-licensed nuclear power plants must obtain a variety of permits from these other agencies before they can operate (e.g., under the CWA, a licensee must obtain a NPDES permit from the EPA or, if the EPA has delegated its CWA authority to a particular State, from the appropriate agency of that State). These permits typically require that the licensee adopt and adhere to best management practices.

Therefore, an assumption underlying the revised GEIS is that NRC licensees will use best management practices to comply with other Federal, State, and local government requirements to prevent or reduce the quantities of non-radiological pollutants released to the environment. This description of best management practices is not a regulatory or policy change by the NRC because the use of best management practices by nuclear power plant licensees was also an underlying assumption of the 1996 GEIS. Rather, the NRC seeks to make transparent its basis for determining that certain issues are Category 1 issues with a small level of impact.

E. Definition of ''Historic Properties''

The proposed rule would have amended 10 CFR part 51 by adding a definition of the term ''historic properties'' to 10 CFR 51.14(a). Upon further consideration, the NRC determined that adding the definition was unnecessary. The NRC's license renewal determination to renew or not renew a nuclear power plant operating license is considered an undertaking as defined by Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations in 36 CFR part 800. The regulations define the term ''historic property'' in 36 CFR 800.16(l)(1). The NRC uses the term ''historic property'' or ''historic properties'' in the same context as set forth in 36 CFR 800.16(l)(1).

VI. Revisions to 10 CFR 51.53

The final rule revises 10 CFR 51.53 to conform to those changes made by the final rule to Table B–1. Because some Category 2 issues have been reclassified as Category 1 issues, license renewal applicants no longer need to assess these issues and, therefore, the final rule removes the requirements for applicants to provide information on these issues in their environmental reports. The final rule also adds new requirements to 10 CFR 51.53 for the new Category 2 issues for which applicants are now required to provide information in their environmental reports. The following describes each revision.

A. Reclassifying Category 2 Issues as Category 1 Issues

Section 51.53(c)(3)(ii)(F). The final rule removes and reserves 10 CFR 51.53(c)(3)(ii)(F) because the final rule reclassifies the Category 2 issue, ''Air quality during refurbishment (nonattainment and maintenance areas),'' to Category 1 and renames the issue, ''Air quality impacts (all plants).'' The removed regulatory language required the applicant to assess anticipated vehicle exhaust emissions at the time of refurbishment for plants located in or near a nonattainment or maintenance area, as those terms are defined under the Clean Air Act.

The final rule reclassifies this issue as Category 1 based upon public comments received on the proposed rule [21] and a subsequent re-evaluation of the data in the draft revised GEIS, which showed that air quality impacts from refurbishment have not resulted in exceedances in the *de minimis* thresholds for criteria pollutants in nonattainment and maintenance areas due to construction vehicle, equipment, and fugitive dust emissions. Significant air quality impacts are no longer anticipated from future license renewals. Therefore, applicants no longer need to assess the impacts on air quality of continued operations and refurbishment associated with license renewal in their environmental reports.

Section IV, ''Response to Public Comments,'' of this document provides a summary of the comments received on this issue, and Section VIII, ''Final Actions and Basis for Changes to Table B–1,'' of this document discusses this issue in more detail under Issue 5, ''Air quality impacts (all plants).''

Section 51.53(c)(3)(ii)(I). The final rule removes and reserves 10 CFR 51.53(c)(3)(ii)(I) because several Category 2 socioeconomic issues are reclassified as Category 1. The removed regulatory language required the applicant to assess the impacts of the proposed license renewal on housing availability, land use, and public schools (impacts from refurbishment activities only) within the vicinity of the plant. Additionally, the removed regulatory language required the applicant to assess the impact of population increases attributable to the proposed project on the public water supply. Specifically, the final rule reclassifies the following 1996 GEIS Category 2 socioeconomic issues: Housing impacts; [22] Public services: public utilities; [23] Public services, education (refurbishment); [24] Offsite land use (refurbishment); and Offsite land use (license renewal term).[25]

The final rule reclassifies these issues as Category 1 because significant changes in housing availability, land use, and increased population demand attributable to the proposed refurbishment project on the public water supply have not occurred at relicensed nuclear power plants. Therefore, impacts to these resources are no longer anticipated for future license renewals. In addition, refurbishment activities (such as steam generator and vessel head replacement) have not required the large numbers of workers and the months of time that were conservatively analyzed in the 1996 GEIS. As such, significant impacts on housing availability, land use, public schools, and the public water supply are no longer anticipated from continued operations during the license renewal term and refurbishment associated with license renewal.

Section 51.53(c)(3)(ii)(J). The final rule removes and reserves 10 CFR 51.53(c)(3)(ii)(J) because the Category 2 issue, ''Public services, transportation,'' is reclassified as Category 1 (the final rule also renames the issue, ''Transportation''). The removed

[21] The proposed rule renamed the ''Air quality during refurbishment (nonattainment and maintenance areas)'' issue as ''Air quality (nonattainment and maintenance areas)'' and retained the Category 2 classification.

[22] The final rule renames this issue as ''Population and housing'' (*see* Issue (55) under Section VIII, ''Final Actions and Basis for Changes to Table B–1,'' of this document).

[23] The final rule merges this issue into the consolidated issue, ''Community services and education'' (*see* Issue (54) under Section VIII of this document).

[24] The final rule merges this issue into the consolidated issue, ''Community services and education'' (*see* Issue (54) under Section VIII of this document).

[25] The final rule merges ''Offsite land use (refurbishment)'' and ''Offsite land use (license renewal term) into the consolidated issue, ''Offsite land use'' (*see* Issue (2) under Section VIII of this document).

regulatory language required the applicant to assess the impact of highway traffic generated by the proposed project on the level of service of local highways during periods of license renewal refurbishment activities and during the term of the renewed license. Therefore, applicants no longer need to assess the impacts on local traffic volumes of continued operations and refurbishment associated with license renewal in their environmental reports.

The issue was reclassified to Category 1 because refurbishment activities (such as steam generator and vessel head replacement) have not required the large numbers of workers and the months of time that was conservatively analyzed in the 1996 GEIS. As such, significant transportation impacts are not anticipated from future refurbishment activities. Section VIII, ''Final Actions and Basis for Changes to Table B–1,'' of this document discusses this issue in more detail under Issue 56, ''Transportation.''

Section 51.53(c)(3)(ii)(O). The proposed rule added a new paragraph 10 CFR 51.53(c)(3)(ii)(O) to address ''Groundwater and soil contamination'' as a Category 2 issue. However, based upon public comments received on the proposed rule [26] and further evaluation by the NRC, it was determined that this issue is properly classified as Category 1. Therefore, the proposed paragraph was not adopted by the final rule.[27]

B. Adding New Category 2 Issues

Section 51.53(c)(3)(ii)(N). The final rule adds a new paragraph 10 CFR 51.53(c)(3)(ii)(N) [28] to address ''Minority and low-income populations'' as a Category 2 issue. This new Category 2 issue is listed under the resource area ''Environmental Justice'' in the revised Table B–1. It addresses the effects of nuclear power plant operations and refurbishment associated with license renewal on minority populations and low-income populations living in the vicinity of the plant. This issue was listed in the original Table B–1 but was not evaluated in the 1996 GEIS. The finding in the original Table B–1 stated that ''[t]he need for and the content of an analysis of environmental justice will be addressed in plant specific reviews.'' This issue was not classified as either a Category 1 or 2 issue in the 1996 GEIS because guidance for implementing Executive Order (E.O.) 12898, dated February 16, 1994 (59 FR 7629), which initiated the Federal government's environmental justice program, was not available before the completion of the 1996 GEIS.

In August 2004, the Commission issued a policy statement on implementation of E.O. 12898: ''NRC's Policy Statement on the Treatment of Environmental Justice Matters in NRC Regulatory and Licensing Actions'' (69 FR 52040). As stated therein, ''the NRC is committed to the general goals of E.O. 12898, [and] it will strive to meet those goals through its normal and traditional NEPA review process.'' By making this a Category 2 issue, the final rule requires license renewal applicants to identify, in their environmental reports, minority and low-income populations and communities residing in the vicinity of the nuclear power plant. The NRC will then assess the information provided by the applicant in the NRC's plant-specific environmental review.

Section 51.53(c)(3)(ii)(O). The final rule adds a new paragraph 10 CFR 51.53(c)(3)(ii)(O) [29] to address ''Cumulative impacts'' as a Category 2 issue. This new Category 2 issue was added to Table B–1 to evaluate the potential cumulative impacts of continued operations during the license renewal term and refurbishment associated with license renewal at nuclear power plants. The NRC did not address cumulative impacts in the 1996 GEIS but has been evaluating these impacts in plant-specific supplements to the GEIS. The Council on Environmental Quality (CEQ) in 40 CFR 1508.7 defines cumulative impacts as ''the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions.'' [30] The NRC considers potential cumulative impacts on the environment resulting from the incremental impact of license renewal when added to other past, present, and reasonably foreseeable future actions.

The final rule change requires license renewal applicants to provide information about other past, present, and reasonably foreseeable future actions occurring in the vicinity of the nuclear power plant that may result in a cumulative impact. An example of the type of information to be provided includes data on the construction and operation of other power plants and other industrial commercial facilities in the vicinity of the nuclear power plant. Section VIII, ''Final Actions and Basis for Changes to Table B–1,'' of this document discusses this issue in more detail under Issue 73, ''Cumulative impacts.''

Section 51.53(c)(3)(ii)(P). The final rule adds a new paragraph 10 CFR 51.53(c)(3)(ii)(P) [31] to address ''Radionuclides released to groundwater'' as a Category 2 issue. This new Category 2 issue has been added to Table B–1 to evaluate the potential combined impact of inadvertent discharges of radioactive liquids from all plant systems into groundwater. The issue is relevant to license renewal because all commercial nuclear power plants have spent fuel pools, liquid storage tanks, and piping that contain and transport radioactive liquids. Over time, these systems and piping have a potential to degrade and release radioactive liquids that could migrate into the groundwater. The NRC has investigated several cases where radioactive liquids have been inadvertently released into the groundwater in an uncontrolled manner. In accordance with NRC requirements, residual activity from these inadvertent releases is subject to characterization and evaluation of the potential hazard. For this new Category 2 issue, the license renewal applicant is required to provide information on radioactive liquids released to groundwater.

In the final rule, the NRC modified the language of the proposed rule to specify that only ''documented'' releases need to be included in the applicant's environmental report. The NRC provides specific guidance on what constitutes a documented release in Regulatory Guide 4.2, Supplement 1, Revision 1, ''Preparation of Environmental Reports for Nuclear

[26] Section IV, ''Response to Public Comments,'' of this document provides a summary of the comments received on this issue.

[27] The final rule merges this issue into the consolidated issue, ''Groundwater contamination and use (non-cooling system impacts)'' (*see* Issue (20) under Section VIII of this document).

[28] The final rule adopts the proposed rule language.

[29] The proposed rule added this paragraph as 10 CFR 51.53(c)(3)(ii)(P). The final rule redesignates it as 10 CFR 51.53(c)(3)(ii)(O) because paragraph 10 CFR 51.53(c)(3)(ii)(O) of the proposed rule, which concerned ''Groundwater and soil contamination'' (*see* discussion in Section VI, ''A. Reclassifying Category 2 Issues as Category 1 Issues,'' of this document) was not adopted by the final rule.

[30] The NRC's regulations in 10 CFR part 51 incorporate the CEQ definition of cumulative impacts (10 CFR 51.14(b)).

[31] The proposed rule added this paragraph as 10 CFR 51.53(c)(3)(ii)(Q). The final rule redesignates it as paragraph 10 CFR 51.53(c)(3)(ii)(P) because the paragraph added as 10 CFR 51.53(c)(3)(ii)(O) by the proposed rule, which concerned groundwater and soil contamination caused by non-radionuclide, industrial contaminants, was not adopted by the final rule (*see* discussion in Section VI, ''A. Reclassifying Category 2 Issues as Category 1 Issues,'' of this document).

Power Plant License Renewal Applications.''

Section IV, ''Response to Public Comments,'' of this document provides a summary of the comments received on this issue, and Section VIII, ''Final Actions and Basis for Changes to Table B–1,'' of this document discusses this issue in more detail under Issue 27, ''Radionuclides released to groundwater.''

VII. Response to Specific Request for Voluntary Information

In Section VII of the Statement of Considerations for the July 31, 2009 (74 FR 38129–38130), proposed rule, the NRC requested voluntary information from industry about refurbishment activities and employment trends at nuclear power plants. Information on refurbishment would have been used to evaluate the significance of impacts from this type of activity. Information on employment trends would have been used to assess the significance of socioeconomic effects of ongoing plant operations on local economies.

The NRC received no response to these requests. The NRC interprets this lack of response on these issues to mean that information on major refurbishment and replacement activities and employment trends is either unavailable or insufficient to assist the NRC in re-evaluating the significance of refurbishment-related environmental impacts and socioeconomic effects of ongoing plant operations on local economies. Although no information was received regarding refurbishment activities and employment trends at nuclear power plants, the NRC believes that it has sufficient information based on lessons learned and knowledge gained from completed license renewal environmental reviews to substantiate the conclusions made in the final rule and GEIS.

VIII. Final Actions and Basis for Changes to Table B–1

The final rule revises Table B–1 to reflect the changes made in the revised GEIS. The revised GEIS is being made available with the final rule and provides a summary change table (in Appendix B) comparing the 92 environmental issues in the 1996 GEIS with the 78 environmental issues in the revised GEIS.

Land Use

(1) Onsite Land Use: ''Onsite land use'' remains a Category 1 issue. The final rule amends Table B–1 by making minor clarifying changes to the finding column entry for this issue. Specifically, the final rule replaces the sentence ''Projected onsite land use changes required during refurbishment and the renewal period would be a small fraction of any nuclear power plant site and would involve land that is controlled by the applicant,'' with ''Changes in onsite land use from continued operations and refurbishment associated with license renewal would be a small fraction of the nuclear power plant site and would involve only land that is controlled by the licensee.''

(2) Offsite Land Use: The final rule amends Table B–1 by consolidating two Category 2 issues, ''Offsite land use (refurbishment),'' with an impact level range small to moderate, and ''Offsite land use (license renewal term),'' with an impact level range small to large, and reclassifying the consolidated issue as a Category 1 issue, with an impact level of small, and naming the consolidated issue, ''Offsite land use.'' The final rule also creates a new Category 1 issue, ''Tax revenues'' (Issue 53), which concerns the impact of license renewal on state and local tax revenues, thereby removing tax revenues from the 1996 GEIS ''Offsite land use (license renewal term)'' issue. The final rule amends Table B–1 by removing the entries for ''Offsite land use (refurbishment)'' and ''Offsite land use (license renewal term),'' and by adding an entry for ''Offsite land use.'' The finding column entry of ''Offsite land use'' states ''[o]ffsite land use would not be affected by continued operations and refurbishment associated with license renewal.''

The Table B–1 finding column entry for the ''Offsite land use (refurbishment)'' issue indicated that impacts may be of moderate significance at plants in low population areas. Similarly, the finding column entry for the ''Offsite land use (license renewal term)'' issue indicates that significant changes (moderate to large) in land use may be associated with population and tax revenue changes resulting from license renewal. As described in the 1996 GEIS, environmental impacts are considered to be small if refurbishment activities were to occur at plants located in high population areas and if population and tax revenues would not change.

As reflected in the revised GEIS, significant impacts on offsite land use are not anticipated. Previous plant-specific license renewal reviews conducted by the NRC have shown no substantial increases in the number of workers during the license renewal term and that refurbishment activities (such as steam generator and vessel head replacement) have not required the large numbers of workers and the months of time that was conservatively estimated in the 1996 GEIS. These reviews support a finding that offsite land use impacts during the license renewal term would be small for all nuclear power plants.

(3) Offsite Land Use in Transmission Line Right-of-Ways (ROWs): The final rule amends Table B–1 by renaming the ''Power line right of way'' issue as ''Offsite land use in transmission line right-of-ways (ROWs).'' It remains a Category 1 issue with an impact level of small. The final rule amends the Table B–1 finding column entry for this issue by replacing the statement,

> Ongoing use of power line right of ways would continue with no change in restrictions. The effects of these restrictions are of small significance.

with the following:

> Use of transmission line ROWs from continued operations and refurbishment associated with license renewal would continue with no change in land use restrictions.

The final rule further amends Table B–1 by appending a footnote to the issue column entry for ''Offsite land use in transmission line right-of-ways (ROWs),'' concerning the extent to which transmission lines and their associated ROWs have been analyzed in the revised GEIS. The footnote states,

> This issue applies only to the in-scope portion of electric power transmission lines which are defined as transmission lines that connect the nuclear power plant to the substation where electricity is fed into the regional power distribution system and transmission lines that supply power to the nuclear plant from the grid.

As stated in the revised GEIS, the final environmental statements (essentially, the equivalent of environmental impact statements) prepared for the original construction of the various nuclear power plants (the construction permits) and for the initial operating licenses evaluated the impacts of those transmission lines built to connect the nuclear power plant to the regional electrical grid. Since the original construction of those lines, regional expansion of the electrical distribution grid has resulted in incorporation of those lines originating at the power plant substations. In most cases, the transmission lines originating at the power plant substations are no longer owned or managed by the nuclear power plant licensees. These lines would remain in place and be energized regardless of whether the subject nuclear power plant license was renewed or not. For this reason, those transmission lines that would not be impacted by a license renewal decision (i.e., those lines that would not be

dismantled or otherwise decommissioned as a result of a plant terminating operations because its operating license had not been renewed) are considered beyond the scope of, and as such are not analyzed in, the revised GEIS.

Visual Resources

(4) Aesthetic Impacts: The final rule amends Table B–1 by consolidating three Category 1 issues, ''Aesthetic impacts (refurbishment),'' ''Aesthetic impacts (license renewal term),'' and ''Aesthetic impacts of transmission lines (license renewal term),'' each with an impact level of small, into one new Category 1 issue, ''Aesthetic impacts.'' The new consolidated issue also has an impact level of small. The 1996 GEIS concluded that renewal of operating licenses and the refurbishment activities would have no significant aesthetic impact during the license renewal term. Impacts are considered to be small if the visual appearance of plant and transmission line structures would not change. Previous license renewal reviews conducted by the NRC show that the appearance of nuclear power plants and transmission line structures do not change significantly over time or because of refurbishment activities. Therefore, because aesthetic impacts are not anticipated and the three issues are similar, they have been consolidated to facilitate the environmental review process. The final rule amends Table B–1 by removing the entries for ''Aesthetic impacts (refurbishment),'' ''Aesthetic impacts (license renewal term),'' and ''Aesthetic impacts of transmission lines (license renewal term),'' and adding an entry for ''Aesthetic impacts.'' The finding column entry for the new combined entry states ''[n]o important changes to the visual appearance of plant structures or transmission lines are expected from continued operations and refurbishment associated with license renewal.''

Air Quality

(5) Air Quality Impacts (All Plants): The final rule amends Table B–1 by renaming the ''Air quality during refurbishment (nonattainment and maintenance areas)'' issue as ''Air quality impacts (all plants).'' The final rule reflects the revised GEIS's expansion of the issue to include air emission impacts from emergency diesel generators, boilers, and particulate emissions from cooling towers. Based on public comments received on the proposed rule and the re-evaluation of information as described in the revised GEIS, the final rule further amends Table B–1 by revising this Category 2 issue, with an impact level range small to large, to a Category 1 issue with an impact level of small.[32] The final rule further amends Table B–1 by revising the finding column entry for this issue to state,

> Air quality impacts from continued operations and refurbishment associated with license renewal are expected to be small at all plants. Emissions resulting from refurbishment activities at locations in or near air quality nonattainment or maintenance areas would be short-lived and would cease after these refurbishment activities are completed. Operating experience has shown that the scale of refurbishment activities has not resulted in exceedance of the *de minimis* thresholds for criteria pollutants, and best management practices including fugitive dust controls and the imposition of permit conditions in State and local air emissions permits would ensure conformance with applicable State or Tribal Implementation Plans.
>
> Emissions from emergency diesel generators and fire pumps and routine operations of boilers used for space heating would not be a concern, even for plants located in or adjacent to nonattainment areas. Impacts from cooling tower particulate emissions even under the worst-case situations have been small.

Operating experience has shown that air quality impacts from these emission sources (including particulate emissions from cooling towers at operating plants) have been small at all nuclear power plants, including those plants located in or adjacent to nonattainment areas.

In addition, air quality impacts during refurbishment have also been small. These types of emissions could be a cause for concern if they occur at plants located in or near air quality nonattainment or maintenance areas. However, these impacts have been temporary and would cease once these activities were completed. Operating experience has also shown that refurbishment activities have not required the large numbers of workers and the months of time that was conservatively predicted and analyzed in the 1996 GEIS, nor have such activities resulted in exceedances in the *de minimis* thresholds for criteria pollutants in nonattainment and maintenance areas.

Implementation of best management practices, including fugitive dust controls as required by the imposition of conditions in State and local air emissions permits, would ensure conformance with applicable State or Tribal Implementation Plans, in accordance with EPA's revised General Conformity Regulations (75 FR 17254; April 5, 2010). On the basis of these considerations, the NRC has concluded that the air quality impact of continued nuclear power plant operations and refurbishment associated with license renewal would be small for all plants.

(6) Air Quality Effects of Transmission Lines: The final rule amends Table B–1 by appending a footnote to the issue column entry for ''Air quality effects of transmission lines,'' concerning the extent to which transmission lines and their associated right of ways have been analyzed under the revised GEIS. This footnote is the same one that was added to Issue 3, ''Offsite land use in transmission line right-of-ways (ROWs).'' See the description of the changes made by the final rule to Issue 3 for further explanation of this amendment.

Noise

(7) Noise Impacts: The final rule amends Table B–1 by renaming the issue ''Noise'' as ''Noise impacts.'' The issue remains a Category 1 issue with an impact level of small. The final rule further amends Table B–1 by making minor clarifying changes to the finding column entry for this issue. Specifically, the final rule replaces the sentence ''Noise has not been found to be a problem at operating plants and is not expected to be a problem at any plant during the license renewal term,'' with ''Noise levels would remain below regulatory guidelines for offsite receptors during continued operations and refurbishment associated with license renewal.''

Geologic Environment

(8) Geology and Soils: The final rule amends Table B–1 by adding a new Category 1 issue, ''Geology and soils.'' This issue has an impact level of small. The finding column entry for this issue states,

> The effect of geologic and soil conditions on plant operations and the impact of continued operations and refurbishment activities on geology and soils would be small for all nuclear power plants and would not change appreciably during the license renewal term.

This issue was not evaluated in the 1996 GEIS, as described in the proposed rule.[33] This new Category 1 issue considers geology and soils from the perspective of those resource conditions or attributes that can be affected by

[32] Under the proposed rule, the issue had been proposed to be renamed ''Air quality (nonattainment and maintenance areas);'' it would have remained a Category 2 issue with an impact level range of small to large (74 FR 38121, 38134; July 31, 2009).

[33] The proposed rule named the issue ''Impacts of nuclear plants on geology and soils.'' Under the proposed rule, the issue was also a Category 1 issue, with an impact level of small (74 FR 38121, 38134; July 31, 2009).

continued operations during the renewal term. The final rule does not require the license renewal applicant to assess this issue in its environmental report unless the applicant is aware of new and significant information about geologic and soil conditions and associated impacts at or near the nuclear power plant site that could change the conclusion in the GEIS.

An understanding of geologic and soil conditions has been well established at all nuclear power plants and associated transmission lines during the current licensing term, and these conditions are expected to remain unchanged during the 20-year license renewal term for each plant. The impact of these conditions on plant operations and the impact of continued power plant operations and refurbishment activities on geology and soils are small for all nuclear power plants and not expected to change appreciably during the license renewal term. Operating experience shows that any impacts to geologic and soil strata would be limited to soil disturbance from construction activities associated with routine infrastructure renovation and maintenance projects during continued plant operations. Implementing best management practices would reduce soil erosion and subsequent impacts on surface water quality. Information in plant-specific SEISs prepared to date and reference documents have not identified these impacts as being significant.

Surface Water Resources

(9) Surface Water Use and Quality (Non-Cooling System Impacts): The final rule amends Table B–1 by consolidating two Category 1 issues, ''Impacts of refurbishment on surface water quality'' and ''Impacts of refurbishment on surface water use,'' both with an impact level of small, and names the consolidated issue, ''Surface water use and quality (non-cooling system impacts).'' These two issues were consolidated because the impacts of refurbishment on both surface water use and quality are negligible and the effects are closely related. The consolidated issue has also been expanded to include the impacts of continued operations. The consolidated issue is a Category 1 issue with an impact level of small.

The final rule amends Table B–1 by removing the entries for ''Impacts of refurbishment on surface water quality'' and ''Impacts of refurbishment on surface water use'' and adding an entry for ''Surface water use and quality (non-cooling system impacts).'' The finding column entry for the new consolidated issue states,

Impacts are expected to be small if best management practices are employed to control soil erosion and spills. Surface water use associated with continued operations and refurbishment associated with license renewal would not increase significantly or would be reduced if refurbishment occurs during a plant outage.

The NRC expects licensees to use best management practices during the license renewal term for both continuing operations and refurbishment activities. Use of best management practices will minimize soil erosion. In addition, implementation of spill prevention and control plans will reduce the likelihood of any liquid chemical spills. If refurbishment activities take place during a plant outage, with the reactor shutdown, the overall water use by the facility will be reduced. Based on this conclusion, the impact on surface water use and quality during the license renewal term will continue to be small for all plants.

(10) Altered Current Patterns at Intake and Discharge Structures, (11) Altered Salinity Gradients, (12) Altered Thermal Stratification of Lakes, and (13) Scouring Caused by Discharged Cooling Water: These four issues remain Category 1 issues, each with an impact level of small. The final rule amends Table B–1 by making minor clarifying changes to the finding column entries for each of these issues.

The final rule amends the ''Altered current patterns at intake and discharge structures'' finding column entry by replacing the statement,

Altered current patterns have not been found to be a problem at operating nuclear power plants and are not expected to be a problem during the license renewal term.

with the following:

Altered current patterns would be limited to the area in the vicinity of the intake and discharge structures. These impacts have been small at operating nuclear power plants.

The final rule amends the ''Altered salinity gradients'' finding column entry by replacing the statement,

Salinity gradients have not been found to be a problem at operating nuclear power plants and are not expected to be a problem during the license renewal term.

with the following:

Effects on salinity gradients would be limited to the area in the vicinity of the intake and discharge structures. These impacts have been small at operating nuclear power plants.

The final rule amends the ''Altered thermal stratification of lakes'' finding column entry by replacing the statement,

Generally, lake stratification has not been found to be a problem at operating nuclear power plants and is not expected to be a problem during the license renewal term.

with the following:

Effects on thermal stratification would be limited to the area in the vicinity of the intake and discharge structures. These impacts have been small at operating nuclear power plants.

The final rule amends the ''Scouring caused by discharged cooling water'' finding column entry by replacing the statement,

Scouring has not been found to be a problem at most operating nuclear power plants and has caused only localized effects at a few plants. It is not expected to be a problem during the license renewal term.

with the following:

Scouring effects would be limited to the area in the vicinity of the intake and discharge structures. These impacts have been small at operating nuclear power plants.

These changes reflect the findings of environmental reviews conducted since the publication of the 1996 GEIS, which show that the effects of these four issues are localized in the vicinity of the plant's intake and discharge structures.

(14) Discharge of Metals in Cooling System Effluent: The final rule amends Table B–1 by renaming ''Discharge of other metals in waste water'' as ''Discharge of metals in cooling system effluent.'' It remains a Category 1 issue with an impact level of small. The final rule also makes minor clarifying changes to the finding column entry for this issue. Specifically, the final rule amends the finding column entry by replacing the statement,

These discharges have not been found to be a problem at operating nuclear power plants with cooling-tower-based heat dissipation systems and have been satisfactorily mitigated at other plants. They are not expected to be a problem during the license renewal term.

with the following:

Discharges of metals have not been found to be a problem at operating nuclear power plants with cooling-tower-based heat dissipation systems and have been satisfactorily mitigated at other plants. Discharges are monitored and controlled as part of the National Pollutant Discharge Elimination System (NPDES) permit process.

(15) Discharge of Biocides, Sanitary Wastes, and Minor Chemical Spills: The final rule amends Table B–1 by consolidating two Category 1 issues, ''Discharge of chlorine or other biocides'' and ''Discharge of sanitary wastes and minor chemical spills,'' both with an impact level of small, and naming the consolidated issue ''Discharge of biocides, sanitary wastes,

and minor chemical spills.'' The consolidated issue is a Category 1 issue with an impact level of small. Specifically, the final rule amends Table B–1 by removing the entries for ''Discharge of chlorine or other biocides'' and ''Discharge of sanitary wastes and minor chemical spills'' and adding an entry for ''Discharge of biocides, sanitary wastes, and minor chemical spills.'' The finding column entry for the new consolidated issue states,

> The effects of these discharges are regulated by Federal and State environmental agencies. Discharges are monitored and controlled as part of the NPDES permit process. These impacts have been small at operating nuclear power plants.

(16) *Surface Water Use Conflicts (Plants with Once-Through Cooling Systems):* ''Water use conflicts (plants with once-through cooling systems)'' remains a Category 1 issue with an impact level of small. The final rule amends Table B–1 by adding the word ''Surface'' to the title of this issue.

(17) *Surface Water Use Conflicts (Plants with Cooling Ponds or Cooling Towers Using Makeup Water from a River):* The final rule amends Table B–1 by adding the term ''surface'' and removing the terms ''small'' and ''low flow'' from the title and the associated numerical definition contained in 10 CFR 51.53(c)(3)(ii)(A) for low flow rivers from this and other related river flow issues. This issue remains a Category 2 issue with an impact range of small to moderate. The final rule also amends the finding column entry by replacing the statement,

> The issue has been a concern at nuclear power plants with cooling ponds and at plants with cooling towers. Impacts on instream and riparian communities near these plants could be of moderate significance in some situations. See § 51.53(c)(3)(ii)(A).

with the following:

> Impacts could be of small or moderate significance, depending on makeup water requirements, water availability, and competing water demands.

The 1996 GEIS distinguished between surface water use impacts during low flow conditions on ''small'' versus ''large'' rivers. Any river, regardless of size, can experience low flow conditions of varying severity during periods of drought and changing conditions in the affected watersheds such as upstream diversions and use of river water. Similarly, the NRC has determined that the use of the term ''low flow'' in categorizing river flow is of little value considering that plants that withdraw makeup water from a river can experience low flow conditions and would be required to conduct a plant-specific assessment of water use conflicts.

(18) *Effects of Dredging on Surface Water Quality:* The final rule amends Table B–1 by adding a new Category 1 issue, ''Effects of dredging on surface water quality,'' which evaluates the impacts of dredging to maintain intake and discharge structures at nuclear power plant facilities. This issue has an impact level of small. The finding column entry for this issue states,

> Dredging to remove accumulated sediments in the vicinity of intake and discharge structures and to maintain barge shipping has not been found to be a problem for surface water quality. Dredging is performed under permit from the U.S. Army Corps of Engineers, and possibly, from other State or local agencies.

The impact of dredging on surface water quality was not considered in the 1996 GEIS and was not listed in Table B–1 prior to this final rule. Most plants have intake and discharge structures that must be maintained by periodic dredging of sediment accumulated in or on the structures. The NRC has found that dredging, while temporarily increasing turbidity in the source water body, generally has little long-term effect on water quality. In addition to maintaining intake and discharge structures, dredging is often done to keep barge slips and channels open to service the plant. Dredged material is most often disposed on property owned by the applicant and usually contains no hazardous materials. Dredging must be performed under a permit issued by the U.S. Army Corps of Engineers (the Corps) and consequently, each dredging action would be subject to a site-specific environmental review conducted by the Corps. Temporary impacts of dredging are measurable in general water quality terms, but the impacts have been shown to be small.

(19) *Temperature Effects on Sediment Transport Capacity:* There are no changes to this issue, and it remains a Category 1 issue with an impact level of small.

Groundwater Resources

(20) *Groundwater Contamination and Use (Non-Cooling System Impacts):* The final rule amends Table B–1 by expanding the scope of ''Impacts of refurbishment on groundwater use and quality'' issue to include the effects of continued nuclear power plant operations during the license renewal term. This Category 1 issue, with an impact level of small, was renamed ''Groundwater use and quality'' in the proposed rule.

The final rule also amends Table B–1 by changing the proposed rule's new Category 2 issue ''Groundwater and soil contamination,'' with an impact range of small to moderate (see 74 FR 38122, 38135), to Category 1, with an impact level of small. This issue was then consolidated with the ''Groundwater use and quality'' issue and renamed ''Groundwater contamination and use (non-cooling system impacts).'' These issues were consolidated because they consider the impact of industrial activities associated with the continued operations of a nuclear power plant (not directly related to cooling system effects) and refurbishment on groundwater use and quality. The final rule further amends Table B–1 by replacing the finding column entry, which states,

> Extensive dewatering during the original construction on some sites will not be repeated during refurbishment on any sites. Any plant wastes produced during refurbishment will be handled in the same manner as in current operating practices and are not expected to be a problem during the license renewal term.

with the following:

> Extensive dewatering is not anticipated from continued operations and refurbishment associated with license renewal. Industrial practices involving the use of solvents, hydrocarbons, heavy metals, or other chemicals, and/or the use of wastewater ponds or lagoons have the potential to contaminate site groundwater, soil, and subsoil. Contamination is subject to State or Environmental Protection Agency regulated cleanup and monitoring programs. The application of best management practices for handling any materials produced or used during these activities would reduce impacts.

The consolidated Category 1 issue considers the impacts from groundwater use and the impacts on groundwater, soil, and subsoil from the industrial use of solvents, hydrocarbons, heavy metals, or other chemicals at nuclear power plant sites from continued operation during the license renewal term and refurbishment. The consolidated issue also includes the use of wastewater disposal ponds or lagoons and non-radionuclide, industrial contaminants released inadvertently or as effluents into the environment. Industrial practices at all nuclear power plants have the potential to contaminate groundwater and soil, especially on sites with unlined wastewater and storm water ponds or lagoons. Any contamination of this type is subject to characterization and clean-up under EPA or State regulated remediation and monitoring programs.

Non-radionuclide contaminants have been found in groundwater and soil

samples at some nuclear power plants during previous license renewal environmental reviews. Release of these contaminants into groundwater and soil degrades the quality of these resources, even if applicable groundwater quality standards are not exceeded. However, each site has its own program for handling chemicals, waste, and other hazardous materials in accordance with Federal and State regulations and is expected to employ best management practices. The use of wastewater disposal ponds or lagoons, whether lined or unlined, may increase the potential for groundwater and soil contamination. However, they are subject to discharge authorizations under NPDES and related State wastewater discharge permit programs.

The finding column of Table B–1 for ''Groundwater use and quality'' prior to this final rule, as analyzed in the 1996 GEIS, indicated that impacts of continued operations and refurbishment on groundwater use and quality would be small, as extensive dewatering is not anticipated. This finding was re-evaluated in the revised GEIS and is retained in Table B–1.

While the proposed rule's ''Groundwater and soil contamination'' issue was identified as a Category 2 issue, further consideration of the ''Groundwater and soil contamination'' issue and public comments revealed that the potential impacts on groundwater and soil quality from common industrial practices can be addressed generically, as these practices are common to all industrial facilities and are not unique to nuclear power plants. Moreover, as supported by the analysis in the revised GEIS, the NRC concludes that the overall impact of industrial practices on groundwater use and quality from past and current operations is small for all nuclear power plants and not expected to change appreciably during the license renewal term.

(21) *Groundwater Use Conflicts (Plants that Withdraw Less Than 100 Gallons per Minute [gpm]):* The final rule amends Table B–1 by renaming the ''Ground-water use conflicts (potable and service water; plants that use <100 gpm)'' issue as ''Groundwater use conflicts (plants that withdraw less than 100 gallons per minute [gpm]).'' It remains a Category 1 issue with an impact level of small. The final rule further amends Table B–1 by making minor clarifying changes to the finding column entry for this issue. Specifically, the final rule replaces the entry statement ''Plants using less than 100 gpm are not expected to cause any ground-water conflicts,'' with ''Plants that withdraw less than 100 gpm are not expected to cause any groundwater use conflicts.''

(22) *Groundwater Use Conflicts (Plants that Withdraw More Than 100 Gallons per Minute [gpm]):* The final rule amends Table B–1 by consolidating two Category 2 issues, ''Groundwater use conflicts (potable and service water, and dewatering; plants that use >100 gpm)'' and ''Ground-water use conflicts (Ranney wells),'' each with an impact level range of small to large, and names the consolidated issue, ''Groundwater use conflicts (plants that withdraw more than 100 gallons per minute [gpm]).'' Because Ranney wells produce significantly more than 100 gpm, the Ranney wells issue was consolidated with the general issue of groundwater use conflicts for plants using more than 100 gpm of groundwater. The consolidated issue is a Category 2 issue, with an impact level range of small to large. The final rule further amends Table B–1 by removing the entries for ''Groundwater use conflicts (potable and service water, and dewatering; plants that use >100 gpm)'' and ''Ground-water use conflicts (Ranney wells)'' and adding an entry for ''Groundwater use conflicts (plants that withdraw more than 100 gallons per minute [gpm]).'' The finding column entry for the new consolidated issue states ''Plants that withdraw more than 100 gpm could cause groundwater use conflicts with nearby groundwater users.''

(23) *Groundwater Use Conflicts (Plants with Closed-Cycle Cooling Systems that Withdraw Makeup Water from a River):* The final rule amends Table B–1 by renaming ''Ground-water use conflicts (plants using cooling towers withdrawing makeup water from a small river)'' as ''Groundwater use conflicts (plants with closed-cycle cooling systems that withdraw makeup water from a river).'' It remains a Category 2 issue, with an impact level range of small to large. The final rule further amends Table B–1 by replacing the finding column entry, which states,

> Water use conflicts may result from surface water withdrawals from small water bodies during low flow conditions which may affect aquifer recharge, especially if other ground-water or upstream surface water users come on line before the time of license renewal. See § 51.53(c)(3)(ii)(A).

with the following:

> Water use conflicts could result from water withdrawals from rivers during low-flow conditions, which may affect aquifer recharge. The significance of impacts would depend on makeup water requirements, water availability, and competing water demands.

The 1996 GEIS distinguished between surface water use impacts during low flow conditions on ''small'' versus ''large'' rivers. Any river, regardless of size, can experience low flow conditions of varying severity during periods of drought and changing conditions in the affected watersheds such as upstream diversions and use of river water. The NRC has thus determined that the use of the term ''small river'' or ''small water bodies'' is of little value considering that plants that withdraw makeup water from a river can experience low-flow conditions and would be required to conduct a plant-specific assessment of water use conflicts.

(24) *Groundwater Quality Degradation Resulting from Water Withdrawals:* The final rule amends Table B–1 by consolidating two Category 1 issues, ''Ground-water quality degradation (Ranney wells)'' and ''Ground-water quality degradation (saltwater intrusion),'' each with an impact level of small, and names the consolidated issue, ''Groundwater quality degradation resulting from water withdrawals.'' The consolidated issue remains a Category 1 issue, with an impact level of small. The final rule further amends Table B–1 by removing the entries for ''Ground-water quality degradation (Ranney wells)'' and ''Ground-water quality degradation (saltwater intrusion)'' and, by adding an entry for ''Groundwater quality degradation resulting from water withdrawals.'' The finding column entry for the consolidated issue states ''Groundwater withdrawals at operating nuclear power plants would not contribute significantly to groundwater quality degradation.'' The two issues were consolidated as they both consider the possibility of groundwater quality becoming degraded as a result of plant operations drawing water of potentially lower quality into the aquifer.

(25) Groundwater Quality Degradation (Plants with Cooling Ponds in Salt Marshes): The final rule amends Table B–1 by revising the title of the issue ''Ground-water quality degradation (cooling ponds in salt marshes)'' to ''Groundwater quality degradation (plants with cooling ponds in salt marshes).'' The issue remains a Category 1 issue, with an impact level of small. The final rule further amends Table B–1 by replacing the finding column entry, which states,

> Sites with closed-cycle ponds may degrade ground-water quality. Because water in salt marshes is brackish, this is not a concern for plants located in salt marshes.

with the following:

Sites with closed-cycle cooling ponds could degrade groundwater quality. However, groundwater in salt marshes is naturally brackish and thus, not potable. Consequently, the human use of such groundwater is limited to industrial purposes.

The final rule change to the finding column entry reflects the NRC's response to a public comment on the proposed rule by: (1) Deleting the term ''plants'' to eliminate any confusion that the NRC might have meant marsh ''plants'' rather than ''nuclear power plants;'' and (2) clarifying that the focus of this issue is on the degradation of groundwater quality for human use. Brackish groundwater has limited human use, thus, any impacts on groundwater quality caused by continued operations and refurbishment associated with license renewal are not significant.

(26) Groundwater Quality Degradation (Plants with Cooling Ponds at Inland Sites): The final rule amends Table B–1 by revising the title of the issue ''Ground-water quality degradation (cooling ponds at inland sites)'' to ''Groundwater quality degradation (plants with cooling ponds at inland sites).'' The issue remains a Category 2 issue, with an impact level range of small to large. The final rule further amends Table B–1 by replacing the finding column entry, which states,

Sites with closed-cycle cooling ponds may degrade ground-water quality. For plants located inland, the quality of the ground water in the vicinity of the ponds must be shown to be adequate to allow continuation of current uses. See § 51.53(c)(3)(ii)(D).

with the following:

Inland sites with closed-cycle cooling ponds could degrade groundwater quality. The significance of the impact would depend on cooling pond water quality, site hydrogeologic conditions (including the interaction of surface water and groundwater), and the location, depth, and pump rate of water wells.

(27) *Radionuclides Released to Groundwater:* The final rule amends Table B–1 by adding a new Category 2 issue, ''Radionuclides released to groundwater,'' with an impact level range of small to moderate, to evaluate the potential impact of discharges of radionuclides from plant systems into groundwater. The finding column entry for this issue states,

Leaks of radioactive liquids from plant components and pipes have occurred at numerous plants. Groundwater protection programs have been established at all operating nuclear power plants to minimize the potential impact from any inadvertent releases. The magnitude of impacts would depend on site-specific characteristics.

This new Category 2 issue has been added to evaluate the potential impact to groundwater quality from the discharge of radionuclides from plant systems, piping, and tanks. This issue was added because within the past several years there have been events at nuclear power reactor sites that involved unknown, uncontrolled, and unmonitored releases of radioactive liquids into the groundwater. The issue is relevant to license renewal because this experience has shown that components and piping at nuclear power plants have the potential to leak radioactive material into the groundwater and degrade its quality. While the NRC's regulations in 10 CFR part 20 and in 10 CFR part 50 limit the amount of radioactive material released (i.e., from routine and inadvertent sources) from a nuclear power plant into the environment, the regulations are focused on protecting the public, not the quality of the groundwater. Therefore, as required by NEPA, the NRC must consider the potential impacts to the groundwater from radioactive liquids released into groundwater.

The majority of the inadvertent radioactive liquid release events involved tritium, which is a radioactive isotope of hydrogen. However, in some of the events, radioactive isotopes of cesium and strontium have also been released. Non-routine releases of radioactive liquids into the groundwater have occurred from plant systems and buried piping.

In 2006, the NRC's Executive Director for Operations chartered a task force to conduct a lessons-learned review of these incidents. On September 1, 2006, the Task Force issued its report: ''Liquid Radioactive Release Lessons Learned Task Force Report'' (ADAMS Accession No. ML062650312). A significant conclusion of the report dealt with the potential health impacts to the public from the inadvertent releases. Although there were numerous events where radioactive liquids were released to the groundwater in an unplanned, uncontrolled, and unmonitored fashion, based on the data available, the task force did not identify any instances where public health and safety was adversely impacted. However, the task force did not evaluate the impact of the releases to groundwater quality. The task force also identified that under the existing regulatory requirements, the potential exists for radioactive liquid releases from leaking systems to not be detected for a period of time and, therefore, the contaminants could migrate into groundwater.

In response to these groundwater events, NEI, which represents the nuclear industry, in 2007 committed to the NRC to develop a voluntary initiative for each nuclear power plant to have a site-specific groundwater protection program. NEI provided guidance to the nuclear industry (NEI 07–07, ADAMS Accession No. ML072610036) on the development and implementation of a groundwater protection program. The program covers the assessment of plant systems and components, site hydrogeology, and methods to detect leaks to determine the needs for each site-specific program. To monitor the actions of the nuclear industry, the NRC routinely inspects nuclear power plant licensees to verify continued implementation of the Groundwater Protection Initiative programs, to review records of identified leakage and spill events, to assess whether the source of the leak or spill was identified and mitigated, and to review any remediation actions taken for effectiveness.

On the basis of the information and experience with these groundwater events and the evaluation in the revised GEIS, the NRC concludes that the impact to groundwater quality from the release of radionuclides is dependent on site-specific variables and could be small or moderate, depending on the magnitude of the leak, radionuclides involved, and the response time of plant personnel to identify and stop the leak in a timely fashion. Therefore, ''Radionuclides released to groundwater'' is a Category 2 issue and, as such, a site-specific evaluation in the environmental report is needed for each application for license renewal. Similarly, the NRC will analyze this issue in the SEIS for each license renewal action.

Terrestrial Resources

(28) *Effects on Terrestrial Resources (Non-Cooling System Impacts):* The final rule amends Table B–1 by renaming the ''Refurbishment impacts'' issue as ''Effects on terrestrial resources (non-cooling system impacts).'' It remains a Category 2 issue, with an impact level range of small to large.[34] The issue, as set forth in the 1996 GEIS, addressed only the impacts upon terrestrial resources resulting from any refurbishment activities during the license renewal term. The analysis in the revised GEIS builds on the analysis in the 1996 GEIS to include the environmental impacts resulting from continued plant operations during the license renewal term. The final rule

[34] The proposed rule named the issue, ''Impacts of continued plant operations on terrestrial ecosystems'' (74 FR 38123, 38136; July 31, 2009).

further amends Table B–1 by replacing the finding column entry, which states,

> Refurbishment impacts are insignificant if no loss of important plant and animal habitat occurs. However, it cannot be known whether important plant and animal communities may be affected until the specific proposal is presented with the license renewal application. See § 51.53(c)(3)(ii)(E).

with the following:

> Impacts resulting from continued operations and refurbishment associated with license renewal may affect terrestrial communities. Application of best management practices would reduce the potential for impacts. The magnitude of impacts would depend on the nature of the activity, the status of the resources that could be affected, and the effectiveness of mitigation.

(29) *Exposure of Terrestrial Organisms to Radionuclides:* The final rule amends Table B–1 by adding a new Category 1 issue, ''Exposure of terrestrial organisms to radionuclides.'' The new issue has been determined to have an impact level of small. The finding column entry for this issue states,

> Doses to terrestrial organisms from continued operations and refurbishment associated with license renewal are expected to be well below exposure guidelines developed to protect these organisms.

This new issue evaluates the potential impact of radionuclides on terrestrial organisms resulting from continued operations of a nuclear power plant during the license renewal term and refurbishment associated with license renewal. This issue was not evaluated in the 1996 GEIS. Subsequent to the publication of the 1996 GEIS, however, members of the public and various Federal and State agencies commented on the need to evaluate the potential impact of radionuclides on terrestrial organisms during plant-specific license renewal reviews.

The revised GEIS evaluates the potential impact of radionuclides on terrestrial biota at nuclear power plants from continued operations during the license renewal term. For the evaluation, site-specific radionuclide concentrations in environmental media (e.g., water, air, milk, crops, food products, sediment, and fish and other aquatic biota) were obtained from publicly available Radiological Environmental Monitoring Program (REMP) annual reports from 15 nuclear power plants. The REMP is conducted at every NRC licensed nuclear power plant to assess the environmental impacts from plant operations. This is done by collecting samples of environmental media from areas surrounding the plant for analysis to measure the amount of radioactivity, if any, in the samples. The media samples reflect the radiation exposure pathways to the public from radioactive effluents released by the nuclear power plant and from background radiation (i.e., cosmic sources, naturally-occurring radioactive material, including radon and global fallout). These 15 plants were selected to represent sites that reported a range of radionuclide concentrations in the sample media and included both boiling water reactors and pressurized water reactors. Site-specific radionuclide concentrations in water and sediments, as reported in the plant's REMP reports, were used in the calculations. The calculated radiation dose rates to terrestrial biota, based on exposure to radioactivity in the environmental media, were compared against radiation-safety guidelines issued by the U.S. Department of Energy (DOE), the International Atomic Energy Agency (IAEA), the National Council of Radiation Protection and Measurements (NCRP), and the International Commission on Radiological Protection (ICRP). The NRC concluded that the impacts of radionuclides on terrestrial biota from past and current normal operations are small for all nuclear power plants and should not change appreciably during the license renewal term.

(30) *Cooling System Impacts on Terrestrial Resources (Plants with Once-Through Cooling Systems or Cooling Ponds):* The final rule amends Table B–1 by renaming the ''Cooling pond impacts on terrestrial resources'' issue as ''Cooling system impacts on terrestrial resources (plants with once-through cooling systems or cooling ponds).'' It remains a Category 1 issue, with an impact level of small. The analysis in the revised GEIS expands the scope of this issue to include plants with once-through cooling systems. This analysis concludes that the impacts on terrestrial resources from once-through cooling systems, as well as from cooling ponds, is of small significance at all plants. The final rule further amends Table B–1 by replacing the finding column entry, which states,

> Impacts of cooling ponds on terrestrial ecological resources are considered to be of small significance at all sites.

with the following:

> No adverse effects to terrestrial plants or animals have been reported as a result of increased water temperatures, fogging, humidity, or reduced habitat quality. Due to the low concentrations of contaminants in cooling system effluents, uptake and accumulation of contaminants in the tissues of wildlife exposed to the contaminated water or aquatic food sources are not expected to be significant issues.

(31) *Cooling Tower Impacts on Vegetation (Plants with Cooling Towers):* The final rule amends Table B–1 by consolidating two Category 1 issues, ''Cooling tower impacts on crops and ornamental vegetation'' and ''Cooling tower impacts on native plants,'' both issues having an impact level of small, and names the consolidated issue, ''Cooling tower impacts on vegetation (plants with cooling towers).'' The consolidated issue is a Category 1 issue with an impact level of small. The two issues were consolidated to conform to the resource-based approach used in the revised GEIS. With the recent trend of replacing lawns with native vegetation, some ornamental plants and crops are native plants, and the original separation into two issues is unnecessary and cumbersome. The final rule further amends Table B–1 by removing the entries for ''Cooling tower impacts on crops and ornamental vegetation'' and ''Cooling tower impacts on native plants,'' and by adding an entry for ''Cooling tower impacts on vegetation (plants with cooling towers).'' The finding column entry for the new consolidated issue states,

> Impacts from salt drift, icing, fogging, or increased humidity associated with cooling tower operation have the potential to affect adjacent vegetation, but these impacts have been small at operating nuclear power plants and are not expected to change over the license renewal term.

(32) *Bird Collisions with Plant Structures and Transmission Lines:* The final rule amends Table B–1 by consolidating two Category 1 issues, ''Bird collisions with cooling towers'' and ''Bird collision with power lines,'' both issues having an impact level of small. The final rule also expands the scope of the consolidated issue to address collisions with all plant structures and names the issue, ''Bird collisions with plant structures and transmission lines.'' The consolidated issue is a Category 1 issue with an impact level of small. The two issues were consolidated to conform to the resource-based approach used in the revised GEIS. The final rule further amends Table B–1 by removing the entries for ''Bird collisions with cooling towers'' and ''Bird collision with power lines,'' and by adding an entry for ''Bird collisions with plant structures and transmission lines.'' The finding column entry for the new consolidated issue states,

Bird collisions with cooling towers and other plant structures and transmission lines occur at rates that are unlikely to affect local or migratory populations and the rates are not expected to change.

The final rule further amends Table B–1 by appending a footnote to the issue column entry for ''Bird collisions with plant structures and transmission lines,'' concerning the extent to which transmission lines and their associated right of ways have been analyzed under the revised GEIS. This footnote is the same one that was added to Issue 3, ''Offsite land use in transmission line right-of-ways (ROWs).'' See the description of the changes made by the final rule to Issue 3 for further explanation of this amendment.

(33) *Water Use Conflicts with Terrestrial Resources (Plants with Cooling Ponds or Cooling Towers Using Makeup Water from a River):* The final rule amends Table B–1 by adding a new Category 2 issue, ''Water use conflicts with terrestrial resources (plants with cooling ponds or cooling towers using makeup water from a river),'' to evaluate water use conflict impacts with terrestrial resources in riparian communities. The 1996 GEIS already addresses the resource aspects of this issue, and 10 CFR 51.53(c)(3)(ii)(A) requires a plant-specific analysis of the impacts of surface water withdrawals from rivers for cooling pond or cooling tower makeup on riparian ecological communities. However, this stand-alone issue was created to clearly separate out the related aspects and potential impacts on terrestrial, riparian communities associated with surface water withdrawals from a river for consumptive cooling water uses. The new issue has an impact level range of small to moderate. The finding column entry for this issue states,

Impacts on terrestrial resources in riparian communities affected by water use conflicts could be of moderate significance.

As described in the revised GEIS, such impacts could occur when water that supports these resources is diminished because of decreased availability due to droughts; increased water demand for agricultural, municipal, or industrial usage; or a combination of these factors. The potential range of impact levels at plants, subject to license renewal, with cooling ponds or cooling towers using makeup water from a river cannot be generically determined. The NRC has also removed the term ''low flow'' from the title of this issue, as set forth in the proposed rule, and other related river flow issues in the final rule as previously discussed in this section (*see* Issue 17, ''Surface Water Use Conflicts (Plants with Cooling Ponds or Cooling Towers Using Makeup Water from a River)'').

(34) *Transmission Line Right-of-Way (ROW) Management Impacts on Terrestrial Resources:* The final rule amends Table B–1 by consolidating two Category 1 issues, ''Power line right-of-way management (cutting and herbicide application)'' and ''Floodplains and wetland on power line right-of-way,'' each with an impact level of small, and names the consolidated issue, ''Transmission line right-of-way (ROW) management impacts on terrestrial resources.'' The consolidated issue is a Category 1 issue, with an impact level of small. The two issues were consolidated to conform to the resource-based approach used in the revised GEIS. The final rule further amends Table B–1 by removing the entries for ''Power line right-of-way management (cutting and herbicide application)'' and ''Floodplains and wetland on power line right-of-way,'' and, by adding an entry for ''Transmission line right-of-way (ROW) management impacts on terrestrial resources.'' The finding column entry for the consolidated issue states,

Continued ROW management during the license renewal term is expected to keep terrestrial communities in their current condition. Application of best management practices would reduce the potential for impacts.

The final rule further amends Table B–1 by appending a footnote to the issue column entry for ''Transmission line right-of-way (ROW) management impacts on terrestrial resources,'' concerning the extent to which transmission lines and their associated rights of way have been analyzed under the revised GEIS. This footnote is the same one that was added to Issue 3, ''Offsite land use in transmission line right-of-ways (ROWs).'' See the description of the changes made by the final rule to Issue 3 for further explanation of this amendment.

(35) Electromagnetic Fields on Flora and Fauna (Plants, Agricultural Crops, Honeybees, Wildlife, Livestock): There are no changes to this issue, and it remains a Category 1 issue with a small level of impact. The final rule amends Table B–1 by appending a footnote to the issue column entry for ''Electromagnetic Fields on Flora and Fauna (Plants, Agricultural Crops, Honeybees, Wildlife, Livestock),'' concerning the extent to which transmission lines and their associated rights of way have been analyzed under the revised GEIS. This footnote is the same one that was added to Issue 3, ''Offsite land use in transmission line right-of-ways (ROWs).'' See the description of the changes made by the final rule to Issue 3 for further explanation of this amendment.

Aquatic Resources

(36) *Impingement and Entrainment of Aquatic Organisms (Plants with Once-Through Cooling Systems or Cooling Ponds):* The final rule amends Table B–1 by consolidating two Category 2 issues, ''Entrainment of fish and shellfish in early life stages (for plants with once-through cooling and cooling pond heat dissipation systems)'' and ''Impingement of fish and shellfish (for plants with once-through cooling and cooling pond heat dissipation systems),'' both with impact level ranges of small to large, and names the consolidated issue, ''Impingement and entrainment of aquatic organisms (plants with once-through cooling systems or cooling ponds).'' The consolidated issue is a Category 2 issue with an impact level range of small to large. The final rule further amends Table B–1 by removing the entries for ''Entrainment of fish and shellfish in early life stages (for plants with once-through cooling and cooling pond heat dissipation systems)'' and ''Impingement of fish and shellfish (for plants with once-through cooling and cooling pond heat dissipation systems),'' and, by adding an entry for ''Impingement and entrainment of aquatic organisms (plants with once-through cooling systems or cooling ponds).'' The finding column entry for the consolidated issue states,

The impacts of impingement and entrainment are small at many plants, but may be moderate or even large at a few plants with once-through and cooling-pond cooling systems, depending on cooling system withdrawal rates and volumes and the aquatic resources at the site.

For the revised GEIS, these issues were consolidated to facilitate the review process in keeping with the resource-based approach and to allow for a more complete analysis of the environmental impact. Nuclear power plants typically conduct separate sampling programs to estimate the numbers of organisms entrained and impinged, which explains the original separation of these issues. However, it is the consolidated effects of entrainment and impingement that reflect the total impact of the cooling system intake on the resource. Environmental conditions are different at each nuclear power plant site, and impacts cannot be determined generically.

(37) *Impingement and Entrainment of Aquatic Organisms (Plants with Cooling Towers):* The final rule amends Table B–1 by consolidating two Category 1 issues, ''Entrainment of fish and shellfish in early life stages (for plants with cooling tower-based heat dissipation systems)'' and ''Impingement of fish and shellfish (for plants with cooling tower-based heat dissipation systems),'' both with impact levels of small, and names the consolidated issue, ''Impingement and entrainment of aquatic organisms (plants with cooling towers).'' The consolidated issue is a Category 1 issue with an impact level of small. The final rule further amends Table B–1 by removing the entries for ''Entrainment of fish and shellfish in early life stages (for plants with cooling tower-based heat dissipation systems)'' and ''Impingement of fish and shellfish (for plants with cooling tower-based heat dissipation systems),'' and by adding an entry for ''Impingement and entrainment of aquatic organisms (plants with cooling towers).'' The finding column entry for the consolidated issue states,

> Impingement and entrainment rates are lower at plants that use closed-cycle cooling with cooling towers because the rates and volumes of water withdrawal needed for makeup are minimized.

The two issues have been consolidated given their similar nature and to facilitate the environmental review process consistent with the resource-based approach in the revised GEIS.

(38) Entrainment of phytoplankton and zooplankton (all plants): There are no changes to this issue, and it remains a Category 1 issue with an impact level of small. The proposed rule had consolidated two Category 2 issues, ''Entrainment of fish and shellfish in early life stages (for plants with once-through cooling and cooling pond heat dissipation systems)'' and ''Impingement of fish and shellfish (for plants with once-through cooling and cooling pond heat dissipation systems)'' with the Category 1 issue, ''Entrainment of phytoplankton and zooplankton (for all plants)'' (74 FR 38124, 38136; July 31, 2009). Under the proposed rule, the consolidated issue would have been a Category 2 issue, with an impact range of small to large. Subsequent to the publication of the proposed rule, the NRC determined that such consolidation would have the effect of making ''Entrainment of phytoplankton and zooplankton (all plants),'' which is an issue generic to all plants (Category 1), a site-specific issue (Category 2). As there is no basis to support making the ''Entrainment of phytoplankton and zooplankton (all plants)'' a site-specific issue, the NRC determined not to adopt the proposed rule change. Instead, only the two Category 2 issues were consolidated (*see* Issue 36), and this issue remains separate.

(39) *Thermal Impacts on Aquatic Organisms (Plants with Once-Through Cooling Systems or Cooling Ponds):* The final rule amends Table B–1 by renaming the issue, ''Heat shock (for plants with once-through and cooling pond heat dissipation systems)'' as ''Thermal Impacts on Aquatic Organisms (plants with once-through cooling systems or cooling ponds).'' It remains a Category 2 issue with an impact level range of small to large. The final rule further amends Table B–1 by replacing the finding column entry for this issue, which states,

> Because of continuing concerns about heat shock and the possible need to modify thermal discharges in response to changing environmental conditions, the impacts may be of moderate or large significance at some plants. See § 51.53(c)(3)(ii)(B).

with the following:

> Most of the effects associated with thermal discharges are localized and are not expected to affect overall stability of populations or resources. The magnitude of impacts, however, would depend on site-specific thermal plume characteristics and the nature of aquatic resources in the area.

Environmental conditions are different at each nuclear power plant site, and thermal impacts associated with once-through and cooling pond heat dissipation systems cannot be determined generically. The proposed rule had consolidated the Category 2 issue, ''Heat shock (for plants with once-through and cooling pond heat dissipation systems)'' with four Category 1 issues, ''Cold shock (for all plants),'' ''Thermal plume barrier to migrating fish (for all plants),'' ''Distribution of aquatic organisms (for all plants),'' and ''Premature emergence of aquatic insects (for all plants)'' (74 FR 38124, 38136; July 31, 2009). These issues were proposed for consolidation to facilitate the environmental review process because they are all caused by thermal effects. The final rule consolidates these four Category 1 issues with another Category 1 issue, ''Stimulation of nuisance organisms (e.g., shipworms),'' as Issue 41, ''Infrequently reported thermal impacts (all plants),'' as described later in this section.

(40) *Thermal Impacts on Aquatic Organisms (Plants with Cooling Towers):* The final rule amends Table B–1 by renaming the issue ''Heat shock (for plants with cooling-tower-based heat dissipation systems)'' as ''Thermal Impacts on Aquatic Organisms (Plants with Cooling Towers).'' It remains a Category 1 issue with an impact level of small. The final rule further amends Table B–1 by replacing the finding column entry for this issue, which states, ''Heat shock has not been found to be a problem at operating nuclear power plants with this type of cooling system and is not expected to be a problem during the license renewal term,'' with the following, ''Thermal effects associated with plants that use cooling towers are expected to be small because of the reduced amount of heated discharge.''

The proposed rule had consolidated the Category 1 issue, ''Heat shock (for plants with cooling-tower-based heat dissipation systems)'' with four other Category 1 issues, ''Cold shock (for all plants),'' ''Thermal plume barrier to migrating fish (for all plants),'' ''Distribution of aquatic organisms (for all plants),'' and ''Premature emergence of aquatic insects (for all plants)'' (74 FR 38124, 38136). These issues were proposed for consolidation to facilitate the environmental review process because they are all caused by thermal effects. The final rule consolidates these four Category 1 issues with another Category 1 issue, ''Stimulation of nuisance organisms (e.g., shipworms),'' as Issue 41, ''Infrequently reported thermal impacts (all plants),'' as described in the following paragraphs.

(41) *Infrequently Reported Thermal Impacts (All Plants):* The final rule amends Table B–1 by consolidating five Category 1 issues, ''Cold shock (for all plants),'' ''Thermal plume barrier to migrating fish (for all plants),'' ''Distribution of aquatic organisms (for all plants),'' ''Premature emergence of aquatic insects (for all plants),'' and ''Stimulation of Nuisance Organisms (e.g., Shipworms),'' each with an impact level of small, and names the consolidated issue, ''Infrequently reported thermal impacts (all plants).'' The consolidated issue is a Category 1 issue, with an impact level of small. The final rule further amends Table B–1 by removing the entries for ''Cold shock (for all plants),'' ''Thermal plume barrier to migrating fish (for all plants),'' ''Distribution of aquatic organisms (for all plants),'' ''Premature emergence of aquatic insects (for all plants),'' and ''Stimulation of Nuisance Organisms (e.g., Shipworms),'' and, by adding an entry for ''Infrequently reported thermal impacts (all plants).'' The finding column entry for the new consolidated issue states,

Continued operations during the license renewal term are expected to have small thermal impacts with respect to the following:

Cold shock has been satisfactorily mitigated at operating nuclear plants with once-through cooling systems, has not endangered fish populations or been found to be a problem at operating nuclear power plants with cooling towers or cooling ponds, and is not expected to be a problem.

Thermal plumes have not been found to be a problem at operating nuclear power plants and are not expected to be a problem.

Thermal discharge may have localized effects but is not expected to affect the larger geographical distribution of aquatic organisms.

Premature emergence has been found to be a localized effect at some operating nuclear power plants but has not been a problem and is not expected to be a problem.

Stimulation of nuisance organisms has been satisfactorily mitigated at the single nuclear power plant with a once-through cooling system where previously it was a problem. It has not been found to be a problem at operating nuclear power plants with cooling towers or cooling ponds and is not expected to be a problem.

The five issues are consolidated to facilitate the environmental review process because they are all caused by thermal effects resulting from operation of a plant's cooling system. Previous license renewal reviews conducted by the NRC have shown that the previously described thermal issues have not been a problem at operating nuclear power plants and would not change during the license renewal term, and so no future impacts are anticipated.

(42) *Effects of Cooling Water Discharge on Dissolved Oxygen, Gas Supersaturation, and Eutrophication:* The final rule amends Table B–1 by consolidating three Category 1 issues, ''Eutrophication,'' ''Gas supersaturation (gas bubble disease),'' and ''Low dissolved oxygen in the discharge,'' each with an impact level of small, and names the consolidated issue, ''Effects of cooling water discharge on dissolved oxygen, gas supersaturation, and eutrophication.'' The consolidated issue is a Category 1 issue, with an impact level of small. The three issues are consolidated given their similar nature and to facilitate the environmental review process. The final rule further amends Table B–1 by removing the entries for ''Eutrophication,'' ''Gas supersaturation (gas bubble disease),'' and ''Low dissolved oxygen in the discharge,'' and, by adding an entry for ''Effects of cooling water discharge on dissolved oxygen, gas supersaturation, and eutrophication.'' The finding column entry for the new consolidated issue states,

Gas supersaturation was a concern at a small number of operating nuclear power plants with once-through cooling systems but has been mitigated. Low dissolved oxygen was a concern at one nuclear power plant with a once-through cooling system but has been mitigated. Eutrophication (nutrient loading) and resulting effects on chemical and biological oxygen demands have not been found to be a problem at operating nuclear power plants.

(43) *Effects of Non-Radiological Contaminants on Aquatic Organisms:* The final rule amends Table B–1 by renaming the issue ''Accumulation of contaminants in sediments or biota'' as ''Effects of non-radiological contaminants on aquatic organisms.'' The renamed issue remains a Category 1 issue with an impact level of small. The final rule further amends Table B–1 by replacing the finding column entry, which states,

Accumulation of contaminants has been a concern at a few nuclear power plants but has been satisfactorily mitigated by replacing copper alloy condenser tubes with those of another metal. It is not expected to be a problem during the license renewal term.

with the following:

Best management practices and discharge limitations of NPDES permits are expected to minimize the potential for impacts to aquatic resources during continued operations and refurbishment associated with license renewal. Accumulation of metal contaminants has been a concern at a few nuclear power plants, but has been satisfactorily mitigated by replacing copper alloy condenser tubes with those of another metal.

(44) *Exposure of Aquatic Organisms to Radionuclides:* The final rule amends Table B–1 by adding a new Category 1 issue, ''Exposure of Aquatic Organisms to Radionuclides,'' with an impact level of small. The finding column entry for this issue states,

Doses to aquatic organisms are expected to be well below exposure guidelines developed to protect these aquatic organisms.

The issue has been added to evaluate the potential impact of radionuclide discharges upon aquatic organisms, based on comments from members of the public and Federal and State agencies raised during the license renewal process for various plants.

The revised GEIS evaluates the potential impact of radionuclides on aquatic organisms at nuclear power plants from continued operations during the license renewal term. For the evaluation, site-specific radionuclide concentrations in environmental media (e.g., water, air, milk, crops, food products, sediment, and fish and other aquatic biota) were obtained from publicly available REMP annual reports from 15 nuclear power plants. The REMP is conducted at every NRC licensed nuclear power plant to assess the environmental impacts from plant operations. This is done by collecting samples of environmental media from areas surrounding the plant for analysis to measure the amount of radioactivity, if any, in the samples. The media samples reflect the radiation exposure pathways to the public from radioactive effluents released by the nuclear power plant and from background radiation (i.e., cosmic sources, naturally-occurring radioactive material, including radon and global fallout). These 15 plants were selected to represent sites that reported a range of radionuclide concentrations in the sample media and included both boiling water reactors and pressurized water reactors. Site-specific radionuclide concentrations in water and sediments, as reported in the plant's REMP reports, were used in the calculations. The calculated radiation dose rates to aquatic organisms, based on exposure to radioactivity in the environmental media, were compared against radiation-safety guidelines issued by DOE, IAEA, NCRP, and ICRP. The NRC concluded that the impacts of radionuclides on aquatic organisms from past and current normal operations are small for all nuclear power plants and should not change appreciably during the license renewal term.

(45) *Effects of Dredging on Aquatic Organisms:* The final rule amends Table B–1 by adding a new Category 1 issue, ''Effects of dredging on aquatic organisms,'' with an impact level of small, to evaluate the impacts of dredging on aquatic organisms. The finding column entry for this issue states,

Dredging at nuclear power plants is expected to occur infrequently, would be of relatively short duration, and would affect relatively small areas. Dredging is performed under permit from the U.S. Army Corps of Engineers, and possibly, from other State or local agencies.

Licensees conduct dredging to maintain intake and discharge structures at nuclear power plant facilities and in some cases, to maintain barge slips. Dredging may disturb or remove benthic communities. In general, maintenance dredging for nuclear power plant operations occur infrequently, is of relatively short duration, and affects relatively small areas. Dredging is performed under a permit issued by the U.S. Army Corps of Engineers and consequently, each dredging action is subject to a site-specific environmental review conducted by the Corps. Dredging

activities may also require permits from various State or local agencies.

(46) *Water Use Conflicts with Aquatic Resources (Plants with Cooling Ponds or Cooling Towers using Makeup Water from a River):* The final rule amends Table B–1 by adding a new Category 2 issue, ''Water use conflicts with aquatic resources (plants with cooling ponds or cooling towers using makeup water from a river),'' with an impact level range of small to moderate, to evaluate water use conflicts with aquatic resources in stream communities. The 1996 GEIS already addresses the resource aspects of this issue, and 10 CFR 51.53(c)(3)(ii)(A) requires a plant-specific analysis of the impacts of surface water withdrawals from rivers for cooling pond or cooling tower makeup on stream (i.e., aquatic) ecological communities. However, this stand-alone issue was created to clearly separate out the related aspects and potential impacts on aquatic communities associated with surface water withdrawals from a river for consumptive cooling water uses.

The finding column entry for this issue states,

> Impacts on aquatic resources in stream communities affected by water use conflicts could be of moderate significance in some situations.

Such impacts could occur when water that supports these resources is diminished because of decreased availability due to droughts; increased water demand for agricultural, municipal, or industrial usage; or a combination of these factors. The potential range of impact levels at plants, subject to license renewal, with cooling ponds or cooling towers using makeup water from a river cannot be generically determined. The NRC has also removed the term ''low flow'' from the title of this issue, as set forth in the proposed rule, and other related river flow issues in the final rule as previously discussed in this section (*see* Issue 17, ''Surface Water Use Conflicts (Plants with Cooling Ponds or Cooling Towers Using Makeup Water from a River)'').

(47) *Effects on Aquatic Resources (Non-Cooling System Impacts):* The final rule amends Table B–1 by renaming the ''Refurbishment'' issue as ''Effects on aquatic resources (non-cooling system impacts).'' [35] It remains a Category 1 issue with an impact level of small. The final rule further amends Table B–1 by replacing the finding column entry, which states,

> During plant shutdown and refurbishment there will be negligible effects on aquatic biota because of a reduction of entrainment and impingement of organisms or a reduced release of chemicals.

with the following:

> Licensee application of appropriate mitigation measures is expected to result in no more than small changes to aquatic communities from their current condition.

(48) *Impacts of Transmission Line Right-of-Way (ROW) Management on Aquatic Resources:* The final rule amends Table B–1 by adding a new Category 1 issue, ''Impacts of transmission line right-of-way (ROW) management on aquatic resources,'' with an impact level of small, to evaluate the impact of transmission line ROW management on aquatic resources during the license renewal term. The finding column entry for this issue states,

> Licensee application of best management practices to ROW maintenance is expected to result in no more than small impacts to aquatic resources.

Impacts on aquatic resources from transmission line ROW maintenance could occur as a result of the direct disturbance of aquatic habitats, soil erosion, changes in water quality (from sedimentation and thermal effects), or inadvertent releases of chemical contaminants from herbicide use. As described in the revised GEIS, the NRC expects any impact on aquatic resources resulting from transmission line ROW maintenance to be small, short term, and localized for all plants because of licensee application of best management practices.

The final rule further amends Table B–1 by appending a footnote to the issue column entry for ''Impacts of Transmission Line Right-of-Way (ROW) Management on Aquatic Resources,'' concerning the extent to which transmission lines and their associated ROW have been analyzed under the revised GEIS. This footnote is the same one that was added to Issue 3, ''Offsite land use in transmission line right-of-ways (ROWs).'' See the description of the changes made by the final rule to Issue 3 for further explanation of this amendment.

(49) Losses from Predation, Parasitism, and Disease Among Organisms Exposed to Sublethal Stresses: There are no changes to this issue, and it remains a Category 1 issue, with an impact level of small.

Special Status Species and Habitats

(50) *Threatened, Endangered, and Protected Species and Essential Fish Habitat:* The final rule amends Table B–1 by renaming the issue ''Threatened or endangered species'' as ''Threatened, endangered, and protected species and essential fish habitat.'' The final rule expands the scope of the issue to include essential fish habitats protected under the Magnuson-Stevens Fishery Conservation and Management Act (MSA). The renamed and expanded issue is a Category 2 issue. The final rule further amends Table B–1 by replacing the finding column entry, which states,

> Generally, plant refurbishment and continued operations are not expected to adversely affect threatened or endangered species. However, consultation with appropriate agencies would be needed at the time of license renewal to determine whether threatened or endangered species are present and whether they would be adversely affected. See § 51.53(c)(3)(ii)(E).

with the following:

> The magnitude of impacts on threatened, endangered, and protected species, critical habitat, and essential fish habitat would depend on the occurrence of listed species and habitats and the effects of power plant systems on them. Consultation with appropriate agencies would be needed to determine whether special status species or habitats are present and whether they would be adversely affected by continued operations and refurbishment associated with license renewal.

The final rule also amends Table B–1 by removing the words ''SMALL, MODERATE, or LARGE'' from the finding column entry because the Endangered Species Act (ESA) requires other findings.[36] In complying with the ESA, the NRC determines whether the effects of continued nuclear power plant operations and refurbishment (1) would have no effect, (2) are not likely to adversely affect, (3) are likely to adversely affect, or (4) are likely to jeopardize the listed species or adversely modify the designated critical habitat of Federally listed species populations or their critical habitat during the license renewal term. For listed species where the NRC has found that its action is ''likely to adversely affect'' the species or habitat, the NRC may further characterize the effects as ''is [or is not] likely to jeopardize listed species or adversely modify designated critical habitat.''

Similarly, the MSA also requires other findings. In complying with the MSA, the NRC determines whether the effects

[35] The proposed rule had renamed this issue ''Refurbishment impacts on aquatic resources.'' (74 FR 38125, 38136; July 31, 2009).

[36] The proposed rule did not reflect this change (74 FR 38125, 38137; July 31, 2009).

of continued nuclear power plant operations and refurbishment associated with license renewal would have: (1) No adverse impact, (2) minimal adverse impact, or (3) substantial adverse impact to the essential habitat of federally managed fish populations during the license renewal term. Therefore, the NRC believes that reporting its ESA and MSA findings instead of the ''SMALL, MODERATE, or LARGE'' significance levels of impact will clarify the results.

Historic and Cultural Resources

(51) *Historic and Cultural Resources:* The final rule amends Table B–1 by renaming the issue ''Historic and archaeological resources'' as ''Historic and cultural resources.'' It remains a Category 2 issue. The final rule further amends Table B–1 by replacing the finding column entry, which states,

> Generally, plant refurbishment and continued operations are expected to have no more than small adverse impacts on historic and archaeological resources. However, the National Historic Preservation Act requires the Federal agency to consult with the State Historic Preservation Officer to determine whether there are properties present that require protection. See § 51.53(c)(3)(ii)(K).

with the following:

> Continued operations and refurbishment associated with license renewal are expected to have no more than small impacts on historic and cultural resources located onsite and in the transmission line ROW because most impacts could be mitigated by avoiding those resources. The National Historic Preservation Act (NHPA) requires the Federal agency to consult with the State Historic Preservation Officer (SHPO) and appropriate Native American Tribes to determine the potential effects on historic properties and mitigation, if necessary.

The final rule further amends Table B–1 by removing the words ''SMALL, MODERATE, or LARGE'' from the finding column entry [37] because the National Historic Preservation Act (NHPA) requires the NRC to determine whether historic properties are present on or near the project site, and if so, whether the license renewal decision would result in any adverse effect upon such properties. Thus, the NRC in its plant-specific environmental review makes the following determinations: no historic properties present; historic properties are present, but not adversely affected; or there is an adverse effect.

If continued operations and refurbishment associated with license renewal result in any adverse effects, the NHPA Section 106 process requires consultation with the requisite State Historic Preservation Officer (SHPO) and if appropriate, the requisite Tribal Historic Preservation Officer. The license renewal applicant is typically an active participant in such consultation, and the applicant may agree to commit to carrying out the appropriate mitigation measures. If an agreement is reached, the parties will execute a Memorandum of Agreement. Therefore, the NRC believes that reporting its NHPA findings in the plant-specific SEIS, instead of the ''SMALL, MODERATE, or LARGE'' significance levels of impact, will clarify the results.

Socioeconomics

(52) *Employment and Income, Recreation and Tourism:* The final rule amends Table B–1 by adding a new Category 1 issue, ''Employment and income, recreation and tourism,'' which includes the ''tourism and recreation'' portion of a current Table B–1 Category 1 issue, ''Public services: public safety, social services, and tourism and recreation.'' The issue has an impact level of small. The final rule consolidates the tourism and recreation portion with the new generic analysis to cover employment and income given the similar nature of these issues and to facilitate the environmental review process. The revised GEIS provides an analysis of this consolidated issue and concludes that the impacts are generic to all plants undergoing license renewal. The finding column entry for this issue states,

> Although most nuclear plants have large numbers of employees with higher than average wages and salaries, employment, income, recreation, and tourism impacts from continued operations and refurbishment associated with license renewal are expected to be small.

(53) *Tax Revenues:* The impact of changes to tax revenues was discussed in the 1996 GEIS, but was not listed in Table B–1. The final rule amends Table B–1 by adding a new Category 1 issue, ''Tax revenues,'' to evaluate the impacts of license renewal on tax revenues. The issue has an impact level of small. The finding column entry for this issue states,

> Nuclear plants provide tax revenue to local jurisdictions in the form of property tax payments, payments in lieu of tax (PILOT), or tax payments on energy production. The amount of tax revenue paid during the license renewal term as a result of continued operations and refurbishment associated with license renewal is not expected to change.

Refurbishment activities, such as steam generator and vessel head replacement, have not had a noticeable effect on the value of nuclear power plants, thus changes in tax revenues are not anticipated from future refurbishment activities. Refurbishment activities involve the one-for-one replacement of existing components and are generally not considered a taxable improvement. Also, new property tax assessments; proprietary payments in lieu of tax stipulations, settlements, and agreements; and State tax laws are continually changing the amounts paid to taxing jurisdictions by nuclear power plant owners, and these occur independent of license renewal and refurbishment activities.

(54) *Community Services and Education:* The final rule amends Table B–1 by reclassifying two Category 2 issues, ''Public services: public utilities,'' with an impact level range of small to moderate, and ''Public services, education (refurbishment),'' with an impact level range of small to large, as Category 1 issues. The final rule consolidates these two issues with the Category 1 issue, ''Public services, education (license renewal term),'' which has an impact level of small, and the ''Public safety and social service'' portion of the Category 1 issue, ''Public services: public safety, social services, and tourism and recreation,'' which also has an impact level of small.[38] The final rule names the consolidated issue, ''Community services and education,'' and classifies it as a Category 1 issue with an impact level of small. The final rule further amends Table B–1 by removing the entries for ''Public services: public utilities,'' ''Public services, education (refurbishment),'' ''Public services, education (license renewal term),'' and ''Public services: public safety, social services, and tourism and recreation,'' and by adding the entry for ''Community services and education.'' The finding column entry for the ''Community services and education'' issue states,

> Changes resulting from continued operations and refurbishment associated with license renewal to local community and educational services would be small. With little or no change in employment at the licensee's plant, value of the power plant, payments on energy production, and PILOT payments expected during the license renewal term, community and educational services would not be affected by continued power plant operations.

The four issues are consolidated because all public services are equally affected by changes in plant operations and refurbishment associated with

[37] The proposed rule did not reflect this change (74 FR 38125, 38137; July 31, 2009).

[38] The ''tourism and recreation'' portion of the ''Public services: public safety, social services, and tourism and recreation'' issue was consolidated with the new generic analysis concerning employment and income to form the consolidated Category 1 issue, ''Employment and income, recreation and tourism'' (see Issue 52).

license renewal. Any changes in the number of workers at a nuclear power plant will affect demand for public services from local communities. Nevertheless, past environmental reviews conducted by the NRC since the issuance of the 1996 GEIS have shown that the number of workers at relicensed nuclear power plants has not changed significantly because of license renewal. Thus, no significant impacts on community services are anticipated from future license renewals. In addition, refurbishment activities, such as steam generator and vessel head replacement, have not required the large numbers of workers and the months of time that was conservatively analyzed in the 1996 GEIS, and as such, significant impacts on community services are no longer anticipated. Combining the four issues also facilitates the environmental review process.

(55) *Population and Housing:* The final rule amends Table B–1 by renaming the Category 2 issue, ''Housing impacts,'' with an impact level range of small to large, to ''Population and housing.'' The final rule reclassifies this issue as a Category 1 issue with an impact level of small. As described in the revised GEIS, the availability and value of housing are directly affected by changes in population. The final rule further amends Table B–1 by removing the entry for ''Housing impacts,'' and by adding an entry for ''Population and housing.'' The finding column entry for this issue states,

> Changes resulting from continued operations and refurbishment associated with license renewal to regional population and housing availability and value would be small. With little or no change in employment at the licensee's plant expected during the license renewal term, population and housing availability and values would not be affected by continued power plant operations.

As described in the revised GEIS, the NRC has determined that the impacts of continued operations and refurbishment activities on population and housing during the license renewal term would be small. Moreover, any impacts are not dependent on the socioeconomic setting of the nuclear power plant and are generic to all plants.

(56) *Transportation:* The final rule amends Table B–1 by reclassifying the Category 2 issue, ''Public services, Transportation,'' with an impact level range of small to large, as a Category 1 issue with an impact level of small, and renaming it ''Transportation.'' The final rule further amends Table B–1 by replacing the finding column entry, which states,

> Transportation impacts (level of service) of highway traffic generated during plant refurbishment and during the term of the renewed license are generally expected to be of small significance. However, the increase in traffic associated with additional workers and the local road and traffic control conditions may lead to impacts of moderate or large significance at some sites. See § 51.53(c)(3)(ii)(J).

with the following:

> Changes resulting from continued operations and refurbishment associated with license renewal to traffic volumes would be small.

As described in the revised GEIS, the NRC has determined that the numbers of workers have not changed significantly due to license renewal, so transportation impacts from continued operations and refurbishment associated with license renewal are no longer expected to be significant.

Human Health

(57) *Radiation Exposures to the Public:* The final rule amends Table B–1 by consolidating two Category 1 issues, ''Radiation exposures to the public during refurbishment'' and ''Radiation exposure to public (license renewal term)'' and names the consolidated issue, ''Radiation exposures to the public.'' The consolidated issue is a Category 1 issue with an impact level of small. These issues are consolidated given their similar nature and to facilitate the environmental review process. The final rule amends Table B–1 by removing the entries for ''Radiation exposures to the public during refurbishment'' and ''Radiation exposure to public (license renewal term)'' and by adding an entry for ''Radiation exposures to the public.'' The finding column entry for this consolidated issue states,

> Radiation doses to the public from continued operations and refurbishment associated with license renewal are expected to continue at current levels, and would be well below regulatory limits.

(58) *Radiation Exposures to Plant Workers:* The final rule amends Table B–1 by consolidating two Category 1 issues, ''Occupational radiation exposures during refurbishment'' and ''Occupational radiation exposures (license renewal term)'' and names the consolidated issue, ''Radiation exposures to plant workers.'' The consolidated issue is a Category 1 issue with an impact level of small. These issues are consolidated given their similar nature and to facilitate the environmental review process. The final rule amends Table B–1 by removing the entries ''Occupational radiation exposures during refurbishment'' and ''Occupational radiation exposures (license renewal term)'' and by adding an entry for ''Radiation exposures to plant workers.'' The finding column entry for the combined issue states,

> Occupational doses from continued operations and refurbishment associated with license renewal are expected to be within the range of doses experienced during the current license term and would continue to be well below regulatory limits.

(59) *Human Health Impact from Chemicals:* The final rule amends Table B–1 by adding a new Category 1 issue, ''Human health impact from chemicals,'' to evaluate the potential impacts to plant workers and members of the public from exposure to chemicals. The new issue has an impact level of small. The finding column entry for this issue states,

> Chemical hazards to plant workers resulting from continued operations and refurbishment associated with license renewal are expected to be minimized by the licensee implementing good industrial hygiene practices as required by permits and Federal and State regulations. Chemical releases to the environment and the potential for impacts to the public are expected to be minimized by adherence to discharge limitations of NPDES and other permits.

The evaluation addresses the potential impact of chemicals on human health resulting from normal operations of a nuclear power plant during the license renewal term. Impacts of chemical exposure to human health are considered to be small if the use of chemicals within the plant is in accordance with industrial safety guides and discharges of chemicals to water bodies are within effluent limitations designed to ensure protection of water quality and aquatic life.

The disposal of hazardous chemicals used at nuclear power plants by licensees is subject to the RCRA and the CWA (which requires licensees to hold an NPDES permit). Adherence by the licensee to these statutory requirements should minimize adverse impacts to the environment, workers, and the public. It is anticipated that all plants would continue to operate in compliance with all applicable permits and that no mitigation measures beyond those implemented during the current license term would be warranted as a result of license renewal.

A review of the documents, as referenced in the revised GEIS, operating monitoring reports, and consultations with utilities and regulatory agencies that were performed for the 1996 GEIS, indicated that the

effects of the discharge of chlorine and other biocides on water quality have been of small significance for all power plants. Small quantities of biocides are readily dissipated and/or are chemically altered in the body of water receiving them, so significant cumulative impacts to water quality would not be expected. The NRC expects no major changes in the operation of plant cooling systems during the license renewal term, so no changes are anticipated in the effects of biocide discharges on the quality of the receiving waters. The EPA and the States regulate discharges of sanitary wastes and heavy metals through NPDES permits. The NRC considers discharges that do not violate the permit limits to be of small significance. The effects of minor chemical discharges and spills on water quality are also expected to be of small significance during the license renewal term, and the appropriate regulating agencies would require the licensee to mitigate these discharges and spills as needed.

(60) *Microbiological Hazards to the Public (Plants with Cooling Ponds or Canals or Cooling Towers that Discharge to a River):* The final rule amends Table B–1 by renaming the ''Microbiological organisms (public health) (plants using lakes or canals, or cooling towers or cooling ponds that discharge to a small river)'' issue as ''Microbiological hazards to the public (plants with cooling ponds or canals or cooling towers that discharge to a river).'' The issue remains a Category 2 issue, with an impact level range of small to large. The final rule further amends Table B–1 by replacing the finding column entry, which states,

> These organisms are not expected to be a problem at most operating plants except possibly at plants using cooling ponds, lakes, or canals that discharge to small rivers. Without site-specific data, it is not possible to predict the effects generically. See § 51.53(c)(3)(ii)(G).

with the following:

> These organisms are not expected to be a problem at most operating plants except possibly at plants using cooling ponds, lakes, or canals, or that discharge into rivers. Impacts would depend on site-specific characteristics.

(61) *Microbiological Hazards to Plant Workers:* The final rule amends Table B–1 by renaming the ''Microbiological organisms (occupational health)'' issue as ''Microbiological hazards to plant workers.'' It remains a Category 1 issue with an impact level of small. The final rule amends Table B–1 by adding the phrase ''as required by permits and Federal and State regulations'' to the end of the finding column entry.

(62) *Chronic Effects of Electromagnetic Fields (EMFs):* The final rule amends Table B–1 by renaming the ''Electromagnetic fields, chronic effects'' issue as ''Chronic effects of electromagnetic fields (EMFs).'' It remains an uncategorized issue with an impact level of uncertain because there is no national scientific consensus on the potential impacts from chronic exposure to EMFs. The final rule further amends Table B–1 by replacing the finding column entry, which states,

> Biological and physical studies of 60-Hz electromagnetic fields have not found consistent evidence linking harmful effects with field exposures. However, research is continuing in this area and a consensus scientific view has not been reached.

with the following:

> Studies of 60-Hz EMFs have not uncovered consistent evidence linking harmful effects with field exposures. EMFs are unlike other agents that have a toxic effect (e.g., toxic chemicals and ionizing radiation) in that dramatic acute effects cannot be forced and longer-term effects, if real, are subtle. Because the state of the science is currently inadequate, no generic conclusion on human health impacts is possible.

Although there is no conclusion as to the impact level, and this issue is not considered to be a Category 1 issue in the sense that a generic conclusion on the impact level has not been reached, this issue will be treated uniformly in plant-specific SEISs by essentially providing the discussion appearing in this issue's finding column entry in Table B–1 until a national scientific consensus has been reached.

The final rule further amends Table B–1 by appending a footnote to the issue column entry for ''Chronic Effects of Electromagnetic Fields (EMFs),'' concerning the extent to which transmission lines and their associated right of ways have been analyzed under the revised GEIS. This footnote is the same one that was added to Issue 3, ''Offsite land use in transmission line right-of-ways (ROWs).'' See the description of the changes made by the final rule to Issue 3 for further explanation of this amendment. In addition, the final rule retains the footnote that was appended to issue column entry but renumbers that footnote from ''5'' to ''6'' and retains the footnote that was appended to category column entry but renumbers that footnote from ''4'' to ''5.''

(63) *Physical Occupational Hazards:* The final rule amends Table B–1 by adding a new Category 1 issue, ''Physical occupational hazards,'' to evaluate the potential impact of physical occupational hazards on human health resulting from normal nuclear power plant operations during the license renewal term. The issue has an impact level of small. The finding column entry for this issue states,

> Occupational safety and health hazards are generic to all types of electrical generating stations, including nuclear power plants, and are of small significance if the workers adhere to safety standards and use protective equipment as required by Federal and State regulations.

Through a Memorandum of Understanding (53 FR 43950; October 31, 1988) between the NRC and the Occupational Safety and Health Administration (OSHA), plant conditions that result in an occupational risk, but do not affect the safety of licensed radioactive materials, are under the statutory authority of OSHA rather than the NRC. Nevertheless, the impact of physical occupational hazards on human health has been raised by the public, as well as Federal and State agencies during the license renewal process. As such, this issue has been added to allow for a more complete analysis of the human health impact of continued power plant operation during the license renewal term. Occupational hazards can be minimized by licensees when workers adhere to safety standards and use appropriate protective equipment, although fatalities and injuries from accidents can still occur. Data for occupational injuries in 2005 obtained from the U.S. Bureau of Labor Statistics indicate that the rate of fatal injuries in the utility sector is less than the rate for many sectors (e.g., construction, transportation and warehousing, agriculture, forestry, fishing and hunting, wholesale trade, and mining) and that the incidence rate for nonfatal occupational injuries and illnesses is the least for electric power generation, followed by electric power transmission control and distribution. It is expected that over the license renewal term, licensees would ensure that their workers continue to adhere to safety standards and use protective equipment, so adverse occupational impacts would be of small significance at all sites.

(64) *Electric Shock Hazards:* The final rule amends Table B–1 by renaming the ''Electromagnetic fields, acute effects (electric shock)'' issue as ''Electric shock hazards.'' It remains a Category 2 issue with an impact level range of small to large. The final rule further amends Table B–1 by replacing the finding column entry, which states,

> Electrical shock resulting from direct access to energized conductors or from induced charges in metallic structures have not been found to be a problem at most operating plants and generally are not expected to be a problem during the license

renewal term. However, site-specific review is required to determine the significance of the electric shock potential at the site. See § 51.53(c)(3)(ii)(H).

with the following:

Electrical shock potential is of small significance for transmission lines that are operated in adherence with the National Electrical Safety Code (NESC). Without a review of conformance with NESC criteria of each nuclear power plant's in-scope transmission lines, it is not possible to generically determine the significance of the electrical shock potential.

The final rule's change to the finding column entry reflects the analysis in the revised GEIS concerning the potential of electrical shock from transmission lines. The final rule further amends Table B–1 by appending a footnote to the issue column entry for ''Electric shock hazards,'' concerning the extent to which transmission lines and their associated right of ways have been analyzed under the revised GEIS. This footnote is the same one that was added to Issue 3, ''Offsite land use in transmission line right-of-ways (ROWs).'' See the description of the changes made by the final rule to Issue 3 for further explanation of this amendment.

Postulated Accidents

(65) *Design-Basis Accidents and (66) Severe Accidents:* ''Design-basis accidents,'' and ''Severe accidents,'' with impact levels of small, remain Category 1 and 2 issues, respectively. The final rule amends Table B–1 by making minor clarifying changes to the finding column entries for both of these issues.

Environmental Justice

(67) *Minority and Low-Income Populations:* The final rule amends Table B–1 by adding a new Category 2 issue, ''Minority and low-income populations,'' to evaluate the impacts of continued operations and any refurbishment activities during the license renewal term on minority and low-income populations living in the vicinity of the plant. This issue was listed in Table B–1, prior to this final rule, but was not evaluated in the 1996 GEIS. In that table the finding column entry for this issue states, ''[t]he need for and the content of an analysis of environmental justice will be addressed in plant-specific reviews.''

Executive Order 12898 (59 FR 7629; February 16, 1994) initiated the Federal government's environmental justice program. The NRC's ''Policy Statement on the Treatment of Environmental Justice Matters in NRC Regulatory and Licensing Actions'' (69 FR 52040; August 24, 2004) states, ''the NRC is committed to the general goals of E.O. 12898, [and] it will strive to meet those goals through its normal and traditional NEPA review process.'' Guidance for implementing E.O. 12898 was not available prior to the completion of the 1996 GEIS. By making this a Category 2 issue, the final rule requires license renewal applicants to identify, in their environmental reports, minority and low-income populations and communities residing in the vicinity of the nuclear power plant.

The final rule amends Table B–1 by replacing the finding column entry, which states,

The need for and the content of an analysis of environmental justice will be addressed in plant-specific reviews.

with the following:

Impacts to minority and low-income populations and subsistence consumption resulting from continued operations and refurbishment associated with license renewal will be addressed in plant-specific reviews. See NRC Policy Statement on the Treatment of Environmental Justice Matters in NRC Regulatory and Licensing Actions (69 FR 52040; August 24, 2004).

The final rule does not adopt the proposed rule's impact range of small to moderate for this issue as E.O. 12898 requires a determination of whether human health and environmental effects of continued operations during the license renewal term and refurbishment associated with license renewal on minority and low-income populations would be disproportionately high and adverse. This determination will be made by the NRC in each plant-specific SEIS.

The final rule removes the footnote from the category column entry for this issue and removes footnote ''6'' from Table B–1 as footnote ''6'' is no longer necessary.

Waste Management

(68) *Low-Level Waste Storage and Disposal:* This issue remains a Category 1 issue with an impact level of small. The final rule amends Table B–1 by replacing the finding column entry, which states,

The comprehensive regulatory controls that are in place and the low public doses being achieved at reactors ensure that the radiological impacts to the environment will remain small during the term of a renewed license. The maximum additional on-site land that may be required for low-level waste storage during the term of a renewed license and associated impacts will be small. Nonradiological impacts on air and water will be negligible. The radiological and nonradiological environmental impacts of long-term disposal of low-level waste from any individual plant at licensed sites are small. In addition, the Commission concludes that there is reasonable assurance that sufficient low-level waste disposal capacity will be made available when needed for facilities to be decommissioned consistent with NRC decommissioning requirements.

with the following:

The comprehensive regulatory controls that are in place and the low public doses being achieved at reactors ensure that the radiological impacts to the environment would remain small during the license renewal term.

(69) *Onsite Storage of Spent Nuclear Fuel:* The final rule amends Table B–1 by renaming the ''Onsite spent fuel'' issue as ''Onsite storage of spent nuclear fuel.'' It remains a Category 1 issue with an impact level of small. As described in Section V, ''Related Issues of Importance,'' of this document, the final rule revises the finding column entry for this issue to reflect the D.C. Circuit's decision in *New York* v. *NRC* and the NRC's planned response thereto. Specifically, the final rule reduces the period of time covered by this issue from the period of extended license (from approval of the license renewal application to the expiration of the operating license) plus 30 years after the permanent shutdown of the reactor and expiration of the operating license to the period of extended license only. The final rule amends Table B–1 by replacing the finding column entry, which states,

The expected increase in the volume of spent fuel from an additional 20 years of operation can be safely accommodated on site with small environmental effects through dry or pool storage at all plants if a permanent repository or monitored retrievable storage is not available.

with the following:

The expected increase in the volume of spent fuel from an additional 20 years of operation can be safely accommodated onsite during the license renewal term with small environmental effects through dry or pool storage at all plants.

(70) *Offsite Radiological Impacts of Spent Nuclear Fuel and High-Level Waste Disposal:* The final rule amends Table B–1 by renaming the ''Offsite radiological impacts (spent fuel and high level waste disposal)'' issue as ''Offsite radiological impacts of spent nuclear fuel and high-level waste disposal.'' As described in Section V ''Related Issues of Importance,'' of this document, the final rule revises the finding column entry for this issue to reflect the D.C. Circuit's decision in *New York* v. *NRC* and the NRC's planned response thereto. Specifically, the final rule reclassifies this issue from Category

1, with no impact level assigned, to an uncategorized issue with an impact level of uncertain. The final rule removes the description in the finding column entry and replaces it with the following: ''Uncertain impact. The generic conclusion on offsite radiological impacts of spent nuclear fuel and high-level waste is not being finalized pending the completion of a generic environmental impact statement on waste confidence.'' Upon issuance of the generic EIS and revised Waste Confidence Rule, the NRC will make any necessary confirming amendments to this rule.

(71) *Mixed-Waste Storage and Disposal:* This issue remains a Category 1 issue with an impact level of small. The final rule amends Table B–1 by replacing the finding column entry for this issue, which states,

The comprehensive regulatory controls and the facilities and procedures that are in place ensure proper handling and storage, as well as negligible doses and exposure to toxic materials for the public and the environment at all plants. License renewal will not increase the small, continuing risk to human health and the environment posed by mixed waste at all plants. The radiological and nonradiological environmental impacts of long-term disposal of mixed waste from any individual plant at licensed sites are small. In addition, the Commission concludes that there is reasonable assurance that sufficient mixed waste disposal capacity will be made available when needed for facilities to be decommissioned consistent with NRC decommissioning requirements.

with the following:

The comprehensive regulatory controls and the facilities and procedures that are in place ensure proper handling and storage, as well as negligible doses and exposure to toxic materials for the public and the environment at all plants. License renewal would not increase the small, continuing risk to human health and the environment posed by mixed waste at all plants. The radiological and nonradiological environmental impacts of long-term disposal of mixed waste from any individual plant at licensed sites are small.

(72) *Nonradioactive Waste Storage and Disposal:* The final rule amends Table B–1 by renaming the issue ''Nonradiological waste'' as ''Nonradiological waste storage and disposal.'' It remains a Category 1 issue, with an impact level of small. The final rule further amends Table B–1 by replacing the finding column entry, which states,

No changes to generating systems are anticipated for license renewal. Facilities and procedures are in place to ensure continued proper handling and disposal at all sites.

with the following:

No changes to systems that generate nonradioactive waste are anticipated during the license renewal term. Facilities and procedures are in place to ensure continued proper handling, storage, and disposal, as well as negligible exposure to toxic materials for the public and the environment at all plants.

Cumulative Impacts

(73) *Cumulative Impacts:* The final rule amends Table B–1 by adding a new Category 2 issue, ''Cumulative impacts,'' to evaluate the potential cumulative impacts of license renewal. The term ''cumulative impacts'' is defined in 10 CFR 51.14(b) by reference to the CEQ regulations, 40 CFR 1508.7, as ''the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions.''

For the purposes of analysis, past actions are considered to be when the nuclear power plant was licensed and constructed, present actions are related to current plant operations, and future actions are those that are reasonably foreseeable through the end of plant operations including the license renewal term. The geographic area over which past, present, and future actions are assessed depends on the affected resource.

The final rule requires license renewal applicants to identify other past, present, and reasonably foreseeable future actions, such as the construction and operation of other power plants and other industrial and commercial facilities in the vicinity of the nuclear power plant. The finding column entry for this issue states,

Cumulative impacts of continued operations and refurbishment associated with license renewal must be considered on a plant-specific basis. Impacts would depend on regional resource characteristics, the resource-specific impacts of license renewal, and the cumulative significance of other factors affecting the resource.

Uranium Fuel Cycle

(74) *Offsite Radiological Impacts—Individual Impacts from Other than the Disposal of Spent Fuel and High-Level Waste:* The final rule amends Table B–1 by renaming the ''Offsite radiological impacts (individual effects from other than the disposal of spent fuel and high level waste)'' issue as ''Offsite radiological impacts—individual impacts from other than the disposal of spent fuel and high-level waste.'' This issue remains a Category 1 issue with an impact level of small. The final rule further amends Table B–1 by replacing the finding column entry, which states,

Off-site impacts of the uranium fuel cycle have been considered by the Commission in Table S–3 of this part. Based on information in the GEIS, impacts on individuals from radioactive gaseous and liquid releases including radon-222 and technetium-99 are small.

with the following:

The impacts to the public from radiological exposures have been considered by the Commission in Table S–3 of this part. Based on information in the GEIS, impacts to individuals from radioactive gaseous and liquid releases, including radon-222 and technetium-99, would remain at or below the NRC's regulatory limits.

(75) *Offsite Radiological Impacts—Collective Impacts from Other than the Disposal of Spent Fuel and High-Level Waste:* The final rule amends Table B–1 by renaming the ''Offsite radiological impacts (collective effects)'' issue as ''Offsite radiological impacts—collective impacts from other than the disposal of spent fuel and high-level waste.'' It remains a Category 1 issue with no impact level assigned. The final rule further amends Table B–1 by replacing the finding column entry, which states,

The 100 year environmental dose commitment to the U.S. population from the fuel cycle, high level waste and spent fuel disposal excepted, is calculated to be about 14,800 person rem, or 12 cancer fatalities, for each additional 20-year power reactor operating term. Much of this, especially the contribution of radon releases from mines and tailing piles, consists of tiny doses summed over large populations. This same dose calculation can theoretically be extended to include many tiny doses over additional thousands of years as well as doses outside the U.S. The result of such a calculation would be thousands of cancer fatalities from the fuel cycle, but this result assumes that even tiny doses have some statistical adverse health effect which will not ever be mitigated (for example no cancer cure in the next thousand years), and that these doses projected over thousands of years are meaningful. However, these assumptions are questionable. In particular, science cannot rule out the possibility that there will be no cancer fatalities from these tiny doses. For perspective, the doses are very small fractions of regulatory limits, and even smaller fractions of natural background exposure to the same populations.

Nevertheless, despite all the uncertainty, some judgment as to the regulatory NEPA implications of these matters should be made and it makes no sense to repeat the same judgment in every case. Even taking the uncertainties into account, the Commission concludes that these impacts are acceptable in that these impacts would not be sufficiently large to require the NEPA conclusion, for any plant, that the option of extended operation under 10 CFR Part 54 should be eliminated. Accordingly, while the Commission has not assigned a single level of significance for the collective effects of the

fuel cycle, this issue is considered Category 1.

with the following:

There are no regulatory limits applicable to collective doses to the general public from fuel-cycle facilities. The practice of estimating health effects on the basis of collective doses may not be meaningful. All fuel-cycle facilities are designed and operated to meet the applicable regulatory limits and standards. The Commission concludes that the collective impacts are acceptable.

The Commission concludes that the impacts would not be sufficiently large to require the NEPA conclusion, for any plant, that the option of extended operation under 10 CFR Part 54 should be eliminated. Accordingly, while the Commission has not assigned a single level of significance for the collective impacts of the uranium fuel cycle, this issue is considered Category 1.

(76) *Nonradiological Impacts of the Uranium Fuel Cycle:* The final rule amends Table B–1 by making minor clarifying changes to the finding column entry for this issue. This issue remains a Category 1 issue with an impact level of small.

(77) *Transportation:* This issue remains a Category 1 issue with an impact level of small. The final rule amends Table B–1 by replacing the finding column entry for this issue, which states,

The impacts of transporting spent fuel enriched up to 5 percent uranium-235 with average burnup for the peak rod to current levels approved by NRC up to 62,000 MWd/MTU and the cumulative impacts of transporting high-level waste to a single repository, such as Yucca Mountain, Nevada are found to be consistent with the impact values contained in 10 CFR 51.52(c), Summary Table S–4—Environmental Impact of Transportation of Fuel and Waste to and from One Light-Water-Cooled Nuclear Power Reactor. If fuel enrichment or burnup conditions are not met, the applicant must submit an assessment of the implications for the environmental impact values reported in § 51.52.

with the following:

The impacts of transporting materials to and from uranium-fuel-cycle facilities on workers, the public, and the environment are expected to be small.

Termination of Nuclear Power Plant Operations and Decommissioning

(78) *Termination of Plant Operations and Decommissioning:* The final rule amends Table B–1 by consolidating a new Category 1 issue, ''Termination of nuclear power plant operations'' with six other Category 1 issues related to the decommissioning of a nuclear power plant: ''Radiation doses,'' ''Waste management,'' ''Air quality,'' ''Water quality,'' ''Ecological resources,'' and ''Socioeconomic impacts,'' each with an impact level of small. The final rule names the consolidated issue, ''Termination of plant operations and decommissioning.'' The consolidated issue is a Category 1 issue with an impact level of small.

The final rule further amends Table B–1 by removing the entries for ''Radiation doses,'' ''Waste management,'' ''Air quality,'' ''Water quality,'' ''Ecological resources,'' and ''Socioeconomic impacts,'' and, by adding an entry for ''Termination of plant operations and decommissioning.'' The finding column entry for the consolidated issue states,

License renewal is expected to have a negligible effect on the impacts of terminating operations and decommissioning on all resources.

The 1996 GEIS analysis indicates that the six decommissioning issues are expected to be small at all nuclear power plant sites. The new issue addresses the impacts from terminating nuclear power plant operations and plant decommissioning. Termination of nuclear power plant operations results in the cessation of many routine plant operations as well as a significant reduction in the plant's workforce. It is assumed that termination of plant operations would not lead to the immediate decommissioning and dismantlement of the reactor or other power plant infrastructure.

The final rule consolidates the six decommissioning issues and the termination of nuclear power plant operations issue into one Category 1 issue to facilitate the environmental review process. For further information about the environmental effects of decommissioning, see the ''2002 Generic Environmental Impact Statement on Decommissioning of Nuclear Facilities: Regarding the Decommissioning of Nuclear Power Reactors,'' NUREG–0586.

IX. Section-by-Section Analysis

The following section-by-section analysis discusses the sections in 10 CFR part 51 that are being amended as a result of the final rule.

Section 51.53(c)(2)

The NRC is clarifying the required contents of the license renewal environmental report, which applicants must submit in accordance with 10 CFR 54.23, ''Contents of application—environmental information,'' by revising the second sentence in this subparagraph to read, ''This report must describe in detail the affected environment around the plant, the modifications directly affecting the environment or any plant effluents, and any planned refurbishment activities.''

Sections 51.53(c)(3)(ii)(A), (B), (C), and (E)

For those applicants seeking an initial license renewal and holding either an operating license, construction permit, or combined license as of June 30, 1995, the environmental report shall include the information required in 10 CFR 51.53(c)(2) but is not required to contain assessments of the environmental impacts of certain license renewal issues identified as Category 1 (generically analyzed) issues in Appendix B to Subpart A of 10 CFR part 51. The environmental report must contain analyses of the environmental impacts of the proposed action, including the impacts of refurbishment activities, if any, associated with license renewal and the impacts of operation during the renewal term, for those issues identified as Category 2 (plant-specific analysis required) issues in Appendix B to Subpart A of 10 CFR part 51 and must include consideration of alternatives for reducing adverse impacts of Category 2 issues. In addition, the environmental report must contain any new and significant information regarding the environmental impacts of license renewal of which the applicant is aware. The required analyses are listed in 10 CFR 51.53(c)(3)(ii)(A)–(P).

The final rule language for 10 CFR 51.53(c)(3)(ii)(A), (B), (C), (E), (F), (G), (I), (J), (K), and (N) consists of changes to conform to the final changes in Table B–1, which in turn, reflects the revised GEIS. The modified paragraphs more accurately reflect the specific information needed in the environmental report that will help the NRC conduct the environmental review of the proposed action.

Section 51.53(c)(3)(ii)(A) is revised to incorporate the findings of the revised GEIS and to require applicants to provide information in their environmental reports regarding water use conflicts encompassing water availability and competing water demands, and related impacts on stream (aquatic) and riparian (terrestrial) communities. The numerical definition for a low flow river has also been deleted requiring that applicants withdrawing makeup water for cooling towers or cooling ponds from any river provide a plant-specific assessment of water use conflicts in their environmental reports.

Section 51.53(c)(3)(ii)(B) is revised to replace ''heat shock'' with ''thermal changes'' to reflect the final changes in

Table B–1 as described earlier in this document under ''Aquatic Resources'' environmental impact Issue 39, ''Thermal impacts on aquatic organisms (plants with once-through cooling systems or cooling ponds).''

Section 51.53(c)(3)(ii)(C) is revised to delete the reference to ''Ranney wells'' to conform to the final changes made in the revised Table B–1.

Section 51.53(c)(3)(ii)(E) is revised to expressly include nuclear power plant continued operations within the scope of the impacts to be assessed by license renewal applicants. The paragraph is further revised to expand the scope of the provision to include all Federal wildlife protection laws and essential fish habitat under the MSA.

Section 51.53(c)(3)(ii)(F)

The final rule removes and reserves 10 CFR 51.53(c)(3)(ii)(F) because the final rule changes the Category 2 issue, ''Air quality during refurbishment (nonattainment and maintenance areas),'' to Category 1, ''Air quality impacts (all plants).''

Section 51.53(c)(3)(ii)(G)

The final rule language for 10 CFR 51.53(c)(3)(ii)(G) is revised to delete the numerical definition for a low flow river to conform to the final changes made in the revised Table B–1.

Section 51.53(c)(3)(ii)(I)

The final rule removes and reserves 10 CFR 51.53(c)(3)(ii)(I) because several Category 2 socioeconomic issues are reclassified as Category 1.

Section 51.53(c)(3)(ii)(J)

The final rule removes and reserves 10 CFR 51.53(c)(3)(ii)(J) because the final rule changes the Category 2 issue, ''Public services, Transportation,'' to Category 1, ''Transportation.''

Section 51.53(c)(3)(ii)(K)

The final rule language for 10 CFR 51.53(c)(3)(ii)(K) is revised to more accurately reflect the specific information needed in the environmental report that will help the NRC conduct the environmental review of the proposed action.

Section 51.53(c)(3)(ii)(N)

The final rule adds a new paragraph 10 CFR 51.53 (c)(3)(ii)(N) to require license renewal applicants to provide information on the general demographic composition of minority and low-income populations and communities (by race and ethnicity) residing in the immediate vicinity of the plant that could be affected by the renewal of the plant's operating license, including any planned refurbishment activities, and ongoing and future plant operations.

Section 51.53(c)(3)(ii)(O)

The final rule adds a new paragraph 10 CFR 51.53 (c)(3)(ii)(O) to require license renewal applicants to provide information about other past, present, and reasonably foreseeable future actions occurring in the vicinity of the nuclear power plant that may result in a cumulative effect.

Section 51.53(c)(3)(ii)(P)

The final rule adds a new paragraph 10 CFR 51.53 (c)(3)(ii)(P) to require the license renewal applicant to assess the impact of any documented inadvertent releases of radionuclides to groundwater. The assessment must include a description of any groundwater protection program used for the surveillance of piping and components containing radioactive liquids for which a pathway to groundwater may exist. The assessment must also include a description of any past inadvertent releases, including the projected impact to the environment (e.g., aquifers, rivers, lakes, ponds) during the license renewal term.

Section 51.71(d)

The final rule language for 10 CFR 51.71(d) is revised to make minor conforming changes to clarify the readability and to include the analysis of cumulative impacts. Cumulative impacts were not addressed in the 1996 GEIS, but are currently being evaluated by the NRC in plant-specific supplements to the GEIS. The NRC is modifying this paragraph to more accurately reflect the cumulative impacts analysis conducted for environmental reviews of the proposed action.

Section 51.95(c)

The final rule language revisions to the introductory text of 10 CFR 51.95(c) are administrative in nature and replace the reference to the 1996 GEIS for license renewal of nuclear power plants with a reference to the revised GEIS.

Section 51.95(c)(4)

The final rule removes the terms ''resolved Category 2 issues'' and ''open Category 2 issues'' from the second sentence of 10 CFR 51.95(c)(4), makes other clarifying changes to enhance the readability of the sentence, corrects a typographical error, and removes otherwise ambiguous or unnecessary language. The terms ''resolved Category 2 issues'' and ''open Category 2 issues'' are not defined nor used in 10 CFR part 51. In addition, the revised GEIS does not contain these terms nor does the NRC use these terms in SEISs. The only instance in past NRC practice in which an ''open'' or ''resolved'' Category 2 issue arises is for the Category 2 ''Severe accidents'' issue. The ''Severe accidents'' issue requires the preparation of a severe accident mitigation alternatives (SAMA) analysis as a prerequisite to license renewal. If a license renewal applicant had not yet performed a SAMA analysis for a given plant, then the issue would remain ''open'' pending the completion of a SAMA analysis. Some licensees, however, have already performed a SAMA analysis at some point. Thus, if a license renewal applicant had performed a SAMA analysis for a particular plant, then the issue would be considered ''resolved,'' and there would be no need to repeat a SAMA analysis as part of a license renewal application. As the finding column entry for ''Severe accidents'' already provides for a previously prepared SAMA analysis, and the ''open'' or ''resolved'' terminology is not used in connection with any other GEIS issue, there is no need to retain this language in the second sentence of 10 CFR 51.95(c)(4).

Table B–1

The final rule revises Table B–1 to follow the organizational format of the revised GEIS. Environmental issues in Table B–1 are arranged by resource area. The environmental impacts of license renewal activities, including plant operations and refurbishment along with replacement power alternatives, are addressed in each resource area. Table B–1 organizes environmental impact issues under the following resource areas: (1) Land use; (2) visual resources; (3) air quality; (4) noise; (5) geologic environment; (6) surface water resources; (7) groundwater resources; (8) terrestrial resources; (9) aquatic resources; (10) special status species and habitats; (11) historic and cultural resources; (12) socioeconomics; (13) human health; (14) postulated accidents; (15) environmental justice; (16) waste management; (17) cumulative impacts; (18) uranium fuel cycle; and (19) termination of nuclear power plant operations and decommissioning. Discussions of the environmental impact issues in each resource area and classification of issues into Category 1 or Category 2 are provided in Section VIII, ''Final Actions and Basis for Changes to Table B–1'' of this document. Additional changes to Table B–1 in the final rule were discussed previously in applicable resource areas in Section VIII. Footnote 1 was updated to reference the revised GEIS. A minor

edit was made to footnote 2, clause (3), to improve clarity. Footnote 4 was added to define the in-scope electric transmission lines. Consequently, the previous footnotes 4 and 5 were renumbered as footnotes 5 and 6, respectively. The previous footnote 6 was deleted, as it is no longer needed.

X. Guidance Documents

In the Rules and Regulations section of this issue of the **Federal Register**, the NRC is providing notice of the availability of three additional documents related to this final rule: (1) A revised GEIS, NUREG–1437, ''Generic Environmental Impact statement for License Renewal of Nuclear Plants,'' Vol. 1, ''Main Report'' (ADAMS Accession No. ML13106A241); Vol. 2, ''Public Comments'' (ADAMS Accession No. ML13106A242); and Vol. 3, ''Appendices'' (ADAMS Acession No. ML13106A244); (2) Revision 1 of Environmental Standard Review Plan (ESRP), NUREG–1555, Supplement 1, ''Standard Review Plans for Environmental Reviews for Nuclear Power Plants, Supplement 1: Operating License Renewal'' (ADAMS Acession No. ML13106A246); and (3) Revision 1 of Regulatory Guide 4.2, Supplement 1, ''Preparation of Environmental Reports for Nuclear Power Plant License Renewal Applications'' (ADAMS Acession No. ML13067A354).

The revised GEIS is intended to improve the efficiency of the license renewal process by (1) Providing an evaluation of the types of environmental impacts that may occur from renewing commercial nuclear power plant operating licenses, (2) identifying and assessing impacts that are expected to be generic (the same or similar) at all nuclear power plants (or plants with specific plant or site characteristics), and (3) defining the number and scope of environmental impact issues that need to be addressed in plant-specific supplemental EISs. The content of the revised GEIS is discussed further in Section III, ''Discussion,'' of this document.

Revision 1 of RG 4.2, Supplement 1, provides general procedures for the preparation of environmental reports, which are submitted as part of the license renewal application for a nuclear power plant in accordance with 10 CFR part 54. More specifically, this revised RG explains the criteria for addressing Category 2 issues in the environmental report as required by the revisions to 10 CFR part 51 under the final rule.

The revised ESRP provides guidance to the NRC staff on how to conduct a license renewal environmental review. The ESRP parallels the format in RG 4.2. The primary purpose of the ESRP is to ensure that these reviews focus on those environmental concerns associated with license renewal as described in 10 CFR part 51.

XI. Agreement State Compatibility

Under the ''Policy Statement on Adequacy and Compatibility of Agreement States Programs,'' approved by the Commission on June 20, 1997, and published in the **Federal Register** (62 FR 46517), this rule is classified as compatibility category ''NRC.'' Agreement State Compatibility is not required for Category ''NRC'' regulations. The NRC program elements in this category are those that relate directly to areas of regulation reserved to the NRC by the Atomic Energy Act of 1954, as amended, or the provisions of Title 10 of the CFR. Although an Agreement State may not adopt program elements reserved to the NRC, it may wish to inform its licensees of certain requirements via a mechanism that is consistent with the particular State's administrative procedure laws. Category ''NRC'' regulations do not confer regulatory authority on the State.

XII. Availability of Documents

The NRC is making the documents identified in the following table available to interested persons through one or more of the methods provided in the **ADDRESSES** section of this document.

Document	PDR	Web	ADAMS Accession No.
NUREG–1437, Revision 1, ''Generic Environmental Impact Statement for License Renewal of Nuclear Plants,'' Vol. 1, ''Main Report''.	X	X	ML13106A241
NUREG–1437, Revision 1, ''Generic Environmental Impact Statement for License Renewal of Nuclear Plants,'' Vol. 2, ''Public Comments''.	X	X	ML13106A242
NUREG–1437, Revision 1, ''Generic Environmental Impact Statement for License Renewal of Nuclear Plants,'' Vol. 3, ''Appendices''.	X	X	ML13106A244
Regulatory Guide 4.2, Supplement 1, Revision 1, ''Preparation of Environmental Reports for Nuclear Power Plant License Renewal Applications''.	X	X	ML13067A354
NUREG–1555, Supplement 1, Revision 1, ''Standard Review Plans for Environmental Reviews for Nuclear Power Plants, Supplement 1: Operating License Renewal''.	X	X	ML13106A246
Regulatory Analysis for RIN 3150–AI42, Final Rulemaking Revisions to Environmental Review for Renewal of Nuclear Power Plant Operating Licenses.	X	X	ML13029A471
OMB Supporting Statement for RIN 3150–AI42, Final Rulemaking Revisions to Environmental Review for Renewal of Nuclear Power Plant Operating Licenses.	X	X	ML110760342
SECY–12–0063, Final Rule: Revisions to Environmental Protection Regulations for the Renewal of Nuclear Power Plant Operating Licenses (10 CFR part 50; RIN 3150–AI42) (April 20, 2012).	X	X	ML110760033
Staff Requirements Memorandum for SECY–12–0063 (December 6, 2012)	X	X	ML12341A134
Meeting Between the U.S. Nuclear Regulatory Commission and Public Stakeholders Concerning Implementation of Final Rule for Revisions to the Environmental Protection Regulations for the Renewal of Nuclear Power Plant Operating Licenses and Other License Renewal Environmental Review Issues (TAC No. ME2308) (July 21, 2011).	X	X	ML11182B535
Recommendations for Enhancing Reactor Safety in the 21st Century, The Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident'' (July 12, 2011).	X	X	ML111861807
NRC Press Release No. 10–060, ''NRC Asks National Academy of Sciences to Study Cancer Risk in Populations Living Near Nuclear Power Facilities'' (April 7, 2010).	X	X	ML100970142
Summary of Public Meetings to Discuss Proposed Rule Regarding Title 10, part 51 of the *Code of Federal Regulations* and the Draft Revision to the Generic Environmental Impact Statement for License Renewal of Nuclear Plants, NUREG–1437, Revision 1 (November 3, 2009).	X	X	ML093070141

Document	PDR	Web	ADAMS Accession No.
Official Transcript of Public Meeting to Discuss the Draft Generic Environmental Impact Statement, Dana Point, CA (October 22, 2009).	X	X	ML093100505
Official Transcript of Public Meeting to Discuss the Draft Generic Environmental Impact Statement, Pismo Beach, CA (October 20, 2009).	X	X	ML093070174
Official Transcript of Public Meeting to Discuss the Draft Generic Environmental Impact Statement, Rockville, MD (October 1, 2009).	X	X	ML092931678
Official Transcript of Public Meeting to Discuss the Draft Generic Environmental Impact Statement, Oak Brook, IL (September 24, 2009).	X	X	ML092931545
Official Transcript of Public Meeting to Discuss the Draft Generic Environmental Impact Statement, Newton, MA (September 17, 2009).	X	X	ML092931681
Official Transcript of Public Meeting to Discuss the Draft Generic Environmental Impact Statement, Atlanta, GA (September 15, 2009).	X	X	ML092810007
NRC Response to Public Comments Received on Proposed 10 CFR part 51 Rule, "Revisions to Environmental Review for Renewal of Nuclear Power Plant Operating Licenses" (RIN 3150–AI42).	X	X	ML111450013
NRC Response to Public Comments Related to Draft Regulatory Guide, DG–4015 (Proposed Revision 1 of Regulatory Guide 4.2, Supplement 1)—"Preparation of Environmental Reports for Nuclear Power Plant License Renewal Applications" (RIN 3150–AI42).	X	X	ML13067A355
Regulatory History for Proposed Rule, "Revisions to Environmental Review for Renewal of Nuclear Power Plant Operating Licenses" (RIN 3150–AI42).	X	X	ML093160539
Draft NUREG–1437, Vols. 1 and 2, Revision 1—"Generic Environmental Impact Statement for License Renewal of Nuclear Plants".	X	X	ML090220654
Draft Regulatory Guide, DG–4015 (Proposed Revision 1 of RG 4.2, Supplement 1), "Preparation of Environmental Reports for Nuclear Power Plant License Renewal Applications".	X	X	ML091620409
Draft NUREG–1555, Supplement 1, Revision 1—"Standard Review Plans for Environmental Reviews for Nuclear Power Plants, Supplement 1: Operating License Renewal".	X	X	ML090230497
NEI 07–07, "Industry Ground Water Protection Initiative—Final Guidance Document"	X	X	ML072610036
Liquid Radioactive Release Lessons Learned Task Force Final Report (September 1, 2006).	X	X	ML062650312
NUREG–1437, Vol. 1, Addendum 1, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants," Main Report, Section 6.3—Transportation, Table 9.1, Summary of NEPA Issues for License Renewal of Nuclear Power Plants.	X	X	ML040690720
NUREG–1437, Vol. 1, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants," Main Report.	X	X	ML040690705
NUREG–1437, Vol. 2, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants," Appendices.	X	X	ML040690738

XIII. Voluntary Consensus Standards

The National Technology Transfer and Advancement Act of 1995, Public Law 104–113, requires that Federal agencies use technical standards that are developed or adopted by voluntary consensus standards bodies unless using such a standard is inconsistent with applicable law or is otherwise impractical. This final rulemaking, which amends various provisions of 10 CFR part 51, does not constitute the establishment of a standard that contains generally applicable requirements.

XIV. Environmental Impact—Categorical Exclusion

The NRC has determined that the promulgation of this final rule is a type of procedural action that meets the criteria of the categorical exclusion set forth in 10 CFR 51.22(c)(3)(i) and (iii). Therefore, neither an environmental impact statement nor an environmental assessment has been prepared for this final rule.

XV. Paperwork Reduction Act Statement

This final rule contains new or amended information collection requirements that are subject to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501, *et seq.*). These requirements were approved by the Office of Management and Budget (OMB), control number 3150–0021.

The burden to the public for these information collections is estimated to be reduced by an average of 311.15 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the information collection. Send comments on any aspect of these information collections, including suggestions for reducing the burden, to the Information Services Branch (T–5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001, or by email to *INFO COLLECTS.RESOURCE@NRC.GOV;* and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB–10202, (3150–0021), Office of Management and Budget, Washington, DC 20503, or by email to *Chad_S._Whiteman@omb.eop.gov.*

Public Protection Notification

The NRC may not conduct or sponsor, and a person is not required to respond to, a request for information or an information collection requirement unless the requesting document displays a currently valid OMB control number.

XVI. Plain Writing

The Plain Writing Act of 2010 (Pub. L. 111–274) requires Federal agencies to write documents in a clear, concise, well-organized manner that also follows other best practices appropriate to the subject or field and the intended audience. The NRC has attempted to use plain language in promulgating this rule consistent with the Federal Plain Writing Act guidelines.

XVII. Regulatory Analysis

The NRC has prepared a regulatory analysis of this regulation. The analysis examines the costs and benefits of the alternatives considered by the NRC. Availability of the regulatory analysis is provided in Section XII, ''Availability of Documents,'' of this document.

XVIII. Regulatory Flexibility Act Certification

In accordance with the Regulatory Flexibility Act (5 U.S.C. 605(b)), the NRC certifies that this rule does not have a significant economic impact on a substantial number of small entities. The final rule affects only nuclear power plant licensees filing license renewal applications. The companies that own these plants do not fall within the scope of the definition of ''small entities'' set forth in the Regulatory Flexibility Act or the size standards established by the NRC (10 CFR 2.810).

XIX. Backfitting and Issue Finality

Issuance of this final rule does not constitute ''backfitting'' as defined in 10 CFR 50.109(a)(1) of the Backfit Rule and is not otherwise inconsistent with the applicable issue finality provisions in 10 CFR part 52. The final rule does not meet the definition of a backfit in 10 CFR 50.109(a)(1) because the document is not a ''modification of or addition to systems, structures, components, or design of a facility; or the design approval or manufacturing license for a facility; or the procedures or organization required to design, construct or operate a facility.'' For these reasons, issuance of this final rule does not constitute ''backfitting'' within the meaning of the definition of ''backfitting'' in 10 CFR 50.109(a)(1). Similarly, the issuance of the this final rule does not constitute an action inconsistent with any of the issue finality provisions in 10 CFR part 52.

XX. Congressional Review Act

In accordance with the Congressional Review Act of 1996, the NRC has determined that this action is not a major rule and has verified this determination with the Office of Information and Regulatory Affairs of the OMB.

List of Subjects in 10 CFR Part 51

Administrative practice and procedure, Environmental impact statement, Nuclear materials, Nuclear power plants and reactors, Reporting and recordkeeping requirements.

For the reasons set out in the preamble and under the authority of the Atomic Energy Act of 1954, as amended; the Energy Reorganization Act of 1974, as amended; and 5 U.S.C. 552 and 553; the NRC amends 10 CFR part 51 as follows:

Part 51—Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions

■ 1. The authority citation for part 51 is revised to read as follows:

Authority: Atomic Energy Act sec. 161, 1701 (42 U.S.C. 2201, 2297f); Energy Reorganization Act secs. 201, 202, 211 (42 U.S.C. 5841, 5842, 5851); Government Paperwork Elimination Act sec. 1704 (44 U.S.C. 3504 note). Subpart A also issued under National Environmental Policy Act secs. 102, 104, 105 (42 U.S.C. 4332, 4334, 4335); Pub. L. 95 604, Title II, 92 Stat. 3033 3041; Atomic Energy Act sec. 193 (42 U.S.C. 2243). Sections 51.20, 51.30, 51.60, 51.80. and 51.97 also issued under Nuclear Waste Policy Act secs. 135, 141, 148 (42 U.S.C. 10155, 10161, 10168). Section 51.22 also issued under Atomic Energy Act sec. 274 (42 U.S.C. 2021) and under Nuclear Waste Policy Act sec. 121 (42 U.S.C. 10141). Sections 51.43, 51.67, and 51.109 also issued under Nuclear Waste Policy Act sec. 114(f) (42 U.S.C. 10134(f)).

■ 2. Amend § 51.53 by:
■ a. Revising the second sentence of paragraph (c)(2);
■ b. Revising the first sentence of paragraph (c)(3)(ii)(A);
■ c. Revising the second sentence of paragraph (c)(3)(ii)(B);
■ d. Revising paragraph (c)(3)(ii)(C);
■ e. Revising paragraph (c)(3)(ii)(E);
■ f. Removing and reserving paragraph (c)(3)(ii)(F);
■ g. Revising paragraph (c)(3)(ii)(G);
■ h. Removing and reserving paragraphs (c)(3)(ii)(I) and (J);
■ i. Revising paragraph (c)(3)(ii)(K); and
■ j. Adding paragraphs (c)(3)(ii)(N), (O), and (P).

The revisions and additions read as follows:

§ 51.53 Postconstruction environmental reports.

* * * * *

(c) * * *

(2) * * * This report must describe in detail the affected environment around the plant, the modifications directly affecting the environment or any plant effluents, and any planned refurbishment activities. * * *

(3) * * *

(ii) * * *

(A) If the applicant's plant utilizes cooling towers or cooling ponds and withdraws makeup water from a river, an assessment of the impact of the proposed action on water availability and competing water demands, the flow of the river, and related impacts on stream (aquatic) and riparian (terrestrial) ecological communities must be provided. * * *

(B) * * * If the applicant cannot provide these documents, it shall assess the impact of the proposed action on fish and shellfish resources resulting from thermal changes and impingement and entrainment.

(C) If the applicant's plant pumps more than 100 gallons (total onsite) of groundwater per minute, an assessment of the impact of the proposed action on groundwater must be provided.

* * * * *

(E) All license renewal applicants shall assess the impact of refurbishment, continued operations, and other license-renewal-related construction activities on important plant and animal habitats. Additionally, the applicant shall assess the impact of the proposed action on threatened or endangered species in accordance with Federal laws protecting wildlife, including but not limited to, the Endangered Species Act, and essential fish habitat in accordance with the Magnuson-Stevens Fishery Conservation and Management Act.

* * * * *

(G) If the applicant's plant uses a cooling pond, lake, or canal or discharges into a river, an assessment of the impact of the proposed action on public health from thermophilic organisms in the affected water must be provided.

* * * * *

(K) All applicants shall identify any potentially affected historic or archaeological properties and assess whether any of these properties will be affected by future plant operations and any planned refurbishment activities in accordance with the National Historic Preservation Act.

* * * * *

(N) Applicants shall provide information on the general demographic composition of minority and low-income populations and communities (by race and ethnicity) residing in the immediate vicinity of the plant that could be affected by the renewal of the plant's operating license, including any planned refurbishment activities, and ongoing and future plant operations.

(O) Applicants shall provide information about other past, present, and reasonably foreseeable future actions occurring in the vicinity of the nuclear plant that may result in a cumulative effect.

(P) An applicant shall assess the impact of any documented inadvertent releases of radionuclides into groundwater. The applicant shall include in its assessment a description of any groundwater protection program

used for the surveillance of piping and components containing radioactive liquids for which a pathway to groundwater may exist. The assessment must also include a description of any past inadvertent releases and the projected impact to the environment (e.g., aquifers, rivers, lakes, ponds, ocean) during the license renewal term.

■ 3. In § 51.71, revise paragraph (d) to read as follows:

§ 51.71 Draft environmental impact statement—contents.

* * * * *

(d) *Analysis.* Unless excepted in this paragraph or § 51.75, the draft environmental impact statement will include a preliminary analysis that considers and weighs the environmental effects, including any cumulative effects, of the proposed action; the environmental impacts of alternatives to the proposed action; and alternatives available for reducing or avoiding adverse environmental effects. Additionally, the draft environmental impact statement will include a consideration of the economic, technical, and other benefits and costs of the proposed action and alternatives. The draft environmental impact statement will indicate what other interests and considerations of Federal policy, including factors not related to environmental quality, if applicable, are relevant to the consideration of environmental effects of the proposed action identified under paragraph (a) of this section. The draft supplemental environmental impact statement prepared at the license renewal stage under § 51.95(c) need not discuss the economic or technical benefits and costs of either the proposed action or alternatives except if benefits and costs are either essential for a determination regarding the inclusion of an alternative in the range of alternatives considered or relevant to mitigation. In addition, the supplemental environmental impact statement prepared at the license renewal stage need not discuss other issues not related to the environmental effects of the proposed action and associated alternatives. The draft supplemental environmental impact statement for license renewal prepared under § 51.95(c) will rely on conclusions as amplified by the supporting information in the GEIS for issues designated as Category 1 in appendix B to subpart A of this part. The draft supplemental environmental impact statement must contain an analysis of those issues identified as Category 2 in appendix B to subpart A of this part that are open for the proposed action. The analysis for all draft environmental impact statements will, to the fullest extent practicable, quantify the various factors considered. To the extent that there are important qualitative considerations or factors that cannot be quantified, these considerations or factors will be discussed in qualitative terms. Consideration will be given to compliance with environmental quality standards and requirements that have been imposed by Federal, State, regional, and local agencies having responsibility for environmental protection, including applicable zoning and land-use regulations and water pollution limitations or requirements issued or imposed under the Federal Water Pollution Control Act. The environmental impact of the proposed action will be considered in the analysis with respect to matters covered by environmental quality standards and requirements irrespective of whether a certification or license from the appropriate authority has been obtained. While satisfaction of Commission standards and criteria pertaining to radiological effects will be necessary to meet the licensing requirements of the Atomic Energy Act, the analysis will, for the purposes of NEPA, consider the radiological effects of the proposed action and alternatives.

* * * * *

Compliance with the environmental quality standards and requirements of the Federal Water Pollution Control Act (imposed by EPA or designated permitting states) is not a substitute for, and does not negate the requirement for NRC to weigh all environmental effects of the proposed action, including the degradation, if any, of water quality, and to consider alternatives to the proposed action that are available for reducing adverse effects. Where an environmental assessment of aquatic impact from plant discharges is available from the permitting authority, the NRC will consider the assessment in its determination of the magnitude of environmental impacts for striking an overall cost-benefit balance at the construction permit and operating license and early site permit and combined license stages, and in its determination of whether the adverse environmental impacts of license renewal are so great that preserving the option of license renewal for energy planning decision-makers would be unreasonable at the license renewal stage. When no such assessment of aquatic impacts is available from the permitting authority, NRC will establish on its own, or in conjunction with the permitting authority and other agencies having relevant expertise, the magnitude of potential impacts for striking an overall cost-benefit balance for the facility at the construction permit and operating license and early site permit and combined license stages, and in its determination of whether the adverse environmental impacts of license renewal are so great that preserving the option of license renewal for energy planning decision-makers would be unreasonable at the license renewal stage.

* * * * *

■ 4. Amend § 51.95 by revising paragraph (c) introductory text and the second sentence of paragraph (c)(4) to read as follows:

§ 51.95 Postconstruction environmental impact statements.

* * * * *

(c) *Operating license renewal stage.* In connection with the renewal of an operating license or combined license for a nuclear power plant under 10 CFR parts 52 or 54 of this chapter, the Commission shall prepare an environmental impact statement, which is a supplement to the Commission's NUREG–1437, ''Generic Environmental Impact Statement for License Renewal of Nuclear Plants'' (June 2013), which is available in the NRC's Public Document Room, 11555 Rockville Pike, Rockville, Maryland 20852.

* * * * *

(4) * * * In order to make recommendations and reach a final decision on the proposed action, the NRC staff, adjudicatory officers, and Commission shall integrate the conclusions in the generic environmental impact statement for issues designated as Category 1 with information developed for those Category 2 issues applicable to the plant under § 51.53(c)(3)(ii) and any new and significant information. * * *

* * * * *

■ 5. In appendix B to subpart A of part 51, Table B–1 is revised to read as follows:

Appendix B to Subpart A—Environmental Effect of Renewing the Operating License of a Nuclear Power Plant

* * * * *

TABLE B–1—SUMMARY OF FINDINGS ON NEPA ISSUES FOR LICENSE RENEWAL OF NUCLEAR POWER PLANTS [1]

Issue	Category [2]	Finding [3]
Land Use		
Onsite land use	1	SMALL. Changes in onsite land use from continued operations and refurbishment associated with license renewal would be a small fraction of the nuclear power plant site and would involve only land that is controlled by the licensee.
Offsite land use	1	SMALL. Offsite land use would not be affected by continued operations and refurbishment associated with license renewal.
Offsite land use in transmission line right-of-ways (ROWs) [4].	1	SMALL. Use of transmission line ROWs from continued operations and refurbishment associated with license renewal would continue with no change in land use restrictions.
Visual Resources		
Aesthetic impacts	1	SMALL. No important changes to the visual appearance of plant structures or transmission lines are expected from continued operations and refurbishment associated with license renewal.
Air Quality		
Air quality impacts (all plants)	1	SMALL. Air quality impacts from continued operations and refurbishment associated with license renewal are expected to be small at all plants. Emissions resulting from refurbishment activities at locations in or near air quality nonattainment or maintenance areas would be short-lived and would cease after these refurbishment activities are completed. Operating experience has shown that the scale of refurbishment activities has not resulted in exceedance of the *de minimis* thresholds for criteria pollutants, and best management practices including fugitive dust controls and the imposition of permit conditions in State and local air emissions permits would ensure conformance with applicable State or Tribal Implementation Plans. Emissions from emergency diesel generators and fire pumps and routine operations of boilers used for space heating would not be a concern, even for plants located in or adjacent to nonattainment areas. Impacts from cooling tower particulate emissions even under the worst-case situations have been small.
Air quality effects of transmission lines [4]	1	SMALL. Production of ozone and oxides of nitrogen is insignificant and does not contribute measurably to ambient levels of these gases.
Noise		
Noise impacts	1	SMALL. Noise levels would remain below regulatory guidelines for offsite receptors during continued operations and refurbishment associated with license renewal.
Geologic Environment		
Geology and soils	1	SMALL. The effect of geologic and soil conditions on plant operations and the impact of continued operations and refurbishment activities on geology and soils would be small for all nuclear power plants and would not change appreciably during the license renewal term.
Surface Water Resources		
Surface water use and quality (non-cooling system impacts).	1	SMALL. Impacts are expected to be small if best management practices are employed to control soil erosion and spills. Surface water use associated with continued operations and refurbishment associated with license renewal would not increase significantly or would be reduced if refurbishment occurs during a plant outage.
Altered current patterns at intake and discharge structures.	1	SMALL. Altered current patterns would be limited to the area in the vicinity of the intake and discharge structures. These impacts have been small at operating nuclear power plants.
Altered salinity gradients	1	SMALL. Effects on salinity gradients would be limited to the area in the vicinity of the intake and discharge structures. These impacts have been small at operating nuclear power plants.
Altered thermal stratification of lakes	1	SMALL. Effects on thermal stratification would be limited to the area in the vicinity of the intake and discharge structures. These impacts have been small at operating nuclear power plants.
Scouring caused by discharged cooling water.	1	SMALL. Scouring effects would be limited to the area in the vicinity of the intake and discharge structures. These impacts have been small at operating nuclear power plants.
Discharge of metals in cooling system effluent.	1	SMALL. Discharges of metals have not been found to be a problem at operating nuclear power plants with cooling-tower-based heat dissipation systems and have been satisfactorily mitigated at other plants. Discharges are monitored and controlled as part of the National Pollutant Discharge Elimination System (NPDES) permit process.

TABLE B–1—SUMMARY OF FINDINGS ON NEPA ISSUES FOR LICENSE RENEWAL OF NUCLEAR POWER PLANTS [1]—Continued

Issue	Category [2]	Finding [3]
Discharge of biocides, sanitary wastes, and minor chemical spills.	1	SMALL. The effects of these discharges are regulated by Federal and State environmental agencies. Discharges are monitored and controlled as part of the NPDES permit process. These impacts have been small at operating nuclear power plants.
Surface water use conflicts (plants with once-through cooling systems).	1	SMALL. These conflicts have not been found to be a problem at operating nuclear power plants with once-through heat dissipation systems.
Surface water use conflicts (plants with cooling ponds or cooling towers using makeup water from a river).	2	SMALL or MODERATE. Impacts could be of small or moderate significance, depending on makeup water requirements, water availability, and competing water demands.
Effects of dredging on surface water quality.	1	SMALL. Dredging to remove accumulated sediments in the vicinity of intake and discharge structures and to maintain barge shipping has not been found to be a problem for surface water quality. Dredging is performed under permit from the U.S. Army Corps of Engineers, and possibly, from other State or local agencies.
Temperature effects on sediment transport capacity.	1	SMALL. These effects have not been found to be a problem at operating nuclear power plants and are not expected to be a problem.
Groundwater Resources		
Groundwater contamination and use (non-cooling system impacts).	1	SMALL. Extensive dewatering is not anticipated from continued operations and refurbishment associated with license renewal. Industrial practices involving the use of solvents, hydrocarbons, heavy metals, or other chemicals, and/or the use of wastewater ponds or lagoons have the potential to contaminate site groundwater, soil, and subsoil. Contamination is subject to State or Environmental Protection Agency regulated cleanup and monitoring programs. The application of best management practices for handling any materials produced or used during these activities would reduce impacts.
Groundwater use conflicts (plants that withdraw less than 100 gallons per minute [gpm]).	1	SMALL. Plants that withdraw less than 100 gpm are not expected to cause any groundwater use conflicts.
Groundwater use conflicts (plants that withdraw more than 100 gallons per minute [gpm]).	2	SMALL, MODERATE, or LARGE. Plants that withdraw more than 100 gpm could cause groundwater use conflicts with nearby groundwater users.
Groundwater use conflicts (plants with closed-cycle cooling systems that withdraw makeup water from a river).	2	SMALL, MODERATE, or LARGE. Water use conflicts could result from water withdrawals from rivers during low-flow conditions, which may affect aquifer recharge. The significance of impacts would depend on makeup water requirements, water availability, and competing water demands.
Groundwater quality degradation resulting from water withdrawals.	1	SMALL. Groundwater withdrawals at operating nuclear power plants would not contribute significantly to groundwater quality degradation.
Groundwater quality degradation (plants with cooling ponds in salt marshes).	1	SMALL. Sites with closed-cycle cooling ponds could degrade groundwater quality. However, groundwater in salt marshes is naturally brackish and thus, not potable. Consequently, the human use of such groundwater is limited to industrial purposes.
Groundwater quality degradation (plants with cooling ponds at inland sites).	2	SMALL, MODERATE, or LARGE. Inland sites with closed-cycle cooling ponds could degrade groundwater quality. The significance of the impact would depend on cooling pond water quality, site hydrogeologic conditions (including the interaction of surface water and groundwater), and the location, depth, and pump rate of water wells.
Radionuclides released to groundwater	2	SMALL or MODERATE. Leaks of radioactive liquids from plant components and pipes have occurred at numerous plants. Groundwater protection programs have been established at all operating nuclear power plants to minimize the potential impact from any inadvertent releases. The magnitude of impacts would depend on site-specific characteristics.
Terrestrial Resources		
Effects on terrestrial resources (non-cooling system impacts).	2	SMALL, MODERATE, or LARGE. Impacts resulting from continued operations and refurbishment associated with license renewal may affect terrestrial communities. Application of best management practices would reduce the potential for impacts. The magnitude of impacts would depend on the nature of the activity, the status of the resources that could be affected, and the effectiveness of mitigation.
Exposure of terrestrial organisms to radionuclides.	1	SMALL. Doses to terrestrial organisms from continued operations and refurbishment associated with license renewal are expected to be well below exposure guidelines developed to protect these organisms.
Cooling system impacts on terrestrial resources (plants with once-through cooling systems or cooling ponds).	1	SMALL. No adverse effects to terrestrial plants or animals have been reported as a result of increased water temperatures, fogging, humidity, or reduced habitat quality. Due to the low concentrations of contaminants in cooling system effluents, uptake and accumulation of contaminants in the tissues of wildlife exposed to the contaminated water or aquatic food sources are not expected to be significant issues.

TABLE B–1—SUMMARY OF FINDINGS ON NEPA ISSUES FOR LICENSE RENEWAL OF NUCLEAR POWER PLANTS [1]—Continued

Issue	Category [2]	Finding [3]
Cooling tower impacts on vegetation (plants with cooling towers).	1	SMALL. Impacts from salt drift, icing, fogging, or increased humidity associated with cooling tower operation have the potential to affect adjacent vegetation, but these impacts have been small at operating nuclear power plants and are not expected to change over the license renewal term.
Bird collisions with plant structures and transmission lines [4].	1	SMALL. Bird collisions with cooling towers and other plant structures and transmission lines occur at rates that are unlikely to affect local or migratory populations and the rates are not expected to change.
Water use conflicts with terrestrial resources (plants with cooling ponds or cooling towers using makeup water from a river).	2	SMALL or MODERATE. Impacts on terrestrial resources in riparian communities affected by water use conflicts could be of moderate significance.
Transmission line right-of-way (ROW) management impacts on terrestrial resources [4].	1	SMALL. Continued ROW management during the license renewal term is expected to keep terrestrial communities in their current condition. Application of best management practices would reduce the potential for impacts.
Electromagnetic fields on flora and fauna (plants, agricultural crops, honeybees, wildlife, livestock) [4].	1	SMALL. No significant impacts of electromagnetic fields on terrestrial flora and fauna have been identified. Such effects are not expected to be a problem during the license renewal term.
Aquatic Resources		
Impingement and entrainment of aquatic organisms (plants with once-through cooling systems or cooling ponds).	2	SMALL, MODERATE, or LARGE. The impacts of impingement and entrainment are small at many plants but may be moderate or even large at a few plants with once-through and cooling-pond cooling systems, depending on cooling system withdrawal rates and volumes and the aquatic resources at the site.
Impingement and entrainment of aquatic organisms (plants with cooling towers).	1	SMALL. Impingement and entrainment rates are lower at plants that use closed-cycle cooling with cooling towers because the rates and volumes of water withdrawal needed for makeup are minimized.
Entrainment of phytoplankton and zooplankton (all plants).	1	SMALL. Entrainment of phytoplankton and zooplankton has not been found to be a problem at operating nuclear power plants and is not expected to be a problem during the license renewal term.
Thermal impacts on aquatic organisms (plants with once-through cooling systems or cooling ponds).	2	SMALL, MODERATE, or LARGE. Most of the effects associated with thermal discharges are localized and are not expected to affect overall stability of populations or resources. The magnitude of impacts, however, would depend on site-specific thermal plume characteristics and the nature of aquatic resources in the area.
Thermal impacts on aquatic organisms (plants with cooling towers).	1	SMALL. Thermal effects associated with plants that use cooling towers are expected to be small because of the reduced amount of heated discharge.
Infrequently reported thermal impacts (all plants).	1	SMALL. Continued operations during the license renewal term are expected to have small thermal impacts with respect to the following: Cold shock has been satisfactorily mitigated at operating nuclear plants with once-through cooling systems, has not endangered fish populations or been found to be a problem at operating nuclear power plants with cooling towers or cooling ponds, and is not expected to be a problem. Thermal plumes have not been found to be a problem at operating nuclear power plants and are not expected to be a problem. Thermal discharge may have localized effects but is not expected to affect the larger geographical distribution of aquatic organisms. Premature emergence has been found to be a localized effect at some operating nuclear power plants but has not been a problem and is not expected to be a problem. Stimulation of nuisance organisms has been satisfactorily mitigated at the single nuclear power plant with a once-through cooling system where previously it was a problem. It has not been found to be a problem at operating nuclear power plants with cooling towers or cooling ponds and is not expected to be a problem.
Effects of cooling water discharge on dissolved oxygen, gas supersaturation, and eutrophication.	1	SMALL. Gas supersaturation was a concern at a small number of operating nuclear power plants with once-through cooling systems but has been mitigated. Low dissolved oxygen was a concern at one nuclear power plant with a once-through cooling system but has been mitigated. Eutrophication (nutrient loading) and resulting effects on chemical and biological oxygen demands have not been found to be a problem at operating nuclear power plants.
Effects of non-radiological contaminants on aquatic organisms.	1	SMALL. Best management practices and discharge limitations of NPDES permits are expected to minimize the potential for impacts to aquatic resources during continued operations and refurbishment associated with license renewal. Accumulation of metal contaminants has been a concern at a few nuclear power plants but has been satisfactorily mitigated by replacing copper alloy condenser tubes with those of another metal.
Exposure of aquatic organisms to radionuclides.	1	SMALL. Doses to aquatic organisms are expected to be well below exposure guidelines developed to protect these aquatic organisms.

TABLE B–1—SUMMARY OF FINDINGS ON NEPA ISSUES FOR LICENSE RENEWAL OF NUCLEAR POWER PLANTS [1]—Continued

Issue	Category [2]	Finding [3]
Effects of dredging on aquatic organisms ..	1	SMALL. Dredging at nuclear power plants is expected to occur infrequently, would be of relatively short duration, and would affect relatively small areas. Dredging is performed under permit from the U.S. Army Corps of Engineers, and possibly, from other State or local agencies.
Water use conflicts with aquatic resources (plants with cooling ponds or cooling towers using makeup water from a river).	2	SMALL or MODERATE. Impacts on aquatic resources in stream communities affected by water use conflicts could be of moderate significance in some situations.
Effects on aquatic resources (non-cooling system impacts).	1	SMALL. Licensee application of appropriate mitigation measures is expected to result in no more than small changes to aquatic communities from their current condition.
Impacts of transmission line right-of-way (ROW) management on aquatic resources [4].	1	SMALL. Licensee application of best management practices to ROW maintenance is expected to result in no more than small impacts to aquatic resources.
Losses from predation, parasitism, and disease among organisms exposed to sublethal stresses.	1	SMALL. These types of losses have not been found to be a problem at operating nuclear power plants and are not expected to be a problem during the license renewal term.
Special Status Species and Habitats		
Threatened, endangered, and protected species and essential fish habitat.	2	The magnitude of impacts on threatened, endangered, and protected species, critical habitat, and essential fish habitat would depend on the occurrence of listed species and habitats and the effects of power plant systems on them. Consultation with appropriate agencies would be needed to determine whether special status species or habitats are present and whether they would be adversely affected by continued operations and refurbishment associated with license renewal.
Historic and Cultural Resources		
Historic and cultural resources [4]	2	Continued operations and refurbishment associated with license renewal are expected to have no more than small impacts on historic and cultural resources located onsite and in the transmission line ROW because most impacts could be mitigated by avoiding those resources. The National Historic Preservation Act (NHPA) requires the Federal agency to consult with the State Historic Preservation Officer (SHPO) and appropriate Native American Tribes to determine the potential effects on historic properties and mitigation, if necessary.
Socioeconomics		
Employment and income, recreation and tourism.	1	SMALL. Although most nuclear plants have large numbers of employees with higher than average wages and salaries, employment, income, recreation, and tourism impacts from continued operations and refurbishment associated with license renewal are expected to be small.
Tax revenues	1	SMALL. Nuclear plants provide tax revenue to local jurisdictions in the form of property tax payments, payments in lieu of tax (PILOT), or tax payments on energy production. The amount of tax revenue paid during the license renewal term as a result of continued operations and refurbishment associated with license renewal is not expected to change.
Community services and education	1	SMALL. Changes resulting from continued operations and refurbishment associated with license renewal to local community and educational services would be small. With little or no change in employment at the licensee's plant, value of the power plant, payments on energy production, and PILOT payments expected during the license renewal term, community and educational services would not be affected by continued power plant operations.
Population and housing	1	SMALL. Changes resulting from continued operations and refurbishment associated with license renewal to regional population and housing availability and value would be small. With little or no change in employment at the licensee's plant expected during the license renewal term, population and housing availability and values would not be affected by continued power plant operations.
Transportation	1	SMALL. Changes resulting from continued operations and refurbishment associated with license renewal to traffic volumes would be small.
Human Health		
Radiation exposures to the public	1	SMALL. Radiation doses to the public from continued operations and refurbishment associated with license renewal are expected to continue at current levels, and would be well below regulatory limits.
Radiation exposures to plant workers	1	SMALL. Occupational doses from continued operations and refurbishment associated with license renewal are expected to be within the range of doses experienced during the current license term, and would continue to be well below regulatory limits.

TABLE B–1—SUMMARY OF FINDINGS ON NEPA ISSUES FOR LICENSE RENEWAL OF NUCLEAR POWER PLANTS [1]—Continued

Issue	Category [2]	Finding [3]
Human health impact from chemicals	1	SMALL. Chemical hazards to plant workers resulting from continued operations and refurbishment associated with license renewal are expected to be minimized by the licensee implementing good industrial hygiene practices as required by permits and Federal and State regulations. Chemical releases to the environment and the potential for impacts to the public are expected to be minimized by adherence to discharge limitations of NPDES and other permits.
Microbiological hazards to the public (plants with cooling ponds or canals or cooling towers that discharge to a river).	2	SMALL, MODERATE, or LARGE. These organisms are not expected to be a problem at most operating plants except possibly at plants using cooling ponds, lakes, or canals, or that discharge into rivers. Impacts would depend on site-specific characteristics.
Microbiological hazards to plant workers	1	SMALL. Occupational health impacts are expected to be controlled by continued application of accepted industrial hygiene practices to minimize worker exposures as required by permits and Federal and State regulations.
Chronic effects of electromagnetic fields (EMFs) [4,6].	N/A [5]	Uncertain impact. Studies of 60-Hz EMFs have not uncovered consistent evidence linking harmful effects with field exposures. EMFs are unlike other agents that have a toxic effect (e.g., toxic chemicals and ionizing radiation) in that dramatic acute effects cannot be forced and longer-term effects, if real, are subtle. Because the state of the science is currently inadequate, no generic conclusion on human health impacts is possible.
Physical occupational hazards	1	SMALL. Occupational safety and health hazards are generic to all types of electrical generating stations, including nuclear power plants, and are of small significance if the workers adhere to safety standards and use protective equipment as required by Federal and State regulations.
Electric shock hazards [4]	2	SMALL, MODERATE, or LARGE. Electrical shock potential is of small significance for transmission lines that are operated in adherence with the National Electrical Safety Code (NESC). Without a review of conformance with NESC criteria of each nuclear power plant's in-scope transmission lines, it is not possible to determine the significance of the electrical shock potential.
Postulated Accidents		
Design-basis accidents	1	SMALL. The NRC staff has concluded that the environmental impacts of design-basis accidents are of small significance for all plants.
Severe accidents	2	SMALL. The probability-weighted consequences of atmospheric releases, fallout onto open bodies of water, releases to groundwater, and societal and economic impacts from severe accidents are small for all plants. However, alternatives to mitigate severe accidents must be considered for all plants that have not considered such alternatives.
Environmental Justice		
Minority and low-income populations	2	Impacts to minority and low-income populations and subsistence consumption resulting from continued operations and refurbishment associated with license renewal will be addressed in plant-specific reviews. See NRC Policy Statement on the Treatment of Environmental Justice Matters in NRC Regulatory and Licensing Actions (69 FR 52040; August 24, 2004).
Waste Management		
Low-level waste storage and disposal	1	SMALL. The comprehensive regulatory controls that are in place and the low public doses being achieved at reactors ensure that the radiological impacts to the environment would remain small during the license renewal term.
Onsite storage of spent nuclear fuel	1	SMALL. The expected increase in the volume of spent fuel from an additional 20 years of operation can be safely accommodated onsite during the license renewal term with small environmental effects through dry or pool storage at all plants.
Offsite radiological impacts of spent nuclear fuel and high-level waste disposal.	N/A [5]	Uncertain impact. The generic conclusion on offsite radiological impacts of spent nuclear fuel and high-level waste is not being finalized pending the completion of a generic environmental impact statement on waste confidence.[7]
Mixed-waste storage and disposal	1	SMALL. The comprehensive regulatory controls and the facilities and procedures that are in place ensure proper handling and storage, as well as negligible doses and exposure to toxic materials for the public and the environment at all plants. License renewal would not increase the small, continuing risk to human health and the environment posed by mixed waste at all plants. The radiological and nonradiological environmental impacts of long-term disposal of mixed waste from any individual plant at licensed sites are small.
Nonradioactive waste storage and disposal	1	SMALL. No changes to systems that generate nonradioactive waste are anticipated during the license renewal term. Facilities and procedures are in place to ensure continued proper handling, storage, and disposal, as well as negligible exposure to toxic materials for the public and the environment at all plants.

TABLE B–1—SUMMARY OF FINDINGS ON NEPA ISSUES FOR LICENSE RENEWAL OF NUCLEAR POWER PLANTS [1]—Continued

Issue	Category [2]	Finding [3]
Cumulative Impacts		
Cumulative impacts	2	Cumulative impacts of continued operations and refurbishment associated with license renewal must be considered on a plant-specific basis. Impacts would depend on regional resource characteristics, the resource-specific impacts of license renewal, and the cumulative significance of other factors affecting the resource.
Uranium Fuel Cycle		
Offsite radiological impacts—individual impacts from other than the disposal of spent fuel and high-level waste.	1	SMALL. The impacts to the public from radiological exposures have been considered by the Commission in Table S–3 of this part. Based on information in the GEIS, impacts to individuals from radioactive gaseous and liquid releases, including radon-222 and technetium-99, would remain at or below the NRC's regulatory limits.
Offsite radiological impacts—collective impacts from other than the disposal of spent fuel and high-level waste.	1	There are no regulatory limits applicable to collective doses to the general public from fuel-cycle facilities. The practice of estimating health effects on the basis of collective doses may not be meaningful. All fuel-cycle facilities are designed and operated to meet the applicable regulatory limits and standards. The Commission concludes that the collective impacts are acceptable. The Commission concludes that the impacts would not be sufficiently large to require the NEPA conclusion, for any plant, that the option of extended operation under 10 CFR part 54 should be eliminated. Accordingly, while the Commission has not assigned a single level of significance for the collective impacts of the uranium fuel cycle, this issue is considered Category 1.
Nonradiological impacts of the uranium fuel cycle.	1	SMALL. The nonradiological impacts of the uranium fuel cycle resulting from the renewal of an operating license for any plant would be small.
Transportation	1	SMALL. The impacts of transporting materials to and from uranium-fuel-cycle facilities on workers, the public, and the environment are expected to be small.
Termination of Nuclear Power Plant Operations and Decommissioning		
Termination of plant operations and decommissioning.	1	SMALL. License renewal is expected to have a negligible effect on the impacts of terminating operations and decommissioning on all resources.

[1] Data supporting this table are contained in NUREG–1437, Revision 1, ''Generic Environmental Impact Statement for License Renewal of Nuclear Plants'' (June 2013).

[2] The numerical entries in this column are based on the following category definitions:

Category 1: For the issue, the analysis reported in the Generic Environmental Impact Statement has shown:

(1) The environmental impacts associated with the issue have been determined to apply either to all plants or, for some issues, to plants having a specific type of cooling system or other specified plant or site characteristic;

(2) A single significance level (i.e., small, moderate, or large) has been assigned to the impacts (except for Offsite radiological impacts—collective impacts from other than the disposal of spent fuel and high-level waste); and

(3) Mitigation of adverse impacts associated with the issue has been considered in the analysis, and it has been determined that additional plant-specific mitigation measures are not likely to be sufficiently beneficial to warrant implementation.

The generic analysis of the issue may be adopted in each plant-specific review.

Category 2: For the issue, the analysis reported in the Generic Environmental Impact Statement has shown that one or more of the criteria of Category 1 cannot be met, and therefore additional plant-specific review is required.

[3] The impact findings in this column are based on the definitions of three significance levels. Unless the significance level is identified as beneficial, the impact is adverse, or in the case of ''small,'' may be negligible. The definitions of significance follow:

SMALL—For the issue, environmental effects are not detectable or are so minor that they will neither destabilize nor noticeably alter any important attribute of the resource. For the purposes of assessing radiological impacts, the Commission has concluded that those impacts that do not exceed permissible levels in the Commission's regulations are considered small as the term is used in this table.

MODERATE—For the issue, environmental effects are sufficient to alter noticeably, but not to destabilize, important attributes of the resource.

LARGE—For the issue, environmental effects are clearly noticeable and are sufficient to destabilize important attributes of the resource.

For issues where probability is a key consideration (i.e., accident consequences), probability was a factor in determining significance.

[4] This issue applies only to the in-scope portion of electric power transmission lines, which are defined as transmission lines that connect the nuclear power plant to the substation where electricity is fed into the regional power distribution system and transmission lines that supply power to the nuclear plant from the grid.

[5] NA (not applicable). The categorization and impact finding definitions do not apply to these issues.

[6] If, in the future, the Commission finds that, contrary to current indications, a consensus has been reached by appropriate Federal health agencies that there are adverse health effects from electromagnetic fields, the Commission will require applicants to submit plant-specific reviews of these health effects as part of their license renewal applications. Until such time, applicants for license renewal are not required to submit information on this issue.

[7] As a result of the decision of United States Court of Appeals in *New York* v. *NRC,* 681 F.3d 471 (DC Cir. 2012), the NRC cannot rely upon its Waste Confidence Decision and Rule until it has taken those actions that will address the deficiencies identified by the D.C. Circuit. Although the Waste Confidence Decision and Rule did not assess the impacts associated with disposal of spent nuclear fuel and high-level waste in a repository, it did reflect the Commission's confidence, at the time, in the technical feasibility of a repository and when that repository could have been expected to become available. Without the analysis in the Waste Confidence Decision and Rule regarding the technical feasibility and availability of a repository, the NRC cannot assess how long the spent fuel will need to be stored onsite.

Dated at Rockville, Maryland, this 11th day of June 2013.

For the Nuclear Regulatory Commission.

Annette L. Vietti-Cook,

Secretary of the Commission.

[FR Doc. 2013–14310 Filed 6–19–13; 8:45 am]

BILLING CODE 7590–01–P

NUCLEAR REGULATORY COMMISSION

10 CFR Parts 51 and 54

[NRC–2008–0608]

RIN 3150–AI42

Preparation of Environmental Reports for Nuclear Power Plant License Renewal Applications

AGENCY: Nuclear Regulatory Commission.

ACTION: Regulatory guide; issuance.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) is issuing Revision 1 to Regulatory Guide (RG) 4.2, Supplement 1 (RG 4.2S1), ''Preparation of Environmental Reports for Nuclear Power Plant License Renewal Applications.'' This regulatory guide provides guidance to applicants in the preparation of environmental reports that are submitted with the application for the renewal of a nuclear power plant operating license. Applicants should use this regulatory guide when preparing an environmental report for license renewal to ensure that the information they submit to the NRC is complete and facilitates the NRC staff's review.

DATES: June 20, 2013.

ADDRESSES: Please refer to Docket ID NRC–2008–0608 when contacting the NRC about the availability of information regarding this document. You may access information related to this document, which the NRC possesses and is publicly available, using any of the following methods:

• *Federal Rulemaking Web site:* Go to *http://www.regulations.gov* and search for Docket ID NRC–2008–0608. Address questions about NRC dockets to Carol Gallagher; telephone: 301–492–3668; email: *Carol.Gallagher@nrc.gov*. For technical questions, contact the individual listed in the **FOR FURTHER INFORMATION CONTACT** section of this document.

• *NRC's Agencywide Documents Access and Management System (ADAMS):* You may access publicly available documents online in the NRC Library at *http://www.nrc.gov/reading-rm/adams.html*. To begin the search, select ''*ADAMS Public Documents*'' and then select ''*Begin Web-based ADAMS Search*.'' For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1–800–397–4209, 301–415–4737, or by email to *pdr.resource@nrc.gov*. Revision 1 of Regulatory Guide 4.2, Supplement 1, is available in ADAMS under Accession No. ML13067A354.

• *NRC's PDR:* You may examine and purchase copies of public documents at the NRC's Public Document Room O1–F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

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FOR FURTHER INFORMATION CONTACT: Emmanuel Sayoc, telephone: 301–415–1924, email: *Emmanuel.Sayoc@nrc.gov,* or Edward O'Donnell, telephone: 301–251–7455, email: *Edward.Odonnell@nrc.gov*. U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001.

SUPPLEMENTARY INFORMATION:

I. Introduction

The NRC is issuing a revision to an existing regulatory guide in the NRC's ''Regulatory Guide'' series. This series was developed to describe and make available to the public information such as methods that are acceptable to the NRC staff for implementing specific parts of the agency's regulations, techniques that the staff uses in evaluating specific problems or postulated accidents, and data that the staff needs in its review of applications for permits and licenses.

The NRC is publishing a final rule, ''Revisions to Environmental Review for Renewal of Nuclear Power Plant Operating Licenses'' (RIN 3150–AI42; NRC–2008–0608), in the Rules and Regulations section of this issue of the **Federal Register** that amends its environmental protection regulations by updating the Commission's 1996 findings on the environmental impacts of renewing the operating license of a nuclear power plant. The NRC complies with the National Environmental Policy Act (NEPA) through the implementation of its regulations in Part 51 of Title 10 of the *Code of Federal Regulations* (10 CFR) (see Table B–1 in Appendix B to Subpart A of 10 CFR part 51). The environmental reports submitted by license renewal applicants are part of the process set forth in 10 CFR part 51. The final rule incorporates lessons learned and knowledge gained from license renewal environmental reviews conducted by the NRC since 1996. Specifically, the final rule amends Table B–1 by redefining the number and scope of the environmental impact issues that must be considered by the NRC during license renewal environmental reviews and amends other related regulations in 10 CFR part 51 (*i.e.,* 10 CFR 51.53, 51.71, and 51.95). For renewal of nuclear power plant operating licenses, RG 4.2S1, Revision 1, provides guidance to applicants in the preparation of environmental reports.

Also in the Rules and Regulations section of this issue of the **Federal Register,** the NRC is publishing Revision 1 to NUREG–1437, ''Generic Environmental Impact Statement for License Renewal of Nuclear Plants'' (ADAMS Accession Nos. ML13106A241, ML13106A242, and ML13106A244); and Revision 1 to NUREG–1555, ''Standard Review Plans for Environmental Reviews for Nuclear Power Plants, Supplement 1: Operating License Renewal'' (ADAMS Accession No. ML13106A246).

II. Further Information

The NRC made the draft of Revision 1 of RG 4.2S1 available for public comment as Draft Guide (DG)–4015 on July 31, 2009 (74 FR 38238), with a 75-day public comment period. The NRC extended the public comment period for another 90 days, with a closing date of January 12, 2010 (74 FR 51522; October 7, 2009). The NRC received 3 public comments from the Nuclear Energy Institute, New York State Office of the Attorney General, and the United States Environmental Protection Agency. The NRC staff's response to public comments is available in ADAMS under Accession No. ML13067A355.

III. Congressional Review Act

This regulatory guide is a rule as designated in the Congressional Review Act (5 U.S.C. 801–808). However, the Office of Management and Budget has not found it to be a major rule as designated in the Congressional Review Act.

IV. Backfitting and Issue Finality

This regulatory guide provides the NRC's first guidance on compliance with the revised provisions of 10 CFR part 51. The statement of considerations for the final rule that amended 10 CFR part 51 explains that issuance of the final rule does not constitute ''backfitting'' as defined in 10 CFR 50.109(a)(1) of the Backfit Rule and is not otherwise inconsistent with the applicable issue finality provisions in 10 CFR part 52 (*see* Section XIX, ''Backfitting and Issue Finality,'' of the final rule). The first issuance of guidance on a new rule does not

evidence of a chilled environment at the Byron Station.

III. Conclusion

The NRC staff conducted inspections at the Byron Station and Braidwood Station that assessed the licensee's compliance with the regulations under 10 CFR part 50, Appendix B, Criterion III, ''Design Control,'' and Criterion XVI, ''Corrective Action,'' related to the adequacy of the AOR for the structural design of the MSIV house and the main steam tunnel, and took enforcement action as outlined in the inspection reports identified above. The NRC staff requested that the licensee evaluate the SCWE concerns expressed in the petition, and conducted an inspection that assessed the licensee's SCWE at Byron Station. Based on the licensee's voluntary response and the results of the inspection, the NRC staff did not identify challenges to the licensee's SCWE or evidence of a chilled environment at the Byron Station and, therefore, determined that issuance of a chilling effect letter was not warranted. Because these actions address the underlying concerns raised in requests 1, 2, 4, and 5 of the petition, the petition is granted in part.

As provided in 10 CFR 2.206(c), a copy of this director's decision will be filed with the Secretary of the Commission for review. As provided by this regulation, the decision will constitute the final action of the Commission 25 days after the date of the decision unless the Commission, on its own motion, institutes a review of the decision within that time.

Dated at Rockville, Maryland, this 24th day of April, 2018.

For the Nuclear Regulatory Commission.

Brian E. Holian,

Acting Director, Office of Nuclear Reactor Regulation.

[FR Doc. 2018–09210 Filed 5–1–18; 8:45 am]

BILLING CODE 7590–01–P

NUCLEAR REGULATORY COMMISSION

[Docket Nos. 50–250 and 50–251; NRC–2018–0074]

Florida Power & Light Company; Turkey Point Nuclear Generating, Unit Nos. 3 and 4

AGENCY: Nuclear Regulatory Commission.

ACTION: License renewal application; opportunity to request a hearing and to petition for leave to intervene.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) is considering an application for the subsequent license renewal of Renewed Facility Operating License Nos. DPR–31 and DPR–41, which authorize Florida Power & Light Company (FPL or the applicant) to operate Turkey Point Nuclear Generating Unit Nos. 3 and 4 (Turkey Point). The renewed licenses would authorize the applicant to operate Turkey Point for an additional 20 years beyond the period specified in each of the current renewed licenses. The current renewed operating licenses for Turkey Point expire as follows: Unit No. 3 on July 19, 2032, and Unit No. 4 on April 10, 2033.

DATES: A request for a hearing or petition for leave to intervene must be filed July 2, 2018.

ADDRESSES: Please refer to Docket ID NRC–2018–0074 when contacting the NRC about the availability of information regarding this document. You may obtain publicly-available information related to this document using any of the following methods:

- *Federal Rulemaking website:* Go to *http://www.regulations.gov* and search for Docket ID NRC–2018–0074. Address questions about NRC dockets to Jennifer Borges; telephone: 301–287–9127; email: *Jennifer.Borges@nrc.gov.* For technical questions, contact the individual listed in the **FOR FURTHER INFORMATION CONTACT** section of this document.
- *NRC's Agencywide Documents Access and Management System (ADAMS):* You may obtain publicly-available documents online in the ADAMS Public Documents collection at *http://www.nrc.gov/reading-rm/adams.html.* To begin the search, select ''ADAMS Public Documents'' and then select ''Begin Web-based ADAMS Search.'' For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1–800–397–4209, 301–415–4737, or by email to *pdr.resource@nrc.gov.* The ADAMS accession number for each document referenced (if it is available in ADAMS) is provided the first time that it is mentioned in this document.
- *NRC's PDR:* You may examine and purchase copies of public documents at the NRC's PDR, Room O1–F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

FOR FURTHER INFORMATION CONTACT: Lois M. James, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001; telephone: 301–415–3306, email: *Lois.James@nrc.gov.*

SUPPLEMENTARY INFORMATION:

I. Introduction

By letters dated January 30, 2018 (ADAMS Package Accession No. ML18037A812); February 9, 2018 (ADAMS Accession No. ML18044A653); February 16, 2018 (ADAMS Package Accession No. ML18053A123); March 1, 2018 (ADAMS Package Accession No. ML18072A224), and April 10, 2018 (ADAMS Package Accession No. ML18102A521 and Accession No. ML18113A132), the NRC received an application from FPL, filed pursuant to Section 103 of the Atomic Energy Act of 1954, as amended (the Act), and part 54 of title 10 of the *Code of Federal Regulations* (10 CFR), to renew the operating licenses for Turkey Point at 2,644 megawatt thermal each. The Turkey Point units are pressurized-water reactors designed by Westinghouse Electric Company and are located in Homestead, Miami-Dade County, Florida. A notice of receipt of the subsequent license renewal application (SLRA) was published in the **Federal Register** (FR) on April 18, 2018 (83 FR 17196).

The NRC staff has determined that FPL has submitted sufficient information in accordance with 10 CFR 54.19, 54.21, 54.22, 54.23, 51.45, and 51.53(c), to enable the staff to undertake a review of the application, and that the application is, therefore, acceptable for docketing. The current Docket Nos. 50–250 and 50–251 for Renewed Facility Operating License Nos. DPR–31 and DPR–41, respectively, will be retained. The determination to accept the SLRA for docketing does not constitute a determination that a subsequent renewed license should be issued, and does not preclude the NRC staff from requesting additional information as the review proceeds.

Before issuance of the requested subsequent renewed licenses, the NRC will have made the findings required by the Act, and the Commission's rules and regulations. In accordance with 10 CFR 54.29, the NRC may issue a subsequent renewed license on the basis of its review if it finds that actions have been identified and have been or will be taken with respect to: (1) Managing the effects of aging during the period of extended operation on the functionality of structures and components that have been identified as requiring aging management review; and (2) time-limited aging analyses that have been identified as requiring review, such that there is reasonable assurance that the activities authorized by the renewed licenses will continue to be conducted in accordance with the current licensing basis and that any changes made to the plant's current licensing basis will comply with the Act and the Commission's regulations.

Additionally, in accordance with 10 CFR 51.95(c), the NRC will prepare an environmental impact statement as a supplement to the Commission's NUREG–1437, ''Generic Environmental Impact Statement for License Renewal

of Nuclear Power Plants,'' dated June 2013. In considering the SLRA, the Commission must find that the applicable requirements of subpart A of 10 CFR part 51 have been satisfied, and that any matters raised under 10 CFR 2.335 have been addressed. Pursuant to 10 CFR 51.26, and as part of the environmental scoping process, the staff intends to hold public scoping meetings. Detailed information regarding the environmental scoping meetings will be the subject of a separate **Federal Register** notice.

II. Opportunity To Request a Hearing and Petition for Leave To Intervene

Within 60 days after the date of publication of this notice, any persons (petitioner) whose interest may be affected by this action may file a request for a hearing and petition for leave to intervene (petition) with respect to the action. Petitions shall be filed in accordance with the Commission's ''Agency Rules of Practice and Procedure'' in 10 CFR part 2. Interested persons should consult a current copy of 10 CFR 2.309. The NRC's regulations are accessible electronically from the NRC Library on the NRC's website at *http://www.nrc.gov/reading-rm/doc-collections/cfr/.* Alternatively, a copy of the regulations is available at the NRC's Public Document Room, located at One White Flint North, Room O1–F21, 11555 Rockville Pike (First Floor), Rockville, Maryland 20852. If a petition is filed, the Commission or a presiding officer will rule on the petition and, if appropriate, a notice of hearing will be issued.

As required by 10 CFR 2.309, a petition should specifically explain the reasons why intervention should be permitted with particular reference to the following general requirements for standing: (1) The name, address, and telephone number of the petitioner; (2) the nature of the petitioner's right under the Act to be made a party to the proceeding; (3) the nature and extent of the petitioner's property, financial, or other interest in the proceeding; and (4) the possible effect of any decision or order which may be entered in the proceeding on the petitioner's interest.

In accordance with 10 CFR 2.309(f), the petition must also set forth the specific contentions which the petitioner seeks to have litigated in the proceeding. Each contention must consist of a specific statement of the issue of law or fact to be raised or controverted. In addition, the petitioner must provide a brief explanation of the bases for the contention and a concise statement of the alleged facts or expert opinion which support the contention and on which the petitioner intends to rely in proving the contention at the hearing. The petitioner must also provide references to the specific sources and documents on which the petitioner intends to rely to support its position on the issue. The petition must include sufficient information to show that a genuine dispute exists with the applicant or licensee on a material issue of law or fact. Contentions must be limited to matters within the scope of the proceeding. The contention must be one which, if proven, would entitle the petitioner to relief. A petitioner who fails to satisfy the requirements at 10 CFR 2.309(f) with respect to at least one contention will not be permitted to participate as a party.

Those permitted to intervene become parties to the proceeding, subject to any limitations in the order granting leave to intervene. Parties have the opportunity to participate fully in the conduct of the hearing with respect to resolution of that party's admitted contentions, including the opportunity to present evidence, consistent with the NRC's regulations, policies, and procedures.

Petitions must be filed no later than 60 days from the date of publication of this notice. Petitions and motions for leave to file new or amended contentions that are filed after the deadline will not be entertained absent a determination by the presiding officer that the filing demonstrates good cause by satisfying the three factors in 10 CFR 2.309(c)(1)(i) through (iii). The petition must be filed in accordance with the filing instructions in the ''Electronic Submissions (E-Filing)'' section of this document.

A State, local governmental body, Federally-recognized Indian Tribe, or agency thereof, may submit a petition to the Commission to participate as a party under 10 CFR 2.309(h)(1). The petition should state the nature and extent of the petitioner's interest in the proceeding. The petition should be submitted to the Commission no later than 60 days from the date of publication of this notice. The petition must be filed in accordance with the filing instructions in the ''Electronic Submission (E-Filing)'' section of this document, and should meet the requirements for petitions set forth in this section, except that under 10 CFR 2.309(h)(2) a State, local governmental body, or Federally-recognized Indian Tribe, or agency thereof does not need to address the standing requirements in 10 CFR 2.309(d) if the facility is located within its boundaries. Alternatively, a State, local governmental body, Federally-recognized Indian Tribe, or agency thereof may participate as a non-party under 10 CFR 2.315(c).

If a hearing is granted, any person who is not a party to the proceeding and is not affiliated with or represented by a party may, in the discretion of the presiding officer, be permitted to make a limited appearance pursuant to the provisions of 10 CFR 2.315(a). A person making a limited appearance may make an oral or written statement of his or her position on the issues but may not otherwise participate in the proceeding. A limited appearance may be made at any session of the hearing or at any prehearing conference, subject to the limits and conditions as may be imposed by the presiding officer. Details regarding the opportunity to make a limited appearance will be provided by the presiding officer if such sessions are scheduled.

III. Electronic Submissions (E-Filing)

All documents filed in NRC adjudicatory proceedings, including a request for hearing and petition for leave to intervene (petition), any motion or other document filed in the proceeding prior to the submission of a request for hearing or petition to intervene, and documents filed by interested governmental entities that request to participate under 10 CFR 2.315(c), must be filed in accordance with the NRC's E-Filing rule (72 FR 49139; August 28, 2007, as amended at 77 FR 46562, August 3, 2012). The E-Filing process requires participants to submit and serve all adjudicatory documents over the internet, or in some cases to mail copies on electronic storage media. Detailed guidance on making electronic submissions may be found in the Guidance for Electronic Submissions to the NRC and on the NRC's website at *http://www.nrc.gov/site-help/e-submittals.html.* Participants may not submit paper copies of their filings unless they seek an exemption in accordance with the procedures described below.

To comply with the procedural requirements of E-Filing, at least 10 days prior to the filing deadline, the participant should contact the Office of the Secretary by email at *hearing.docket@nrc.gov,* or by telephone at 301–415–1677, to request (1) a digital identification (ID) certificate, which allows the participant (or its counsel or representative) to digitally sign submissions and access the E-Filing system for any proceeding in which it is participating; and (2) advise the Secretary that the participant will be submitting a request or other adjudicatory document (even in instances in which the participant, or its

counsel or representative, already holds an NRC-issued digital ID certificate). Based upon this information, the Secretary will establish an electronic docket for the hearing in this proceeding if the Secretary has not already established an electronic docket.

Information about applying for a digital ID certificate is available on the NRC's public website at *http://www.nrc.gov/site-help/e-submittals/getting-started.html.* Once a participant has obtained a digital ID certificate and a docket has been created, the participant can then submit adjudicatory documents. Submissions must be in Portable Document Format (PDF). Additional guidance on PDF submissions is available on the NRC's public website at *http://www.nrc.gov/site-help/electronic-sub-ref-mat.html.* A filing is considered complete at the time the document is submitted through the NRC's E-Filing system. To be timely, an electronic filing must be submitted to the E-Filing system no later than 11:59 p.m. Eastern Time on the due date. Upon receipt of a transmission, the E-Filing system time-stamps the document and sends the submitter an email notice confirming receipt of the document. The E-Filing system also distributes an email notice that provides access to the document to the NRC's Office of the General Counsel and any others who have advised the Office of the Secretary that they wish to participate in the proceeding, so that the filer need not serve the document on those participants separately. Therefore, applicants and other participants (or their counsel or representative) must apply for and receive a digital ID certificate before adjudicatory documents are filed so that they can obtain access to the documents via the E-Filing system.

A person filing electronically using the NRC's adjudicatory E-Filing system may seek assistance by contacting the NRC's Electronic Filing Help Desk through the ''Contact Us'' link located on the NRC's public website at *http://www.nrc.gov/site-help/e-submittals.html,* by email to *MSHD.Resource@nrc.gov,* or by a toll-free call at 1–866–672–7640. The NRC Electronic Filing Help Desk is available between 9 a.m. and 6 p.m., Eastern Time, Monday through Friday, excluding government holidays.

Participants who believe that they have a good cause for not submitting documents electronically must file an exemption request, in accordance with 10 CFR 2.302(g), with their initial paper filing stating why there is good cause for not filing electronically and requesting authorization to continue to submit documents in paper format. Such filings must be submitted by: (1) First class mail addressed to the Office of the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001, Attention: Rulemaking and Adjudications Staff; or (2) courier, express mail, or expedited delivery service to the Office of the Secretary, 11555 Rockville Pike, Rockville, Maryland 20852, Attention: Rulemaking and Adjudications Staff. Participants filing adjudicatory documents in this manner are responsible for serving the document on all other participants. Filing is considered complete by first-class mail as of the time of deposit in the mail, or by courier, express mail, or expedited delivery service upon depositing the document with the provider of the service. A presiding officer, having granted a request for exemption from using E-Filing, may require a participant or party to use E-Filing if the presiding officer subsequently determines that the reason for granting the exemption from use of E-Filing no longer exists.

Documents submitted in adjudicatory proceedings will appear in the NRC's electronic hearing docket which is available to the public at *https://adams.nrc.gov/ehd,* unless excluded pursuant to an order of the Commission or the presiding officer. If you do not have an NRC-issued digital ID certificate as described above, click cancel when the link requests certificates and you will be automatically directed to the NRC's electronic hearing dockets where you will be able to access any publicly available documents in a particular hearing docket. Participants are requested not to include personal privacy information, such as social security numbers, home addresses, or personal phone numbers in their filings, unless an NRC regulation or other law requires submission of such information. For example, in some instances, individuals provide home addresses in order to demonstrate proximity to a facility or site. With respect to copyrighted works, except for limited excerpts that serve the purpose of the adjudicatory filings and would constitute a Fair Use application, participants are requested not to include copyrighted materials in their submission.

Detailed information about the subsequent license renewal process can be found under the Nuclear Reactors icon at *http://www.nrc.gov/reactors/operating/licensing/renewal.html* on the NRC's website. Copies of the application to renew the operating licenses for Turkey Point are available for public inspection at the NRC's PDR, and at *https://www.nrc.gov/reactors/operating/licensing/renewal/subsequent-license-renewal.html,* the NRC's website while the application is under review. The application may be accessed in ADAMS through the NRC Library on the internet at *http://www.nrc.gov/reading-rm/adams.html* under ADAMS Accession No. ML18113A132. As stated above, persons who do not have access to ADAMS or who encounter problems in accessing the documents located in ADAMS may contact the NRC's PDR reference staff by telephone at 1–800–397–4209 or 301–415–4737, or by email to *pdr.resources@nrc.gov.*

The NRC staff has verified that a copy of the SLRA is also available for inspection near the site at the Homestead Branch Library, 700 North Homestead Boulevard, Homestead, Florida 33030; South Dade Regional Library, 10750 SW 211th Street, Miami, Florida 33189; Naranja Branch Library, 14850 SW 280 St., Homestead, Florida 33032; and Main Library, 101 West Flagler St., Miami, Florida 33130.

Dated at Rockville, Maryland, this 27th day of April 2018.

For the Nuclear Regulatory Commission.

Eric R. Oesterle,

Chief, License Renewal Project Branch, Division of Materials and License Renewal, Office of Nuclear Reactor Regulation.

[FR Doc. 2018–09279 Filed 5–1–18; 8:45 am]

BILLING CODE 7590–01–P

NUCLEAR REGULATORY COMMISSION

[Docket Nos. 52–029 and 52–030; NRC–2008–0558]

Duke Energy Florida, LLC; Levy Nuclear Plant, Units 1 and 2

AGENCY: Nuclear Regulatory Commission.

ACTION: Termination of licenses.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) is terminating the Levy Nuclear Plant (LNP) Units 1 and 2 Combined Licenses (COLs) designated as NPF–99 and NPF–100 and their included licenses to manufacture, produce, transfer, receive, acquire, own, possess, or use byproduct material. By letter dated January 25, 2018, Duke Energy Florida, LLC (Duke) requested that the NRC terminate the LNP COLs. Construction was not initiated for LNP Units 1 and 2, and nuclear materials were never procured or possessed under these licenses. Consequently, the LNP site is approved for unrestricted use.

DATES: The termination was issued on April 26, 2018.

(3150–XXXX), Attn: Desk Officer for the Nuclear Regulatory Commission, 725 17th Street NW, Washington, DC 20503; email: *oira_submission@omb.eop.gov.*

FOR FURTHER INFORMATION CONTACT: David Cullison, NRC Clearance Officer, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001; telephone: 301–415–2084; email: *Infocollects.Resource@nrc.gov.*

SUPPLEMENTARY INFORMATION:

I. Obtaining Information and Submitting Comments

A. Obtaining Information

Please refer to Docket ID NRC–2017–0060 when contacting the NRC about the availability of information for this action. You may obtain publicly-available information related to this action by any of the following methods:

• *Federal Rulemaking website:* Go to *http://www.regulations.gov* and search for Docket ID NRC–2017–0060. A copy of the collection of information and related instructions may be obtained without charge by accessing Docket ID NRC–2017–0060 on this website.

• *NRC's Agencywide Documents Access and Management System (ADAMS):* You may obtain publicly-available documents online in the ADAMS Public Documents collection at *http://www.nrc.gov/reading-rm/adams.html.* To begin the search, select ''*ADAMS Public Documents*'' and then select ''*Begin Web-based ADAMS Search.*'' For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1–800–397–4209, 301–415–4737, or by email to *pdr.resource@nrc.gov.* A copy of the collection of information and related instructions may be obtained without charge by accessing ADAMS Accession Nos: ML19057A161, ML19057A167, and ML19057A169. The supporting statement is available in ADAMS under Accession No. ML19057A101.

• *NRC's PDR:* You may examine and purchase copies of public documents at the NRC's PDR, Room O1–F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

• *NRC's Clearance Officer:* A copy of the collection of information and related instructions may be obtained without charge by contacting the NRC's Clearance Officer, David Cullison, Office of the Chief Information Officer, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001; telephone: 301–415–2084; email: *Infocollects.Resource@nrc.gov.*

B. Submitting Comments

The NRC cautions you not to include identifying or contact information in comment submissions that you do not want to be publicly disclosed in your comment submission. All comment submissions are posted at *http://www.regulations.gov* and entered into ADAMS. Comment submissions are not routinely edited to remove identifying or contact information.

If you are requesting or aggregating comments from other persons for submission to the OMB, then you should inform those persons not to include identifying or contact information that they do not want to be publicly disclosed in their comment submission. Your request should state that comment submissions are not routinely edited to remove such information before making the comment submissions available to the public or entering the comment into ADAMS.

II. Background

Under the provisions of the Paperwork Reduction Act of 1995 (44 U.S.C. Chapter 35), the NRC recently submitted a proposed collection of information to OMB for review entitled, ''NRC Form 361, Reactor Plant Event Notification Worksheet; NRC Form 361A, Fuel Cycle and Materials Event Notification Worksheet; NRC Form 361N, Non-Power Reactor Event Notification Worksheet.'' The NRC hereby informs potential respondents that an agency may not conduct or sponsor, and that a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

The NRC published a **Federal Register** notice with a 60-day comment period on this information collection on September 25, 2018 (83 FR 48472).

1. *The title of the information collection:* NRC Form 361, Reactor Plant Event Notification Worksheet, NRC Form 361A, Fuel Cycle and Materials Event Notification Worksheet; NRC Form 361N, Non-Power Reactor Event Notification Worksheet.''

2. *OMB approval number:* 3150–XXXX.

3. *Type of submission:* New.

4. *The form number if applicable:* NRC Form 361, NRC Form 361A, NRC Form 361N.

5. *How often the collection is required or requested:* On occasion, as defined, NRC licensee events are reportable when they occur.

6. *Who will be required or asked to respond:* Holders of NRC licenses for commercial nuclear power plants, fuel cycle facilities, NRC material licensees, and non-power reactors.

7. *The estimated number of annual responses:* 537.

8. *The estimated number of annual respondents:* 537.

9. *An estimate of the total number of hours needed annually to comply with the information collection requirement or request:* 268.5 hours.

10. *Abstract:* The NRC requires its licensees to report by telephone certain reactor events and emergencies that have potential impact to public health and safety. In order to efficiently process the information received through such reports for reactors, the NRC created Forms 361 to provide a templated worksheet for recording the information. NRC licensees are not required to fill out or submit the worksheet, but the form provides the usual order of questions and discussion to enable a licensee to prepare answers for a more clear and complete telephonic notification. Without the templated format of the NRC Forms 361, the information exchange between licensees and NRC Headquarters Operations Officers via telephone could result in delays as well as unnecessary transposition errors.

Dated at Rockville, Maryland, this 1st day of April 2019.

For the Nuclear Regulatory Commission.

David C. Cullison,

NRC Clearance Officer, Office of the Chief Information Officer.

[FR Doc. 2019–06550 Filed 4–3–19; 8:45 am]

BILLING CODE 7590–01–P

NUCLEAR REGULATORY COMMISSION

[Docket Nos. 50–250, 50–251; NRC–2018–0101]

Florida Power & Light Company; Turkey Point Nuclear Generating Unit Nos. 3 and 4

AGENCY: Nuclear Regulatory Commission.

ACTION: Draft supplemental environmental impact statement; request for comment.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) is issuing for public comment draft plant-specific Supplement 5, Second Renewal, to the Generic Environmental Impact Statement (GEIS) for License Renewal of Nuclear Plants, NUREG–1437, regarding the subsequent renewal of Facility Operating License Nos. DPR–31 and DPR–41 for an additional 20 years of operation for Turkey Point Nuclear Generating Unit Nos. 3 and 4 (Turkey Point). The Turkey Point facility is

located in Miami-Dade County, Florida. Possible alternatives to the proposed action (subsequent license renewal) include no action and reasonable replacement power and cooling water system alternatives.

DATES: Submit comments by May 20, 2019. Comments received after this date will be considered, if it is practical to do so, but the NRC is able to ensure consideration only for comments received on or before this date.

ADDRESSES: You may submit comments by any of the following methods:

- *Federal Rulemaking Website:* Go to *http://www.regulations.gov* and search for Docket ID NRC–2018–0101. Address questions about NRC dockets to Jennifer Borges; telephone: 301 287–9127; email: *Jennifer.Borges@nrc.gov.* For technical questions, contact the individual listed in the **FOR FURTHER INFORMATION CONTACT** section of this document.
- *Mail comments to:* Office of Administration, Mail Stop: TWFN–7–A60M, ATTN: Program Management, Announcements and Editing Staff, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001.
- *Email comments to: TurkeyPoint34SLREIS.Resource@nrc.gov*

For additional direction on obtaining information and submitting comments, see ''Obtaining Information and Submitting Comments'' in the **SUPPLEMENTARY INFORMATION** section of this document.

FOR FURTHER INFORMATION CONTACT: David Drucker, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001; telephone: 301–415–6223; email: *David.Drucker@nrc.gov.*

SUPPLEMENTARY INFORMATION:

I. Obtaining Information and Submitting Comments

A. Obtaining Information

Please refer to Docket ID NRC–2018–0101 when contacting the NRC about the availability of information regarding this document. You may obtain publicly-available information related to this document by any of the following methods:

- *Federal Rulemaking Website:* Go to *http://www.regulations.gov* and search for Docket ID NRC–2018–0101.
- *NRC's Agencywide Documents Access and Management System (ADAMS):* You may access publicly-available documents online in the ADAMS Public Documents collection at *http://www.nrc.gov/reading-rm/adams.html.* To begin the search, select ''*Begin Web-based ADAMS Search.*'' For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1–800–397–4209, 301–415–4737, or by email to *pdr.resource@nrc.gov.* The ADAMS accession number for each document referenced in this document (if that document is available in ADAMS) is provided the first time that the document is referenced here. Draft plant-specific Supplement 5, Second Renewal, to the GEIS for License Renewal of Nuclear Plants, NUREG–1437, is available in ADAMS under Accession No. ML19078A330.
- *NRC's PDR:* You may examine and purchase copies of public documents at the NRC's PDR, Room O1–F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.
- *Library:* A copy of draft plant-specific Supplement 5, Second Renewal, to the GEIS for License Renewal of Nuclear Plants, NUREG–1437, is available at the following locations: Homestead Branch Library, 700 N. Homestead Blvd., Homestead, FL 33033; Naranja Branch Library, 14850 SW 280th St., Homestead, FL 33032; South Dade Regional Library, 10750 SW 211th St., Miami, FL 33189; and Downtown Miami Branch, 101 West Flagler St., Miami, FL 30130.

B. Submitting Comments

Please include Docket ID NRC–2018–0101 in the subject line of your comment submission, in order to ensure that the NRC is able to make your comment submission available to the public in this docket.

The NRC cautions you not to include identifying or contact information in comment submissions that you do not want to be publicly disclosed. The NRC will post all comment submissions at *http://www.regulations.gov* as well as enter the comment submissions into ADAMS. The NRC does not routinely edit comment submissions to remove identifying or contact information.

If you are requesting or aggregating comments from other persons for submission to the NRC, you should inform those persons not to include identifying or contact information that they do not want to be publicly disclosed in their comment submission. Your request should state that the NRC does not routinely edit comment submissions to remove such information before making the comment submissions available to the public or entering the comment into ADAMS.

II. Discussion

The NRC is issuing for public comment draft plant-specific Supplement 5, Second Renewal, to the GEIS for License Renewal of Nuclear Plants, NUREG–1437, regarding the subsequent renewal of Facility Operating License Nos. DPR–31 and DPR–41 for an additional 20 years of operation for Turkey Point Unit Nos. 3 and 4. Draft plant-specific Supplement 5, Second Renewal, to the GEIS includes the preliminary analysis that evaluates the environmental impacts of the proposed action and alternatives to the proposed action. The NRC's preliminary recommendation is that the adverse environmental impacts of subsequent license renewal for Turkey Point are not so great that preserving the option of subsequent license renewal for energy-planning decisionmakers would be unreasonable.

III. Public Meetings

The NRC staff will hold two public meetings prior to the close of the public comment period to present an overview of the draft plant-specific supplement to the GEIS and to accept public comment on the document. The meetings will be held on May 1, 2019, from 1:00 p.m. to 3:00 p.m. and from 6:00 p.m. to 8:00 p.m. at the City of Homestead City Hall, 100 Civic Court, Homestead, FL 33030. There will be an open house one hour before each meeting for members of the public to meet with NRC staff members and sign in to speak. The meetings will be transcribed and will include: (1) A presentation of the contents of the draft plant-specific supplement to the GEIS and (2) the opportunity for interested government agencies, organizations, and individuals to provide comments on the draft plant-specific supplement to the GEIS. To be considered in the final supplement to the GEIS, comments must be provided either at the transcribed public meetings or submitted in writing by the comment deadline identified above. Persons may pre-register to attend or present oral comments at the meetings by contacting Mr. William Burton, the NRC Project Manager, at 301–415–6332, or by email at *William.Burton@nrc.gov* no later than Tuesday, April 23, 2019. Members of the public may also register to provide oral comments within 15 minutes before the start of the meetings. Individual oral comments may be limited by the time available, depending on the number of persons who register. If special equipment or accommodations are needed to attend or present information at the public meeting, the need should be brought to Mr. Burton's attention no later than Tuesday, April 23, 2019, to provide the NRC staff adequate notice to determine whether the request can be accommodated.

Dated at Rockville, Maryland, this 1st day of April 2019.

For the Nuclear Regulatory Commission.

Eric R. Oesterle,

Chief, License Renewal Projects Branch, Division of Materials and License Renewal, Office of Nuclear Reactor Regulation.

[FR Doc. 2019–06612 Filed 4–3–19; 8:45 am]

BILLING CODE 7590–01–P

POSTAL SERVICE

Product Change—Priority Mail and First-Class Package Service Negotiated Service Agreement

AGENCY: Postal Service™.

ACTION: Notice.

SUMMARY: The Postal Service gives notice of filing a request with the Postal Regulatory Commission to add a domestic shipping services contract to the list of Negotiated Service Agreements in the Mail Classification Schedule's Competitive Products List.

DATES: *Date of required notice:* April 4, 2019.

FOR FURTHER INFORMATION CONTACT: Elizabeth Reed, 202–268–3179.

SUPPLEMENTARY INFORMATION: The United States Postal Service® hereby gives notice that, pursuant to 39 U.S.C. 3642 and 3632(b)(3), on March 29, 2019, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail & First-Class Package Service Contract 98 to Competitive Product List.* Documents are available at *www.prc.gov,* Docket Nos. MC2019–114, CP2019–123.

Elizabeth Reed,

Attorney, Corporate and Postal Business Law.

[FR Doc. 2019–06531 Filed 4–3–19; 8:45 am]

BILLING CODE 7710–12–P

POSTAL SERVICE

Product Change—Priority Mail Negotiated Service Agreement

AGENCY: Postal Service™.

ACTION: Notice.

SUMMARY: The Postal Service gives notice of filing a request with the Postal Regulatory Commission to add a domestic shipping services contract to the list of Negotiated Service Agreements in the Mail Classification Schedule's Competitive Products List.

DATES: *Date of required notice:* April 4, 2019.

FOR FURTHER INFORMATION CONTACT: Elizabeth Reed, 202–268–3179.

SUPPLEMENTARY INFORMATION: The United States Postal Service® hereby gives notice that, pursuant to 39 U.S.C. 3642 and 3632(b)(3), on March 29, 2019, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Contract 518 to Competitive Product List.* Documents are available at *www.prc.gov,* Docket Nos. MC2019–115, CP2019–124.

Elizabeth Reed,

Attorney, Corporate and Postal Business Law.

[FR Doc. 2019–06532 Filed 4–3–19; 8:45 am]

BILLING CODE 7710–12–P

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–85449; File No. SR–NYSENAT–2019–03]

Self-Regulatory Organizations; NYSE National, Inc.; Notice of Filing and Immediate Effectiveness of Proposed Rule Change To Amend Its Schedule of Fees and Rebates Related to Co-Location Services

March 29, 2019.

Pursuant to Section 19(b)(1) [1] of the Securities Exchange Act of 1934 (the ''Act'') [2] and Rule 19b–4 thereunder,[3] notice is hereby given that, on March 15, 2019, NYSE National, Inc. (the ''Exchange'' or ''NYSE National'') filed with the Securities and Exchange Commission (the ''Commission'') the proposed rule change as described in Items I and II below, which Items have been prepared by the self-regulatory organization. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

The Exchange proposes to amend its Schedule of Fees and Rebates (the ''Price List'') related to co-location services to provide access to the execution system of Global OTC. The proposed rule change is available on the Exchange's website at *www.nyse.com,* at the principal office of the Exchange, and at the Commission's Public Reference Room.

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the self-regulatory organization included statements concerning the purpose of, and basis for, the proposed rule change and discussed any comments it received on the proposed rule change. The text of those statements may be examined at the places specified in Item IV below. The Exchange has prepared summaries, set forth in sections A, B, and C below, of the most significant parts of such statements.

A. Self-Regulatory Organization's Statement of the Purpose of, and the Statutory Basis for, the Proposed Rule Change

1. Purpose

The Exchange proposes to amend the Price List related to co-location [4] services offered by the Exchange to provide Users [5] with access to the execution system of Global OTC (the ''Global OTC System''). Global OTC is an alternative trading system (''ATS'') that facilitates transactions in over-the-counter equity securities.[6]

The Exchange proposes to implement the rule change on the first day of the month after it becomes operative. The Exchange will announce the implementation date through a customer notice.

As set forth in the Price List, the Exchange charges fees for connectivity to the execution systems of third party markets and other content service providers (''Third Party Systems'').[7] The Exchange has an indirect interest in Global OTC because it is owned by the Exchange's ultimate parent, Intercontinental Exchange, Inc.[8] The Exchange proposes to treat Global OTC as a Third Party System and add it to the list of Third Party Systems set forth in the Price List.

As with the current Third Party Systems, in order to obtain access to the

[1] 15 U.S.C. 78s(b)(1).

[2] 15 U.S.C. 78a.

[3] 17 CFR 240.19b–4.

[4] The Exchange initially filed rule changes relating to its co-location services with the Commission on May 18, 2018. *See* Securities Exchange Act Release No. 83351 (May 31, 2018), 83 FR 26314 (June 6, 2018) (SR–NYSENAT–2018–07). The Exchange operates a data center in Mahwah, New Jersey (the ''data center'') from which it provides co-location services to Users.

[5] For purposes of the Exchange's co-location services, a ''User'' means any market participant that requests to receive co-location services directly from the Exchange. *See id.* at note 9. As specified in the Price List, a User that incurs co-location fees for a particular co-location service pursuant thereto would not be subject to co-location fees for the same co-location service charged by the Exchange's affiliates the New York Stock Exchange (''NYSE''), NYSE American LLC (''NYSE American''), and NYSE Arca, Inc. (''NYSE Arca'' and together, the ''Affiliate SROs''). *See id.* at note 11.

[6] *See* 17 CFR 242.300(a). An ATS is a trading system that meets the definition of ''exchange'' under federal securities laws but is not required to register as a national securities exchange if the ATS operates under an exemption provided under the Act.

[7] *See* 83 FR 26314, *supra* note 4, at 26322.

[8] *See id.*

COUNCIL ON ENVIRONMENTAL QUALITY

40 CFR Parts 1500, 1501, 1502, 1503, 1504, 1505, 1506, 1507, 1508, 1515, 1516, 1517, and 1518

[CEQ–2019–0003]

RIN 0331–AA03

Update to the Regulations Implementing the Procedural Provisions of the National Environmental Policy Act

AGENCY: Council on Environmental Quality.

ACTION: Final rule.

SUMMARY: The Council on Environmental Quality (CEQ) issues this final rule to update its regulations for Federal agencies to implement the National Environmental Policy Act (NEPA). CEQ has not comprehensively updated its regulations since their promulgation in 1978, more than four decades ago. This final rule comprehensively updates, modernizes, and clarifies the regulations to facilitate more efficient, effective, and timely NEPA reviews by Federal agencies in connection with proposals for agency action. The rule will improve interagency coordination in the environmental review process, promote earlier public involvement, increase transparency, and enhance the participation of States, Tribes, and localities. The amendments will advance the original goals of the CEQ regulations to reduce paperwork and delays, and promote better decisions consistent with the national environmental policy set forth in section 101 of NEPA.

DATES: This is a major rule subject to congressional review. The effective date is September 14, 2020. However, if congressional review has changed the effective date, CEQ will publish a document in the **Federal Register** to establish the actual effective date or to terminate the rule.

ADDRESSES: CEQ has established a docket for this action under docket number CEQ–2019–0003. All documents in the docket are listed on *www.regulations.gov.*

FOR FURTHER INFORMATION CONTACT: Viktoria Z. Seale, Chief of Staff and General Counsel, 202–395–5750, *NEPA-Update@ceq.eop.gov.*

SUPPLEMENTARY INFORMATION:

Table of Contents

I. Background

President Nixon signed the National Environmental Policy Act of 1969, 42 U.S.C. 4321 *et seq.,* (NEPA or the Act) into law on January 1, 1970. The Council on Environmental Quality (CEQ) initially issued interim guidelines for implementing NEPA in 1970, revised those guidelines in 1971 and 1973, and subsequently promulgated its regulations implementing NEPA in 1978. The original goals of those regulations were to reduce paperwork and delays, and promote better decisions consistent with the national environmental policy established by the Act.

Since the promulgation of the 1978 regulations, however, the NEPA process has become increasingly complicated and can involve excessive paperwork and lengthy delays. The regulations have been challenging to navigate with related provisions scattered throughout, and include definitions and provisions that have led to confusion and generated extensive litigation. The complexity of the regulations has given rise to CEQ's issuance of more than 30 guidance documents to assist Federal agencies in understanding and complying with NEPA. Agencies also have developed procedures and practices to improve their implementation of NEPA. Additionally, Presidents have issued directives, and Congress has enacted legislation to reduce delays and expedite the implementation of NEPA and the CEQ regulations, including for transportation, water, and other types of infrastructure projects.

Despite these efforts, the NEPA process continues to slow or prevent the development of important infrastructure and other projects that require Federal permits or approvals, as well as rulemakings and other proposed actions. Agency practice has also continued to evolve over the past four decades, but many of the most efficient and effective practices have not been incorporated into the CEQ regulations. Further, a wide range of judicial decisions, including those issued by the Supreme Court, evaluating Federal agencies' compliance with NEPA have construed and interpreted key provisions of the statute and CEQ's regulations. CEQ's guidance, agency practice, more recent presidential directives and statutory developments, and the body of case law related to NEPA implementation have not been harmonized or codified in CEQ's regulations.

As discussed further below, NEPA implementation and related litigation can be lengthy and significantly delay major infrastructure and other projects.[1] For example, CEQ has found that NEPA reviews for Federal Highway Administration projects, on average take more than seven years to proceed from a notice of intent (NOI) to prepare an environmental impact statement (EIS) to issuance of a record of decision (ROD). This is a dramatic departure from CEQ's prediction in 1981 that Federal agencies would be able to complete most EISs, the most intensive review of a project's environmental impacts under NEPA, in 12 months or less.[2] In its most recent review, CEQ found that, across the Federal Government, the average time for completion of an EIS and issuance of a ROD was 4.5 years and the median was 3.5 years.[3] CEQ determined that one quarter of EISs took less than 2.2 years, and one quarter of the EISs took more than 6 years. And these timelines do not necessarily include further delays associated with litigation over the legal sufficiency of the NEPA process or its resulting documentation.

Although other factors may contribute to project delays, the frequency and consistency of multi-year review processes for EISs for projects across the Federal Government leaves no doubt that NEPA implementation and related litigation is a significant factor.[4] It is critical to improve NEPA implementation, not just for major projects, but because tens of thousands of projects and activities are subject to NEPA every year, many of which are important to modernizing our Nation's infrastructure.[5]

As noted above, an extensive body of case law interpreting NEPA and CEQ's implementing regulations drives much of agencies' modern day practice. Though courts have correctly recognized that NEPA requires agencies to follow certain procedures and not to reach particular substantive results, the accretion of cases has not necessarily clarified implementation of the law. In light of the litigation risk such a situation presents, agencies have responded by generating voluminous studies analyzing impacts and alternatives well beyond the point where useful information is being produced and utilized by decision makers. In its most recent review, CEQ found that final EISs averaged 661 pages in length, and the median document was 447 pages.[6] One quarter were 748 pages or longer. The page count and document length data do not include

[1] *See infra* sec. I.B.3 and I.C.

[2] Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations, 46 FR 18026 (Mar. 23, 1981) (''Forty Questions''), *https://www.energy.gov/nepa/downloads/forty-most-asked-questions-concerning-ceqs-national-environmental-policy-act.* ''The Council has advised agencies that under the new NEPA regulations even large complex energy projects would require only about 12 months for the completion of the entire EIS process. For most major actions, this period is well within the planning time that is needed in any event, apart from NEPA.'' *Id.* at Question 35.

[3] *See infra* sec. I.B.3.

[4] *See also,* Philip K. Howard, Common Good, Two Years, Not Ten: Redesigning Infrastructure Approvals (Sept. 2015) (''Two Years, Not Ten''), *https://www.commongood.org/wp-content/uploads/2017/07/2YearsNot10Years.pdf.*

[5] As discussed in sections II.D and II.C.5, CEQ estimates that Federal agencies complete 176 EISs and 10,000 environmental assessments each year. In addition, CEQ estimates that agencies apply categorical exclusions to 100,000 actions annually. *See infra* sec. II.C.4.

[6] *See infra* sec. I.B.3.

appendices. The average modern EIS is more than 4 times as long as the 150 pages contemplated by the 1978 regulations.

By adopting these regulations following so many decades of NEPA practice, implementation, and litigation, CEQ is acting now to enhance the efficiency of the process based on its decades of experience overseeing Federal agency practice, and clarifying a number of key NEPA terms and requirements that have frequently been subject to litigation. The modifications and refinements reflected in the final rule will contribute to greater certainty and predictability in NEPA implementation, and thus eliminate at least in some measure the unnecessary and burdensome delays that have hampered national infrastructure and other important projects.

In June 2018, CEQ issued an advance notice of proposed rulemaking (ANPRM) requesting comment on potential updates and clarifications to the CEQ regulations.[7] On January 10, 2020, CEQ published a notice of proposed rulemaking[8] (NPRM or proposed rule) in the **Federal Register** proposing to update its regulations for implementing the procedural provisions of NEPA.

Following the publication of the NPRM, CEQ received approximately 1,145,571 comments on the proposed rule.[9] A majority of the comments (approximately 1,136,755) were the result of mass mail campaigns, which are comments with multiple signatories or groups of comments that are identical or very similar in form and content. CEQ received approximately 8,587 unique public comments of which 2,359 were substantive comments raising a variety of issues related to the rulemaking and contents of the proposed rule, including procedural, legal, and technical issues. Finally, 229 comments were duplicate or non-germane submissions, or contained only supporting materials.

The background section below summarizes NEPA, the CEQ regulations, and developments since CEQ issued those regulations. Specifically, section I.A provides a brief summary of the NEPA statute. Section I.B describes the history of CEQ's regulations implementing NEPA and provides an overview of CEQ's numerous guidance documents and reports issued subsequent to the regulations. Section I.C discusses the role of the courts in interpreting NEPA. Section I.D provides a brief overview of Congress's efforts, and section I.E describes the initiatives of multiple administrations to reduce delays and improve implementation of NEPA. Finally, sections I.F and I.G provides the background on this rulemaking, including the ANPRM and the NPRM.

In section II, CEQ provides a summary of the final rule, including changes CEQ made from the proposed rule, which comprehensively updates and substantially revises CEQ's prior regulations. This final rule modernizes and clarifies the CEQ regulations to facilitate more efficient, effective, and timely NEPA reviews by Federal agencies by simplifying regulatory requirements, codifying certain guidance and case law relevant to these regulations, revising the regulations to reflect current technologies and agency practices, eliminating obsolete provisions, and improving the format and readability of the regulations. CEQ's revisions include provisions intended to promote timely submission of relevant information to ensure consideration of such information by agencies. CEQ's revisions will provide greater clarity for Federal agencies, States, Tribes, localities, and the public, and advance the original goals of the CEQ regulations to reduce paperwork and delays and promote better decisions consistent with the national environmental policy set forth in section 101 of NEPA.

CEQ provides a summary of the comments received on the proposed rule and responses in the document titled ''Update to the Regulations Implementing the Procedural Provisions of the National Environmental Policy Act Final Rule Response to Comments'' [10] (''Final Rule Response to Comments''). This document organizes the comments by the parts and sections of the proposed rule that the comment addresses, and includes a subsection on other general or crosscutting topics.

Ultimately, the purpose of the NEPA process is to ensure informed decision making by Federal agencies with regard to the potential environmental effects of proposed major Federal actions and to make the public aware of the agency's decision-making process. When effective and well managed, the NEPA process results in more informative documentation, enhanced coordination, resolution of conflicts, and improved environmental outcomes. With this final rule, CEQ codifies effective agency practice and provides clarity on the requirements of the NEPA process.

A. National Environmental Policy Act

Congress enacted NEPA to establish a national policy for the environment, provide for the establishment of CEQ, and for other purposes. Section 101 of NEPA sets forth a national policy ''to use all practicable means and measures, including financial and technical assistance, in a manner calculated to foster and promote the general welfare, to create and maintain conditions under which man and nature can exist in productive harmony, and [to] fulfill the social, economic, and other requirements of present and future generations of Americans.'' 42 U.S.C. 4331(a). Section 102 of NEPA establishes procedural requirements, applying that national policy to proposals for major Federal actions significantly affecting the quality of the human environment by requiring Federal agencies to prepare a detailed statement on: (1) The environmental impact of the proposed action; (2) any adverse environmental effects that cannot be avoided; (3) alternatives to the proposed action; (4) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity; and (5) any irreversible and irretrievable commitments of resources that would be involved in the proposed action. 42 U.S.C. 4332(2)(C). NEPA also established CEQ as an agency within the Executive Office of the President to administer Federal agency implementation of NEPA. 42 U.S.C. 4332(2)(B), (C), (I), 4342, 4344; *see also Dep't of Transp.* v. *Pub. Citizen*, 541 U.S. 752, 757 (2004); *Warm Springs Dam Task Force* v. *Gribble,* 417 U.S. 1301, 1309–10 (Douglas, J. Circuit Justice 1974).

NEPA does not mandate particular results or substantive outcomes. Rather, NEPA requires Federal agencies to consider environmental impacts of proposed actions as part of agencies' decision-making processes. Additionally, NEPA does not include a private right of action and specifies no remedies. Challenges to agency action alleging noncompliance with NEPA procedures are brought under the Administrative Procedure Act (APA). 5

[7] 83 FR 28591 (June 20, 2018).

[8] 85 FR 1684 (Jan. 10, 2020).

[9] In the NPRM, CEQ listed several methods for members of the public to submit written comments, including submittal to the docket on *regulations.gov,* by fax, or by mail. In addition, CEQ also included an email address (*NEPA-Update@ceq.eop.gov*) in the NPRM for further information. While the NPRM did not list this email address among the several methods for the public to provide comments, CEQ has considered comments received through this email address during the public comment period and included them in the docket on *regulations.gov.*

[10] The Update to the Regulations Implementing the Procedural Provisions of the National Environmental Policy Act Final Rule Response to Comments document is available under ''Supporting Documents'' in the docket on *regulations.gov* under docket ID CEQ–2019–0003.

U.S.C. 551 *et seq.* Accordingly, NEPA cases proceed as APA cases. Limitations on APA cases and remedies thus apply to the adjudication of NEPA disputes.

B. Council on Environmental Quality Regulations, Guidance, and Reports

1. Regulatory History

In 1970, President Nixon issued Executive Order (E.O.) 11514, titled ''Protection and Enhancement of Environmental Quality,'' which directed CEQ to ''[i]ssue guidelines to Federal agencies for the preparation of detailed statements on proposals for legislation and other Federal actions affecting the environment, as required by section 102(2)(C) of the Act.'' [11] CEQ issued interim guidelines in April of 1970 and revised them in 1971 and 1973.[12]

In 1977, President Carter issued E.O. 11991, titled ''Relating to Protection and Enhancement of Environmental Quality.'' [13] E.O. 11991 amended section 3(h) of E.O. 11514, directing CEQ to ''[i]ssue regulations to Federal agencies for the implementation of the procedural provisions of [NEPA] . . . to make the environmental impact statement process more useful to decision[ ]makers and the public; and to reduce paperwork and the accumulation of extraneous background data, in order to emphasize the need to focus on real environmental issues and alternatives,'' and to ''require [environmental] impact statements to be concise, clear, and to the point, and supported by evidence that agencies have made the necessary environmental analyses.'' E.O. 11991 also amended section 2 of E.O. 11514, requiring agency compliance with the regulations issued by CEQ. The Executive order was based on the President's constitutional and statutory authority, including NEPA, the Environmental Quality Improvement Act, 42 U.S.C. 4371 *et seq.,* and section 309 of the Clean Air Act, 42 U.S.C. 7609. The President has a constitutional duty to ensure that the ''Laws be faithfully executed,'' U.S. Const. art. II, sec. 3, which may be delegated to appropriate officials. 3 U.S.C. 301. In signing E.O. 11991, the President delegated this authority to CEQ.[14]

In 1978, CEQ promulgated its ''National Environmental Policy Act, Regulations, Implementation of Procedural Provisions,'' 40 CFR parts 1500–1508 (''CEQ regulations'' or ''NEPA regulations''), ''[t]o reduce paperwork, to reduce delays, and at the same time to produce better decisions [that] further the national policy to protect and enhance the quality of the human environment.'' [15] The Supreme Court has explained that E.O. 11991 requires all ''heads of [F]ederal agencies to comply'' with the ''single set of uniform, mandatory regulations'' that CEQ issued to implement NEPA's provisions. *Andrus* v. *Sierra Club,* 442 U.S. 347, 357 (1979).

The Supreme Court has afforded the CEQ regulations ''substantial deference.'' *Robertson* v. *Methow Valley Citizens Council,* 490 U.S. 332, 355 (1989) (citing *Andrus,* 442 U.S. at 358); *Pub. Citizen,* 541 U.S. at 757 (''The [CEQ], established by NEPA with authority to issue regulations interpreting it, has promulgated regulations to guide [F]ederal agencies in determining what actions are subject to that statutory requirement.'' (citing 40 CFR 1500.3)). The new regulations are intended to embody CEQ's interpretation of NEPA for *Chevron* purposes and to operate as legislative rules.[16] *See Chevron U.S.A., Inc.* v. *Nat. Res. Def. Council, Inc.,* 467 U.S. 837, 842–43 (1984); *see also Nat'l Cable & Telecomm. Ass'n* v. *Brand X internet Servs.,* 545 U.S. 967, 980–86 (2005) (applying *Chevron* deference to Federal Communications Commission regulations); *United States* v. *Mead Corp.,* 533 U.S. 218, 227–30 (2001) (properly promulgated agency regulations addressing ambiguities or gaps in a statute qualify for *Chevron* deference when agencies possess the authority to issue regulations interpreting the statute). The Supreme Court has held that NEPA is a procedural statute that serves the twin aims of ensuring that agencies consider the significant environmental consequences of their proposed actions and inform the public about their decision making. *Balt. Gas & Elec. Co.* v. *Nat. Res. Def. Council, Inc.,* 462 U.S. 87, 97 (1983) (citing *Vt. Yankee Nuclear Power Corp.* v. *Nat. Res. Def. Council, Inc.,* 435 U.S. 519, 553 (1978); *Weinberger* v. *Catholic Action of Haw./Peace Educ. Project,* 454 U.S. 139, 143 (1981)).

Furthermore, in describing the role of NEPA in agencies' decision-making processes, the Supreme Court has stated, ''Congress in enacting NEPA, however, did not require agencies to elevate environmental concerns over other appropriate considerations.'' [17] *Balt. Gas & Elec. Co.,* 462 U.S. at 97 (citing *Strycker's Bay Neighborhood Council* v. *Karlen,* 444 U.S. 223, 227 (1980) (per curiam)). Instead, NEPA requires agencies to analyze the environmental consequences before taking a major Federal action. *Id.* (citing *Kleppe* v. *Sierra Club,* 427 U.S. 390, 410 n.21 (1976)). The Supreme Court has recognized that agencies have limited time and resources and that ''[t]he scope of the agency's inquiries must remain manageable if NEPA's goal of '[insuring] a fully informed and well-considered decision,' . . . is to be accomplished.'' *Metro. Edison Co.* v. *People Against Nuclear Energy,* 460 U.S. 766, 776 (1983) (quoting *Vt. Yankee,* 435 U.S. at 558).

CEQ has substantively amended its NEPA regulations only once, at 40 CFR 1502.22, to replace the ''worst case'' analysis requirement with a provision for the consideration of incomplete or unavailable information regarding reasonably foreseeable significant adverse effects.[18] CEQ found that the amended 40 CFR 1502.22 would ''generate information and discussion on those consequences of greatest concern to the public and of greatest relevance to the agency's decision,'' [19] rather than distorting the decision-making process by overemphasizing highly speculative harms.[20] The Supreme Court found this reasoning to

[11] 35 FR 4247 (Mar. 7, 1970), sec. 3(h).

[12] *See* 35 FR 7390 (May 12, 1970) (interim guidelines); 36 FR 7724 (Apr. 23, 1971) (final guidelines); 38 FR 10856 (May 2, 1973) (proposed revisions to guidelines); 38 FR 20550 (Aug. 1, 1973) (revised guidelines).

[13] 42 FR 26967 (May 25, 1977).

[14] The Presidential directive was consistent with the recommendation of the Commission on Federal Paperwork that the President require the development of consistent regulations and definitions and ensure coordination among agencies in the implementation of Environmental Impact Statement preparation. *See* The Report of the Commission on Federal Paperwork, Environmental Impact Statements 16 (Feb. 25, 1977).

[15] 43 FR 55978 (Nov. 29, 1978); *see also* 44 FR 873 (Jan. 3, 1979) (technical corrections), and 43 FR 25230 (June 9, 1978) (proposed rule).

[16] Even without expressly invoking *Chevron* here and noting that CEQ intends these regulations to operate as legislative rules, *Chevron* would still apply. *See Guedes* v. *ATF,* 920 F.3d 1, 23 (D.C. Cir. 2019) (''And for this Rule in particular, another telltale sign of the agency's belief that it was promulgating a rule entitled to *Chevron* deference is the Rule's invocation of *Chevron* by name. To be sure, an agency of course need not expressly invoke the *Chevron* framework to obtain *Chevron* deference: '*Chevron* is a standard of *judicial* review, not of *agency* action.' *SoundExchange*[, *Inc.* v. *Copyright Royalty Bd.*,] 904 F.3d [41,] 54 [(D.C. Cir. 2018)]. Still, the Bureau's invocation of *Chevron* here is powerful evidence of its intent to engage in an exercise of interpretive authority warranting *Chevron* treatment.'') (emphasis in original).

[17] Section 101 of NEPA provides that it is the Federal Government's policy ''to use all practicable means and measures . . . to create and maintain conditions under which man and nature can exist in productive harmony, and [to] *fulfill the social, economic, and other requirements of present and future generations of Americans.*'' 42 U.S.C. 4331(a) (emphasis added).

[18] 51 FR 15618 (Apr. 25, 1986).

[19] 50 FR 32234, 32237 (Aug. 9, 1985).

[20] 51 FR 15618, 15620 (Apr. 25, 1986).

be a well-considered basis for the change, and that the new regulation was entitled to substantial deference. *Methow Valley,* 490 U.S. at 356.

The NEPA regulations direct Federal agencies to adopt their own implementing procedures, as necessary, in consultation with CEQ. 40 CFR 1507.3. Under this regulation, over 85 Federal agencies and their subunits have developed such procedures.[21]

2. CEQ Guidance and Reports

Over the past four decades, numerous questions have been raised regarding appropriate implementation of NEPA and the CEQ regulations. Soon after the issuance of the CEQ regulations and in response to CEQ's review of NEPA implementation and input from Federal, State, and local officials, including NEPA practitioners, CEQ issued the ''Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations'' [22] in 1981 (''Forty Questions''). This guidance covered a wide range of topics including alternatives, coordination among applicants, lead and cooperating agencies, and integration of NEPA documents with analysis for other environmental statutes. In addition, CEQ has periodically examined the effectiveness of the NEPA process and issued a number of reports on NEPA implementation. In some instances, these reports led to additional guidance. These documents have been intended to provide guidance and clarifications with respect to various aspects of the implementation of NEPA and the definitions in the CEQ regulations, and to increase the efficiency and effectiveness of the environmental review process.[23]

In January 1997, CEQ issued ''The National Environmental Policy Act: A Study of Its Effectiveness After Twenty-five Years.'' [24] In that report, CEQ acknowledged that NEPA has ensured that agencies adequately analyze the potential environmental consequences of their actions and bring the public into the decision-making processes of Federal agencies. However, CEQ also identified matters of concern to participants in the study, including concerns with overly lengthy documents that may not enhance or improve decision making,[25] and concerns that agencies may seek to '''litigation-proof' documents, increasing costs and time but not necessarily quality.'' [26] The report further stated that ''[o]ther matters of concern to participants in the Study were the length of NEPA processes, the extensive detail of NEPA analyses, and the sometimes confusing overlay of other laws and regulations.'' [27] The participants in the study identified five elements of the NEPA process' collaborative framework (strategic planning, public information and input, interagency coordination, interdisciplinary place-based decision making, and science-based flexible management) as critical to effective and efficient NEPA implementation.

In 2002, the Chairman of CEQ established a NEPA task force, composed of Federal agency officials, to examine NEPA implementation by focusing on (1) technology and information management and security; (2) Federal and intergovernmental collaboration; (3) programmatic analyses and tiering; (4) adaptive management and monitoring; (5) categorical exclusions (CEs); and (6) environmental assessments (EAs). In 2003, the task force issued a report [28] recommending actions to improve and modernize the NEPA process, leading to additional guidance documents and handbooks.

Over the past 4 decades, CEQ has issued over 30 documents on a wide variety of topics to provide guidance and clarifications to assist Federal agencies in more efficiently and effectively implementing the NEPA regulations.[29] While CEQ has sought to provide clarity and direction related to implementation of the regulations and the Act through the issuance of guidance, agencies continue to face implementation challenges. Further, the documentation and timelines for completing environmental reviews can be very lengthy, and the process can be complex and costly.

In 2018, CEQ and the Office of Management and Budget (OMB) issued a memorandum titled ''One Federal Decision Framework for the Environmental Review and Authorization Process for Major Infrastructure Projects under E.O. 13807'' (''OFD Framework Guidance'').[30] CEQ and OMB issued this guidance pursuant to E.O. 13807, titled ''Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects,'' [31] to improve agency coordination for infrastructure

[21] A list of agency NEPA procedures is available at *https://ceq.doe.gov/laws-regulations/agency_implementing_procedures.html.*

[22] Forty Questions, *supra* note 2.

[23] *See https://www.energy.gov/nepa/ceq-guidance-documents.*

[24] *https://ceq.doe.gov/docs/ceq-publications/nepa25fn.pdf.*

[25] *Id.* at iii.

[26] *Id.*

[27] *Id.* In the 50 years since the passage of NEPA, Congress has amended or enacted a number of other environmental laws that may also apply to proposed Federal agency actions, such as the Endangered Species Act, the Clean Water Act, the Clean Air Act, and other substantive statutes. *See* discussion *infra* sec. I.D. Consistent with 40 CFR 1502.25, longstanding agency practice has been to use the NEPA process as the umbrella procedural statute, integrating compliance with these laws into the NEPA review and discussing them in the NEPA document. However, this practice sometimes leads to confusion as to whether an agency does an analysis to comply with NEPA or another, potentially substantive, environmental law.

[28] *See* The NEPA Task Force Report to the Council on Environmental Quality, Modernizing NEPA Implementation (Sept. 2003) (''NEPA Task Force Report''), *https://ceq.doe.gov/docs/ceq-publications/report/finalreport.pdf.*

[29] *See, e.g.,* Emergencies and the National Environmental Policy Act (Oct. 2016) (''Emergencies Guidance''), *https://ceq.doe.gov/docs/nepa-practice/Emergencies_and_NEPA.pdf;* Effective Use of Programmatic NEPA Reviews (Dec. 18, 2014) (''Programmatic Guidance''), *https://ceq.doe.gov/docs/ceq-regulations-and-guidance/Effective_Use_of_Programmatic_NEPA_Reviews_Final_Dec2014_searchable.pdf;* NEPA and NHPA: A Handbook for Integrating NEPA and Section 106 (Mar. 2013), *https://ceq.doe.gov/publications/nepa-handbooks.html;* Memorandum on Environmental Conflict Resolution (Nov. 28, 2005), as expanded by Memorandum on Environmental Collaboration and Conflict Resolution (Sept. 7, 2012), *https://ceq.doe.gov/nepa-practice/environmental-collaboration-and-conflict-resolution.html;* Final Guidance on Improving the Process for Preparing Efficient and Timely Environmental Reviews Under the National Environmental Policy Act, 77 FR 14473 (Mar. 12, 2012) (''Timely Environmental Reviews Guidance''), *https://ceq.doe.gov/docs/ceq-regulations-and-guidance/Improving_NEPA_Efficiencies_06Mar2012.pdf;* Final Guidance for Federal Departments and Agencies on the Appropriate Use of Mitigation and Monitoring and Clarifying the Appropriate Use of Mitigated Findings of No Significant Impact, 76 FR 3843 (Jan. 21, 2011) (''Mitigation Guidance''), *https://ceq.doe.gov/docs/ceq-regulations-and-guidance/Mitigation_and_Monitoring_Guidance_14Jan2011.pdf;* Council on Environmental Quality, Final Guidance for Federal Departments and Agencies on Establishing, Applying, and Revising Categorical Exclusions under the National Environmental Policy Act, 75 FR 75628 (Dec. 6, 2010) (''CE Guidance''), *https://ceq.doe.gov/docs/ceq-regulations-and-guidance/NEPA_CE_Guidance_Nov232010.pdf;* Letter from the Hon. James L. Connaughton, Chairman, Council on Environmental Quality, to the Hon. Norman Y. Mineta, Secretary, Department of Transportation (May 12, 2003) (''Connaughton Letter''), *https://ceq.doe.gov/docs/ceq-regulations-and-guidance/CEQ-DOT_PurposeNeed_May-2013.pdf;* Considering Cumulative Effects Under the National Environmental Policy Act (Jan. 1997) (''Cumulative Effects Guidance''), *https://ceq.doe.gov/publications/cumulative_effects.html;* Environmental Justice: Guidance under the National Environmental Policy Act (Dec. 10, 1997) (''EJ Guidance''), *https://ceq.doe.gov/docs/ceq-regulations-and-guidance/regs/ej/justice.pdf;* Forty Questions, *supra* note 2. CEQ also issued a resource for the public, A Citizen's Guide to the NEPA: Having Your Voice Heard (Dec. 2007), *https://ceq.doe.gov/get-involved/citizens_guide_to_nepa.html.*

[30] M–18–13 (Mar. 20, 2018), *https://www.whitehouse.gov/wp-content/uploads/2018/04/M-18-13.pdf.*

[31] *82 FR 40463* (Aug. 24, 2017).

projects requiring an EIS and permits or other authorizations from multiple agencies and to improve the timeliness of the environmental review process. *See* E.O. 13807, *infra* sec. I.E. Consistent with the OFD Framework Guidance, *supra* note 30, Federal agencies signed a memorandum of understanding committing to implement the One Federal Decision (OFD) policy for major infrastructure projects, including by committing to establishing a joint schedule for such projects, preparation of a single EIS and joint ROD, elevation of delays and dispute resolution, and setting a goal of completing environmental reviews for such projects within two years.[32] Subsequently, CEQ and OMB issued guidance for the Secretary of Transportation regarding the applicability of the OFD policy to States under the Surface Transportation Project Delivery Program,[33] and for the Secretary of Housing and Urban Development (HUD) regarding the applicability of the OFD policy to entities assuming HUD environmental review responsibilities.[34] CEQ also has provided direction to the Federal Energy Regulatory Commission (FERC) relating to the requirement for joint RODs under the OFD policy.[35]

3. Environmental Impact Statement Timelines and Page Count Reports

CEQ also has conducted reviews and prepared reports on the length of time it takes for agencies to prepare EISs and the length of these documents. These reviews found that the process for preparing EISs is taking much longer than CEQ advised, and that the documents are far longer than the CEQ regulations and guidance recommended. In December 2018, CEQ issued a report compiling information relating to the timelines for preparing EISs during the period of 2010–2017, and the NPRM included a summary of the report. CEQ has since updated this analysis to include EISs completed in 2018, and this section reflects the updated data.[36]

While CEQ's Forty Questions states that the time for an EIS, even for a complex project, should not exceed 1 year,[37] CEQ found that, across the Federal Government, the average time for completion of an EIS and issuance of a ROD was 4.5 years and the median was 3.5 years. One quarter of the EISs took less than 2.2 years, and one quarter of the EISs took more than 6 years.

As reflected in the timelines report, the period from publication of a NOI to prepare an EIS to the notice of availability of the draft EIS took, on average, 58.4 percent of the total time, while preparing the final EIS, including addressing comments received on the draft EIS, took, on average, 32.2 percent of the total time. The period from the final EIS to publication of the ROD took, on average, 9.4 percent of the total time. This report recognized that EIS timelines vary widely and many factors may influence the timing of the document, including variations in the scope and complexity of the actions, variations in the extent of work done prior to issuance of the NOI, and suspension of EIS activities due to external factors.

Additionally, in July 2019, CEQ issued a report on the length, by page count, of EISs (excluding appendices) finalized during the period of 2013–2017, and the NPRM included a summary of the report. CEQ has since updated this analysis to include EISs completed in 2018, and this section reflects the updated data.

While the CEQ regulations include recommended page limits for the text of final EISs of normally less than 150 pages, or normally less than 300 pages for proposals of ''unusual scope or complexity,'' 40 CFR 1502.7, CEQ found that many EISs are significantly longer. In particular, CEQ found that across all Federal agencies, draft EISs averaged 575 pages in total, with a median document length of 397 pages.[38] One quarter of the draft EISs were 279 pages or shorter, and one quarter were 621 pages or longer. For final EISs, the average document length was 661 pages, and the median document length was 447 pages. One quarter of the final EISs were 286 pages or shorter, and one quarter were 748 pages or longer. On average, the change in document length from draft EIS to final EIS was an additional 86 pages or a 15 percent increase.

With respect to final EISs, CEQ found that approximately 7 percent were 150 pages or shorter, and 27 percent were 300 pages or shorter.[39] Similar to the conclusions of its EIS timelines study, CEQ noted that a number of factors may influence the length of EISs, including variation in the scope and complexity of the decisions that the EIS is designed to inform, the degree to which NEPA documentation is used to document compliance with other statutes, and considerations relating to potential legal challenges. Moreover, variation in EIS length may reflect differences in management, oversight, and contracting practices among agencies that could result in longer documents.

While there can be many factors affecting the timelines and length of EISs, CEQ has concluded that revisions to the CEQ regulations to advance more timely reviews and reduce unnecessary paperwork are warranted. CEQ has determined that improvements to agency processes, such as earlier solicitation of information from States, Tribes, and local governments and the public, and improved coordination in the development of EISs, can achieve more useful and timely documents to support agency decision making.

C. Judicial Review of Agency NEPA Compliance

NEPA is the most litigated environmental statute in the United States.[40] Over the past 50 years, Federal courts have issued an extensive body of case law addressing appropriate implementation and interpretation of NEPA and the CEQ regulations.[41] The Supreme Court has directly addressed NEPA in 17 decisions, and the U.S. district and appellate courts issue approximately 100 to 140 decisions

[32] *See* Memorandum of Understanding Implementing One Federal Decision under Executive Order 13807 (2018), *https://www.whitehouse.gov/wp-content/uploads/2018/04/MOU-One-Federal-Decision-m-18-13-Part-2-1.pdf.*

[33] Guidance on the Applicability of E.O. 13807 to States with NEPA Assignment Authority Under the Surface Transportation Project Delivery Program, M–19–11 (Feb. 26, 2019), *https://www.whitehouse.gov/wp-content/uploads/2017/11/20190226OMB-CEQ327.pdf.*

[34] Guidance on the Applicability of E.O. 13807 to Responsible Entities Assuming Department of Housing and Urban Development Environmental Review Responsibilities, M–19–20 (June 28, 2019), *https://www.whitehouse.gov/wp-content/uploads/2019/06/M-19-20.pdf.*

[35] *See* Letter from the Hon. Mary B. Neumayr, Chairman, Council on Environmental Quality, to the Hon. Neil Chatterjee, Chairman, Federal Energy Regulatory Comm'n (Aug. 22, 2019), *https://www.whitehouse.gov/wp-content/uploads/2017/11/20190822FERCOFDLetter.pdf.*

[36] *See* Council on Environmental Quality, Environmental Impact Statement Timelines (2010–2018), (June 12, 2020), *https://ceq.doe.gov/nepa-practice/eis-timelines.html.*

[37] Forty Questions, *supra* note 2, at Question 35.

[38] *See* Council on Environmental Quality, Length of Environmental Impact Statements (2013–2018), (June 12, 2020) (''CEQ Length of EISs Report''), *https://ceq.doe.gov/nepa-practice/eis-length.html.*

[39] The page counts compiled for 2010–2017 include the text of the EIS as well as supporting content to which the page limit in 40 CFR 1502.7 does not apply. For 2018, CEQ analyzed the data to determine the length of the text of the EISs and found that 19 percent of the final EISs were 150 pages or shorter and 51 percent were 300 pages or shorter.

[40] James E. Salzman and Barton H. Thompson, Jr., *Environmental Law and Policy* 340 (5th ed. 2019) (''Perhaps surprisingly, there have been thousands of NEPA suits. It might seem strange that NEPA's seemingly innocuous requirement of preparing an EIS has led to more lawsuits than any other environmental statute.'').

[41] The 2019 edition of NEPA Law and Litigation includes a 115–page Table of Cases decisions construing NEPA. *See* Daniel R. Mandelker et al., NEPA Law and Litigation, Table of Cases (2d ed. 2019).

each year interpreting NEPA. The Supreme Court has construed NEPA and the CEQ regulations in light of a ''rule of reason,'' which ensures that agencies determine whether and to what extent to prepare an EIS based on the usefulness of information to the decision-making process. *See Marsh* v. *Or. Nat. Res. Council,* 490 U.S. 360, 373–74 (1989). ''Although [NEPA] procedures are almost certain to affect the agency's substantive decision, it is now well settled that NEPA itself does not mandate particular results, but simply prescribes the necessary process.'' *Methow Valley,* 490 U.S. at 350 (citing *Strycker's Bay Neighborhood Council, Inc.,* 444 U.S. at 227–28; *Vt. Yankee,* 435 U.S. at 558; *see also Pub. Citizen,* 541 U.S. at 756–57 (''NEPA imposes only procedural requirements on [F]ederal agencies with a particular focus on requiring agencies to undertake analyses of the environmental impact of their proposals and actions.'' (citing *Methow Valley,* 490 U.S. at 349–50)). The thousands of decisions interpreting NEPA and the current CEQ regulations being amended here drive much of agencies' modern-day practice. A challenge for agencies is that courts have interpreted key terms and requirements differently, adding to the complexity of environmental reviews. For example, in 2018 and 2019, the U.S. Courts of Appeals issued 56 substantive decisions on a range of topics, including assessment of impacts, sufficiency of alternatives, whether an agency's action qualified as Federal action, and purpose and need statements.[42] As discussed below, the final rule codifies longstanding case law in some instances, and, in other instances, clarifies the meaning of the regulations where there is a lack of uniformity in judicial interpretation of NEPA and the CEQ regulations.

D. Statutory Developments

Since the enactment of NEPA in 1970, Congress has amended or enacted a large number of substantive environmental statutes. These have included significant amendments to the Clean Water Act and Clean Air Act, establishment of new Federal land management standards and planning processes for National forests, public lands, and coastal zones, and statutory requirements to conserve fish, wildlife, and plant species.[43] Additionally, the consideration of the effects on historic properties under the National Historic Preservation Act is typically integrated into the NEPA review.[44] NEPA has served as the umbrella procedural statute, integrating these laws into NEPA reviews and discussing them in NEPA documents.

Over the past two decades and multiple administrations, Congress has also undertaken efforts to facilitate more efficient environmental reviews by Federal agencies, and has enacted a number of statutes aimed at improving the implementation of NEPA, including in the context of infrastructure projects. In particular, Congress has enacted legislation to improve coordination among agencies, integrate NEPA with other environmental reviews, and bring more transparency to the NEPA process.

In 2005, Congress enacted 23 U.S.C. 139, ''Efficient environmental reviews for project decisionmaking,'' a streamlined environmental review process for highway, transit, and multimodal transportation projects (the ''section 139 process''), in the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA–LU), Public Law 109–59, sec. 6002(a), 119 Stat. 1144, 1857. Congress amended section 139 with additional provisions designed to improve the NEPA process in the 2012 Moving Ahead for Progress in the 21st Century Act (MAP–21), Public Law 112–141, sec. 1305–1309, 126 Stat. 405, and the 2015 Fixing America's Surface Transportation (FAST) Act, Public Law 114–94, sec. 1304, 129 Stat. 1312, 1378. Section 139 provides for an environmental review process that is based on and codifies many aspects of the NEPA regulations, including provisions relating to lead and cooperating agencies, concurrent environmental reviews in a single NEPA document, coordination on the development of the purpose and need statement and reasonable alternatives, and adoption of environmental documents. Further, section 139 provides for referral to CEQ for issue resolution, similar to part 1504 of the NEPA regulations, and allows for the use of errata sheets, consistent with 40 CFR 1503.4(c).[45]

When Congress enacted section 2045 of the Water Resources Development Act of 2007, Public Law 110–114, 121 Stat. 1041, 1103, it created a similar environmental review provision for water resources development projects by the U.S. Army Corps of Engineers (Corps). 33 U.S.C. 2348.[46] This project acceleration provision also requires a coordinated environmental review process, provides for dispute resolution, and codifies aspects of the NEPA regulations such as lead and cooperating agencies, concurrent environmental reviews, and the establishment of CEs. Section 2348(o) also directs the Corps to consult with CEQ on the development of guidance for implementing this provision.

In 2015 Congress enacted Title 41 of the FAST Act (FAST–41), to provide for a more efficient environmental review and permitting process for ''covered projects.'' *See* Public Law 114–94, sec. 41001–41014, 129 Stat. 1312, 1741 (42 U.S.C. 4370m—4370m–12). These are projects that require Federal environmental review under NEPA, are expected to exceed $200 million, and involve the construction of infrastructure for certain energy production, electricity transmission, water resource projects, broadband, pipelines, manufacturing, and other sectors. *Id.* FAST–41 codified certain roles and responsibilities required by the NEPA regulations. In particular, FAST–41 imports the concepts of lead and cooperating agencies, and the different levels of NEPA analysis—EISs, EAs, and CEs. Consistent with 40 CFR 1501.5(e) through (f), CEQ is required to resolve any dispute over designation of a facilitating or lead agency for a covered project. 42 U.S.C. 4370m–2(a)(6)(B). Section 4370m–4 codified several requirements from the CEQ

[42] National Association of Environmental Professionals, 2019 Annual NEPA Report of the National Environmental Policy Act (NEPA) Practice (2020) at 30–31, *https://naep.memberclicks.net/assets/annual-report/2019_NEPA_Annual_Report/NEPA_Annual_Report_2019.pdf;* National Association of Environmental Professionals, 2018 Annual NEPA Report of the National Environmental Policy Act (NEPA) Practice (2019) at 41–51, *https://naep.memberclicks.net/assets/documents/2019/NEPA_Annual_Report_2018.pdf.*

[43] *See, e.g.,* the Clean Air Act, 42 U.S.C. 7401–7671q; Clean Water Act, 33 U.S.C. 1251–1388; Coastal Zone Management Act, 16 U.S.C. 1451–1466; Federal Land Policy and Management Act, 43 U.S.C. 1701–1787; Forest and Rangeland Renewable Resources Planning Act of 1974, 16 U.S.C. 1600–1614; Magnuson-Stevens Fishery Conservation and Management Act, 16 U.S.C. 1801–1884; Endangered Species Act, 16 U.S.C. 1531–1544; Oil Pollution Act of 1990, 33 U.S.C. 2701–2762; Surface Mining Control and Reclamation Act of 1977, 30 U.S.C. 1201, 1202, and 1211; and Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. 9601–9675.

[44] Similar to NEPA, section 106 (54 U.S.C. 306108) of the National Historic Preservation Act is a procedural statute.

[45] To facilitate the NEPA process for transportation projects subject to section 139, the statute specifically calls for development of a coordination plan, including development of a schedule, and publicly tracking the implementation of that schedule through use of the Permitting Dashboard. *See infra* sec. I.E. In addition, the section 139 process provides for ''participating'' agencies, which are any agencies invited to participate in the environmental review process. Section 139 also requires, to the maximum extent practicable, issuance of a combined final EIS and ROD.

[46] Congress significantly revised this provision in the Water Resources Reform and Development Act of 2014, Public Law 113–121, sec. 1005(a)(1), 128 Stat. 1193 1199.

regulations, including the requirement for concurrent environmental reviews, which is consistent with 40 CFR 1500.2(c), 1501.7(a)(6), and 1502.25(a), and the tools of adoption, incorporation by reference, supplementation, and use of State documents, consistent with 40 CFR 1506.3, 1502.21, 1502.9(c), and 1506.2.[47] Finally, 42 U.S.C. 4370m–4 addresses interagency coordination on key aspects of the NEPA process, including scoping (40 CFR 1501.7), identification of the range of reasonable alternatives for study in an EIS (40 CFR 1502.14), and the public comment process (40 CFR part 1503).

To ensure a timely NEPA process so that important infrastructure projects can move forward, Congress has also established shorter statutes of limitations for challenges to certain types of projects. SAFETEA–LU created a 180-day statute of limitations for highway or public transportation capital projects, which MAP–21 later reduced to 150 days. 23 U.S.C. 139(l). The Water Resources Reform and Development Act of 2014 established a three-year statute of limitations for judicial review of any permits, licenses, or other approvals for water resources development project studies. 33 U.S.C. 2348(k). Most recently in FAST–41, Congress established a two-year statute of limitations for covered projects. 42 U.S.C. 4370m–6.

There are a number of additional instances where Congress has enacted legislation to facilitate more timely environmental reviews. For example, similar to the provisions described above, there are other statutes where Congress has called for a coordinated and concurrent environmental review. *See, e.g.,* 33 U.S.C. 408(b) (concurrent review for river and harbor permits); 49 U.S.C. 40128 (coordination on environmental reviews for air tour management plans for national parks); 49 U.S.C. 47171 (expedited and coordinated environmental review process for airport capacity enhancement projects).

Additionally, Congress has established or directed agencies to establish CEs to facilitate NEPA compliance. *See, e.g.,* 16 U.S.C. 6554(d) (applied silvicultural assessment and research treatments); 16 U.S.C. 6591d (hazardous fuels reduction projects to carry out forest restoration treatments); 16 U.S.C. 6591e (vegetation management activity in greater sage-grouse or mule deer habitat); 33 U.S.C. 2349 (actions to repair, reconstruct, or rehabilitate water resources projects in response to emergencies); 42 U.S.C. 15942 (certain activities for the purpose of exploration or development of oil or gas); 43 U.S.C. 1772(c)(5) (development and approval of vegetation management, facility inspection, and operation and maintenance plans); MAP–21, Public Law 112–141, sec. 1315 (actions to repair or reconstruct roads, highways, or bridges damaged by emergencies), 1316 (projects within the operational right-of-way), and 1317 (projects with limited Federal assistance); FAA Modernization and Reform Act of 2012, Public Law 112–95, sec. 213(c), 126 Stat. 11, 46 (navigation performance and area navigation procedures); and Omnibus Appropriations Act, 2009, Public Law 111–8, sec. 423, 123 Stat. 524, 748 (Lake Tahoe Basin Management Unit hazardous fuel reduction projects).

Further, in the context of emergency response, including economic crisis, Congress has enacted legislation to facilitate timely NEPA reviews or to exempt certain actions from NEPA review. Congress has directed the use or development of alternative arrangements in accordance with 40 CFR 1506.11 for reconstruction of transportation facilities damaged in an emergency (FAST Act, Pub. L. 114–94, sec. 1432, 129 Stat. 1312, 1429) and for projects by the Departments of the Interior and Commerce to address invasive species (Water Infrastructure Improvements for the Nation Act, Pub. L. 114–322, sec. 4010(e)(3), 130 Stat. 1628, 1877). Section 1609(c) of the American Recovery and Reinvestment Act of 2009 directed agencies to complete environmental reviews under NEPA on an expedited basis using the most efficient applicable process. Public Law 111–5, sec. 1609, 123 Stat. 115, 304.

In 2013, Congress also enacted section 429 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (''Stafford Act''), 42 U.S.C. 5189g, which directed the President, in consultation with CEQ and the Advisory Council on Historic Preservation, to ''establish an expedited and unified interagency review process to ensure compliance with environmental and historic requirements under Federal law relating to disaster recovery projects, in order to expedite the recovery process, consistent with applicable law.'' Sandy Recovery Improvement Act of 2013, Public Law 113–2, sec. 1106, 127 Stat. 4, 45–46. This unified Federal environmental and historic preservation review (UFR) process is a framework for coordinating Federal agency environmental and historic preservation reviews for disaster recovery projects associated with presidentially declared disasters under the Stafford Act. The goal of the UFR process is to enhance the ability of Federal environmental review and authorization processes to inform and expedite disaster recovery decisions for grant applicants and other potential beneficiaries of disaster assistance by improving coordination and consistency across Federal agencies, and assisting agencies in better leveraging their resources and tools.[48]

Finally, in some instances, Congress has exempted actions from NEPA. In 1996, Congress enacted the Illegal Immigration Reform and Immigrant Responsibility Act, which authorized the waiver of NEPA for the construction of the physical barriers and roads between the United States and Mexico border when necessary to ''ensure expeditious construction.'' Public Law 104–208, sec. 102(c), 110 Stat. 3009.[49] In 2013, Congress exempted certain disaster recovery actions or financial assistance to restore ''a facility substantially to its condition prior to the disaster or emergency.'' 42 U.S.C. 5159. In 2020, Congress enacted the Coronavirus Aid, Relief, and Economic Security Act, which created an exemption from NEPA for the General Services Administration's acquisition of real property and interests in real property or improvements in real property in response to coronavirus in

[47] For covered projects, section 4370m–4 authorizes lead agencies to adopt or incorporate by reference existing environmental analyses and documentation prepared under State laws and procedures if the analyses and documentation meet certain requirements. 42 U.S.C. 4370m–4(b)(1)(A)(i). This provision also requires that the lead agency, in consultation with CEQ, determine that the analyses and documentation were prepared using a process that allowed for public participation and consideration of alternatives, environmental consequences, and other required analyses that are substantially equivalent to what a Federal agency would have prepared pursuant to NEPA. *Id.*

[48] *See generally* Memorandum of Understanding Establishing the Unified Federal Environmental and Historic Preservation Review Process for Disaster Recovery Projects (July 29, 2014), *https://www.fema.gov/media-library-data/1414507626204-f156c4795571b85a4f8e1c1f4c4b7de1/Final_Signed_UFR_MOU_9_24_14_508_ST.PDF.*

[49] The Homeland Security Act of 2002 transferred responsibility for the construction of border barriers from the Attorney General to the Department of Homeland Security. Public Law 107–296, 116 Stat. 2135. In 2005, the REAL ID Act amended the waiver authority of section 102(c) expanding the Secretary of DHS' authority to waive ''all legal requirements'' that the Secretary, in his or her own discretion, determines ''necessary to ensure expeditious construction'' of certain ''barriers and roads.'' Public Law 109–13, Div. B, tit. I, sec. 102, 119 Stat. 231, 302, 306. It also added a judicial review provision that limited the district court's jurisdiction to hear any causes or claims concerning the Secretary's waiver authority to solely constitutional claims. *Id.* sec. 102(c)(2)(A). Further, the provision directed that any review of the district court's decision be raised by petition for a writ of certiorari with the Supreme Court of the United States. *Id.* sec. 102(c)(2)(C). *See In re Border Infrastructure Envtl. Litig.,* 284 F. Supp. 3d 1092 (S.D. Cal. 2018).

conjunction with the provision of additional funding to prevent, prepare for, and respond to the coronavirus. Public Law 116–136, Div. B.

These statutes reflect that Congress has recognized that the environmental review process can be more efficient and effective, including for infrastructure projects, and that in certain circumstances, Congress has determined it appropriate to exempt certain actions from NEPA review. Congress also has identified specific process improvements that can accelerate environmental reviews, including improved interagency coordination, concurrent reviews, and increased transparency.

E. Presidential Directives

Over the past two decades and multiple administrations, Presidents also have recognized the need to improve the environmental review process to make it more timely and efficient, and have directed agencies, through Executive orders and Presidential memoranda, to undertake various initiatives to address these issues. In 2002, President Bush issued E.O. 13274 titled ''Environmental Stewardship and Transportation Infrastructure Project Reviews,'' [50] which stated that the development and implementation of transportation infrastructure projects in an efficient and environmentally sound manner is essential, and directed agencies to conduct environmental reviews for transportation projects in a timely manner.

In 2011, President Obama's memorandum titled ''Speeding Infrastructure Development Through More Efficient and Effective Permitting and Environmental Review'' [51] directed certain agencies to identify up to three high-priority infrastructure projects for expedited environmental review and permitting decisions to be tracked publicly on a ''centralized, online tool.'' This requirement led to the creation of what is now the Permitting Dashboard, *www.permits.performance.gov.*

In 2012, E.O. 13604, titled ''Improving Performance of Federal Permitting and Review of Infrastructure Projects,'' [52] established an interagency Steering Committee on Federal Infrastructure Permitting and Review Process Improvement (''Steering Committee'') to facilitate improvements in Federal permitting and review processes for infrastructure projects. The Executive order directed the Steering Committee to develop a plan ''to significantly reduce the aggregate time required to make Federal permitting and review decisions on infrastructure projects while improving outcomes for communities and the environment.'' Similarly, E.O. 13616, titled ''Accelerating Broadband Infrastructure Deployment,'' [53] established an interagency working group to, among other things, avoid duplicative reviews and coordinate review processes to advance broadband deployment.

A 2013 Presidential Memorandum titled ''Modernizing Federal Infrastructure Review and Permitting Regulations, Policies, and Procedures'' [54] directed the Steering Committee established by E.O. 13604 to work with agencies, OMB, and CEQ to ''modernize Federal infrastructure review and permitting regulations, policies, and procedures to significantly reduce the aggregate time required by the Federal Government to make decisions in the review and permitting of infrastructure projects, while improving environmental and community outcomes'' and develop a plan to achieve this goal. Among other things, the memorandum directed that the plan create process efficiencies, including additional use of concurrent and integrated reviews; expand coordination with State, Tribal, and local governments; and expand the use of information technology tools. CEQ and OMB led the effort to develop a comprehensive plan to modernize the environmental review and permitting process while improving environmental and community outcomes, including budget proposals for funding and new authorities. Following the development of the plan, CEQ continued to work with agencies to improve the permitting process, including through expanded collection of timeframe metrics on the Permitting Dashboard. In late 2015, these ongoing efforts were superseded by the enactment of FAST–41, which codified the use of the Permitting Dashboard, established the Federal Permitting Improvement Steering Council (''Permitting Council''), and established other requirements for managing the environmental review and permitting process for covered infrastructure projects.

On August 15, 2017, President Trump issued E.O. 13807 titled ''Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects.'' [55] Section 5(e)(i) directed CEQ to develop an initial list of actions to enhance and modernize the Federal environmental review and authorization process, including issuing such regulations as CEQ deems necessary to: (1) Ensure optimal interagency coordination of environmental review and authorization decisions; (2) ensure that multi-agency environmental reviews and authorization decisions are conducted in a manner that is concurrent, synchronized, timely, and efficient; (3) provide for use of prior Federal, State, Tribal, and local environmental studies, analysis, and decisions; and (4) ensure that agencies apply NEPA in a manner that reduces unnecessary burdens and delays, including by using CEQ's authority to interpret NEPA to simplify and accelerate the NEPA review process. In response to E.O. 13807, CEQ published an initial list of actions and stated its intent to review its existing NEPA regulations in order to identify potential revisions to update and clarify these regulations.[56]

F. Advance Notice of Proposed Rulemaking

Consistent with E.O. 13807 and CEQ's initial list of actions, and given the length of time since CEQ issued its regulations, on June 20, 2018, CEQ published an ANPRM titled ''Update to the Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act.'' [57] The ANPRM requested public comments on how CEQ could ensure a more efficient, timely, and effective NEPA process consistent with the Act's national environmental policy and provided for a 30-day comment period.[58]

The ANPRM requested comment on potential revisions to update and clarify the NEPA regulations, and included a list of questions on specific aspects of the regulations. For example, with respect to the NEPA process, the ANPRM asked whether there are provisions that CEQ could revise to ensure more efficient environmental reviews and authorization decisions, such as facilitating agency use of existing environmental studies, analyses and decisions, as well as improving interagency coordination. The ANPRM also requested comments on the scope of NEPA reviews, including whether CEQ should revise, clarify, or add definitions. The ANPRM also asked whether additional revisions relating to

[50] 67 FR 59449 (Sept. 23, 2002).

[51] *https://www.govinfo.gov/content/pkg/DCPD-201100601/pdf/DCPD-201100601.pdf.*

[52] 77 FR 18887 (Mar. 28, 2012).

[53] 77 FR 36903 (June 20, 2012).

[54] 78 FR 30733 (May 22, 2013).

[55] 82 FR 40463 (Aug. 24, 2017).

[56] 82 FR 43226 (Sept. 14, 2017).

[57] 83 FR 28591 (June 20, 2018).

[58] In response to comments, CEQ extended the comment period 31 additional days to August 20, 2018. 83 FR 32071 (July 11, 2018).

environmental documentation issued pursuant to NEPA, including CEs, EAs, EISs, and other documents, would be appropriate. Finally, the ANPRM requested general comments, including whether there were obsolete provisions that CEQ could update to reflect new technologies or make the process more efficient, or that CEQ could revise to reduce unnecessary burdens or delays.

In response to the ANPRM, CEQ received over 12,500 comments, which are available for public review.[59] These included comments from a wide range of stakeholders, including States, Tribes, localities, environmental organizations, trade associations, NEPA practitioners, and interested members of the public. While some commenters opposed any updates to the regulations, other commenters urged CEQ to consider potential revisions. Though the approaches to the update of the NEPA regulations varied, most of the substantive comments supported some degree of updating of the regulations. Many noted that overly lengthy documents and the time required for the NEPA process remain real and legitimate concerns despite the NEPA regulations' explicit direction with respect to reducing paperwork and delays. In general, numerous commenters requested that CEQ consider revisions to modernize its regulations, reduce unnecessary burdens and costs, and make the NEPA process more efficient, effective, and timely.

G. Notice of Proposed Rulemaking

On January 9, 2020, President Trump announced the release of CEQ's NPRM titled ''Update to the Regulations Implementing the Procedural Provisions of the National Environmental Policy Act'' and the rule was published in the **Federal Register** on January 10, 2020.[60] The NPRM provided a 60-day comment period, and the comment period ended on March 10, 2020.

CEQ hosted two public hearings in Denver, Colorado on February 11, 2020, and in Washington, DC on February 25, 2020.[61] CEQ also notified all federally recognized Tribes and over 400 interested groups, including State, Tribal, and local officials, environmental organizations, trade associations, NEPA practitioners, and interested members of the public representing a broad range of diverse views, that CEQ had issued the proposed rule for public comment.[62] Additionally, CEQ made information to aid the public's review of the proposed rule available on its websites at *www.whitehouse.gov/ceq* and *www.nepa.gov,* including a redline version of the proposed changes to the regulations posted on *www.regulations.gov,* along with a presentation on the proposed rule and other background information.[63] CEQ also conducted additional public outreach to solicit comments, including meetings with Tribal representatives in Denver, Colorado, Anchorage, Alaska, and Washington, DC.[64]

In response to the NPRM, CEQ received comments from a broad range of stakeholders on a diversity of issues relating to the proposed rule. These included comments from members of Congress, State, Tribal, and local officials, environmental organizations, trade associations, NEPA practitioners, and interested members of the public. CEQ also received a large number of campaign comments, including comments with multiple signatories or groups of comments that were identical or very similar in form or content. The comments received on the NPRM raised a variety of issues related to the rulemaking and contents of the proposed rule, including procedural, legal, and technical issues. The Final Rule Response to Comments provides a summary of the comments and responses to those comments.

II. Summary of Final Rule

In this section, CEQ summarizes the NPRM proposed changes and the final rule, including any changes or additions to what CEQ proposed. CEQ makes the additions, clarifications, and updates to its regulations based on its record evaluating the implementation of the NEPA regulations, suggestions in response to the ANPRM, and comments provided in response to the NPRM. The revisions finalized in this rule advance the original objectives of the 1978 regulations[65] ''[t]o reduce paperwork, to reduce delays, and at the same time to produce better decisions [that] further the national policy to protect and enhance the quality of the human environment.'' [66]

In this final rule, CEQ makes various revisions to align the regulations with the text of the NEPA statute, including revisions to reflect the procedural nature of the statute, including under section 102(2). CEQ also revises the regulations to ensure that environmental documents prepared pursuant to NEPA are concise and serve their purpose of informing decision makers regarding significant potential environmental effects of proposed major Federal actions and the public of the environmental issues in the pending decision-making process. CEQ makes changes to ensure that the regulations reflect changes in technology, increase public participation in the process, and facilitate the use of existing studies, analyses, and environmental documents prepared by States, Tribes, and local governments.

CEQ also makes its regulations consistent with the OFD policy established by E.O. 13807 for multi-agency review and related permitting and other authorization decisions. The Executive order specifically instructed CEQ to take steps to ensure optimal interagency coordination, including through a concurrent, synchronized, timely, and efficient process for environmental reviews and authorization decisions. In response to the NPRM, CEQ received many comments supporting revisions to codify key aspects of the OFD policy in the NEPA regulations, including by providing greater specificity on the roles and responsibilities of lead and cooperating agencies. Commenters also suggested that the regulations require agencies to establish and adhere to timetables for the completion of reviews, another key element of the OFD policy. To promote improved interagency coordination and more timely and efficient reviews and in response to these comments, CEQ codifies and generally applies a number of key elements from the OFD policy in this final rule. These include development by the lead agency of a joint schedule, procedures to elevate delays or disputes, preparation of a single EIS and joint ROD to the extent practicable, and a two-year goal for completion of environmental reviews. Consistent with section 104 of NEPA (42 U.S.C. 4334), codification of these policies will not limit or affect the authority or legal responsibilities of agencies under other statutory mandates that may be covered by joint schedules,

[59] *See https://www.regulations.gov,* docket no. CEQ–2018–0001.

[60] *Supra* note 8.

[61] Transcripts of the two public hearings with copies of testimony and written comments submitted at the hearings are available in the docket on *www.regulations.gov,* docket ID CEQ–2019–0003.

[62] Notices are available under ''Supporting Documents'' in the docket, *www.regulations.gov,* docket ID CEQ–2019–0003, *https://www.regulations.gov/docketBrowser?rpp=25&so=DESC&sb=commentDueDate&po=0&dct=SR%2BO&D=CEQ-2019-0003.*

[63] *Id.*

[64] CEQ also includes meeting summaries under supplemental materials. *Id.*

[65] In this final rule, CEQ uses the term ''1978 regulations'' to refer to the regulations as they exist prior to this final rule's amendment thereof, which includes the 1986 amendment to 40 CFR 1502.22.

[66] 43 FR 55978 (Nov. 29, 1978).

and CEQ includes language to that effect in § 1500.6.[67]

CEQ also clarifies the process and documentation required for complying with NEPA by amending part 1501 to add sections on threshold considerations, determination of the appropriate level of NEPA review, and the application of CEs; and revising sections in part 1501 on EAs and findings of no significant impact (FONSIs), and EISs in part 1502. CEQ further revises the regulations to promote more efficient and timely environmental reviews, including revisions to promote interagency coordination by amending sections of parts 1501, 1506, and 1507 relating to lead, cooperating, and participating agencies, timing of agency action, scoping, and agency NEPA procedures.

To promote a more efficient and timely NEPA process, CEQ amends provisions in parts 1501, 1506, and 1507 relating to applying NEPA early in the process, scoping, tiering, adoption, use of current technologies, and avoiding duplication of State, Tribal, and local environmental reviews; revises parts 1501 and 1502 to provide for presumptive time and page limits; and amends part 1508 to clarify the definitions. For example, CEQ includes two new mechanisms to facilitate the use of CEs when appropriate. Under § 1506.3(d), an agency can adopt another agency's determination that a CE applies to a proposed action when the adopting agency's proposed action is substantially the same. This extends the adoption process and standards from EISs to CE determinations.[68] This allows agencies to ''piggyback'' where more than one agency is taking an action related to the same project or activity. Alternatively, to apply CEs listed in another agency's procedures (without that agency already having made a determination that a CE applies to a substantially similar action), agencies can establish a process in their agency NEPA procedures to coordinate and apply CEs listed in other agencies' procedures.

Another efficiency included in this final rule is the ability for agencies to identify other requirements that serve the function of agency compliance with NEPA. Under §§ 1501.1 and 1507.3(d)(6), agencies may determine that another statute's requirements serve the function of agency compliance with NEPA. Alternatively, agencies may designate in their agency NEPA procedures one or more procedures or documents under other statutes or Executive orders that satisfy one or more requirements in the NEPA regulations, consistent with § 1507.3(c)(5). Finally, § 1506.9 allows agencies to substitute processes and documentation developed as part of the rulemaking process for corresponding requirements in these regulations.

As noted above, NEPA is a procedural statute that has twin aims. The first is to promote informed decision making, while the second is to inform the public about the agency's decision making. In this final rule, CEQ amends parts 1500, 1501, 1502, 1503, 1505, and 1508 to ensure that agencies solicit and consider relevant information early in the NEPA process and have the maximum opportunity to take that information into account in their decision making.

In situations where an EIS is required, this process takes place in two discrete steps. First, § 1501.9(d) directs agencies to include information on the proposed action in the NOI, including its expected impacts and alternatives, and a request for comments from interested parties on the potential alternatives, information, and analyses relevant to the proposed action. Second, § 1503.1(a) requires agencies to request comments on the analysis and conclusions of the draft EIS. The purpose of these two provisions is to bring relevant comments, information, and analyses to the agency's attention, as early in the process as possible, to enable the agency to make maximum use of this information.

To facilitate this process, § 1503.3 requires comments on the draft EIS to be submitted on a timely basis and to be as specific as possible. Similarly, § 1503.1(a)(3) requires agencies to invite interested parties to comment specifically on the alternatives, information, and analyses submitted for consideration in the development of the draft EIS. Finally, § 1503.3(b) provides that comments, information, and analyses on the draft EIS not timely received are deemed unexhausted and therefore forfeited. The intent of these amendments is two-fold: (1) To ensure that comments are timely received and at a level of specificity where they can be meaningfully taken into account, where appropriate; and (2) to prevent unnecessary delay in the decision-making process.

Consistent with this intent, § 1500.3(b)(2) also directs agencies to include a new section in both the draft and final EIS that summarizes all alternatives, information, and analyses submitted by interested parties in response to the agency's requests for comment in the NOI and on the draft EIS. In addition, §§ 1502.17(a)(2) and 1503.1(a)(3) direct agencies to request comment on the summary in the draft EIS. The purpose of these provisions is to ensure that the agency, through outreach to the public, has identified all relevant information submitted by State, Tribal, and local governments and other public commenters. Although not a substitute for the entire record, the summary will assist agency decision makers in their consideration of the record for the proposed action. As the Supreme Court observed in *Metropolitan Edison Co.* v. *People Against Nuclear Energy,* ''[t]he scope of [an] agency's inquiries must remain manageable if NEPA's goal of '[insuring] a fully informed and well-considered decision' . . . is to be accomplished.'' 460 U.S. at 776 (quoting *Vt. Yankee,* 435 U.S. at 558).

Finally, informed by the summary included in the final EIS pursuant to §§ 1500.3(b)(2) and 1502.17 and the response to comments pursuant to § 1503.4, together with any other material in the record that he or she determines to be relevant, the decision maker is required under § 1505.2(b) to certify in the ROD that the agency has considered the alternatives, information, analyses, and objections submitted by State, Tribal, and local governments and public commenters for consideration in the development of the final EIS. Section 1505.2(b) further provides that a decision certified in this manner is entitled to a presumption that the agency has adequately considered the submitted alternatives, information, and analyses, including the summary thereof, in reaching its decision. This presumption will advance the purposes of the directive in E.O. 11991 to ensure that EISs are supported by evidence that agencies have performed the necessary environmental analyses. *See* E.O. 11991, sec. 1 amending E.O. 11514, sec. 3(h). This presumption is also consistent with the longstanding presumption of regularity that government officials have properly discharged their official duties. *See U.S. Postal Serv.* v. *Gregory,* 534 U.S. 1, 10 (2001) (''[W]e note that a presumption of regularity attaches to the actions of government agencies.'' (citing *United States* v. *Chem. Found., Inc.,* 272 U.S. 1, 14–15 (1926)); *INS* v. *Miranda,* 459 U.S. 14, 18 (1982) (specific evidence required to overcome presumption that public officers have executed their responsibilities properly); *Citizens to Preserve Overton Park, Inc.* v. *Volpe,* 401 U.S. 402, 415 (1971) (Although a

[67] In the preamble, CEQ uses the section symbol (§) to refer to the final regulations as set forth in this final rule and 40 CFR to refer to the 1978 CEQ regulations as set forth in 40 CFR parts 1500–1508.

[68] The final rule also extends the adoption process and standards, which only applies to EISs under the 1978 regulations, to EAs as well.

statute prohibited Federal funds for roads through parks absent a feasible and prudent alternative, and although the Secretary of Transportation approved funds without formal findings, the Secretary's decision-making process was nevertheless entitled to a presumption of regularity.); *Fed. Commc'ns Comm'n* v. *Schreiber,* 381 U.S. 279, 296 (1965) (noting ''the presumption to which administrative agencies are entitled—that they will act properly and according to law''); *Phila. & T. Ry.* v. *Stimpson,* 39 U.S. (14 Pet.) 448, 458 (1840) (Where a statute imposed certain conditions before a corrected patent could issue, the signatures of the President and the Secretary of State on a corrected patent raised a presumption that the conditions were satisfied, despite absence of recitals to that effect on face of patent.); *Martin* v. *Mott,* 25 U.S. (12 Wheat.) 19, 33 (1827) (''Every public officer is presumed to act in obedience to his duty, until the contrary is shown . . . .''); *Udall* v. *Wash., Va. & Md. Coach Co.,* 398 F.2d 765, 769 (D.C. Cir. 1968) (The Secretary of the Interior's determination that limitation of commercial bus service was required to preserve a parkway's natural beauty was entitled to presumption of validity, and the burden was on the challenger to overcome it.).

In light of this precedent and the interactive process established by these regulations, under which the agency and interested parties exchange information multiple times, the agency compiles and evaluates summaries of that information, and a public official is required to certify the agency's consideration of the record, it is CEQ's intention that this presumption may be rebutted only by clear and convincing evidence that the agency has not properly discharged its duties under the statute.

Finally, CEQ revises the regulations to make them easier to understand and apply. CEQ reorganizes the regulatory text to move topics addressed in multiple sections and sometimes multiple parts into consolidated sections. CEQ simplifies and clarifies part 1508 to focus on definitions by moving operative requirements to the relevant regulatory provisions. CEQ revises the regulations to consolidate provisions and reduce duplication. Such consolidation, reordering, and reorganization promotes greater clarity and ease of use.

A. Changes Throughout Parts 1500–1508

CEQ proposed several revisions throughout parts 1500–1508 to provide consistency, improve clarity, and correct grammatical errors. CEQ proposed to make certain grammatical corrections in the regulations where it proposed other changes to the regulations to achieve the goals of this rulemaking, or where CEQ determined the changes are necessary for the reader to understand fully the meaning of the sentence. CEQ proposed to revise sentences from passive voice to active voice to help identify the responsible parties. CEQ also proposed to correct the usage of the term ''insure'' with ''ensure'' consistent with modern usage. ''Insure'' is typically used in the context of providing or obtaining insurance, whereas ''ensure'' is used in the context of making something sure, certain, or safe. While NEPA uses the term ''insure,'' the context in which it is used makes it clear that Congress meant ''ensure'' consistent with modern usage. Similarly, CEQ proposed to correct the use of ''which'' and ''that'' throughout the rule.

CEQ proposed to add paragraph letters to certain introductory paragraphs where it would improve clarity. Finally, CEQ invited comment on whether it should make these types of grammatical and editorial changes throughout the rule or if there are additional specific instances where CEQ should make these types of changes. In the final rule, CEQ adopts the proposed revisions to provide consistency and clarity and to correct grammatical errors and makes these types of changes throughout.

CEQ proposed to add ''Tribal'' to the phrase ''State and local'' throughout the rule to ensure consultation with Tribal entities and to reflect existing NEPA practice to coordinate or consult with affected Tribal governments and agencies, as necessary and appropriate for a proposed action. CEQ also proposed this change in response to comments on the ANPRM supporting expansion of the recognition of the sovereign rights, interests, and expertise of Tribes. CEQ proposed to eliminate the provisions in the regulations that limit Tribal interest to reservations. CEQ adopts these proposals in the final rule and makes these additions and revisions in §§ 1500.3(b)(2)–(4), 1500.4(p), 1500.5(j), 1501.2(b)(4)(ii), 1501.3(b)(2)(iv), 1501.5(e), 1501.7(b) and (d), 1501.8(a), 1501.9(b), 1501.10(f), 1502.5(b), 1502.16(a)(5), 1502.17(a) and (b), 1502.20(a), 1503.1(a)(2)(i) and (ii), 1505.2(b), and 1506.1(b), 1506.2, 1506.6(b)(3)(i)–(iii), and 1508.1(e), (k), and (w). As noted in the NPRM, these changes are consistent with and in support of government-to-government consultation pursuant to E.O. 13175, titled ''Consultation and Coordination With Indian Tribal Governments.'' [69]

CEQ proposed several changes for consistent use of certain terms. In particular, CEQ proposed to change ''entitlements'' to the defined term ''authorizations'' proposed in § 1508.1(c) throughout the regulations and added ''authorizations'' where appropriate to reflect the mandate in E.O. 13807 for better integration and coordination of authorization decisions and related environmental reviews. CEQ is adopting these revisions in the final rule in §§ 1501.2(a), 1501.7(i), 1501.9(d)(4) and (f)(4), 1502.13, 1502.24(b), 1503.3(d), and 1508.1(w).

CEQ proposed to use the term ''decision maker'' to refer to an individual responsible for making decisions on agency actions and ''senior agency official'' to refer to the individual who oversees the agency's overall compliance with NEPA. CEQ adopts these changes in the final rule. There may be multiple individuals within certain departments or agencies that have these responsibilities, including where subunits have developed agency procedures or NEPA compliance programs.

CEQ proposed to replace ''circulate'' or ''circulation'' with ''publish'' or ''publication'' throughout the rule and make ''publish or publication'' a defined term in § 1508.1(y), which provides agencies with the flexibility to make environmental review and information available to the public by electronic means not available at the time of promulgation of the CEQ regulations in 1978. As explained in the NPRM, historically, the practice of circulation included mailing of hard copies or providing electronic copies on disks or CDs. While it may be necessary to provide a hard copy or copy on physical media in limited circumstances, agencies now provide most documents in an electronic format by posting them online and using email or other electronic forms of communication to notify interested or affected parties. This change will help reduce paperwork and delays, and modernize the NEPA process to be more accessible to the public. CEQ finalizes these changes in §§ 1500.4(o), 1501.2(b)(2), 1502.9(b) and (d)(3), 1502.20, 1503.4(b) and (c), 1506.3(b)(1) and (2), and 1506.8(c)(2).

CEQ proposed to change the term ''possible'' to ''practicable'' in the NPRM in a number of sections of the regulations. As noted in the NPRM, ''practicable'' is the more commonly used term in regulations to convey the ability for something to be done,

[69] 65 FR 67249 (Nov. 9, 2000).

considering the cost, including time required, technical and economic feasibility, and the purpose and need for agency action. The term ''practicable,'' which is in the statute (42 U.S.C. 4331(a), (b)) and used many times in the 1978 regulations,[70] is consistent with notions of feasibility, which the case law has recognized as part of the NEPA process. *See, e.g., Vt. Yankee,* 435 U.S. at 551 (''alternatives must be bounded by some notion of feasibility''); *Kleppe,* 427 U.S. at 414 (''[P]ractical considerations of feasibility might well necessitate restricting the scope'' of an agency's analysis.) CEQ makes these changes in the final rule in §§ 1501.7(h)(1) and (2), 1501.8(b)(1), 1502.5, 1502.9(b), 1504.2, and 1506.2(b) and (c).

Similarly, CEQ proposed to change ''no later than immediately'' to ''as soon as practicable'' in § 1502.5(b), and CEQ finalizes this change. Finally, CEQ proposed to refer to the procedures required in § 1507.3 using the term ''agency NEPA procedures'' throughout. CEQ makes this change in the final rule.

CEQ proposed to eliminate obsolete references and provisions in several sections of the CEQ regulations. In particular, CEQ proposed to remove references to the 102 Monitor in 40 CFR 1506.6(b)(2) and 1506.7(c) because the publication no longer exists, and OMB Circular A–95, which was revoked pursuant to section 7 of E.O. 12372 (47 FR 30959, July 16, 1982), including the requirement to use State and area-wide clearinghouses in 40 CFR 1501.4(e)(2), 1503.1(a)(2)(iii), 1505.2, and 1506.6(b)(3)(i). CEQ removes these references in the final rule.

CEQ proposed changes to citations and authorities in parts 1500 through 1508. CEQ is updating the authorities sections for each part to correct the format. CEQ also is removing cross-references to the sections of part 1508, ''Definitions,'' and updates or inserts new cross-references throughout the rule to reflect revised or new sections. CEQ makes these changes throughout the final rule.

Finally, CEQ is reorganizing chapter V of title 40 of the Code of Federal Regulations to place the NEPA regulations into a new subchapter A, ''National Environmental Policy Act Implementing Regulations,'' and organizing its other regulations into their own new subchapter B, ''Administrative Procedures and Operations.'' References to ''parts 1500 through 1508'' in the proposed rule are referenced to ''this subchapter'' in the final rule. CEQ notes that the provisions of the NEPA regulations, which the final rule comprehensively updates, should be read in their entirety to understand the requirements under the modernized regulations.[71]

B. Revisions To Update the Purpose, Policy, and Mandate (Part 1500)

In part 1500, CEQ proposed several revisions to update the policy and mandate sections of the regulations to reflect statutory, judicial, policy, and other developments since the CEQ regulations were issued in 1978. CEQ includes the proposed changes with some revisions in the final rule.

1. Purpose and Policy (§ 1500.1)

In the NPRM, CEQ proposed to retitle and revise § 1500.1, ''Purpose and policy,'' to align this section with the statutory text of NEPA and certain case law, and reflect the procedural requirements of section 102(2) (42 U.S.C. 4332(2)). These changes also are consistent with the President's directive to CEQ to ''[i]ssue regulations to Federal agencies for the implementation of the procedural provisions of the Act (42 U.S.C. 4332(2)).'' E.O. 11514, as amended by E.O. 11991, sec. 3(h). Many commenters supported these revisions to promote more efficient and timely reviews under NEPA, while others opposed the changes and requested that CEQ maintain the existing language. CEQ revises this section in the final rule consistent with its proposal.

Section 1500.1 provides that NEPA is a procedural statute intended to ensure Federal agencies consider the environmental impacts of their actions in the decision-making process. The Supreme Court has made clear that NEPA is a procedural statute that does not mandate particular results; ''[r]ather, NEPA imposes only procedural requirements on [F]ederal agencies with a particular focus on requiring agencies to undertake analyses of the environmental impact of their proposals and actions.'' *Pub. Citizen,* 541 U.S. at 756–57 (citing *Methow Valley,* 490 U.S. at 349–50); *see also Vt. Yankee,* 435 U.S. at 558 (''NEPA does set forth significant substantive goals for the Nation, but its mandate to the agencies is essentially procedural.'').

As proposed in the NPRM, CEQ revises § 1500.1(a) to summarize section 101 of the Act (42 U.S.C. 4331) and to reflect that section 102(2) establishes the procedural requirements to carry out the policy stated in section 101. CEQ revises § 1500.1(a) consistent with the case law to reflect that the purpose and function of NEPA is satisfied if Federal agencies have considered relevant environmental information and the public has been informed regarding the decision-making process, and to reflect that NEPA does not mandate particular results or substantive outcomes. *Marsh,* 490 U.S. at 373–74; *Vt. Yankee,* 435 U.S. at 558. CEQ replaces the vague reference to ''action-forcing'' provisions ensuring that Federal agencies act ''according to the letter and spirit of the Act'' (as well as consistently with their organic and program-specific governing statutes) with a more specific reference to the consideration of environmental impacts of their actions in agency decisions. These changes codify the Supreme Court's interpretation of section 102 in two important respects: Section 102 ''ensures that the agency, in reaching its decision, will have available, and will carefully consider, detailed information concerning significant environmental impacts; it also guarantees that the relevant information will be made available to the larger audience that may also play a role in both the decision[-]making process and the implementation of that decision.'' *Methow Valley,* 490 U.S. at 349; *see also Winter* v. *Nat. Res. Def. Council, Inc.,* 555 U.S. 7, 23 (2008); *Pub. Citizen,* 541 U.S. at 756–58.

Consistent with CEQ's proposal in the NPRM, CEQ revises § 1500.1(b) to describe the NEPA regulations as revised in this final rule. In particular, CEQ revises this paragraph to reflect that the regulations include direction to Federal agencies to determine what actions are subject to NEPA's procedural requirements and the level of NEPA review, where applicable. The revisions also ensure that Federal agencies identify and consider relevant environmental information early in the process in order to promote informed decision making. These revisions reduce unnecessary burdens and delays consistent with E.O. 13807 and the purposes of the regulations as originally promulgated in 1978. These amendments emphasize that the policy of integrating NEPA with other environmental reviews is to promote concurrent and timely reviews and decision making consistent with statutes, Executive orders, and CEQ guidance. *See, e.g.,* 42 U.S.C. 5189g; 23 U.S.C. 139; 42 U.S.C. 4370m *et seq.;* E.O. 13604; E.O. 13807; Mitigation

[70] *See* 40 CFR 1500.2(f), 1501.4(b), 1501.7, 1505.2(c), 1506.6(f) and 1506.12(a).

[71] While the final rule retains, in large part, the numbering scheme used in the 1978 regulations, the final rule comprehensively updates the prior regulations. The new regulations should be consulted and reviewed to ensure application is consistent with the modernized provisions. Assumptions should not be made concerning the degree of change to, similarity to, or any interpretation of the prior version of the regulations.

Guidance, *supra* note 29, and Timely Environmental Reviews Guidance, *supra* note 29.

2. Remove and Reserve Policy (§ 1500.2)

CEQ proposed to remove and reserve 40 CFR 1500.2, ''Policy.'' The section included language that is identical or similar to language in E.O. 11514, as amended. That Executive order directed CEQ to develop regulations that would make the ''[EIS] process more useful to decision makers and the public; and . . . reduce paperwork and the accumulation of extraneous background data, in order to emphasize the need to focus on real environmental issues and alternatives.'' *See* E.O. 11514, as amended by E.O. 11991, sec. 3(h). The Executive order also directed CEQ to require EISs to be ''concise, clear and to the point, and supported by evidence that agencies have made the necessary environmental analyses.'' *Id.* CEQ proposed to remove this section because it is duplicative of other sections of the regulations, thereby eliminating redundancy. CEQ is making this change in the final rule.

Specifically, 40 CFR 1500.2(a) restated the statutory text in section 102 of NEPA (42 U.S.C. 4332) and is duplicative of language in § 1500.6, ''Agency authority,'' requiring each agency to interpret the provisions of NEPA as a supplement to its existing authority and as a mandate to view policies and missions in light of the Act's national environmental objectives. Paragraph (b) required agencies to implement procedures to make the NEPA process more useful to decision makers and the public; reduce paperwork and accumulation of extraneous background data; emphasize relevant environmental issues and alternatives; and make EISs concise, clear, and to the point and supported by evidence that thy have made the necessary analyses. This paragraph is duplicative of language in § 1502.1, ''Purpose of environmental impact statement,'' and paragraphs (c) through (i) of § 1500.4, ''Reducing paperwork.''

Paragraph (c) of 40 CFR 1500.2, requiring agencies to integrate NEPA requirements with other planning and review procedures to run concurrently rather than consecutively, is duplicative of language in § 1502.24, ''Environmental review and consultation requirements,'' § 1501.2, ''Apply NEPA early in the process,'' § 1501.9, ''Scoping,'' and § 1500.4, ''Reducing paperwork.'' Paragraph (d) encouraging public involvement is duplicative of sections that direct agencies to provide notice and information to and seek comment from the public regarding proposed actions and environmental documents, including provisions in § 1506.6, ''Public involvement,'' § 1501.9, ''Scoping,'' and § 1503.1, ''Inviting comments and requesting information and analyses.'' [72] Paragraph (e), which required agencies to use the NEPA process to identify and assess reasonable alternatives to proposed actions that will avoid or minimize adverse effects, is duplicative of language in § 1502.1, ''Purpose of environmental impact statement,'' and paragraph (c) of § 1505.2, ''Record of decision in cases requiring environmental impact statements.''

Paragraph (f) of 40 CFR 1500.2 required agencies to use all practicable means, consistent with the Act and other essential considerations of national policy, to restore and enhance the quality of the human environment and avoid or minimize any possible adverse effects of their actions upon the quality of the human environment. The rule specifically directs agencies to consider reasonable alternatives to avoid or minimize adverse environmental impacts in § 1502.1, ''Purpose of environmental impact statement.'' The final rule also provides direction to agencies about the relevant environmental information to be considered in the decision-making process, including potential adverse effects and alternatives, and expressly directs agencies to identify alternatives considered (§§ 1502.14 and 1502.16), and to state in their RODs whether they have adopted all practicable means to avoid or minimize environmental harm from the alternative selected (§ 1505.2).

3. NEPA Compliance (§ 1500.3)

CEQ proposed numerous changes and additions to § 1500.3, ''NEPA compliance,'' including the addition of paragraph headings to improve readability. In paragraph (a), ''Mandate,'' CEQ proposed to update the authorities under which it issues the regulations. CEQ adds these references, including to E.O. 13807, in the final rule. In the NPRM, CEQ proposed to add a sentence to this paragraph regarding agency NEPA procedures not imposing additional procedures or requirements beyond those set forth in the regulations. To address confusion expressed by some commenters, CEQ does not include this sentence in the final rule because it includes this requirement in § 1507.3, ''Agency NEPA procedures.''

CEQ proposed to add a new paragraph (b), ''Exhaustion,'' to summarize public comment requirements and an exhaustion requirement. Specifically, CEQ proposed in paragraph (b)(1) to require that, in a NOI to prepare an EIS, agencies request comments from interested parties on the potential effects of and potential alternatives to proposed actions, and also request that interested parties identify any relevant information, studies, or analyses of any kind concerning such effects. CEQ includes this provision in the final rule to ensure that agencies solicit and consider relevant information early in the development of an EIS.

In paragraph (b)(2) of § 1500.3, CEQ proposed to require that the EIS include a summary of all the comments received for consideration in developing the EIS. CEQ includes this provision in the final rule with some changes. For consistency with the language in § 1502.17, the final rule specifies that the draft and final EISs must include a summary of ''all alternatives, information, and analyses.'' Also, in response to comments requesting clarification on the meaning of ''public commenters,'' the final rule changes this phrase in paragraphs (b)(2) and (3) of § 1500.3 and in § 1502.17 to ''State, Tribal, and local governments and other public commenters'' for consistency with §§ 1501.9 and 1506.6 and to clarify that public commenters includes governments as well as other commenters such as organizations, associations, and individuals.

In paragraph (b)(3) of § 1500.3, CEQ proposed to require that public commenters timely submit comments on draft EISs and any information on environmental impacts or alternatives to a proposed action to ensure informed decision making by Federal agencies. CEQ further proposed to provide that comments not timely raised and information not provided shall be deemed unexhausted and forfeited. This reinforces the principle that parties may not raise claims based on issues they themselves did not raise during the public comment period. *See, e.g., Pub. Citizen,* 541 U.S. at 764–65 (finding claims forfeited because respondents had not raised particular objections to the EA in their comments); *Karst Envtl. Educ. & Prot., Inc.* v. *Fed. Highway Admin.,* 559 Fed. Appx. 421, 426–27

[72] Section 1506.6 includes detailed provisions directing agencies to facilitate public involvement, including by providing the public with notice regarding actions, holding or sponsoring public hearings, and providing notice of NEPA-related hearings, public meetings, and other opportunities for public involvement, and the availability of environmental documents. Section 1501.9 requires agencies to issue a public notice regarding proposed actions for which the agencies will be preparing an EIS and to include specific information for, and to solicit information from the public regarding such proposed actions. Section 1503 provides direction to agencies regarding inviting comments from the public and requesting information and analyses.

(6th Cir. 2014) (concluding that comments did not raise issue with ''sufficient clarity'' to alert the Federal Highway Administration to concerns); *Friends of the Norbeck* v. *U.S. Forest Serv.,* 661 F.3d 969, 974 (8th Cir. 2011) (concluding that comments were insufficient to give the Forest Service an opportunity to consider claim and that judicial review was therefore improper); *Exxon Mobil Corp.* v. *U.S. EPA,* 217 F.3d 1246, 1249 (9th Cir. 2000) (arguments not raised in comments are waived); *Ass'n of Mfrs.* v. *Dep't of the Interior,* 134 F.3d 1095, 1111 (D.C. Cir. 1998) (failure to raise argument in rulemaking constitutes failure to exhaust administrative remedies). Finally, CEQ proposed to require that the public raise any objections to the submitted alternatives, information, and analyses section within 30 days of the notice of availability of the final EIS.

The final rule includes paragraph (b)(3) with some modifications. The final rule requires State, Tribal, and local governments and other public commenters to submit comments within the comment periods provided under § 1503.1 and that comments be as specific as possible under § 1503.3. The rule specifies that comments or objections of any kind not submitted ''shall be forfeited as unexhausted'' to clarify any ambiguity about forfeiture and exhaustion. CEQ received comments opposing the proposal to require the public to raise objections to the submitted alternatives, information, and analyses section within 30 days of the notice of availability of the final EIS. The final rule does not include the proposed mandatory 30-day comment period. However, § 1506.11 retains from the 1978 regulations the 30-day waiting period prior to issuance of the ROD, subject to limited exceptions, and under § 1503.1(b), agencies may solicit comments on the final EIS if they so choose. Each commenter should put its own comments into the record as soon as practicable to ensure that the agency has adequate time to consider the commenter's input as part of the agency's decision-making process. Finally, to ensure commenters timely identify issues, CEQ expresses its intention that commenters rely on their own comments and not those submitted by other commenters in any subsequent litigation, except where otherwise provided by law.

CEQ also proposed in paragraph (b)(4) of § 1500.3 to require that the agency decision maker certify in the ROD that the agency has considered all of the alternatives, information, and analyses submitted by public commenters based on the summary in the EIS. CEQ includes this section in the final rule with some modifications. The final rule requires the decision maker, informed by the final EIS (including the public comments, summary thereof, and responses thereto) and other relevant material in the record, certify that she or he considered the alternatives, information, and analyses submitted by States, Tribes, and local governments and other public commenters. Relevant material includes both the draft and final EIS as well as any supporting materials incorporated by reference or appended to the document. The final rule does not specify the decision maker ''for the lead agency'' to account for multiple decision makers, consistent with the OFD policy.

CEQ proposed to add a new paragraph (c), ''Review of NEPA compliance,'' to § 1500.3 to reflect the development of case law since the promulgation of the CEQ regulations. Specifically, CEQ proposed to revise the sentence regarding timing of judicial review to strike references to the filing of an EIS or FONSI and replace them with the issuance of a signed ROD or the taking of another final agency action. CEQ includes this change in the final rule. Judicial review of NEPA compliance for agency actions can occur only under the APA, which requires finality. 5 U.S.C. 704. A private right of action to enforce NEPA, which is lacking, would be required to review non-final agency action. In addition, non-final agency action may not be fit for judicial review as a matter of prudential standing. *See Abbott Labs* v. *Gardner,* 387 U.S. 136, 148–49 (1967). Under the APA, judicial review does not occur until an agency has taken final agency action. *Bennett* v. *Spear,* 520 U.S. 154, 177–78 (1997) (''[T]he action must mark the 'consummation' of the agency's decision[-]making process—it must not be of a merely tentative or interlocutory nature. And second, the action must be one by which 'rights or obligations have been determined' or from which 'legal consequences will flow''' (citations omitted)). Because NEPA's procedural requirements apply to proposals for agency action, judicial review should not occur until the agency has completed its decision-making process, and there are ''direct and appreciable legal consequences.'' *Id.* at 178. Final agency action for judicial review purposes is not necessarily when the agency publishes the final EIS, issues a FONSI, or makes the determination to categorically exclude an action.

CEQ also proposed in paragraph (c) to clarify that any allegation of noncompliance be resolved as expeditiously as possible, and that agencies may structure their decision making to allow private parties to seek agency stays or provide for efficient mechanisms, such as imposition of bonds, for seeking, granting, and imposing conditions on stays. The final rule clarifies that it is CEQ's intention that any allegation of noncompliance be resolved as expeditiously as possible. The final rule also clarifies that agencies may structure their procedures consistent with their organic statutes, and as part of implementing the exhaustion provisions in paragraph (b) of § 1500.3, to include an appropriate bond or other security requirement to protect against harms associated with delays.

Consistent with their statutory authorities, agencies may impose, as appropriate, bond and security requirements or other conditions as part of their administrative processes, including administrative appeals, and a prerequisite to staying their decisions, as courts do under rule 18 of the Federal Rules of Appellate Procedure and other rules.[73] *See, e.g.,* Fed. R. App. P. 18(b); Fed. R. App. P. 8(a)(2)(E); Fed. R. Civ. P. 65(c); Fed. R. Civ. P. 62(b); Fed. R. Civ. P. 62(d). CEQ notes that there is no ''NEPA exception'' that exempts litigants bringing NEPA claims from otherwise applicable bond or security requirements or other appropriate conditions, and that some courts have imposed substantial bond requirements in NEPA cases. *See, e.g., Save Our Sonoran, Inc.* v. *Flowers,* 408 F.3d 1113, 1125–26 (9th Cir. 2005) (concluding that district court's imposition of a $50,000 bond was appropriate and supported by the record); *Stockslager* v. *Carroll Elec. Co-op Corp.,* 528 F.2d 949 (8th Cir. 1976) (concluding that district court's imposition of a $10,000 bond was appropriate).

CEQ proposed to add a new paragraph (d), ''Remedies,'' to § 1500.3. CEQ proposed to state explicitly that harm from the failure to comply with NEPA can be remedied by compliance with NEPA's procedural requirements, and that CEQ's regulations do not create a cause of action for violation of NEPA. The statute does not create any cause of action, and agencies may not create private rights of action by regulation; ''[l]ike substantive [F]ederal law itself, private rights of action to enforce [F]ederal law must be created by Congress.'' *Alexander* v. *Sandoval,* 532 U.S. 275, 286 (2001) (citing *Touche Ross*

[73] *See, e.g.,* 26 CFR 2.6 (Bureau of Indian Affairs' regulatory provision that allows a person that believes he or she may suffer a measurable and substantial financial loss as a result of the delay caused by an appeal to request that the official require the posting of a reasonable bond).

& Co. v. *Redington,* 442 U.S. 560, 578 (1979)). This is particularly relevant where, as here, the counterparty in any action to enforce NEPA would be a Federal officer or agency. *See San Carlos Apache Tribe* v. *United States,* 417 F.3d 1091, 1096–97 (9th Cir. 2005) (''[C]reating a direct private action against the federal government makes little sense in light of the administrative review scheme set out in the APA.'').

The CEQ regulations create no presumption that violation of NEPA is a basis for injunctive relief or for a finding of irreparable harm. As the Supreme Court has held, the irreparable harm requirement, as a prerequisite to the issuance of preliminary or permanent injunctive relief, is neither eliminated nor diminished in NEPA cases. A showing of a NEPA violation alone does not warrant injunctive relief and does not satisfy the irreparable harm requirement. *See Monsanto Co.* v. *Geertson Seed Farms,* 561 U.S. 139, 157 (2010) (''[T]he statements quoted [from prior Ninth Circuit cases] appear to presume that an injunction is the proper remedy for a NEPA violation except in unusual circumstances. No such thumb on the scales is warranted.''); *Winter,* 555 U.S. at 21–22, 31–33; *see also Amoco Prod. Co.* v. *Vill. of Gambell,* 480 U.S. 531, 544–45 (1987) (rejecting proposition that irreparable damage is presumed when an agency fails to evaluate thoroughly the environmental impact of a proposed action). Moreover, a showing of irreparable harm in a NEPA case does not entitle a litigant to an injunction or a stay. *See Winter,* 555 U.S. at 20 (''A plaintiff seeking a preliminary injunction must establish that he is likely to succeed on the merits, that he is likely to suffer irreparable harm in the absence of preliminary relief, that the balance of equities tips in his favor, *and* that an injunction is in the public interest.'') (emphasis added); *Geertson Seed Farms,* 561 U.S. at 157 (''The traditional four-factor test applies when a plaintiff seeks a permanent injunction to remedy a NEPA violation . . . . An injunction should issue only if the traditional four-factor test is satisfied.'').

Consistent with the Supreme Court's analysis in *Geertson Seed Farms,* agencies (as well as applicants) should give practical consideration to measures that might serve to anticipate, reduce, or eliminate possible adverse effects from a project. To the extent such measures are incorporated into an agency's ROD, they may provide grounds upon which a court, presented with an alleged violation of NEPA, might reasonably conclude that injunctive relief is not warranted because the measures prevent any irreparable harm from occurring. *See* § 1505.3. For example, regular inspections or requirements that applicants obtain third-party insurance, for example, might constitute such measures in certain circumstances. Inspections can reveal defects before they cause harm. Third-party insurers, because of their exposure to risk, have an economic incentive to conduct thorough inspections, facilitating discovery of defects. Such measures would be relevant to whether a valid claim of irreparable harm has been established.

CEQ also proposed to state that any actions to review, enjoin, vacate, stay, or alter an agency decision on the basis of an alleged NEPA violation be raised as soon as practicable to avoid or minimize any costs to agencies, applicants, or any affected third parties. As reflected in comments received in response to the ANPRM, delays have the potential to result in substantial costs. CEQ also proposed to replace the language providing that trivial violations should not give rise to an independent cause of action with language that states that minor, non-substantive errors that have no effect on agency decision making shall be considered harmless and shall not invalidate an agency action. Invalidating actions due to minor errors does not advance the goals of the statute and adds delays and costs. CEQ includes paragraph (d) in the final rule with a change to clarify that it is CEQ's intention that the regulations create no presumption that violation of NEPA is a basis for injunctive relief or for a finding of irreparable harm. As noted above, NEPA is a procedural statute and any harm is thus reparable by providing the necessary environmental documentation in accordance with the Act and these regulations. CEQ also adds ''vacate, or otherwise'' to the types of actions that may alter a decision to address situations where there may be a nationwide or other vacatur and ''after final agency action'' to clarify when the actions should be raised.

Finally, CEQ proposed to add a new paragraph (e), ''Severability,'' to § 1500.3 to address the possibility that this rule, or portions of this rule, may be challenged in litigation. CEQ finalizes this paragraph as proposed, correcting the cross reference. As stated in the NPRM, it is CEQ's intention that the individual sections of this rule be severable from each other, and that if a court stays or invalidates any sections or portions of the regulations, this will not affect the validity of the remainder of the sections, which will continue to be operative.

4. Reducing Paperwork and Delay (§§ 1500.4 and 1500.5)

In the NPRM, CEQ proposed to reorder the paragraphs in § 1500.4, ''Reducing paperwork,'' and § 1500.5, ''Reducing delay,'' for a more logical ordering, consistent with the three levels of NEPA review. CEQ also proposed edits to §§ 1500.4 and 1500.5 for consistency with proposed edits to the cross-referenced sections. CEQ makes these proposed changes in the final rule. Additionally, the final rule revises the language in paragraphs (a) and (b) of §§ 1500.4 and 1500.5 to make the references to CEs and FONSIs consistent with the language in §§ 1501.4(a) and 1501.6(a), respectively. CEQ also proposed conforming edits to § 1500.4(c) to broaden the paragraph to include EAs by changing ''environmental impact statements'' to ''environmental documents'' and changing ''setting'' to ''meeting'' since page limits would be required for both EAs and EISs. CEQ makes these changes in the final rule and corrects the cross-reference. CEQ revises paragraph (h) of § 1500.4 to add ''*e.g.*'' to the citations to clarify that these are just examples of the useful portions of EISs and to correct the cross-reference to background material from § 1502.16 to § 1502.1. CEQ revises the citations in paragraph (k) of § 1500.4 to make them sequential. Finally, CEQ revises paragraph (d) of § 1500.5 for clarity.

5. Agency Authority (§ 1500.6)

CEQ proposed to add a savings clause to § 1500.6, ''Agency authority,'' to clarify that the CEQ regulations do not limit an agency's other authorities or legal responsibilities. This clarification is consistent with section 104 of NEPA (42 U.S.C. 4334), section 2(g) of E.O. 11514, and the 1978 regulations, but acknowledges the possibility of different statutory authorities that may set forth different requirements, such as timeframes. In the final rule, CEQ makes the proposed changes and clarifies further that agencies interpret the provisions of the Act as a mandate to view the agency's policies and missions in the light of the Act's national environmental objectives, to the extent NEPA is consistent with the agency's existing authority. This is consistent with E.O. 11514, which provides that Federal agencies shall ''[i]n carrying out their responsibilities under the Act and this Order, comply with the [CEQ regulations] except where such compliance would be inconsistent with statutory requirements.'' E.O. 11514, as amended by E.O. 11991, sec. 2(g). CEQ also proposed to clarify that compliance

with NEPA means the Act ''as interpreted'' by the CEQ regulations. CEQ makes this change in the final rule in § 1500.6, as well as in §§ 1502.2(d) and 1502.9(b), to clarify that agencies should implement the statute through the framework established in these regulations. Finally, CEQ revises the sentence explaining the meaning of the phrase ''to the fullest extent possible'' in section 102, to replace ''unless existing law applicable to the agency's operations expressly prohibits or makes compliance impossible'' with ''consistent with § 1501.1.'' As discussed in section II.C.1, § 1501.1 sets forth threshold considerations for assessing whether NEPA applies or is otherwise fulfilled, including considerations related to other statutes with which agencies must comply.

C. Revisions to NEPA and Agency Planning (Part 1501)

CEQ proposed significant changes to modernize and clarify part 1501. CEQ proposed to replace the current 40 CFR 1501.1, ''Purpose,'' because it is unnecessary and duplicative, with a new section, ''NEPA threshold applicability analysis,'' to address threshold considerations of NEPA applicability. CEQ proposed to add additional sections to address the level of NEPA review and CEs. CEQ further proposed to consolidate and clarify provisions on EAs and FONSIs, and relocate to part 1501 from part 1502 the provisions on tiering and incorporation by reference. CEQ also proposed to set presumptive time limits for the completion of NEPA reviews, and clarify the roles of lead and cooperating agencies to further the OFD policy and encourage more efficient and timely NEPA reviews. CEQ makes many of these changes in the final rule with modifications as discussed further in this section.

1. NEPA Thresholds (§ 1501.1)

Since the enactment of NEPA, courts have examined the applicability of NEPA to proposed agency activities and decisions, based on a variety of considerations. Courts have found that NEPA is inapplicable when an agency's statutory obligations clearly or fundamentally conflict with NEPA compliance; when Congress has established requirements under another statute that displace NEPA compliance in some fashion; when an agency is carrying out a non-discretionary duty or obligation (in whole or in part); or when environmental review and public participation procedures under another statute satisfy the requirements (*i.e.,* are functionally equivalent) of NEPA.

CEQ proposed a new § 1501.1 to provide a series of considerations to assist agencies in a threshold analysis for determining whether NEPA applies to a proposed activity or whether NEPA is satisfied through another mechanism. CEQ proposed to title this section ''NEPA threshold applicability analysis'' in the NPRM. CEQ includes this provision in the final rule at § 1501.1, ''NEPA thresholds.'' This section recognizes that the application of NEPA by Congress and the courts has evolved over the last four decades in light of numerous other statutory requirements implemented by Federal agencies. CEQ reorders these considerations in the final rule and adds a new consideration to paragraph (a)(1)—whether another statute expressly exempts a proposed activity or decision from NEPA. *See, e.g.,* 15 U.S.C. 793(c)(1) (exempting Environmental Protection Agency (EPA) actions under the Clean Air Act); 33 U.S.C. 1371(c)(1) (exempting certain EPA actions under the Clean Water Act); 42 U.S.C. 5159 (exempting certain actions taken or assistance provided within a Presidentially declared emergency or disaster area); and 16 U.S.C. 3636(a) (exempting regulation of Pacific salmon fishing).

The second consideration in paragraph (a)(2) is whether compliance with NEPA would clearly and fundamentally conflict with the requirements of another statute. *See, e.g., Flint Ridge Dev. Co.* v. *Scenic Rivers Ass'n,* 426 U.S. 776, 791 (1976) (concluding that the Secretary of Housing and Urban Development could not comply with NEPA's EIS requirement because it conflicted with requirements of the Interstate Land Sales Full Disclosure Act). The third consideration in paragraph (a)(3) is whether compliance with NEPA would be inconsistent with congressional intent expressed in another statute. *See, e.g., Douglas County* v. *Babbitt,* 48 F.3d 1495, 1503 (9th Cir. 1995) (holding that NEPA was displaced by the Endangered Species Act's procedural requirements for designating critical habitat); and *Merrell* v. *Thomas,* 807 F.2d 776, 778–80 (9th Cir. 1986) (holding that NEPA did not apply to the EPA's registration of pesticides under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)).

The fourth and fifth considerations in paragraphs (a)(4) and (5) are whether the proposed activity or decision meets the definition of a major Federal action generally and whether the proposed activity or decision does not meet the definition because it is non-discretionary such that the agency lacks authority to consider environmental effects as part of its decision-making process. *See, e.g., Pub. Citizen,* 541 U.S. at 768–70 (concluding that, because the Federal Motor Carrier Safety Administration lacked discretion to prevent the entry of Mexican trucks into the United States, the agency did not need to consider under NEPA the environmental effects of Mexican trucks' cross-border operations that the President authorized); *Nat'l Wildlife Fed'n* v. *Sec'y of the U.S. Dep't. of Transp.,* 2020 U.S. App. LEXIS 17723, at *15–18 (6th Cir. June 5, 2010) (applying *Public Citizen* and finding NEPA not applicable as EPA lacked discretion to reject Clean Water Act oil spill response plans that satisfied enumerated criteria); *Citizens Against Rails-To-Trails* v. *Surface Transp. Bd.,* 267 F.3d 1144, 1152–54 (D.C. Cir. 2001) (concluding that because the Surface Transportation Board lacked significant discretion regarding issuance of a certificate of interim trail use under the National Trails System Act, NEPA was not applicable); *South Dakota* v. *Andrus,* 614 F.2d 1190, 1193–95 (8th Cir. 1980) (concluding that the granting of a mineral patent for a mining claim was a non-discretionary, ministerial act and non-discretionary acts should be exempt from NEPA). Consistent with *Public Citizen,* 541 U.S. at 768–70, NEPA applies to the portion of an agency decision that is discretionary. In *Public Citizen,* the Supreme Court considered whether the Federal Motor Carrier Safety Administration was required to consider the effects of a non-discretionary action in its NEPA document and concluded that it was not required to do so because it had no authority to prevent the cross-border entry of Mexican motor carriers, which was the result of presidential action. *Id.*

Finally, the sixth consideration in paragraph (a)(6) is whether the proposed action is an action for which another statute's requirements serve the function of agency compliance with NEPA. *See, e.g., Envtl. Def. Fund, Inc.* v. *U.S. EPA,* 489 F.2d 1247, 1256–57 (D.C. Cir. 1973) (concluding that the substantive and procedural standards of FIFRA were functionally equivalent to NEPA and therefore formal compliance was not necessary); *W. Neb. Res. Council* v. *U.S. EPA,* 943 F.2d 867, 871–72 (8th Cir. 1991) (finding that the procedures of the Safe Drinking Water Act were functionally equivalent to those required by NEPA); *Cellular Phone Taskforce* v. *Fed. Commc'ns Comm'n,* 205 F.3d 82, 94–95 (2d Cir. 2000) (concluding that the procedures followed by the Federal Communications Commission were

functionally compliant with EA and FONSI requirements under NEPA). Paragraph (b) of § 1501.1 clarifies that agencies can make this determination in their agency NEPA procedures in accordance with § 1507.3(d) or on a case-by-case basis. The final rule adds a new paragraph (b)(1) to state that agencies may request assistance from CEQ in making a case-by-case determination under this section, and a new paragraph (b)(2) to require agencies to consult with other Federal agencies for their concurrence when making a determination where more than one Federal agency administers the statute (*e.g.,* the Endangered Species Act (ESA)). Agencies may document these consultations, as appropriate. Agencies will only apply the thresholds in this section after consideration on a case-by-case basis, or after agencies have determined whether and how to incorporate them into their own agency NEPA procedures.

Some agencies already include information related to the applicability of NEPA to their actions in their agency NEPA procedures. For example, EPA's NEPA procedures include an applicability provision that explains which EPA actions NEPA does not apply to, including actions under the Clean Air Act and certain actions under the Clean Water Act. *See* 40 CFR 6.101. The final rule codifies the agency practice of including this information in agency NEPA procedures but also provides agencies' flexibility to make case-by-case determinations as needed.

2. Apply NEPA Early in the Process (§ 1501.2)

CEQ proposed to amend § 1501.2, ''Apply NEPA early in the process,'' designating the introductory paragraph as paragraph (a) and changing ''shall'' to ''should'' and ''possible'' to ''reasonable.'' CEQ makes these changes in the final rule. Agencies need the discretion to structure the timing of their NEPA processes to align with their decision-making processes, consistent with their statutory authorities. Agencies also need flexibility to determine the appropriate time to start the NEPA process, based on the context of the particular proposed action and governed by the rule of reason, so that the NEPA analysis meaningfully informs the agency's decision. The appropriate time to begin the NEPA process is dependent on when the agency has sufficient information, and on how it can most effectively integrate the NEPA review into the agency's decision-making process. Further, some courts have viewed this provision as a legally enforceable standard, rather than an opportunity for agencies to integrate NEPA into their decision-making programs and processes. *See, e.g., N.M. ex rel. Richardson* v. *Bureau of Land Mgmt.,* 565 F.3d 683 (10th Cir. 2009); *Metcalf* v. *Daley,* 214 F.3d 1135 (9th Cir. 2000). As discussed above, only final agency action is subject to judicial review under the APA. CEQ's view is that agencies should have discretion with respect to timing, consistent with the regulatory provisions in §§ 1501.11 and 1502.4 for deferring NEPA analysis to appropriate points in the decision-making process. As noted in the NPRM, this change is consistent with CEQ guidance that agencies should ''concentrate on relevant environmental analysis'' in their EISs rather than ''produc[ing] an encyclopedia of all applicable information.'' Timely Environmental Reviews Guidance, *supra* note 29; *see also* §§ 1500.4(b), 1502.2(a). Therefore, CEQ makes these changes to clarify that agencies have discretion to structure their NEPA processes in accordance with the rule of reason. CEQ also proposed to change ''possible'' to ''reasonable'' in paragraph (b)(4)(iii) and ''shall'' to ''should'' in the introductory paragraph of § 1502.5 for consistency with the changes to § 1501.2. CEQ makes these changes in the final rule.

CEQ also proposed to change ''planning and decisions reflect environmental values'' to ''agencies consider environmental impacts in their planning and decisions'' in paragraph (a). CEQ makes this change in the final rule because ''consider environmental impacts'' provides more explicit direction to agencies and is more consistent with the Act and the CEQ regulations.

CEQ proposed to redesignate the remaining paragraphs in § 1501.2 to list out other general requirements for agencies. In paragraph (b)(1), the final rule removes the direct quote of NEPA consistent with the **Federal Register's** requirements for the Code of Federal Regualtions. In paragraph (b)(2), CEQ proposed to clarify that agencies should consider economic and technical analyses along with environmental effects. This change is consistent with section 102(2)(B) of NEPA, which directs agencies, in consultation with CEQ, to identify and develop methods and procedures to ensure environmental amenities and values are considered along with economic and technical considerations in decision making. CEQ makes this change in the final rule and revises the second sentence in this paragraph to qualify that agencies must review and publish environmental documents and appropriate analyses at the same time as other planning documents ''whenever practicable.'' CEQ recognizes that it is not always practicable to publish such documents at the same time because it can delay publication of one or the other. Finally, CEQ proposed to amend paragraph (b)(4)(ii) to change ''agencies'' to ''governments'' consistent with and in support of government-to-government consultation pursuant to E.O. 13175 [74] and E.O. 13132, ''Federalism.'' [75] CEQ makes these changes in the final rule.

3. Determine the Appropriate Level of NEPA Review (§ 1501.3)

As discussed in the NPRM, NEPA requires a ''detailed statement'' for ''major Federal actions significantly affecting the quality of the human environment.'' 42 U.S.C. 4332(2)(C). To determine whether an action requires such a detailed statement, the 1978 regulations provided three levels of review for Federal agencies to assess proposals for agency action. Specifically, the CEQ regulations allow agencies to review expeditiously those actions that normally do not have significant effects by using CEs or, for actions that are not likely to have significant effects, by preparing EAs. By using CEs and EAs whenever appropriate, agencies then can focus their limited resources on those actions that are likely to have significant effects and require the ''detailed statement,'' or EIS, required by NEPA.

While the 1978 CEQ regulations provided for these three levels of NEPA review, they do not clearly set out the decisional framework by which agencies should assess their proposed actions and select the appropriate level of review. To provide this direction and clarity, the NPRM proposed to add a new section at § 1501.3, ''Determine the appropriate level of NEPA review.'' The proposal described the three levels of NEPA review and the basis upon which an agency makes a determination regarding the appropriate level of review for a proposed action. CEQ includes the proposal in the final rule at paragraph (a) of § 1501.3.

CEQ proposed to address the consideration of significance in paragraph (b) since it is central to determining the appropriate level of review. CEQ proposed to move the language from 40 CFR 1508.27, ''Significantly,'' since it did not contain a definition, but rather set forth factors for considering whether an effect is significant, to paragraph (b). CEQ also proposed to eliminate most of the

[74] *Supra* note 69.

[75] 64 FR 43255 (Aug. 10, 1999).

factors in favor of a simpler, more flexible approach for agencies to assess significance. Specifically, CEQ proposed to change ''context'' to ''potentially affected environment'' and ''intensity'' to ''degree'' to provide greater clarity as to what agencies should consider in assessing potential significant effects. The phrase ''potentially affected environment'' relates more closely to physical, ecological, and socio-economic aspects than ''context.'' The final rule reorganizes several factors formerly categorized under ''intensity'' to clarify further this distinction. The final rule uses the term ''degree'' because some effects may not necessarily be of an intense or severe nature, but nonetheless should be considered when determining significance. While 40 CFR 1508.27 used several different words to explain what was meant by ''intensity,'' it also used ''degree'' numerous times. Therefore, the consistent use of ''degree'' throughout is clearer. In the final rule, CEQ includes these proposed changes in paragraph (b) with some additional revisions in response to comments. CEQ clarifies in paragraph (b)(1) that agencies ''should'' (rather than ''may'') consider the affected area specific to the proposed action, consistent with the construction of paragraph (b)(2), and the affected area's resources. The final rule includes one example, listed species and designated critical habitat under the Endangered Species Act, but this could include any type of resource such as historic, cultural, or park lands. The final rule also modifies the example of significance varying with the setting, because there was some misunderstanding of the proposed change from ''world'' to ''Nation.'' This sentence merely serves as an example. Consistent with the NPRM, paragraph (b)(2) addresses considerations of the degree of effects. CEQ moves short- and long-term effects from ''affected environment'' in (b)(1) to ''degree'' in paragraph (b)(2)(i). CEQ proposed to exclude consideration of controversy (40 CFR 1508.27(b)(4)) because the extent to which effects may be controversial is subjective and is not dispositive of effects' significance. Further, courts have interpreted controversy to mean scientific controversy, which the final rule addresses within the definition of effects, as the strength of the science informs whether an effect is reasonably foreseeable. The controversial nature of a project is not relevant to assessing its significance.

Additionally, CEQ proposed to remove the reference in 40 CFR 1508.27(b)(7) to ''[s]ignificance cannot be avoided by terming an action temporary or by breaking it down into small component parts'' because this is addressed in the criteria for scope in §§ 1501.9(e) and 1502.4(a), which would provide that agencies evaluate in a single EIS proposals or parts of proposals that are related closely enough to be, in effect, a single course of action. Commenters noted that §§ 1501.9 and 1502.4 are applicable only to EISs. Therefore, in the final rule CEQ includes a sentence in paragraph (b) stating that agencies should consider connected actions when determining the significance of the effects of the proposed action.

4. Categorical Exclusions (§ 1501.4)

Under the 1978 regulations, agencies could categorically exclude actions from detailed review where the agency has found in its agency NEPA procedures that the action normally would not have significant effects. Over the past 4 decades, Federal agencies have developed more than 2,000 CEs.[76] CEQ estimates that each year, Federal agencies apply CEs to approximately 100,000 Federal agency actions that typically require little or no documentation.[77] While CEs are the most commonly used level of NEPA review, CEQ has addressed CE development and implementation in only one comprehensive guidance document, *see* CE Guidance, *supra* note 29, and the 1978 regulations did not address CEs in detail.

In response to the ANPRM, many commenters requested that CEQ update the NEPA regulations to provide more detailed direction on the application of CEs. To provide greater clarity, CEQ proposed to add a new section on CEs in proposed § 1501.4, ''Categorical exclusions,'' to address in more detail the process by which an agency considers whether a proposed action is categorically excluded under NEPA.

Proposed paragraph (a) stated that agencies identify CEs in their NEPA procedures. CEQ adds this paragraph to the final rule, reiterating the requirement in § 1507.3(e)(2)(ii) that agencies establish CEs in their agency NEPA procedures. The NPRM proposed in paragraph (b) to set forth the requirement to consider extraordinary circumstances once an agency determines that a CE covers a proposed action, consistent with the current requirement in 40 CFR 1508.4. CEQ includes this provision in the final rule, changing the language from passive to active voice. CEQ proposed in paragraph (b)(1) to provide that, when extraordinary circumstances are present, agencies may consider whether mitigating circumstances, such as the design of the proposed action to avoid effects that create extraordinary circumstances, are sufficient to allow the proposed action to be categorically excluded. CEQ includes this paragraph in the final rule, but revises it to address confusion over whether CEQ is creating a ''mitigated CE.'' In the final rule, paragraph (b)(1) provides that an agency can categorically exclude a proposed action when an environmental resource or condition identified as a potential extraordinary circumstance is present if the agency determines that there are ''circumstances that lessen the impacts'' or other conditions sufficient to avoid significant effects. This paragraph clarifies that agencies' extraordinary circumstances criteria are not intended to necessarily preclude the application of a CE merely because a listed factor may be present or implicated. Courts have rejected a ''mere presence'' test for CEs. *Sierra Club* v. *U.S. Forest Serv.,* 828 F.3d 402 (6th Cir. 2016); *Sierra Club* v. *Bosworth,* 510 F.3d 1016 (9th Cir. 2007); *Utah Envtl. Cong.* v. *Bosworth,* 443 F.3d 732 (10th Cir. 2006); *Sw. Ctr. for Biological Diversity* v. *U.S. Forest Serv.,* 100 F.3d 1443, 1450 (9th Cir. 1996); *cf. Rhodes* v. *Johnson,* 153 F.3d 785 (7th Cir. 1998). Instead, the agency may consider in light of the extraordinary circumstances criteria, whether the proposed action would take place in such a way that it would not have significant effects, or whether the agency could modify the proposed action to avoid the extraordinary circumstances so that the action remains eligible for categorical exclusion. While this reflects current practice for some agencies,[78] this revision would assist agencies as they consider whether to categorically exclude an action that would otherwise be considered in an EA and FONSI.

Finally, CEQ proposed paragraph (b)(2) to address agencies' obligation to prepare an EA or EIS, as appropriate, if the agency cannot categorically exclude

[76] *See* Council on Environmental Quality, List of Federal Agency Categorical Exclusions (June 18, 2020), *https://ceq.doe.gov/nepa-practice/categorical-exclusions.html.*

[77] *See, e.g.,* Council on Environmental Quality, The Eleventh and Final Report on the National Environmental Policy Act Status and Progress for American Recovery and Reinvestment Act of 2009 Activities and Projects (Nov. 2, 2011), *https://ceq.doe.gov/docs/ceq-reports/nov2011/CEQ_ARRA_NEPA_Report_Nov_2011.pdf.*

[78] *See, e.g.,* Forest Service categorical exclusions, 36 CFR 220.6(b)(2); surface transportation categorical exclusions, 23 CFR 771.116–771.118.

a proposed action. CEQ includes this provision in the final rule revising the language to active voice and making it consistent with the format of paragraph (b).

CEQ invited comment on the proposed revisions and asked whether it should address any other aspects of CEs in its regulations. CEQ also invited comment on whether it should establish government-wide CEs in its regulations to address routine administrative activities, for example, internal orders or directives regarding agency operations, procurement of office supplies and travel, and rulemakings to establish administrative processes such as those established under the Freedom of Information Act or Privacy Act. After considering the comments, as discussed in the Final Rule Response to Comments, CEQ is not including any additional provisions on CEs in the final rule.

5. Environmental Assessments (§ 1501.5)

Under the 1978 regulations, when an agency has not categorically excluded a proposed action, the agency can prepare an EA to document its effects analysis. If the analysis in the EA demonstrates that the action's effects would not be significant, the agency documents its reasoning in a FONSI, which completes the NEPA process; otherwise, the agency uses the EA to help prepare an EIS. CEQ estimates that Federal agencies prepare over 10,000 EAs each year.[79]

CEQ proposed to consolidate the requirements for EAs that are scattered throughout the 1978 regulations into a new § 1501.5, ''Environmental assessments.'' CEQ proposed to revise paragraph (a) to state when agencies are required to prepare EAs. CEQ proposed minor clarifying edits to paragraph (b), which states that agencies may prepare an EA to assist in agency planning and decision making. The NPRM proposed to move the operative language regarding the requirements for an EA from the definition of EA in 40 CFR 1508.9 to paragraph (c). CEQ makes these proposed changes in the final rule.

Under the final rule, the format for an EA is flexible and responsive to agency decision-making needs and the circumstances of the particular proposal for agency action. Requirements for documenting the proposed action and alternatives in an EA continue to be more limited than EIS requirements. An agency must briefly describe the need for the proposed action by describing the existing conditions, projected future conditions, and statutory obligations and authorities that may relate to the proposed agency action with cross-references to supporting documents. The final rule continues to require agencies to describe briefly the proposed action and any alternatives it is considering that would meet the need of the proposed agency action. For actions to protect or restore the environment, without unresolved conflicts concerning alternative uses of available resources, CEQ expects agencies to examine a narrower range of alternatives to the proposed action. When the action may have significant impacts, the agency should consider reasonable alternatives that would avoid those impacts or otherwise mitigate those impacts to less than significant levels.

An agency does not need to include a detailed discussion of each alternative in an EA, nor does it need to include any detailed discussion of alternatives that it eliminated from study. While agencies have discretion to include more information in their EAs than is required to determine whether to prepare an EIS or a FONSI, they should carefully consider their reasons and have a clear rationale for doing so. Agencies should focus on analyzing material effects and alternatives, rather than marginal details that may unnecessarily delay the environmental review process.

Under the final rule, an agency must describe the environmental impacts of its proposed action and alternatives, providing enough information to support a decision to prepare either a FONSI or an EIS. The EA should focus on whether the proposed action (including mitigation) would ''significantly'' affect the quality of the human environment and tailor the length of the discussion to the relevant effects. The agency may contrast the impacts of the proposed action and alternatives with the current and expected future conditions of the affected environment in the absence of the action, which constitutes consideration of a no-action alternative.

Under the final rule, agencies should continue to list persons, relevant agencies, and applicants involved in preparing the EA to document agency compliance with the requirement to involve the public in preparing EAs to the extent practicable, consistent with paragraph (e). This may include incorporation by reference of records related to compliance with other environmental laws such as the National Historic Preservation Act, Clean Water Act, Endangered Species Act, or Clean Air Act.

CEQ adds a new paragraph (d) to the final rule to move the language from 40 CFR 1502.5(b) regarding when to begin preparing an EA that is required for an application to the agency.[80] Agencies may specify in their NEPA procedures when an application is complete such that it can commence the NEPA process. While the NPRM did not propose this change, the move is consistent with CEQ's proposal to consolidate EA requirements in § 1501.5.

The final rule continues to provide that agencies may prepare EAs by and with other agencies, applicants, and the public. Modern information technology can help facilitate this collaborative EA preparation, allowing the agency to make a coordinated but independent evaluation of the environmental issues and assume responsibility for the scope and content of the EA. CEQ proposed to move the public involvement requirements for EAs from the current 40 CFR 1501.4(b) to § 1501.5 and change ''environmental'' to ''relevant'' agencies to include all agencies that may contribute information that is relevant to the development of an EA. CEQ makes these changes in paragraph (e) in the final rule. CEQ also adds to and reorders the list to ''the public, State, Tribal, and local governments, relevant agencies, and any applicants,'' to address some confusion by public commenters that interpreted relevant to modify the public and applicants. In addition, this revision acknowledges that there will not be an applicant in all instances. Consistent with the 1978 regulations, the final rule does not specifically require publication of a draft EA for public review and comment, but continues to require agencies to reasonably involve the public prior to completion of the EA, so that they may provide meaningful input on those subject areas that the agency must consider in preparing the EA. Depending on the circumstances, the agency could provide adequate information through public meetings or by a detailed scoping notice, for example. There is no single correct approach for public involvement. Rather, agencies should consider the circumstances and have discretion to conduct public involvement tailored to the interested public, to available means of communications to reach the interested and affected parties, and to

[79] *See, e.g.,* Council on Environmental Quality, Fourth Report on Cooperating Agencies in Implementing the Procedural Requirements of the National Environmental Policy Act, Attachment A (Oct. 4, 2016), *https://ceq.doe.gov/docs/ceq-reports/Attachment-A-Fourth-Cooperating-Agency-Report_Oct2016.pdf.*

[80] CEQ also retains the statement in § 1502.5(b), as proposed, with respect to EISs.

the particular circumstances of each proposed action.

The NPRM proposed to establish a presumptive 75-page limit for EAs, but allow a senior agency official to approve a longer length and establish a new page limit in writing. CEQ adds this new requirement at paragraph (f) in the final rule. As noted in the NPRM, while Question 36a of the Forty Questions, *supra* note 2, stated that EAs should be approximately 10 to 15 pages, in practice, such assessments are often longer to address compliance with other applicable laws, and to document the effects of mitigation to support a FONSI. To achieve the presumptive 75-page limit, agencies should write all NEPA environmental documents in plain language, follow a clear format, and emphasize important impact analyses and relevant information necessary for those analyses, rather than providing extensive background material. An EA should have clear and concise conclusions and may incorporate by reference data, survey results, inventories, and other information that support these conclusions, so long as this information is reasonably available to the public.

The presumptive EA page limit promotes more readable documents and provides agencies flexibility to prepare longer documents, where necessary, to support the agency's analysis. This presumptive page limit is consistent with CEQ's guidance on EAs, which advises agencies to avoid preparing lengthy EAs except in unusual cases where a proposal is so complex that a concise document cannot meet the goals of an EA and where it is extremely difficult to determine whether the proposal could cause significant effects. Page limits will encourage agencies to identify the relevant issues, focus on significant environmental impacts, and prepare concise readable documents that will inform decision makers as well as the public. Voluminous, unfocused environmental documents do not advance the goals of informed decision making or protection of the environment.

CEQ proposed to add a new paragraph (f) to § 1501.5 to clarify that agencies also may apply, as appropriate, certain provisions in part 1502 regarding incomplete or unavailable information, methodology and scientific accuracy, and environmental review and consultation requirements to EAs. CEQ includes this new paragraph at § 1501.5(g) in the final rule.

In addition to the new § 1501.5, CEQ incorporates reference to EAs in other sections of the regulations to codify existing agency practice where it would make the NEPA process more efficient and effective. As discussed in section II.C.9, CEQ makes a presumptive time limit applicable to EAs in § 1501.10. Further, for some agencies, it is a common practice to have lead and cooperating agencies coordinate in the preparation of EAs where more than one agency may have an action on a proposal; therefore, CEQ adds EAs to §§ 1501.7 and 1501.8, as discussed in section II.C.7. Finally, as discussed in section II.C.10, CEQ proposed to add EAs to § 1501.11, ''Tiering,'' to codify current agency practice of using EAs where the effects of a proposed agency action are not likely to be significant. These include program decisions that may facilitate later site-specific EISs as well as the typical use of EAs as a second-tier document tiered from an EIS. CEQ makes these changes in the final rule.

6. Findings of No Significant Impact (§ 1501.6)

When an agency determines in its EA that an EIS is not required, it typically prepares a FONSI. The FONSI reflects that the agency has engaged in the necessary review of environmental impacts under NEPA. The FONSI shows that the agency examined the relevant data and explained the agency findings by providing a rational connection between the facts presented in the EA and the conclusions drawn in the finding. Any finding should clearly identify the facts found and the conclusions drawn by the agency based on those facts.

In response to the ANPRM, CEQ received comments requesting that CEQ update its regulations to consolidate provisions and provide more detailed requirements for FONSIs. CEQ proposed to consolidate the operative language of 40 CFR 1508.13, ''Finding of no significant impact'' with 40 CFR 1501.4, ''Whether to prepare an environmental impact statement,'' in the proposed § 1501.6, ''Findings of no significant impact.'' CEQ proposed to strike paragraph (a) as the requirements in that paragraph are addressed in § 1507.3(d)(2) (§ 1507.3(e)(2) in the final rule). As noted in section II.C.5, CEQ proposed to move 40 CFR 1501.4(b) to § 1501.5, ''Environmental assessments.'' Similarly, CEQ proposed to strike 40 CFR 1501.4(d), because § 1501.9, ''Scoping,'' addresses this requirement. CEQ makes these changes in the final rule.

CEQ proposed to make 40 CFR 1501.4(e) the new § 1501.6(a), and revise the language to clarify that an agency must prepare a FONSI when it determines that a proposed action will not have significant effects based on the analysis in the EA, consistent with the definition of FONSI. The proposed rule had erroneously included the standard for preparing an EA—''is not likely to have significant effects.'' CEQ proposed to clarify in paragraph (a)(2) that the circumstances listed in paragraphs (a)(2)(i) and (ii) are the situations where the agency must make a FONSI available for public review. CEQ makes these changes in the final rule.

CEQ proposed to move the operative requirement that a FONSI include the EA or a summary from the definition of FONSI in 40 CFR 1508.13 to a new paragraph (b). CEQ also proposed to change the requirement that the FONSI include a summary of the EA to ''incorporate it by reference.'' Consistent with § 1501.12, in order to incorporate the EA by reference, the agency would need to briefly summarize it. Making this change ensures that the EA is available to the public. CEQ makes these changes in the final rule.

Finally, CEQ proposed a new paragraph (c) to address mitigation, which CEQ includes in the final rule. The first sentence addresses mitigation generally in a FONSI, requiring agencies to state the authority for any mitigation adopted and any applicable monitoring or enforcement provisions. This sentence applies to all FONSIs. CEQ omits the ''means of'' mitigation from the final rule because it is unnecessary and many commenters misunderstood its meaning or found it confusing. The second sentence codifies the practice of mitigated FONSIs, consistent with CEQ's Mitigation Guidance.[81] This provision requires the agency to identify the enforceable mitigation requirements and commitments, which are those mitigation requirements and commitments needed to reduce the effects below the level of significance.[82] When preparing an EA, many agencies develop, consider, and commit to mitigation measures to avoid, minimize, rectify, reduce, or compensate for potentially significant adverse environmental impacts that would otherwise require preparation of an EIS. An agency can commit to mitigation

[81] The Mitigation Guidance, *supra* note 29, amended and supplemented the Forty Questions, *supra* note 2, specifically withdrawing Question 39 insofar as it suggests that mitigation measures developed during scoping or in an EA ''[do] not obviate the need for an EIS.''

[82] As discussed in sections I.B.1 and II.B, NEPA is a procedural statute and does not require adoption of a mitigation plan. However, agencies may consider mitigation measures that would avoid, minimize, rectify, reduce, or compensate for potentially significant adverse environmental impacts and may require mitigation pursuant to substantive statutes.

measures for a mitigated FONSI when it can ensure that the mitigation will be performed, when the agency expects that resources will be available, and when the agency has sufficient legal authorities to ensure implementation of the proposed mitigation measures. CEQ does not intend this codification of CEQ guidance to create a different standard for analysis of mitigation for a ''mitigated FONSI,'' but to provide clarity regarding the use of FONSIs.

7. Lead and Cooperating Agencies (§§ 1501.7 and 1501.8)

The 1978 CEQ regulations created the roles of lead agency and cooperating agencies for NEPA reviews, which are critical for actions, such as non-Federal projects, requiring the approval or authorization of multiple agencies. Agencies need to coordinate and synchronize their NEPA processes to ensure an efficient environmental review that does not cause delays. In recent years, Congress and several administrations have worked to establish a more synchronized procedure for multi-agency NEPA reviews and related authorizations, including through the development of expedited procedures such as the section 139 process and FAST–41. In response to the ANPRM, CEQ received comments requesting that CEQ update its regulations to clarify the roles of lead and cooperating agencies.

CEQ proposed a number of modifications to § 1501.7, ''Lead agencies,'' and § 1501.8, ''Cooperating agencies,'' (40 CFR 1501.5 and 1501.6, respectively, in the 1978 regulations) to improve interagency coordination, make development of NEPA documents more efficient, and facilitate implementation of the OFD policy. As stated in the NPRM, CEQ intends these modifications to improve the efficiency and outcomes of the NEPA process—including cost reduction, improved relationships, and better outcomes that avoid litigation—by promoting environmental collaboration.[83] These modifications are consistent with Questions 14a and 14c of the Forty Questions, *supra* note 2. CEQ proposed to apply §§ 1501.7 and 1501.8 to EAs as well as EISs consistent with agency practice. CEQ makes these changes in the final rule, but clarifies that the provisions apply to ''complex'' EAs and not routine EAs where involving multiple agencies could slow down an already efficient and effective process.[84]

CEQ proposed to clarify in § 1501.7(d) that requests for lead agency designations should be sent in writing to the senior agency officials of the potential lead agencies. CEQ makes this change in the final rule. CEQ did not propose any changes to paragraphs (e) and (f) of § 1501.7, but makes clarifying edits by reorganizing phrases and changing the language to active voice in the final rule.

Consistent with the OFD policy to ensure coordinated and timely reviews, CEQ proposed to add a new paragraph (g) to § 1501.7 to require that Federal agencies evaluate proposals involving multiple Federal agencies in a single EIS and issue a joint ROD [85] or single EA and joint FONSI when practicable. CEQ adds this paragraph to the final rule with edits to the EA sentence to make the language consistent with the EIS sentence.

CEQ proposed to move language from the cooperating agency provision, 40 CFR 1501.6(a), that addresses the lead agency's responsibilities with respect to cooperating agencies to proposed paragraph (h) in § 1501.7 so that all of the lead agency's responsibilities are in a single section. CEQ also proposed to clarify in paragraph (h)(4) that the lead agency is responsible for determining the purpose and need, and alternatives in consultation with any cooperating agencies.[86] CEQ makes this move and addition in the final rule. In response to comments, the final rule eliminates the phrase ''consistent with its responsibility as lead agency'' in paragraph (h)(2) because it is non-specific and could cause agencies to reject germane and informative scientific research.

CEQ proposed new paragraphs (i) and (j) in § 1501.7, and (b)(6) and (7) in § 1501.8, to require development of and adherence to a schedule for the environmental review of and any authorizations required for a proposed action, and resolution of disputes and other issues that may cause delays in the schedule. CEQ includes these provisions in the final rule with minor edits for clarity. These provisions are consistent with current practices at agencies that have adopted elevation procedures pursuant to various statutes and directives, including 23 U.S.C. 139, FAST–41, and E.O. 13807. In response to comments, CEQ includes a new paragraph (b)(8) in § 1501.8 requiring cooperating agencies to jointly issue environmental documents with the lead agency, to the maximum extent practicable. This addition is consistent with the goal of interagency cooperation and efficiency.

CEQ proposed to move the operative language that State, Tribal, and local agencies may serve as cooperating agencies from the definition of cooperating agency (40 CFR 1508.5) to paragraph (a) of § 1501.8. Upon the request of the lead agency, non-Federal agencies should participate in the environmental review process to ensure early collaboration on proposed actions where such entities have jurisdiction by law or special expertise. CEQ also proposed in paragraph (a) to codify current practice to allow a Federal agency to appeal to CEQ a lead agency's denial of a request to serve as cooperating agency. Resolving disputes among agencies early in the process furthers the OFD policy and the goal of more efficient and timely NEPA reviews. CEQ makes these changes in the final rule with minor edits for clarity. Finally, CEQ proposed clarifications and grammatical edits throughout § 1501.8. CEQ makes these changes in the final rule.

8. Scoping (§ 1501.9)

In response to the ANPRM, CEQ received comments requesting that CEQ update its regulations related to scoping,

[83] *See, e.g.,* Federal Forum on Environmental Collaboration and Conflict Resolution, Environmental Collaboration and Conflict Resolution (ECCR): Enhancing Agency Efficiency and Making Government Accountable to the People (May 2, 2018), *https://ceq.doe.gov/docs/nepa-practice/ECCR_Benefits_Recommendations_Report_%205-02-018.pdf.*

[84] This is consistent with CEQ's reports on cooperating agencies, which have shown that use of cooperating agencies for EAs has remained low. Council on Environmental Quality, Attachment A, The Fourth Report on Cooperating Agencies in Implementing the Procedural Requirements of the National Environmental Policy Act (NEPA) 1 (Oct. 2016), *https://ceq.doe.gov/docs/ceq-reports/Attachment-A-Fourth-Cooperating-Agency-Report_Oct2016.pdf* (percentage of EAs with cooperating agencies was 6.8 percent for Fiscal Years 2012 through 2015); *see also* Council on Environmental Quality, Attachment A, The Second Report on Cooperating Agencies in Implementing the Procedural Requirements of the National Environmental Policy Act (NEPA) 2 (May 2012), *https://ceq.doe.gov/docs/ceq-reports/Cooperating_Agency_Report_2005-11_Attachment_23May2012.pdf* (percentage of EAs with cooperating agencies was 5.9 percent for Fiscal Years 2005 through 2011).

[85] A ''single ROD,'' as used in E.O. 13807, is the same as a ''joint ROD,'' which is a ROD addressing all Federal agency actions covered in the single EIS and necessary for a proposed project. 40 CFR 1508.25(a)(3). The regulations would provide flexibility for circumstances where a joint ROD is impracticable. Examples include the statutory directive to issue a combined final EIS and ROD for transportation actions and the FERC's adjudicatory process.

[86] *See* OFD Framework Guidance, *supra* note 30, sec. VIII.A.5 (''The lead agency is responsible for developing the Purpose and Need, identifying the range of alternatives to be analyzed, identifying the preferred alternative and determining whether to develop the preferred alternative to a higher level of detail.''); Connaughton Letter, *supra* note 29 (''[J]oint lead or cooperating agencies should afford substantial deference to the [ ] agency's articulation of purpose and need.'')

including comments requesting that agencies have greater flexibility in how to conduct scoping. CEQ proposed to reorganize in more chronological order, § 1501.9, ''Scoping,'' (40 CFR 1501.7 in the 1978 regulations), consolidate all the requirements for the NOI and the scoping process into the same section, and add paragraph headings to improve clarity. CEQ makes these changes in the final rule with minor edits as described further in this section.

Specifically, CEQ proposed to revise paragraph (a) to state the general requirement to use scoping for EISs. Rather than requiring publication of an NOI as a precondition to the scoping process, CEQ proposed to modify paragraph (a) so that agencies can begin the scoping process as soon as the proposed action is developed sufficiently for meaningful agency consideration. Some agencies refer to this as pre-scoping under the existing regulations to capture scoping work done before publication of the NOI. Rather than tying the start of scoping to the agency's decision to publish an NOI to prepare an EIS, the timing and content of the NOI would instead become an important step in the scoping process itself, thereby obviating the artificial distinction between scoping and pre-scoping. However, agencies should not unduly delay publication of the NOI and should be transparent about any work done prior to publication of the NOI. CEQ makes the changes as proposed in the final rule.

Paragraph (b) addresses the responsibility of the lead agency to invite cooperating and participating agencies as well as other likely affected or interested persons. CEQ proposed to add ''likely'' to this paragraph to capture the reality that, at the scoping stage, agencies may not know the identities of all affected parties and that one of the purposes of scoping is to identify affected parties. CEQ makes this change in the final rule. In the final rule, CEQ strikes ''on environmental grounds'' from the parenthetical noting that likely affected or interested persons include those who might not agree with the action because the clause is unnecessarily limiting. Agencies should invite the participation of those who do not agree with the action irrespective of whether it is on environmental grounds.

The NPRM proposed to move the existing (b)(4) to paragraph (c), ''Scoping outreach.'' CEQ proposed to broaden the types of activities agencies might hold during scoping, including meetings, publishing information, and other means of communication to provide agencies additional flexibility in how to reach interested or affected parties in the scoping process. CEQ finalizes this change as proposed.

Paragraph (d) proposed to address the NOI requirements. CEQ proposed a list of what agencies must include in an NOI to standardize NOI format, achieve greater consistency across agencies, provide the public with more information and transparency, and ensure that agencies conduct the scoping process in a manner that facilitates implementation of the OFD policy for multi-agency actions, including by proactively soliciting comments on alternatives, impacts, and relevant information to better inform agency decision making. CEQ makes these changes in the final rule with minor edits for clarity and edits to paragraph (d)(7) for consistency with §§ 1500.3 and 1502.17 and to correct the cross-reference.

CEQ proposed to move the criteria for determining scope from the definition of scope, 40 CFR 1508.25, to paragraph (e) and to strike the paragraph on ''cumulative actions'' for consistency with the proposed revisions to the definition of ''effects'' discussed below. CEQ makes this change in the final rule, but does not include the reference to ''similar actions'' in proposed paragraph (e)(1)(ii) because commenters expressed confusion regarding whether the determination of the scope of the environmental documentation, as discussed in proposed § 1501.9(e)(1)(i)(C) was directly related to the discussion of the ''effects of the action'' as effects are defined in § 1508.1(g). To eliminate this confusion, CEQ strikes the language in proposed § 1501.9(e)(1)(i)(C) (40 CFR 1508.25(a)(3)) regarding similar actions. Further, CEQ notes that, in cases where the question of the consideration of similar actions to determine the scope of the NEPA documentation was raised, courts noted the discretionary nature of the language (use of the word ''may'' and ''should'' in proposed § 1501.9(e)(1)(i)(C) (40 CFR 1508.25(a)(3)) and have held that determinations as to the scope of a NEPA document based on a consideration of similar actions was left to the agency's discretion. *See e.g., Klamath-Siskiyou Wildlands Ctr.* v. *Bureau of Land Mgmt.,* 387 F.3d 989, 1000–01 (9th Cir. 2004). CEQ also notes that the reference to ''other reasonable courses of action'' in paragraph (e)(2) are within the judgement of the agency. Agencies have discretion to address similar actions through a single analysis, pursuant to revised § 1502.4(b).

Finally, paragraph (f) addresses other scoping responsibilities, including identifying and eliminating from detailed study non-significant issues, allocating assignments among lead and cooperating agencies, indicating other related NEPA documents, identifying other environmental review requirements, and indicating the relationship between the environmental review and decision-making schedule. CEQ retains this paragraph in the final rule as proposed with minor grammatical edits.

9. Time Limits (§ 1501.10)

In response to the ANPRM, CEQ received many comments on the lengthy timelines and costs of environmental reviews, and many suggestions for more meaningful time limits for the completion of the NEPA process. Accordingly, and to promote timely reviews, CEQ proposed to establish presumptive time limits for EAs and EISs consistent with E.O. 13807 and prior CEQ guidance. In Question 35 of the Forty Questions, *supra* note 2, CEQ stated its expectation that ''even large complex energy projects would require only about 12 months for the completion of the entire EIS process'' and that, for most major actions, ''this period is well within the planning time that is needed in any event, apart from NEPA.'' CEQ also recognized that ''some projects will entail difficult long-term planning and/or the acquisition of certain data which of necessity will require more time for the preparation of the EIS.'' *Id.* Finally, Question 35 stated that an EA ''should take no more than 3 months, and in many cases substantially less as part of the normal analysis and approval process for the action.''

Based on agency experience with the implementation of the regulations, CEQ proposed in § 1501.10, ''Time limits,'' to change the introductory text to paragraph (a) and add a new paragraph (b) to establish a presumptive time limit for EAs of one year and a presumptive time limit for EISs of two years. However, the NPRM also proposed that a senior agency official could approve in writing a longer period. CEQ proposed to define the start and end dates of the period consistent with E.O. 13807. CEQ makes these changes in the final rule. CEQ eliminates the sentence regarding lead agency from paragraph (a) because it is no longer needed given the revisions to this section changing ''agency'' to ''senior agency official.'' In response to comments, the final rule also adds ''FONSI'' to paragraph (b)(1) to clarify that the time limit for EAs is measured from the date of decision to prepare to the publication of an EA or FONSI, since agencies may not publish

the EA separately. The final rule also clarifies that the time period is measured from the date the agency decides to prepare an EA, since applicants sometimes prepare EAs on behalf of agencies.

Consistent with CEQ and OMB guidance, agencies should begin scoping and development of a schedule for timely completion of an EIS prior to issuing an NOI and commit to cooperate, communicate, share information, and resolve conflicts that could prevent meeting milestones.[87] CEQ recognizes that agency capacity, including those of cooperating and participating agencies, may affect timing, and that agencies should schedule and prioritize their resources accordingly to ensure effective environmental analyses and public involvement. Further, agencies have flexibility in the management of their internal processes to set shorter time limits and to define the precise start and end times for measuring the completion time of an EA. Therefore, CEQ proposed to retain the factors for determining time limits in paragraph (c). CEQ proposed to revise paragraph (c)(6) for clarity and strike paragraph (c)(7) regarding controversial actions because it overlaps with numerous other factors, and because whether or not an action is controversial is not relevant to the analysis under NEPA. CEQ also proposed to retain with edits for clarity the list of parts of the NEPA process for which the senior agency official may set time limits in paragraph (d). CEQ retains paragraphs (c) and (d) in the final rule with the changes as proposed.

CEQ proposed conforming edits to § 1500.5(g) to change ''establishing'' to ''meeting'' time limits and add ''environmental assessment.'' CEQ makes these edits in the final rule.

10. Tiering (§ 1501.11)

CEQ proposed to move 40 CFR 1502.20, ''Tiering,'' to a new § 1501.11 and revise it to make clear that this provision is applicable to both EAs and EISs. CEQ proposed a number of revisions in § 1501.11 to clarify when agencies can use existing studies and environmental analyses in the NEPA process and when agencies would need to supplement such studies and analyses. The revisions clarify that agencies do not need to conduct site-specific analyses prior to an irretrievable commitment of resources, which in most cases will not be until the decision at the site-specific stage. CEQ makes these changes with additional updates in the final rule.

Specifically, the final rule splits proposed paragraph (a) into two paragraphs. In the new paragraph (a), CEQ changes ''are encouraged to'' to ''should'' and moves to the end of this paragraph the sentence stating that tiering may also be appropriate for different stages of actions. The new paragraph (b) addresses the relationship between the different levels of tiered documents, and CEQ makes additional edits to this paragraph for clarity.

CEQ also proposed to move the operative language addressing specific examples of when tiering is appropriate from the definition of tiering in 40 CFR 1508.28 to proposed paragraph (b). CEQ moves this language to paragraph (c) in the final rule with the edits as proposed.

11. Incorporation by Reference (§ 1501.12)

CEQ proposed to move 40 CFR 1502.21, ''Incorporation by reference,'' to a new § 1501.12 and change ''environmental impact statements'' to ''environmental documents'' because this provision is applicable generally, not just to EISs. CEQ makes this change in the final rule. CEQ makes additional changes in the final rule to revise sentences from passive to active voice. In response to comments, CEQ adds examples to the types of material that agencies may incorporate, including planning studies and analyses.

D. Revisions to Environmental Impact Statements (Part 1502)

As stated in the NPRM, the most extensive level of NEPA analysis is an EIS, which is the ''detailed statement'' required under section 102(2)(C) of NEPA. When an agency prepares an EIS, it typically issues a ROD at the conclusion of the NEPA review. Based on the Environmental Protection Agency (EPA) weekly Notices of Availability published in the **Federal Register** between 2010 and 2019, Federal agencies published approximately 176 final EISs per year. CEQ proposed to update the format, page length, and timeline to complete EISs to better achieve the purposes of NEPA. CEQ also proposed several changes to streamline, allow for flexibility in, and improve the preparation of EISs. CEQ includes provisions in part 1502 to promote informed decision making by agencies and to inform the public about the decision-making process. The final rule continues to encourage application of NEPA early in the process and early engagement with applicants for non-Federal projects.

1. Purpose of Environmental Impact Statement (§ 1502.1)

CEQ proposed to revise § 1502.1 for consistency with the statutory language of NEPA and make other non-substantive revisions for clarity. CEQ makes these changes in the final rule. The final rule also retitles this section.

2. Implementation (§ 1502.2)

CEQ proposed to strike the introductory text of § 1502.2 as unnecessary and revise the text in paragraphs (a) and (c) for clarity and consistency with the language in the rule and regulatory text generally. CEQ makes these changes in the final rule with minor clarifying edits. The final rule clarifies in paragraph (d) that, in preparing an EIS, agencies shall state how the alternatives considered in it and decisions based on it serve the purposes of the statute as interpreted in the CEQ regulations. The final rule strikes ''ultimate agency'' in paragraph (e) because there may be multiple individuals within certain departments or agencies that have decision-making responsibilities, including where subunits have developed agency procedures or NEPA compliance programs.

3. Statutory Requirements for Statements (§ 1502.3)

CEQ proposed to revise § 1502.3 to make it a single paragraph, remove cross-references to the definition, and make minor clarifying edits. CEQ makes these changes in the final rule.

4. Major Federal Actions Requiring the Preparation of Environmental Impact Statements (§ 1502.4)

CEQ proposed to revise § 1502.4 to clarify in paragraph (a) that a ''properly defined'' proposal is one that is based on the statutory authorities for the proposed action. CEQ proposed to change ''broad'' and ''program'' to ''programmatic'' in this section, as well as §§ 1500.4(k) and 1506.1(c), since ''programmatic'' is the term commonly used by NEPA practitioners. The NPRM proposed further revisions to paragraph (b), including eliminating reference to programmatic EISs that ''are sometimes required,'' to focus the provision on the discretionary use of programmatic EISs in support of clearly defined decision-making purposes. For consistency, CEQ proposed to change the mandatory language to be discretionary in proposed paragraph (c)(3) (paragraph (b)(1)(iii) in the final rule). As CEQ stated in its 2014 guidance, programmatic NEPA reviews

[87] *See* OFD Framework Guidance, *supra* note 30 (''[w]hile the actual schedule for any given project may vary based upon the circumstances of the project and applicable law, agencies should endeavor to meet the two-year goal . . . .'').

''should result in clearer and more transparent decision[ ]making, as well as provide a better defined and more expeditious path toward decisions on proposed actions.'' [88] Other statutes or regulations may grant discretion or otherwise identify circumstances for when to prepare a programmatic EIS. *See, e.g.,* National Forest Management Act, 16 U.S.C. 1604(g); 36 CFR 219.16. CEQ makes these changes in the final rule, and reorganizes proposed paragraphs (c) and (d) to be paragraphs (b)(1) and (2) since these paragraphs all address programmatic reviews. Finally, CEQ proposed to add a new sentence to proposed paragraph (d) (paragraph (b)(2) in the final rule) to clarify that when conducting programmatic reviews, agencies may tier their analyses to defer detailed analysis of specific program elements until they are ripe for decisions that would involve an irreversible or irretrievable commitment of resources. The final rule removes this latter clause and simplifies it to elements ''ripe for final agency action'' because NEPA review occurs pursuant to the APA and ''final agency action,'' as construed in *Bennett* v. *Spear,* is the test for when judicial review can commence. *See* 520 U.S. at 177–78.

5. Timing (§ 1502.5)

For the reasons discussed in section II.C.2 and consistent with the edits to § 1501.2, CEQ proposed to change ''shall'' to ''should'' in the introductory text so that agencies can exercise their best judgement about when to begin the preparation of an EIS. CEQ also proposed to revise paragraph (b) to clarify that agencies should work with potential applicants and applicable agencies before applicants submit applications. CEQ makes these changes in the final rule. Also, as noted in section II.C.7, CEQ revises paragraph (b) in the final rule to only address EISs in this section and move the discussion of EAs to § 1501.5. Finally, CEQ adds ''and governments'' to ''State, Tribal, and local agencies'' to be comprehensive and consistent with similar changes made throughout the rule.

6. Interdisciplinary Preparation (§ 1502.6)

CEQ proposed minor edits to § 1502.6 consistent with the global changes discussed in section II.A. CEQ includes these changes in the final rule and revises this provision from passive to active voice.

7. Page Limits (§ 1502.7)

In response to the ANPRM, CEQ received many comments on the length, complexity, and readability of environmental documents, and many suggestions for more meaningful page limits. As the President Carter noted in 1977 regarding issuance of E.O. 11991, ''to be more useful to decision[ ]makers and the public, [EISs] must be concise, readable, and based upon competent professional analysis. They must reflect a concern with quality, not quantity. We do not want [EISs] that are measured by the inch or weighed by the pound.'' [89] The core purpose of page limits from the original regulations remains—documents must be a reasonable length and in a readable format so that it is practicable for the decision maker to read and understand the document in a reasonable time period. If documents are unreasonable in their length or unwieldly, there is a risk that they will not inform the decision maker, thereby undermining the purposes of the Act. As the Supreme Court noted in *Metropolitan Edison Co.* v. *People Against Nuclear Energy,* ''[t]he scope of the agency's inquiries must remain manageable if NEPA's goal of '[insuring] a fully informed and well-considered decision,' . . . is to be accomplished.'' 460 U.S. at 776 (quoting *Vt. Yankee,* 435 U.S. at 558). Therefore, CEQ proposed to reinforce the page limits for EISs set forth in § 1502.7, while allowing a senior agency official to approve a statement exceeding 300 pages when it is useful to the decision-making process. CEQ makes these changes in the final rule.

As captured in CEQ's updated report on the length of final EISs, these documents average over 600 pages. *See* CEQ Length of EISs Report, *supra* note 38. While the length of an EIS will vary based on the complexity and significance of the proposed action and environmental effects the EIS considers, every EIS must be bounded by the practical limits of the decision maker's ability to consider detailed information. CEQ proposed this change to ensure that agencies develop EISs focused on significant effects and on the information useful to decision makers and the public to more successfully implement NEPA.

CEQ intends for senior agency officials to take responsibility for the quantity, quality, and timelines of environmental analyses developed in support of the decisions of their agencies. Therefore, the senior agency official approving an EA or EIS in excess of the page limits should ensure that the final environmental document meets the informational needs of the agency's decision maker. For example, the agency decision makers may have varying levels of capacity to consider the information presented in the environmental document. In ensuring that the agency provides the resources necessary to implement NEPA, in accordance with § 1507.2, senior agency officials should ensure that agency staff have the resources and competencies necessary to produce timely, concise, and effective environmental documents. Decisions as to page length for these documents are therefore closely related to an agency's decision as to how to structure its decision-making process, and for that reason must ultimately remain within the discretion of the agency.

8. Writing (§ 1502.8)

CEQ did not propose any changes to § 1502.8. In the final rule, CEQ revises this provision to correct grammatical errors, including revising it from passive to active voice.

9. Draft, Final and Supplemental Statements (§ 1502.9)

CEQ proposed to include headings for each of the paragraphs in § 1502.9, ''Draft, final, and supplemental statements,'' to improve readability. CEQ proposed edits to paragraph (b) for clarity, replacing ''revised draft'' with ''supplemental draft.'' CEQ makes these changes in the final rule and makes additional clarifying edits in § 1502.9, including to revise the language from passive to active voice.

CEQ also received many comments in response to the ANPRM requesting clarification regarding when supplemental statements are required. CEQ proposed revisions to paragraph (d)(1) to clarify that agencies need to update environmental documents when there is new information or a change in the proposed action only if a major Federal action remains to occur and other requirements are met. CEQ makes this change in the final rule. As noted in the NPRM, this revision is consistent with Supreme Court case law holding that a supplemental EIS is required only ''[i]f there remains 'major Federal actio[n]' to occur, and if the new information is sufficient to show that the remaining action will 'affec[t] the quality of the human environment' in a significant manner or to a significant extent not already considered . . . .'' *Marsh,* 490 U.S. at 374 (quoting 42 U.S.C. 4332(2)(C)); *see also Norton* v. *S. Utah Wilderness All.,* 542 U.S. 55, 73 (2004). For example, supplementation

[88] Programmatic Guidance, *supra* note 29, at 7.

[89] The Environment—Message to the Congress, 1977 Pub. Papers 967, 985 (May 23, 1977).

may be triggered after an agency executes a grant agreement but before construction is complete because the agency has yet to provide all of the funds under that grant agreement. On the other hand, when an agency issues a final rule establishing a regulatory scheme, there is no remaining action to occur, and therefore supplementation is not required. If there is no further agency action after the agency's decision, supplementation does not apply because the Federal agency action is complete. *S. Utah Wilderness All.,* 542 U.S. at 73 (''although the '*[a]pproval* of a [land use plan]' is a 'major Federal action' requiring an EIS . . . that action is completed when the plan is approved. . . . There is no ongoing 'major Federal action' that could require supplementation (though BLM *is* required to perform additional NEPA analyses if a plan is amended or revised . . . .)'') (emphasis in original).

In order to determine whether a supplemental analysis is required, CEQ proposed a new paragraph (d)(4) to provide that an agency may document its determination of whether a supplemental analysis is required consistent with its agency NEPA procedures or may, although it is not required, do so in an EA. CEQ adds this paragraph to the final rule, codifying the existing practice of several Federal agencies, such as the Department of Transportation's reevaluation provided for highway, transit, and railroad projects (23 CFR 771.129); the Bureau of Land Management's Determination of NEPA Adequacy (Department of the Interior Departmental Manual, Part 516, Chapter 11, § 11.6); and the Corps' Supplemental Information Report (section 13(d) of Engineering Regulation 200–2–2).

10. Recommended Format (§ 1502.10)

CEQ proposed to revise § 1502.10 to provide agencies with more flexibility in formatting an EIS given that most EISs are prepared and distributed electronically. Specifically, CEQ proposed to eliminate the requirement to have a list of agencies, organizations and persons to whom copies of the EIS are sent since EISs are published online, and an index, as this is no longer necessary when most documents are produced in an electronically searchable format. Proposed changes to this section would also allow agencies to use a different format so that they may customize EISs to address the particular proposed action and better integrate environmental considerations into agency decision-making processes. CEQ makes these changes in the final rule.

11. Cover (§ 1502.11)

CEQ proposed to retitle and amend § 1502.11 to remove the reference to a ''sheet'' since agencies prepare EISs electronically. CEQ also proposed to add a requirement to include the estimated cost of preparing the EIS to the cover in new paragraph (g) to provide transparency to the public on the costs of EIS-level NEPA reviews. To track costs, the NPRM proposed that agencies must prepare an estimate of environmental review costs, including costs of the agency's full-time equivalent (FTE) personnel hours, contractor costs, and other direct costs related to the environmental review of the proposed action.[90] CEQ also proposed this amendment to address the concerns raised by the U.S. Government Accountability Office that agencies are not tracking the costs of NEPA analyses, as well as the many comments CEQ received from stakeholders regarding the costs associated with development of NEPA analyses.[91] CEQ noted in the NPRM that including such costs on the cover sheet would also be consistent with current OMB direction to Federal agencies to track costs of environmental reviews and authorizations for major infrastructure projects pursuant to E.O. 13807 and would provide the public with additional information regarding EIS-level NEPA documents.

CEQ adds this new paragraph (g) in the final rule with additional changes to clarify that agencies should provide the estimate on the final EIS, and that it should include the costs of preparing both the draft EIS and the final EIS. The final rule also adds a sentence to clarify that agencies should include the costs of cooperating and participating agencies if practicable. If not practicable, agencies must so indicate. For integrated documents where an agency is preparing a document pursuant to multiple environmental statutory requirements, it may indicate that the estimate reflects costs associated with NEPA compliance as well as compliance with other environmental review and authorization requirements. Agencies can develop methodologies for preparing these cost estimates and include them in their implementing procedures.

12. Summary (§ 1502.12)

CEQ proposed to change ''controversy'' to ''disputed'' in § 1502.12. CEQ makes this and grammatical changes in the final rule. This change will better align the second clause of the sentence, ''areas of disputed issues raised by agencies and the public,'' with the final clause of the sentence, ''and the issues to be resolved (including the choice among alternatives).''

13. Purpose and Need (§ 1502.13)

CEQ received a number of comments in response to the ANPRM recommending that CEQ better define the requirements for purpose and need statements. The focus of a purpose and need statement is the purpose and need for the proposed action, and agencies should develop it based on consideration of the relevant statutory authority for the proposed action. The purpose and need statement also provides the framework in which the agency will identify ''reasonable alternatives'' to the proposed action. CEQ has advised that this discussion of purpose and need should be concise (typically one or two paragraphs long) and that the lead agency is responsible for its definition. *See* Connaughton Letter, *supra* note 29 (''Thoughtful resolution of the purpose and need statement at the beginning of the process will contribute to a rational environmental review process and save considerable delay and frustration later in the decision[-]making process.''). ''In situations involving two or more agencies that have a decision to make for the same proposed action and responsibility to comply with NEPA or a similar statute, it is prudent to jointly develop a purpose and need statement that can be utilized by both agencies. An agreed-upon purpose and need statement at this stage can prevent problems later that may delay completion of the NEPA process.'' *Id.* The lead agency is responsible for developing the purpose and need, and cooperating agencies should give deference to the lead agency and identify any substantive concerns early in the process to ensure swift resolution. *See* OFD Framework Guidance, sec. VIII.A.5 and XII, *supra* note 30; Connaughton Letter, *supra* note 29.

[90] *See, e.g.,* U.S. Department of the Interior, Reporting Costs Associated with Developing Environmental Impact Statements (July 23, 2018), *https://www.doi.gov/sites/doi.gov/files/uploads/dep_sec_memo_07232018_-_reporting_costs_associated_w_developing_environmental_impact_statements.pdf.*

[91] In a 2014 report, the U.S. Government Accountability Office found that Federal agencies do not routinely track data on the cost of completing NEPA analyses, and that the cost can vary considerably, depending on the complexity and scope of the project. U.S. Gov't Accountability Office, GAO–14–370, National Environmental Policy Act: Little Information Exists on NEPA Analyses (Apr. 15, 2014) (''GAO NEPA Report''), *https://www.gao.gov/products/GAO-14-370.* The report referenced the 2003 CEQ task force analysis referenced above which estimated that a typical EIS costs from $250,000 to $2 million. *See* NEPA Task Force Report, *supra* note 28, at p. 65.

Agencies should tailor the purpose and need statement to meet the authorization requirements of both the lead and cooperating agencies.

Consistent with CEQ guidance and in response to the ANPRM comments, CEQ proposed to revise § 1502.13, ''Purpose and need,'' to clarify that the statement should focus on the purpose and need for the proposed action. In particular, CEQ proposed to strike ''to which the agency is responding in proposing the alternatives including'' to focus on the proposed action. CEQ further proposed, as discussed below, to address the relationship between the proposed action and alternatives in the definition of reasonable alternatives and other sections that refer to alternatives. Additionally, CEQ proposed to add a sentence to clarify that when an agency is responsible for reviewing applications for authorizations, the agency shall base the purpose and need on the applicant's goals and the agency's statutory authority. *See, e.g., Citizens Against Burlington, Inc.* v. *Busey,* 938 F.2d 190, 196 (D.C. Cir. 1991) (agencies must consider the relevant factors including the needs and goals of the applicants and Congress' views as expressed in the agency's statutory authorization). This addition is consistent with the definition of reasonable alternatives, which must meet the goals of the applicant, where applicable. CEQ revises § 1502.13 in the final rule consistent with the NPRM proposal.

14. Alternatives Including the Proposed Action (§ 1502.14)

CEQ also received many comments on the ANPRM requesting clarification regarding ''alternatives'' under the regulations. This section of an EIS describes the proposed action and alternatives in comparative form, including their environmental impacts, such that the decision maker and the public can understand the basis for choice. However, as explained in § 1502.16, this section of the EIS should not duplicate the affected environment and environmental consequences sections, and agencies have flexibility to combine these three sections in a manner that clearly sets forth the basis for decision making.

CEQ proposed changes to § 1502.14, ''Alternatives including the proposed action,'' to simplify and clarify the language and provide further clarity on the scope of the alternatives analysis in an EIS. Specifically, CEQ proposed to revise the introductory paragraph to remove the colloquial language, including ''heart of'' the EIS and ''sharply defining,'' and clarify that the alternatives section of the EIS should present the environmental impacts in comparative form. CEQ makes these changes in the final rule.

In paragraph (a), CEQ proposed to delete ''all'' before ''reasonable alternatives'' and add ''to the proposed action'' afterward for clarity because NEPA does not require consideration of all alternatives and does not provide specific guidance concerning the range of alternatives an agency must consider for each proposal. Section 102(2)(C) provides only that an agency should prepare a detailed statement addressing, among other things, ''alternatives to the proposed action.'' 42 U.S.C. 4332(2)(C). Section 102(2)(E) requires only that agencies ''study, develop, and describe appropriate alternatives to recommended courses of action.'' 42 U.S.C. 4332(2)(E). Implementing this limited statutory direction, CEQ has long advised that ''[w]hen there are potentially a very large number of alternatives, only a reasonable number of examples, covering the full spectrum of alternatives, must be analyzed and compared in the EIS.'' Forty Questions, *supra* note 2, at Question 1b. CEQ makes this change in the final rule and rephrases paragraph (a) from passive to active voice.

As stated in the NPRM, it is CEQ's view that NEPA's policy goals are satisfied when an agency analyzes reasonable alternatives, and that an EIS need not include every available alternative where the consideration of a spectrum of alternatives allows for the selection of any alternative within that spectrum. The reasonableness of the analysis of alternatives in a final EIS is resolved not by any particular number of alternatives considered, but by the nature of the underlying agency action and by the inherent practical limitations of the decision-making process. The discussion of environmental effects of alternatives need not be exhaustive, but must provide information sufficient to permit a reasoned choice of alternatives for the agency to evaluate available reasonable alternatives including significant alternatives that are called to its attention by other agencies, organizations, communities, or a member of the public.[92] As discussed in section II.C.8, to aid agencies in identification of alternatives, § 1501.9, ''Scoping,'' requires agencies to request identification of potential alternatives in the NOI. Analysis of alternatives also may serve purposes other than NEPA compliance, such as evaluation of the least environmentally damaging practicable alternative for the discharge of dredged or fill material under section 404(b)(1) of the Clean Water Act, 33 U.S.C. 1344(b)(1).

The number of alternatives that is appropriate for an agency to consider will vary. For some actions, such as where the Federal agency's authority to consider alternatives is limited by statute, the range of alternatives may be limited to the proposed action and the no action alternative. For actions where the Federal authority to consider a range of alternatives is broad, the final EIS itself should consider a broader range of reasonable alternatives. However, a process of narrowing alternatives is in accord with NEPA's ''rule of reason'' and common sense—agencies need not reanalyze alternatives previously rejected, particularly when an earlier analysis of numerous reasonable alternatives was incorporated into the final analysis and the agency has considered and responded to public comment favoring other alternatives. Furthermore, agencies should limit alternatives to those available to the decision maker at the time of decision.

For consistency with this change, CEQ proposed to strike ''the'' before ''reasonable alternatives'' in § 1502.1, and amend § 1502.16, ''Environmental consequences,'' to clarify in proposed paragraph (a)(1) that the discussion must include the environmental impacts of the ''proposed action and reasonable alternatives.'' CEQ makes these changes in the final rule.

In response to CEQ's ANPRM, some commenters urged that the regulations should not require agencies to account for impacts over which the agency has no control, including those resulting from alternatives outside its jurisdiction. CEQ proposed to strike 40 CFR 1502.14(c) requiring consideration of reasonable alternatives not within the jurisdiction of the lead agency for all EISs because it is not efficient or reasonable to require agencies to develop detailed analyses relating to alternatives outside the jurisdiction of the lead agency. CEQ removes this paragraph in the final rule. Further, the new definition of ''reasonable alternatives'' excludes alternatives outside the agency's jurisdiction when they would not be technically feasible due to the agency's lack of statutory authority to implement that alternative. However, an agency may discuss reasonable alternatives not within its jurisdiction when necessary for the agency's decision-making process such as when preparing an EIS to address

[92] Additionally, by crafting alternatives, agencies can ''bound'' different options and develop information on intermediate options that occupy the logical space in between different formal alternatives. *See, e.g.,* H.A. Simon, ''Bounded Rationality,'' in *Utility and Probability* (J. Eatwell, M. Milgate, & P. Newman P. eds. 1990).

legislative EIS requirements pursuant to § 1506.8 and to address specific congressional directives.

A concern raised by many ANPRM commenters is that agencies have limited resources and that it is important that agencies use those resources effectively. The provisions inviting commenters to identify potential alternatives will help to inform agencies as to how many alternatives are reasonable to consider, and allow agencies to assess whether any particular submitted alternative is reasonable to consider. Analyzing a large number of alternatives, particularly where it is clear that only a few alternatives would be economically and technically feasible and could be realistically implemented by the applicant, can divert limited agency resources. CEQ invited comment on whether the regulations should establish a presumptive maximum number of alternatives for evaluation of a proposed action, or alternatively for certain categories of proposed actions. CEQ sought comment on (1) specific categories of actions, if any, that should be identified for the presumption or for exceptions to the presumption; and (2) what the presumptive number of alternatives should be (*e.g.,* a maximum of three alternatives including the no action alternative). CEQ did not receive sufficient information to establish a minimum, but adds a new paragraph (f) to the final rule to state that agencies shall limit their consideration to a reasonable number of alternatives. The revisions to the regulations to promote earlier solicitation of information and identification of alternatives, and timely submission of comments, will assist agencies in establishing how many alternatives are reasonable to consider and assessing whether any particular submitted alternative is reasonable to consider.

15. Affected Environment (§ 1502.15)

CEQ proposed in § 1502.15, ''Affected environment,'' to explicitly allow for combining of affected environment and environmental consequences sections to adopt what has become a common practice in some agencies. This revision would ensure that the description of the affected environment focuses on those aspects of the environment that the proposed action affects. CEQ makes this change in the final rule. Additionally, the final rule adds a clause to emphasize that the affected environment includes reasonably foreseeable environmental trends and planned actions in the affected areas. This change responds to comments raising concerns that eliminating the definition of cumulative impact (40 CFR 1508.7) would result in less consideration of changes in the environment. To the extent environmental trends or planned actions in the area(s) are reasonably foreseeable, the agency should include them in the discussion of the affected environment. Consistent with current agency practice, this also may include non-Federal planned activities that are reasonably foreseeable.

In response to the NPRM, commenters expressed concerns that impacts of climate change on a proposed project would no longer be taken into account. Under the final rule, agencies will consider predictable environmental trends in the area in the baseline analysis of the affected environment. Trends determined to be a consequence of climate change would be characterized in the baseline analysis of the affected environment rather than as an effect of the action. Discussion of the affected environment should be informative but should not be speculative.

16. Environmental Consequences (§ 1502.16)

CEQ proposed to reorganize § 1502.16, ''Environmental consequences.'' CEQ proposed to designate the introductory paragraph as paragraph (a), move up the sentence that it should not duplicate the alternatives discussion, and create subordinate paragraphs (a)(1) through (10) for clarity. In paragraph (a)(1), CEQ proposed to consolidate into one paragraph the requirements regarding effects scattered throughout 40 CFR 1502.16, including paragraphs (a), (b), and (d), to include a discussion of the effects of the proposed action and reasonable alternatives. Also consistent with the definition of effects, CEQ proposed to strike references to direct, indirect, and cumulative effects. The combined discussion should focus on those effects that are reasonably foreseeable and have a reasonably close causal relationship to the proposed action, consistent with the proposed revised definition of effects addressed in § 1508.1(g). CEQ proposed to move 40 CFR 1502.16(c) and (e) through (h) to be paragraphs (a)(5) through (9). To align with the statute, CEQ also proposed to add a new paragraph (a)(10) to provide that discussion of environmental consequences should include, where applicable, economic and technical considerations consistent with section 102(2)(B) of NEPA. CEQ makes these changes in the final rule with minor edits to clarify that ''this section'' in paragraph (a) refers to the ''environmental consequences'' section; address the dangling modifier, ''their significance,'' in paragraph (a)(1); correct the usage of ''which'' and ''that'' throughout; and clarify the language in paragraph (b).

Further, CEQ proposed to move the operative language that addresses when agencies need to consider economic and social effects in EISs from the definition of human environment in 40 CFR 1508.14 to proposed § 1502.16(b). CEQ also proposed to amend the language for clarity, explain that the agency makes the determination of when consideration of economic and social effects is interrelated with consideration of natural or physical environmental effects at which point the agency should give appropriate consideration to those effects, and strike ''all of'' as unnecessary. CEQ makes these changes in the final rule.

17. Submitted Alternatives, Information, and Analyses (§ 1502.17)

To ensure agencies have considered the alternatives, information, and analyses submitted by the public, including State, Tribal, and local governments as well as individuals and organizations, CEQ proposed to add a new § 1502.17 to require a new ''submitted alternatives, information, and analyses'' section in draft and final EISs. CEQ includes this new provision in the final rule with some modifications to separate the requirements for draft and final EISs, as discussed in this section.

To ensure agencies receive and consider relevant information as early in the process as possible, § 1501.9, ''Scoping,'' requires agencies to specifically solicit such information in their notices of intent. Under § 1502.17, agencies must include a summary in the EIS identifying all alternatives, information, and analyses the agency received from State, Tribal, and local governments and other public commenters. In developing the summary, agencies may refer to other relevant sections of the EIS or to appendices. A new paragraph (a)(1) requires agencies to append to the draft EIS or otherwise publish the comments received during scoping and, consistent with the proposed rule, paragraph (a)(2) requires the lead agency to invite comment on the summary. Finally, paragraph (b) requires agencies to prepare a summary in the final EIS based on all comments received on the draft EIS.

CEQ proposed to require in a new § 1502.18, ''Certification of alternatives, information, and analyses section,'' that, informed by the alternatives, information, and analyses section

required under § 1502.17, the decision maker for the lead agency certify that the agency has considered such information and include the certification in the ROD under proposed § 1505.2(e). CEQ moves this provision to § 1505.2(b) in the final rule, as discussed in further detail in section II.G.2.

18. List of Preparers (§ 1502.18)

CEQ proposed to move ''List of preparers'' from § 1502.17 to § 1502.19 to accommodate the two new sections addressing submitted alternatives, information, and analyses. The final rule moves this section to § 1502.18 and makes minor revisions to change the language from passive to active voice and remove the erroneous cross-references.

19. Appendix (§ 1502.19)

CEQ proposed to move ''Appendix'' from § 1502.18 to § 1502.20 and revise the language for clarity. The final rule moves this provision to § 1502.19 with additional clarifying revisions. The final rule also adds a new paragraph (d) to reflect the potential appendix for scoping comments on alternatives, information, and analyses pursuant to § 1502.17(a)(1) and a new paragraph (e) for the potential appendix of draft EIS comments pursuant to §§ 1503.1 and 1503.4(b).

20. Publication of the Environmental Impact Statement (§ 1502.20)

CEQ proposed to move ''Circulation of the environmental impact statement'' from § 1502.19 to § 1502.21 and retitle it ''Publication of the environmental impact statement.'' CEQ moves this to § 1502.20 in the final rule. CEQ proposed to modernize this provision, changing circulate to publish and eliminating the option to circulate the summary of an EIS given that agencies electronically produce most EISs. CEQ proposed to require agencies to transmit the EIS electronically, but provide for paper copies by request. CEQ makes these changes in the final rule.

21. Incomplete or Unavailable Information (§ 1502.21)

CEQ proposed several revisions to proposed § 1502.22, ''Incomplete or unavailable information,'' which CEQ redesignates as § 1502.21 in the final rule. Specifically, CEQ proposed to further subdivide the paragraphs for clarity and strike the word ''always'' from paragraph (a) as unnecessarily limiting and inconsistent with the rule of reason, and replaced the term ''exorbitant'' with ''unreasonable'' in paragraphs (b) and (c), which is consistent with CEQ's description of ''overall cost'' considerations in its 1986 promulgation of amendments to this provision.[93] CEQ reiterates that the term ''overall cost'' as used in this section includes ''financial costs and other costs such as costs in terms of time (delay) and personnel.'' [94] CEQ invited comment on whether the ''overall costs'' of obtaining incomplete of unavailable information warrants further definition to address whether certain costs are or are not ''unreasonable.'' CEQ does not include any definition in the final rule.

For clarity and in response to comments, the final rule inserts ''but available'' in paragraph (b) to clarify that agencies will continue to be required to obtain available information essential to a reasoned choice between alternatives where the overall costs are not unreasonable and the means of obtaining that information are known.[95] New scientific or technical research is unavailable information and is addressed in § 1502.23. Where the overall costs are unreasonable or means of obtaining the information are not known, agencies will continue to be required to disclose in the EIS that information is incomplete or unavailable and provide additional information to assist in analyzing the reasonably foreseeable significant adverse impacts. However, § 1502.23 does not require agencies to undertake new scientific and technical research to inform their analyses.

Finally, CEQ proposed to eliminate 40 CFR 1502.22(c) addressing the applicability of the 1986 amendments to this section because this paragraph is obsolete. CEQ does not include this provision in the final rule.

22. Cost-Benefit Analysis (§ 1502.22)

CEQ did not propose changes to the cost-benefit analysis section other than an update to the citation. In the final rule, CEQ moves this provision from § 1502.23 to § 1502.22 and adds a parenthetical after ''section 102(2)(B) of NEPA'' that paraphrases the statutory text relating to considering unquantified environmental amenities and values along with economic and technical considerations. This is consistent with the policy established in section 101(a), which also refers to fulfilling the social, economic, and other requirements of present and future generations of Americans. Finally, CEQ revises the language for clarity, including changing from passive to active voice.

23. Methodology and Scientific Accuracy (§ 1502.23)

CEQ proposed revisions to update proposed § 1502.24, which CEQ redesigantes § 1502.23 in the final rule. The NPRM proposed to broaden this provision to environmental documents and CEQ makes this change in the final rule. CEQ proposed to clarify that agencies must make use of reliable existing data and resources when they are available and appropriate. CEQ also proposed to revise this section to allow agencies to draw on any source of information (such as remote sensing and statistical modeling) that the agency finds reliable and useful to the decision-making process. As noted in the NPRM, these changes will promote the use of reliable data, including information gathered using modern technologies. CEQ makes these changes in the final rule with minor changes. The final rule revises the sentence regarding placing the discussion of methodology in an appendix from singular to plural for consistency with the rest of the language in this section. In response to comments, CEQ moves the proposed sentence regarding new scientific and technical research to a new sentence at the end of the section and adds a sentence clarifying that nothing in this provision is intended to prohibit agencies from compliance with the requirements of other statutes pertaining to scientific and technical research. Agencies must continue to conduct surveys and collect data where required by other statutes.

24. Environmental Review and Consultation Requirements (§ 1502.24)

CEQ proposed to revise this section to clarify that agencies must integrate, to the fullest extent possible, their NEPA analysis with all other applicable Federal environmental review laws and Executive orders in furtherance of the OFD policy established by E.O. 13807 and to make the environmental review process more efficient.[96] CEQ redesignates this section in the final rule to § 1502.24, updates a statutory

[93] 51 FR at 15622 (Apr. 25, 1986).

[94] *Id.*

[95] *See, e.g. Pub. Citizen,* 541 U.S. at 767 (''Also, inherent in NEPA and its implementing regulations is a 'rule of reason,' which ensures that agencies determine whether and to what extent to prepare an EIS based on the usefulness of any new potential information to the decision[-]making process.''); *see also Marsh,* 490 U.S. at 373–74 (agencies should apply a ''rule of reason'').

[96] The Permitting Council has compiled a list of environmental laws and Executive orders that may apply to a proposed action. *See* Federal Environmental Review and Authorization Inventory, *https://www.permits.performance.gov/tools/federal-environmental-review-and-authorization-inventory.*

citation, and revises the text as proposed.

E. Revisions to Commenting on Environmental Impact Statements (Part 1503)

Section 102(2)(C) of NEPA requires that agencies obtain views of Federal agencies with jurisdiction by law or expertise with respect to any environmental impact, and also directs that agencies make copies of the EIS and the comments and views of appropriate Federal, State, and local agencies available to the President, CEQ and the public. 42 U.S.C. 4332(2)(C). Part 1503 of the CEQ regulations include provisions relating to inviting and responding to comments. CEQ proposed to modernize part 1503 given modern technologies not available at the time of the 1978 regulations. In particular, the proposed regulations encouraged agencies to use the current methods of electronic communication both to publish important environmental information and to structure public participation for greater efficiency and inclusion of interested persons. Additionally, CEQ proposed changes to encourage commenters to provide information early and to require comments to be as specific as possible to ensure agencies can consider them in their decision-making process. CEQ finalizes many of the proposed changes with modifications as this section discusses in further detail.

1. Inviting Comments and Requesting Information and Analyses (§ 1503.1)

CEQ proposed to retitle and revise § 1503.1, ''Inviting comments and requesting information and analyses,'' to better reach interested and affected parties and ensure agencies receive the relevant information they need to complete their analyses. CEQ proposed to revise paragraphs (a)(2)(i) and (ii) to include State, Tribal and local agencies and governments to be comprehensive and consistent with the addition of ''Tribal'' as discussed in section II.A. CEQ proposed to eliminate the obsolete reference to OMB Circular A–95 from paragraph (a)(2)(iii) and move paragraphs (a)(3) and (4) to (a)(2)(iv) and (v), respectively, since these are additional parties from which agencies should request comments. CEQ also proposed in paragraph (a)(2)(v) to give agencies flexibility to tailor their public involvement process to more effectively reach interested and affected parties by soliciting comments ''in a manner designed to inform'' parties interested or affected ''by the proposed action.'' CEQ makes these changes in the final rule.

CEQ also proposed to add a new paragraph (a)(3) that requires agencies to specifically invite comment on the completeness of the submitted alternatives, information and analyses section (§ 1502.17). CEQ includes this new paragraph in the final rule with revisions to clarify that agencies should invite comments on the submitted alternatives, information, and analyses generally as well as the summary required under § 1502.17, rather than on the completeness of the summary, as proposed. Interested parties who may seek to challenge the agency's decision have an affirmative duty to comment during the public review period in order for the agency to consider their positions. *See Vt. Yankee,* 435 U.S. at 553.

In paragraph (b), CEQ proposed to require agencies to provide a 30-day comment period on the final EIS's submitted alternatives, information and analyses section. As noted in the discussion of § 1500.3(b) in section II.B.3, CEQ does not include this requirement in the final rule. However, the final rule adds language that if an agency requests comments on a final EIS before the final decision, the agency should set a deadline for such comments. This provides agencies the flexibility to request comments on a final EIS. Agencies may use this option where it would be helpful to inform the agency's decision making process.

Finally, CEQ proposed a new paragraph (c) to require agencies to provide for commenting using electronic means while ensuring accessibility to those who may not have such access to ensure adequate notice and opportunity to comment. CEQ includes this proposed paragraph in the final rule.

2. Duty To Comment (§ 1503.2)

Section 1503.2, ''Duty to comment,'' addresses the obligations of other agencies to comment on an EIS. CEQ proposed to clarify that this provision applies to cooperating agencies and agencies authorized to develop and enforce environmental standards. CEQ makes this change in the final rule and makes additional revisions to change the language from passive to active voice.

3. Specificity of Comments and Information (§ 1503.3)

CEQ proposed to revise paragraph (a) and retitle § 1503.3, ''Specificity of comments and information,'' to explain that the purposes of comments is to promote informed decision making and further clarify that comments should provide sufficient detail for the agency to consider the comment in its decision-making process. *See Pub. Citizen,* 541 U.S. at 764; *Vt. Yankee,* 435 U.S. at 553 (while ''NEPA places upon an agency the obligation to consider every significant aspect of the environmental impact of a proposed action, it is still incumbent upon [parties] who wish to participate to structure their participation so that it is meaningful, so that it alerts the agency to the [parties'] position . . . .''). CEQ also proposed in this paragraph that comments should explain why the issues raised are significant to the consideration of potential environmental impacts and alternatives to the proposed action, as well as economic and employment impacts, and other impacts affecting the quality of the human environment. In addition, CEQ proposed in this paragraph that comments should reference the section or page of the draft EIS, propose specific changes to those parts of the statement, where possible, and include or describe the data sources and methodologies supporting the proposed changes. *See Vt. Yankee,* 435 U.S. at 553 (''[Comments] must be significant enough to step over a threshold requirement of materiality before any lack of agency response or consideration becomes a concern. The comment cannot merely state that a particular mistake was made . . . ; it must show why the mistake was of possible significance in the results . . . .'' (quoting *Portland Cement Ass'n* v. *Ruckelshaus,* 486 F.2d 375, 394 (D.C. Cir. 1973)). CEQ includes these changes in the final rule to ensure that agencies are alerted to all interested and affected parties' concerns, but changes ''significant'' to ''important'' issues in the second sentence to avoid confusion with significant effects. Nothing in these revisions should be construed to limit public comment to those members of the public with scientific or technical expertise, and agencies should continue to solicit comment from all interested and affected members of the public. Consistent with the goal of promoting a manageable process and a meaningful focus on pertinent issues, CEQ also clarifies that commenters should submit information and raise issues as early in the process as possible, including during scoping to the extent practicable. Commenters should timely submit all comments and make their comments as specific as possible to promote informed and timely decision making.

CEQ also proposed a new paragraph (b) to emphasize that comments on the submitted alternatives, information, and analyses section should identify any additional alternatives, information, or

analyses not included in the draft EIS, and should be as specific as possible. The proposal required comments and objections to be raised within 30 days of publication of the notice of availability of the final EIS and noted that comments and objections not provided within those 30 days are considered exhausted and forfeited under § 1500.3(b). In the final rule, CEQ includes this paragraph with some changes. The final rule provides that comments should be on the submitted alternatives, information, and analyses themselves as well as the summary that § 1502.17 requires and be as specific as possible. It further provides that comments and objections on the draft EIS must be raised within the comment period provided by the agency, consistent with § 1506.11. The final rule does not include the 30-day comment period, as discussed in sections II.B.3 and II.E.1; however, it provides that if the agency requests comments on the final EIS, comments and objections must be raised within the comment period. The final rule also provides that comments and objections not provided within the relevant comment periods are considered unexhausted and forfeited under § 1500.3(b).

CEQ proposed to change ''commenting'' agency to ''participating'' agency in paragraph (c), and ''entitlements'' to ''authorizations'' in paragraph (d). CEQ makes these changes in the final rule. Finally, CEQ proposed to broaden paragraph (e) to require cooperating agencies with jurisdiction by law to specify the mitigation measures they consider necessary for permits, licenses, or related requirements, including the applicable statutory authority. CEQ includes this change in the final rule because it will provide greater transparency and clarity to the lead agency and the public when mitigation is required under another statute.

4. Response to Comments (§ 1503.4)

In practice, the processing of comments can require substantial time and resources. CEQ proposed to amend § 1503.4, ''Response to comments,'' to simplify and clarify in paragraph (a) that agencies are required to consider substantive comments timely submitted during the public comment period. CEQ also proposed to clarify that an agency may respond to comments individually or collectively. Consistent with this revision, CEQ proposed to clarify that, in the final EIS, agencies may respond by a variety of means, and to strike the detailed language in paragraph (a)(5) relating to comments that do not warrant further agency response. CEQ includes these changes with some modifications in the final rule. Specifically, CEQ changes ''individually'' to ''individual'' and ''collectively'' to ''groups of comments'' to clarify that agencies may respond to individual comments or group and respond once to a group of comments addressing the same issue. CEQ also modifies paragraph (a) introductory text to make clear that the list in paragraphs (a)(1) through (5) is how the agency may respond to comments. Finally, CEQ adds a clause to paragraph (a)(5) to reinforce that agencies do not have to respond to each comment individually. Under the 1978 regulations, agencies have had flexibility in how they structure their responses to comments, and CEQ does not consider this clarification to be a change in position.

CEQ proposed to clarify in paragraph (b) that agencies must append comments and responses to EISs rather than including them in the body of the EIS, or otherwise publish them. Under current practice, some agencies include these comment responses in the EISs themselves, which can contribute to excessive length. *See* CEQ Length of EISs Report, *supra* note 38. CEQ makes this change in the final rule. As noted in the NPRM, these changes do not preclude an agency from summarizing or discussing specific comments in the EIS as well.

Finally, CEQ proposed to amend paragraph (c) for clarity. CEQ makes the proposed changes and additional clarifying edits in the final rule.

F. Revisions to Pre-Decisional Referrals to the Council of Proposed Federal Actions Determined To Be Environmentally Unsatisfactory (Part 1504)

CEQ proposed edits to part 1504, ''Pre-decisional Referrals to the Council of Proposed Federal Actions Determined to be Environmentally Unsatisfactory,'' to improve clarity, including grammatical corrections. CEQ also proposed to reference specifically EAs in this part. Although infrequent, agencies have made referrals to CEQ on EAs. CEQ also proposed a minor revision to the title of part 1504, striking ''Predecision'' and inserting ''Pre-decisional.'' CEQ makes these changes in the final rule.

1. Purpose (§ 1504.1)

Section 1504.1, ''Purpose,'' addresses the purpose of part 1504, including CEQ referrals by the EPA. Section 309 of the Clean Air Act (42 U.S.C. 7609) requires EPA to review and comment on certain proposed actions of other Federal agencies and to make those comments public. Where appropriate, EPA may exercise its authority under section 309(b) of the Clean Air Act and refer the matter to CEQ, as stated in paragraph (b). The final rule revises this paragraph for clarity, changing it from passive to active voice. Paragraph (c) provides that other Federal agencies also may prepare such reviews. In the NPRM, CEQ proposed to change ''may make'' to ''may produce'' in this paragraph. The final rule changes this phrase to ''may prepare'' since ''prepare'' is the commonly used verb in these regulations.

2. Criterial for Referral (§ 1504.2)

CEQ proposed to change ''possible'' to ''practicable'' in the introductory paragraph of § 1504.2, ''Criteria for referral.'' CEQ makes this change in the final rule as discussed in section II.A. Consistent with the NEPA statute, CEQ proposed to add economic and technical considerations to paragraph (g) of § 1504.2, ''Criteria for referrals.'' CEQ includes this change in the final rule.

3. Procedure for Referrals and Response (§ 1504.3)

In § 1504.3, ''Procedure for referrals and response,'' CEQ proposed changes to simplify and modernize the referral process to ensure it is timely and efficient. CEQ proposed to change the language in this section from passive to active voice and make other clarifying edits to the language. CEQ includes these changes with some additional clarifying edits in the final rule. Specifically, in paragraphs (a)(1) and (2), CEQ changes ''advise'' and ''such advice'' to ''notify'' and ''a notification'' respectively. CEQ proposed to eliminate the exception in paragraph (a)(2) for statements that do not contain adequate information to permit an assessment of the matter's environmental acceptability. CEQ removes this clause in the final rule. The referring agency should provide the lead agency and CEQ with as much information as possible, including identification of when the information is inadequate to permit an assessment. In paragraph (a)(4), CEQ changes ''such advice'' to ''the referring agency's views'' in the final rule to clarify what the referring agency is sending to CEQ.

In paragraph (b), CEQ proposed to change ''commenting agencies'' to ''participating agencies,'' a change CEQ proposed throughout the rule, and to add a timeframe for referrals of EAs. CEQ makes these changes in the final rule. CEQ proposed to strike from paragraph (c)(1) the clause requiring the referral request that no action be taken to implement the matter until CEQ takes

action. CEQ removes this clause in the final rule because it is unnecessarily limiting. Agencies should have the flexibility to determine what they are requesting of the lead agency when making a referral, which may include a request not to take any action on the matter.

CEQ proposed to change ''material facts in controversy'' to ''disputed material facts'' in paragraph (c)(2)(i) for clarity and to simplify paragraph (c)(2)(iii) to focus on the reasons for the referral, which may include that the matter is environmentally unsatisfactory. CEQ proposed to revise paragraph (d)(2) to emphasize that the lead agency's response should include both evidence and explanations, as appropriate. CEQ proposed to revise paragraph (e) to simplify the process and to provide direction to applicants regarding the submittal of their views to the CEQ. CEQ proposed to strike the reference to public meetings or hearings in paragraph (f)(3) to provide more flexibility to CEQ in how it obtains additional views and information, which could include a public meeting or hearing. However, there may be other, more effective mechanisms to collect such information, including through use of current technologies. CEQ makes these changes in the final rule.

Finally, CEQ proposed to modify paragraph (h) to clarify that the referral process is not a final agency action that is judicially reviewable and to remove the requirement that referrals be conducted consistent with the APA where a statute requires that an action be determined on the record after an opportunity for a hearing. Where other statutes govern the referral process, those statutes continue to apply, and these regulations do not need to speculate about what process might be required. Therefore, CEQ eliminates this language in the final rule and replaces it with the clarification that the referral process does not create a private right of action because, among other considerations, there is no final agency action.

G. Revisions to NEPA and Agency Decision Making (Part 1505)

1. Remove and Reserve Agency Decisionmaking Procedures (§ 1505.1)

In the NPRM, CEQ proposed to move the text of 40 CFR 1505.1, ''Agency decisionmaking procedures,'' to § 1507.3(b). As discussed further in section II.I.3, CEQ makes this change in the final rule and reserves § 1505.1 for future use.

2. Record of Decision in Cases Requiring Environmental Impact Statements (§ 1505.2)

CEQ proposed to redesignate the introductory paragraph of § 1505.2, ''Record of decision in cases requiring environmental impact statements,'' as paragraph (a) and revise it to require agencies to ''timely publish'' a ROD. CEQ also proposed to clarify that the CEQ regulations allow for ''joint'' RODs by two or more Federal agencies; this change is also consistent with the OFD policy and E.O. 13807. Finally, CEQ proposed to remove references to OMB Circular A–95 as noted previously in section II.A.

CEQ proposed clarifying edits to proposed paragraphs (a) and (c) (paragraphs (a)(1) and (3) in the final rule) to change from passive to active voice for clarity. The final rule makes these changes in paragraphs (a)(1), (2), and (3) in the final rule. The final rule also removes ''all'' before ''alternatives'' in paragraph (a)(2) for consistency with the same change in § 1502.14(a).

CEQ proposed to include a requirement in proposed paragraph (d) to require agencies to respond to any comments on the submitted alternatives, information, and analyses section in the final EIS. As discussed in sections II.B.3 and II.E.1, CEQ does not include the proposed 30-day comment period in the final rule; therefore, CEQ is not including proposed § 1505.2(d) in the final rule.

In the NPRM, proposed paragraph (e) would require the ROD to include the decision maker's certification regarding consideration of the submitted alternatives, information, and analyses section, which proposed § 1502.18 required. The final rule replaces what was proposed paragraph (e) with the language moved from proposed § 1502.18, ''Certification of alternatives, information, and analyses section,'' in paragraph (b). In the NPRM, § 1502.18 stated that, based on the alternatives, information, and analyses section required under § 1502.17, the decision maker for the lead agency must certify that the agency has considered such information and include the certification in the ROD under § 1505.2(d) (as proposed). This provision also proposed a conclusive presumption that the agency has considered information summarized in that section because it is reasonable to presume the agency has considered such information based on the process to request and summarize public comments on the submitted alternatives, information, and analyses.

CEQ modifies the proposed text of § 1502.18 in the final rule and in paragraph (b) of § 1505.2 to clarify that the decision maker's certification in the ROD is informed by the summary of submitted alternatives, information, and analyses in the final EIS and any other material in the record that the decision maker determines to be relevant. This includes both the draft and final EIS as well as any supporting materials incorporated by reference or appended to the document. The final rule also changes ''conclusive presumption'' to a ''presumption'' and clarifies that the agency is entitled to a presumption that it has considered the submitted alternatives, information, and analyses, including the summary thereof in the final EIS. Establishing a rebuttable presumption will give appropriate weight to the process that culminates in the certification, while also allowing some flexibility in situations where essential information may have been inadvertently overlooked. The presumption and associated exhaustion requirement also will encourage commenters to provide the agency with all available information prior to the agency's decision, rather than disclosing information after the decision is made or in subsequent litigation. This is important for the decision-making process and efficient management of agency resources.

3. Implementing the Decision (§ 1505.3)

CEQ proposed minor edits to § 1505.3, ''Implementing the decision'' to change ''commenting'' agencies to ''participating'' in paragraph (c) and ''make available to the public'' to ''publish'' in paragraph (d). CEQ makes these changes in the final rule.

H. Revisions to Other Requirements of NEPA (Part 1506)

CEQ proposed a number of edits to part 1506 to improve the NEPA process to make it more efficient and flexible, especially where actions involve third-party applicants. CEQ also proposed several edits for clarity. CEQ finalizes many of these proposed changes in the final rule with some additional clarifying edits.

1. Limitations on Actions During NEPA Process (§ 1506.1)

CEQ proposed to add FONSIs to paragraph (a) of § 1506.1, ''Limitations on actions during NEPA process,'' to clarify existing practice and judicial determinations that the limitation on actions applies when an agency is preparing an EA as well as an EIS. CEQ proposed to consolidate paragraph (d) with paragraph (b) and revise the

language to provide additional clarity on what activities are allowable during the NEPA process. Specifically, CEQ proposed to eliminate reference to one specific agency, broadening the provision to all agencies and providing that this section does not preclude certain activities by an applicant to support an application of Federal, State, Tribal, or local permits or assistance. As an example of activities an applicant may undertake, CEQ proposed to add ''acquisition of interests in land,'' which includes acquisitions of rights-of-way and conservation easements. CEQ invited comment on whether it should make any additional changes to § 1506.1, including whether there are circumstances under which an agency may authorize irreversible and irretrievable commitments of resources. CEQ finalizes this provision as proposed with minor grammatical changes, and simplifying the references in paragraphs (c) introductory text and (c)(2) from programmatic environmental impact ''statement'' to ''review.''

2. Elimination of Duplication With State, Tribal, and Local Procedures (§ 1506.2)

CEQ proposed revisions to § 1506.2, ''Elimination of duplication with State, Tribal, and local procedures'' to promote efficiency and reduce duplication between Federal and State, Tribal, and local requirements. These changes are consistent with the President's directive in E.O. 13807 to provide for agency use, to the maximum extent permitted by law, of environmental studies, analysis, and decisions in support of earlier Federal, State, Tribal, or local environmental reviews or authorization decisions. E.O. 13807, sec. 5(e)(i)(C). CEQ proposed to revise paragraph (a) to acknowledge the increasing number of State, Tribal, and local governments conducting NEPA reviews pursuant to assignment from Federal agencies. *See, e.g.,* 23 U.S.C. 327, and 25 U.S.C. 4115 and 5389(a). CEQ makes this change in the final rule. The revision in paragraph (a) clarifies that Federal agencies are authorized to cooperate with such State, Tribal, and local agencies, and paragraph (b) requires cooperation to reduce duplication.

CEQ proposed to add examples to paragraph (b) to encourage use of prior reviews and decisions and modify paragraph (c) to give agencies flexibility to determine whether to cooperate in fulfilling State, Tribal, or local EIS or similar requirements. CEQ includes these proposed changes in the final rule and reorders the language to provide additional clarity. Additionally, the final rule makes further changes to paragraph (b) to remove potential impediments for agency use of studies, analysis, and decisions developed by State, Tribal, and local government agencies. Some commenters stated that CEQ proposed to limit agency use to only environmental studies, analysis, and decisions and exclude socio-economic and other information. The final rule clarifies that agencies should make broad use of studies, analysis, and decisions prepared by State, Tribal, and local agencies, as appropriate based on other requirements including § 1502.23. Finally, CEQ proposed to clarify in paragraph (d) that NEPA does not require reconciliation of inconsistencies between the proposed action and State, Tribal, or local plans or laws, although the EIS should discuss the inconsistencies. CEQ makes these revisions in the final rule.

3. Adoption (§ 1506.3)

CEQ proposed to expand adoption to EAs, consistent with current practice by many agencies, and CE determinations and clarify the process for documenting the decision to adopt. CEQ includes these proposed changes in the final rule with additional revisions to align the language for consistency in each paragraph and better organize § 1506.3 by grouping the provisions relating to EISs into paragraph (b), EAs in paragraph (c), and CE determinations in paragraph (d).

Paragraph (a) includes the general requirement for adoption, which is that any adoption must meet the standard for an adequate EIS, EA, or CE determination, as appropriate, under the CEQ regulations. CEQ proposed to reference EAs in this paragraph. The final rule includes CE determinations as well as EAs and reorders the documents for consistency with the ordering of paragraphs (b) through (d)—EISs, EAs (including portions of EISs or EAs), and CE determinations.

CEQ proposed clarifying edits in paragraph (b) and changed references from recirculation to republication consistent with this change throughout the rule. In the final rule, CEQ subdivides paragraph (b) into subordinate paragraphs (b)(1) and (2). Paragraph (b)(1) addresses EISs where the adopting agency is not a cooperating agency. CEQ moves the cooperating agency exception to republication to paragraph (b)(2). Consistent with the proposed rule, this paragraph also clarifies that the cooperating agency adopts such an EIS by issuing its own ROD.

In the NPRM, proposed paragraph (f) would allow an agency to adopt another agency's determination that its CE applies to an action if the adopting agency's proposed action is substantially the same. CEQ includes this provision in paragraph (d) of the final rule with clarifying edits. The final rule provides agencies the flexibility to adopt another agency's determination that a CE applies to an action when the actions are substantially the same to address situations where a proposed action would result in a CE determination by one agency and an EA and FONSI by another agency. For example, this would be the case when two agencies are engaging in similar activities in similar areas like small-scale prescribed burns, ecological restoration, and small-scale land management practices. Another example is when one agency's action may be a funding decision for a proposed project, and another agency's action is to consider a permit for the same project.

To allow agencies to use one another's CEs without the agency that promulgated the CE having to take an action, CEQ also proposed a new § 1507.3(e)(5), which would allow agencies to establish a process in their NEPA procedures to apply another agency's CE. CEQ notes that there was some confusion among commenters regarding the difference between the adoption of CEs under § 1506.3 and the provision in § 1507.3(f)(5) (proposed § 1507.3(e)(5)).[97] CEQ has made clarifying edits to address this confusion.

The adoption process in § 1506.3(d) first requires that an agency has applied a CE listed in its agency NEPA procedures. Then, the adopting agency must verify that its proposed action is substantially the same as the action for which it is adopting the CE determination. CEQ adds a sentence in § 1507.3(f)(5) of the final rule to clarify that agencies may establish a separate process for using another agency's listed CE and applying the CE to its proposed actions. The final rule also requires the adopting agency to document the adoption. Agencies may publish, where appropriate, such documentation or other information relating to the adoption.

4. Combining Documents (§ 1506.4)

CEQ proposed to amend § 1506.4, ''Combining documents,'' to encourage agencies ''to the fullest extent practicable'' to combine their environmental documents with other

[97] For a discussion of the differences between these two provisions, see section I.3 of the Final Rule Response to Comments.

agency documents to reduce duplication and paperwork. For example, the Corps routinely combines EISs with feasibility reports, and agencies may use their NEPA documents to satisfy compliance with section 106 of the National Historic Preservation Act under 36 CFR 800.8. CEQ includes the proposed revisions in the final rule with no changes.

5. Agency Responsibility for Environmental Documents (§ 1506.5)

As discussed in the NPRM, CEQ proposed to revise § 1506.5, ''Agency responsibility for environmental documents,'' in response to ANPRM comments urging CEQ to allow greater flexibility for the project sponsor (including private entities) to participate in the preparation of NEPA documents under the supervision of the lead agency. CEQ proposed updates to give agencies more flexibility with respect to the preparation of environmental documents while continuing to require agencies to independently evaluate and take responsibility for those documents. Under the proposal, applicants and contractors would be able to assume a greater role in contributing information and material to the preparation of environmental documents, subject to the supervision of the agency. However, agencies would remain responsible for taking reasonable steps to ensure the accuracy of information prepared by applicants and contractors. If a contractor or applicant prepares the document, proposed paragraph (c)(1) would require the decision-making agency official to provide guidance, participate in the preparation, independently evaluate the statement, and take responsibility for its content.

In the final rule, CEQ retains these concepts, but reorganizes § 1506.5 to better communicate the requirements. Specifically, paragraph (a) contains a clear statement that the Federal agency is ultimately responsible for the environmental document irrespective of who prepares it. While this is consistent with the 1978 regulations, CEQ provides this direct statement at the beginning of the section to respond to comments that suggested agencies would be handing over their responsibilities to project sponsors under the proposed rule.

Paragraph (b) introductory text and its subordinate paragraphs capture the requirements when a project sponsor or contractor prepares an environmental document, consolidating requirements for EISs and EAs into one because there is no longer a distinction between the requirements for each document in this context. Paragraph (b) allows an agency to require an applicant to submit environmental information for the agency's use in preparing an environmental document or to direct an applicant or authorize a contractor to prepare an environmental document under the agency's supervision. As noted in the NPRM, CEQ intends these changes to improve communication between proponents of a proposal for agency action and the officials tasked with evaluating the effects of the action and reasonable alternatives, to improve the quality of NEPA documents and efficiency of the NEPA process.

Paragraph (b)(1) requires agencies to provide guidance to the applicant or contractor and participate in the preparation of the NEPA document. Paragraph (b)(2) continues to require the agency to independently evaluate the information or environmental document and take responsibility for its accuracy, scope, and contents. Paragraph (b)(3) requires the agency to include the names and qualifications of the persons who prepared the environmental document. Adding ''qualifications'' is consistent with § 1502.18 and is important for transparency. For an EIS, this information would be included in the list of preparers as required by § 1502.18, but agencies have flexibility on where to include such information in an EA. Paragraph (b)(4) requires contractors or applicants preparing EAs or EISs to submit a disclosure statement to the lead agency specifying any financial or other interest in the outcome of the action, but it need not include privileged or confidential trade secrets or other confidential business information. In the NPRM, CEQ had proposed to remove the requirement for a disclosure statement. In response to comments, CEQ is retaining this concept in the final rule, recognizing that most applicants will have such a financial interest. However, as discussed above, CEQ finds that it is appropriate to allow applicants to prepare documents for the sake of efficiency and because agencies retain responsibility to oversee and take responsibility for the final environmental document.

6. Public Involvement (§ 1506.6)

CEQ proposed to update § 1506.6, ''Public involvement,'' to give agencies greater flexibility to design and customize public involvement to best meet the specific circumstances of their proposed actions. The NPRM proposed revisions to paragraphs (b) and (c) to add ''other opportunities for public engagement'' to recognize that there are other ways to engage with interested and affected parties besides hearings and meetings. CEQ finalizes these changes in the final rule but changes ''engagement'' to ''involvement'' consistent with the title of the section. Additionally, the final rule adds a sentence to these paragraphs to require agencies to consider interested and affected parties' access to electronic media, such as in rural locations or economically distressed areas. CEQ had proposed to state in a new paragraph (b)(3)(x) that notice may not be limited solely to electronic methods for actions occurring in an area with limited access to high-speed internet. However, CEQ is including this more general statement in paragraph (b) as it is a consideration for notice generally. In paragraph (b)(1), CEQ proposed to change the requirement to mail notice in paragraphs (b)(1) and (2) to the more general requirement to ''notify'' to give agencies the flexibility to use email or other mechanisms to provide such notice. CEQ makes this change in the final rule. CEQ also eliminates the requirement in paragraph (b)(2) to maintain a list of organizations reasonably expected to be interested in actions with effects of national concern because such a requirement is unnecessarily prescriptive given that agencies may collect and organize contact information for organizations that have requested regular notice in another format given advances in technology. In the proposed rule, CEQ proposed to change paragraph (b)(3)(i) to modify State clearinghouses to State and local agencies, and change paragraph (b)(3)(ii) to affected Tribal governments. In the final rule, CEQ modifies paragraph (b)(3)(i) to include notice to State, Tribal, and local agencies, and paragraph (b)(3)(ii) to include notice to interested or affected State, Tribal, and local governments for consistency with § 1501.9 and part 1503. CEQ proposed a new paragraph (b)(3)(x) to allow for notice through electronic media. CEQ includes this provision in the final rule, moving the language regarding consideration of access to paragraph (b), as noted previously.

In addition to the changes described above, CEQ proposed to strike the mandatory criteria in paragraph (c) for consideration of when to hold or sponsor public hearings or meetings. CEQ is removing this language in the final rule because such criteria are unnecessarily limiting. Agencies consider many factors in determining the most appropriate mechanism for promoting public involvement, including the particular location of the proposed action (if one exists), the types of effects it may have, and the needs of interested and affected parties, and may design their outreach in a manner that

best engages with those parties. The flexibility to consider relevant factors is critical especially in light of unexpected circumstances, such as the COVID–19 pandemic, which may require agencies to adapt their outreach as required by State, Tribal, and local authorities and conditions.

Finally, CEQ proposed to simplify paragraph (f) to require agencies to make EISs, comments and underlying documents available to the public consistent with the Freedom of Information Act (FOIA), removing the provisos regarding interagency memoranda and fees. Congress has amended FOIA numerous times since the enactment of NEPA, mostly recently by the FOIA Improvement Act of 2016, Public Law 114–185, 130 Stat. 538. Additionally, the revised paragraph (f) is consistent with the text of section 102(2)(C) of NEPA, including with regard to fees. CEQ makes these changes as proposed in the final rule.

7. Further Guidance (§ 1506.7)

CEQ proposed to update and modernize § 1506.7, ''Further guidance,'' to remove the specific references to handbooks, memoranda, and the 102 monitor, and replace it with a statement that CEQ may provide further guidance concerning NEPA and its procedures consistent with E.O. 13807 and E.O. 13891, ''Promoting the Rule of Law Through Improved Agency Guidance Documents.'' [98] CEQ makes these changes in paragraph (a) in the final rule. This rule supersedes preexisting CEQ guidance and materials in many respects. CEQ intends to publish a separate notice in the **Federal Register** listing guidance it is withdrawing. CEQ will issue new guidance, as needed, consistent with the final rule and Presidential directives. In the interim, in any instances where an interpretation of the 1978 regulations is inconsistent with the new regulations or this preamble's interpretation of the new regulations, the new regulations and interpretations shall apply, and CEQ includes a new paragraph (b) in the final rule to provide this clarification. CEQ notes that guidance does not have the force and effect of law and is meant to provide clarity regarding existing law and policy.

8. Proposals for Legislation (§ 1506.8)

CEQ proposed to move the legislative EIS requirements from the definition of legislation in 40 CFR 1508.17 to paragraph (a) of § 1506.8, ''Proposals for legislation,'' and revise the section for clarity. As noted in the NPRM, agencies prepare legislative EISs for Congress when they are proposing specific actions. CEQ also invited comment on whether the legislative EIS requirement should be eliminated or modified because the President proposes legislation, and therefore it is inconsistent with the Recommendations Clause of the U.S. Constitution, which provides the President shall recommend for Congress' consideration ''such [m]easures as he shall judge necessary and expedient . . . .'' U.S. Const., art. II, § 3. The President is not a Federal agency, 40 CFR 1508.12, and the proposal of legislation by the President is not an agency action. *Franklin* v. *Mass.,* 505 U.S. 788, 800–01 (1992).

In the final rule, CEQ retains the provision, but removes the reference to providing ''significant cooperation and support in the development'' of legislation and the test for significant cooperation to more closely align this provision with the statute. The final rule clarifies that technical drafting assistance is not a legislative proposal under these regulations. Consistent with these edits, CEQ strikes the reference to the Wilderness Act. The mandate has expired.[99] Under the Wilderness Act, a study was required to make a recommendation to the President. If the President agreed with the recommendation, the President then provided ''advice'' to Congress about making a wilderness determination. The President is not subject to NEPA in his direct recommendations to Congress, but agencies subject to the APA are subject to NEPA, as appropriate, concerning legislative proposals they develop. This avoids the constitutional issue. *See Ashwander* v. *Tenn. Valley Auth.,* 297 U.S. 288, 347 (1936) (Brandeis, J., concurring); *Rescue Army* v. *Mun. Court of L.A.,* 331 U.S. 549, 569 (1947).

9. Proposals for Regulations (§ 1506.9)

CEQ proposed to add a new § 1506.9, ''Proposals for regulations,'' to address the analyses required for rulemakings and to promote efficiency and reduce duplication in the assessment of regulatory proposals. CEQ proposed criteria for agencies to identify analyses that could serve as the functional equivalent of the EIS. In response to comments, CEQ revises this section in the final rule. This section clarifies that one or more procedures and documentation prepared pursuant to other statutory or Executive order requirements may satisfy one or more requirements of the CEQ regulations. When a procedure or document satisfies one or more requirements of this subchapter, the agency may substitute it for the corresponding requirements in this subchapter and need not carry out duplicative procedures or documentation. Agencies must identify which corresponding requirements in this subchapter are satisfied and consult with CEQ to confirm such determinations.

CEQ invited comments on analyses agencies are already conducting that, in whole or when aggregated, can serve as the functional equivalent of the EIS. Aspects of the cost-benefit analysis prepared pursuant to E.O. 12866, ''Regulatory Planning and Review,'' the Regulatory Flexibility Act, or the Unfunded Mandates Reform Act, may overlap with aspects of the CEQ regulations. Further, an agency may rely on the procedures implementing the requirements of a variety of statutes and Executive orders that could meet some or all of the requirements of this subchapter. CEQ does not expressly include specific analyses in the final rule that satisfy the requirements of the CEQ regulations. In all instances, agencies should clearly identify how and which specific parts of the analyses serve the purpose of NEPA compliance, including which requirements in the CEQ regulations are satisfied.

10. Filing Requirements (§ 1506.10)

CEQ proposed to update § 1506.10, ''Filing requirements,'' to remove the obsolete process for filing paper copies of EISs with EPA and EPA's delivery of a copy to CEQ, and instead provide for electronic filing, consistent with EPA's procedures. CEQ proposed this change to provide flexibility to adapt as EPA changes its processes. CEQ revises this section in the final rule, making the proposed changes as well as phrasing the language in active voice.

11. Timing of Agency Action (§ 1506.11)

CEQ proposed to revise paragraph (a) of § 1506.11, ''Timing of agency action,'' to clarify the timing of EPA's notices of availability of EISs. In paragraph (b), CEQ proposed to add a clause to acknowledge statutory authorities that provide for the issuance of a combined final EIS and ROD. *See* 23 U.S.C. 139(n)(2); 49 U.S.C. 304a(b). CEQ makes these changes in the final rule.

In proposed paragraph (c), CEQ proposed to add introductory text and create subordinate paragraphs to address those situations where agencies may make an exception to the time provisions in paragraph (b). Specifically, paragraph (c)(1) addresses agencies with formal appeals processes. Paragraph (c)(2) provides exceptions for

[98] 84 FR 55235 (Oct. 15, 2019).

[99] 16 U.S.C. 1132(b)–(c).

rulemaking to protect public health or safety. Paragraph (d) addresses timing when an agency files the final EIS within 90 days of the draft EIS. Finally, paragraph (e) addresses when agencies may extend or reduce the time periods. The proposed rule made edits to clarify the language in these paragraphs without changing the substance of the provisions. CEQ includes these changes in the final rule and makes additional clarifying revisions.

12. Emergencies (§ 1506.12)

Section 1506.12, ''Emergencies,'' addresses agency compliance with NEPA when an agency has to take an action with significant environmental effects during emergency circumstances. Over the last 40 years, CEQ has developed significant experience with NEPA in the context of emergencies and disaster recoveries. Actions following Hurricanes Katrina, Harvey, and Michael, and other natural disasters, have given CEQ the opportunity to respond to a variety of circumstances where alternative arrangements for complying with NEPA are necessary. CEQ has approved alternative arrangements to allow a wide range of proposed actions in emergency circumstances including catastrophic wildfires, threats to species and their habitat, economic crisis, infectious disease outbreaks, potential dam failures, and insect infestations.[100] CEQ proposed to amend § 1506.12, ''Emergencies,'' to clarify that alternative arrangements are still meant to comply with section 102(2)(C)'s requirement for a ''detailed statement.'' This amendment is consistent with CEQ's longstanding position that it has no authority to exempt Federal agencies from compliance with NEPA, but that CEQ can appropriately provide for exceptions to specific requirements of CEQ's regulations to address extraordinary circumstances that are not addressed by agency implementing procedures previously approved by CEQ. *See* Emergencies Guidance, *supra* note 29. CEQ maintains a public description of all pending and completed alternative arrangements on its website.[101] CEQ makes this change in the final rule.

13. Effective Date (§ 1506.13)

Finally, CEQ proposed to modify § 1506.13, ''Effective date,'' to clarify that these regulations would apply to all NEPA processes begun after the effective date, but agencies have the discretion to apply them to ongoing NEPA processes. CEQ also proposed to remove the 1979 effective date from the introductory paragraph, and strike 40 CFR 1506.13(a) referencing the 1973 guidance and 40 CFR 1506.13(b) regarding actions begun before January 1, 1970 because they are obsolete. This final rule makes these changes.

I. Revisions to Agency Compliance (Part 1507)

CEQ proposed modifications to part 1507, which addresses agency compliance with NEPA, to consolidate provisions relating to agency procedures from elsewhere in the CEQ regulations, and add a new section to address the dissemination of information about agency NEPA programs. CEQ makes these changes in the final rule with some modifications to the proposed rule as discussed in the following sections.

1. Compliance (§ 1507.1)

CEQ proposed a change to § 1507.1, ''Compliance,'' to strike the second sentence regarding agency flexibility in adapting its implementing procedures to the requirements of other applicable laws for consistency with changes to paragraphs (a) and (b) of § 1507.3, ''Agency NEPA procedures.'' This change is also consistent with the direction of the President to Federal agencies to ''comply with the regulations issued by the Council except where such compliance would be inconsistent with statutory requirements.'' E.O. 11514, as amended by E.O. 11991, sec. 2(g). CEQ makes this change in the final rule. Under the final rule, § 1507.1 requires all Federal agencies to comply with the CEQ regulations as set forth in parts 1500 through 1508.

2. Agency Capability To Comply (§ 1507.2)

CEQ proposed edits to the introductory paragraph of § 1507.2, ''Agency capability to comply,'' to clarify its meaning, which is to allow agencies to use the resources (including personnel and financial resources) of other parties, including agencies and applicants, and to specifically require agencies to account for the contributions of these other parties in complying with NEPA. This section also requires agencies to have their own capacity to comply with NEPA and the implementing regulations. This includes staff with the expertise to independently evaluate environmental documents, including those prepared by applicants and contractors. CEQ makes these clarifying edits in the final rule.

Additionally, CEQ proposed to revise paragraph (a) to make the senior agency official responsible for overall agency compliance with NEPA, including coordination, communication, and resolution of implementation issues. CEQ is finalizing this change. Under the final rule, the senior agency official is an official of assistant secretary rank or higher (or equivalent) with responsibilities consistent with the responsibilities of senior agency officials in E.O. 13807 to whom agencies elevate anticipated missed or extended permitting timetable milestones. The senior agency official is responsible for addressing disputes among lead and cooperating agencies and enforcing page and time limits. The senior agency official also is responsible for ensuring all environmental documents—even exceptionally lengthy ones—are provided to Federal agency decision makers in a timely, readable, and useful format. *See* §§ 1501.5(f), 1501.7(d), 1501.8(b)(6) and (c), 1501.10, 1502.7, 1507.2, 1508.1(dd).

CEQ proposed to amend paragraph (c) to emphasize agency cooperation, which includes commenting on environmental documents on which an agency is cooperating. CEQ makes this change in the final rule. CEQ revises paragraph (d) in response to comments to strike the second sentence, which created confusion regarding the reach of section 102(2)(E) of NEPA. Finally, CEQ proposed to add references to E.O. 11991, which amended E.O. 11514, and E.O. 13807 in paragraph (f) to codify agencies' responsibility to comply with the orders. CEQ makes both of these changes in the final rule.

3. Agency NEPA Procedures (§ 1507.3)

Agency NEPA procedures set forth the process by which agencies comply with NEPA and the CEQ regulations in the context of their particular programs and processes. In developing their procedures, agencies should strive to identify and apply efficiencies, such as use of applicable CEs, adoption of prior NEPA analyses, and incorporation by reference to prior relevant Federal, State, Tribal, and local analyses, wherever practicable. To facilitate effective and efficient procedures, CEQ

[100] In response to the economic crisis associated with the coronavirus outbreak, Executive Order 13927, titled ''Accelerating the Nation's Economic Recovery From the COVID–19 Emergency by Expediting Infrastructure Investments and Other Activities,'' was issued on June 4, 2020. 85 FR 35165. This Executive order directs agencies to identify planned or potential actions to facilitate the Nation's economic recovery, including identification of actions that may be subject to emergency treatment as alternative arrangements.

[101] *https://ceq.doe.gov/nepa-practice/alternative_arrangements.html.*

proposed to consolidate all of the requirements for agency NEPA procedures in § 1507.3, as discussed in detail below.

In the final rule, CEQ adds a new paragraph (a) to clarify the applicability of these regulations in the interim period between the effective date of the final rule and when the agencies complete updates to their agency NEPA procedures for consistency with these regulations. Consistent with § 1506.13, ''Effective date,'' which makes the regulations applicable to NEPA reviews begun after the effective date of the final rule, paragraph (a) of § 1507.3 requires agencies to apply these regulations to new reviews unless there is a clear and fundamental conflict with an applicable statute. For NEPA reviews in process that agencies began before the final rule's effective date, agencies may choose whether to apply the revised regulations or proceed under the 1978 regulations and their existing agency NEPA procedures. Agencies should clearly indicate to interested and affected parties which procedures it is applying for each proposed action. The final rule does not require agencies to withdraw their existing agency NEPA procedures upon the effective date, but agencies should conduct a consistency review of their procedures in order to proceed appropriately on new proposed actions.

Paragraph (a) also provides that agencies' existing CEs are consistent with the subchapter. CEQ adds this language to ensure CEs remain available for agencies' use to ensure a smooth transition period while they work to update their existing agency procedures, including their CEs, as necessary. This change allows agencies to continue to use their existing CEs for ongoing activities as well as proposed actions that begin after the effective date of the CEQ final rule, and clarifies that revisions to existing CEs are not required within 12 months of the publication date of the final rule. Agencies must still consider whether extraordinary circumstances are present and should rely upon any extraordinary circumstances listed in their agency NEPA procedures as an integral part of an agency's process for applying CEs.

In paragraph (b) (proposed paragraph (a)), CEQ proposed to provide agencies the later of one year after publication of the final rule or nine months after the establishment of an agency to develop or revise proposed agency NEPA procedures, as necessary, to implement the CEQ regulations and eliminate any inconsistencies with the revised regulations. CEQ includes this sentence in the final rule with a correction to the deadline—the deadline is calculated from the effective date, not the publication date. CEQ notes that this provision references ''proposed procedures,'' and agencies need not finalize them by this date. The final rule strikes a balance between minimizing the disruption to ongoing environmental reviews while also requiring agencies to revise their procedures in a timely manner to ensure future reviews are consistent with the final rule. Agencies have the flexibility to address the requirements of the CEQ regulations as they relate to their programs and need not state them verbatim in their procedures. In addition, CEQ proposed to clarify that, except as otherwise provided by law or for agency efficiency, agency NEPA procedures shall not impose additional procedures or requirements beyond those set forth in the CEQ regulations. CEQ includes this language in the final rule, changing the order of the phrases, changing ''provided by law'' to ''required by law'' to enhance clarity, and adding a cross-reference to paragraph (c), which references efficiencies. This change is consistent with the direction of the President to Federal agencies in E.O. 11514 to comply with the CEQ regulations issued except where such compliance would be inconsistent with statutory requirements. E.O. 11514, as amended by E.O. 11991, sec. 2(g). Finally, the final rule eliminates the sentence from 40 CFR 1507.3(a) prohibiting agencies from paraphrasing the CEQ regulations because it is unnecessarily limiting on agencies. Agencies have the flexibility to address the requirements of the CEQ regulations as they relate to their programs and need not state them verbatim in their procedures.

Consistent with its proposal, the final rule requires agencies to develop or revise, as necessary, proposed procedures to implement these regulations. In the NPRM, CEQ proposed to subdivide 40 CFR 1507.3(a) into subordinate paragraphs (a)(1) and (2) for additional clarity because each of these paragraphs have an independent requirement. CEQ finalizes this change as paragraphs (b)(1) and (2) in the final rule. Paragraph (b)(1) addresses the requirement for agencies to consult with CEQ when developing or revising proposed procedures. Paragraph (b)(2) requires agencies to publish proposed agency NEPA procedures for public review and comment. After agencies address these comments, CEQ must determine that the agency NEPA procedures conform to and are consistent with NEPA and the CEQ regulations. CEQ proposed to eliminate the recommendation to agencies to issue explanatory guidance and the requirement to review their policies and procedures. CEQ makes this change in the final rule because it is redundant to the proposed language in paragraph (b) requiring agencies to update their procedures to implement the final rule.

The NPRM proposed to move the provisions in § 1505.1, ''Agency decision making procedures,'' to proposed § 1507.3(b). The final rule moves these provisions to paragraph (c). As stated in the NPRM, consistent with the proposed edits to § 1500.1, CEQ proposed to revise this paragraph to clarify that agencies should ensure decisions are made in accordance with the Act's procedural requirements and policy of integrating NEPA with other environmental reviews to promote efficient and timely decision making. CEQ includes these edits in the final rule, along with an additional edit to change passive to active voice. CEQ does not include proposed paragraph (b)(1) (40 CFR 1505.1(a)) in the final rule because the phrase ''[i]mplementing procedures under section 102(2) of NEPA to achieve the requirements of section 101 and 102(1)'' could be read to suggest that agencies could interpret NEPA in a manner that would impose more burdens than the requirements of the final rule. Including this provision in the final rule would be inconsistent with the language in paragraph (b) that limits agency NEPA procedures to the requirements in these regulations unless otherwise required by law or for agency efficiency. Finally, CEQ corrects the reference in paragraph (c)(4) to EIS, changing it to ''environmental documents'' consistent with the rest of the paragraph.

CEQ proposed a new paragraph (b)(6) to direct agencies to set forth in their NEPA procedures requirements to combine their NEPA documents with other agency documents, especially where the same or similar analyses are required for compliance with other requirements. As stated in the NPRM, many agencies implement statutes that call for consideration of alternatives to the agency proposal, including the no action alternative, the effects of the agencies' proposal and alternatives, and public involvement. Agencies can use their NEPA procedures to align compliance with NEPA and these other statutory authorities to integrate NEPA's goals for informed decision making with agencies' specific statutory requirements. This approach is consistent with some agency practice. *See, e.g.,* 36 CFR part 220; Forest Service Handbook 1909.15 (U.S.

Department of Agriculture Forest Service NEPA procedures). More agencies could use it to achieve greater efficiency and reduce unnecessary duplication. Additionally the NPRM proposed to allow agencies to designate analyses or processes that serve as the functional equivalent of NEPA compliance.

CEQ includes this provision in the final rule at paragraph (c)(5) with revisions to clarify that agencies may designate and rely on one or more procedures or documents under other statutes or Executive orders as satisfying some or all of the requirements in the CEQ regulations. While courts have held that agencies do not need to conduct NEPA analyses under a number of statutes that are ''functionally equivalent,'' including the Clean Air Act, the Ocean Dumping Act, the Federal Insecticide, Fungicide, and Rodenticide Act, the Resource Conservation and Recovery Act, and the Comprehensive Environmental Response, Compensation, and Liability Act,[102] the final rule recognizes that agencies may substitute processes or documentation prepared pursuant to other statutes or Executive orders to satisfy one or more requirements in the CEQ regulations to reduce duplication. Agencies must identify the respective requirements in this subchapter that are satisfied by other statutes or Executive orders.

Furthermore, CEQ proposed to add a new paragraph to allow agencies to identify activities or decisions that are not subject to NEPA, consistent with § 1501.1, in their agency NEPA procedures. CEQ adds this provision to paragraph (d) in the final rule. The final rule uses ''should'' instead of ''may'' to encourage agencies to make these identifications in their agency NEPA procedures. The final rule also replaces ''actions'' with ''activities or decisions'' to avoid confusion with the definition of ''action'' in § 1508.1(q). CEQ includes this list in the final rule consistent with the changes in § 1501.1 as discussed in section II.C.1, with minor revisions to improve readability and a reordering of the provisions consistent with the reordering of the provisions in § 1501.1.

Paragraph (e) (proposed paragraph (d)) maintains much of the language from 40 CFR 1507.3(b). CEQ proposed to add parenthetical descriptions of the cross-references in proposed paragraph (d)(1), and CEQ includes these in the final rule at paragraph (e)(1). CEQ proposed to revise paragraph (d)(2)(ii), which requires agencies to identify CEs in their agency NEPA procedures, move the requirement for extraordinary circumstances from the definition of CEs in 40 CFR 1508.4, and require agencies to identify in their procedures when documentation of a CE determination is required. CEQ also proposed to add language to proposed paragraph (e) to codify existing agency practice to publish notices when an agency pauses an EIS or withdraws an NOI. CEQ includes this provision with the proposed revisions in the final rule at paragraph (f)(3). Finally, CEQ proposed to move from 40 CFR 1502.9(c)(3) to proposed paragraph (d)(3) the requirement to include procedures for introducing a supplement into its formal administrative record and clarify that this includes EAs and EISs. CEQ includes this provision in the final rule at paragraph (e)(3).

Paragraphs (f)(1) through (3) (proposed paragraphs (e)(1) through (3)) maintain much of the language from 40 CFR 1507.3(c) through (e). In proposed paragraph (e)(1), CEQ proposed to revise the language to active voice and encourage, rather than just allow, agencies to organize environmental documents in such a way as to make unclassified portions of environmental documents available to the public. CEQ makes these revisions in the final rule in paragraph (f)(1). CEQ also modifies paragraph (f)(2) to add a reference to the requirements of lead and cooperating agencies. CEQ adds this example consistent with the addition to § 1506.11(b) referencing statutory provisions for combining a final EIS and ROD. This is also consistent with CEQ's goal of improving coordination between lead and cooperating agencies and providing efficient processes to allow for integration of the NEPA review with reviews conducted under other statutes. This allows for altering time periods to facilitate issuance of a combined FEIS and ROD. Additionally, CEQ proposed to move the language allowing agencies to adopt procedures to combine their EA process with their scoping process from 40 CFR 1501.7(b)(3) to paragraph (e)(4). CEQ makes this change in the final rule at paragraph (f)(4).

Finally, CEQ proposed in paragraph (e)(5) to allow agencies to establish a process in their agency NEPA procedures to apply the CEs of other agencies. CEQ also invited comment on whether to set forth this process in these regulations. In the final rule, CEQ includes the provision to allow agencies to establish a process in paragraph (f)(5) with some changes. CEQ includes clarifying language to address the confusion commenters had as to differences between this section and adoption of a CE determination under § 1506.3. An agency's process must provide for consultation with the agency that listed the CE in its NEPA procedures to ensure that the planned use of the CE is consistent with the originating agency's intent and practice.[103] The process should ensure documentation of the consultation and identify to the public those CEs the agency may use for its proposed actions. Consistent with § 1507.4, agencies could post such information on their websites. Then, an agency may apply the CE to its proposed actions, including proposed projects or activities or groups of proposed projects or activities.

4. Agency NEPA Program Information (§ 1507.4)

CEQ proposed to add a new § 1507.4, ''Agency NEPA program information,'' to provide the means of publishing information on ongoing NEPA reviews and agency records relating to NEPA reviews. CEQ is finalizing this provision as proposed with no changes. As stated in the NPRM, this provision requires agencies in their NEPA procedures to provide for a website or other means of publishing certain information on ongoing NEPA reviews and maintaining and permitting public access to agency records relating to NEPA reviews.

Section 1507.4 promotes transparency and efficiency in the NEPA process, and improves interagency coordination by

[102] *See Portland Cement Ass'n,* 486 F.2d at 387 (finding an exemption from NEPA for Clean Air Act section 111); *see also Envtl. Def. Fund, Inc,* 489 F.2d at 1254–56 (concluding that the standards of FIFRA provide the functional equivalent of NEPA); *Cellular Phone Taskforce,* 205 F.3d at 94–95 (concluding that the procedures followed by the Federal Communications Commission were functionally compliant with NEPA's EA and FONSI requirements); *W. Neb. Res. Council,* 943 F.2d at 871–72 (concluding that EPA's procedures and analysis under the Safe Drinking Water Act were functionally equivalent to NEPA); *Wyo.* v. *Hathaway,* 525 F.2d 66, 71–72 (10th Cir. 1975) (concluding that EPA need not prepare an EIS before cancelling or suspending registrations of three chemical toxins used to control coyotes under FIFRA); *State of Ala. ex rel. Siegelman* v. *U.S. EPA,* 911 F.2d 499, 504–05 (11th Cir. 1990) (holding that EPA did not need to comply with NEPA when issuing a final operating permit under the Resource Conservation and Recovery Act); *Envtl. Def. Fund, Inc.* v. *Blum,* 458 F. Supp. 650, 661–62 (D.D.C. 1978) (EPA need not prepare an EIS before granting an emergency exemption to a state to use an unregistered pesticide); *State of Md.* v. *Train,* 415 F. Supp. 116, 121–22 (D. Md. 1976) (Ocean Dumping Act functional equivalent of NEPA). For further discussion, see section J.3 of the Final Rule Response to Comments.

[103] The use of another agency's CE under a process in the agency's NEPA procedures is an option separate from the adoption, under § 1506.3(f), of another agency's determination that its CE applies to a particular action that is substantially the same as the adopting agency's proposed action. An agency may adopt another agency's CE determination for a particular action regardless of whether its procedures provide a process for application of other agencies' CEs.

ensuring that information is more readily available to other agencies and the public. As discussed in the NPRM, opportunities exist for agencies to combine existing geospatial data, including remotely sensed images, and analyses to streamline environmental review and better coordinate development of environmental documents for multi-agency projects, consistent with the OFD policy. One option involves creating a single NEPA application that facilitates consolidation of existing datasets and can run several relevant geographic information system (GIS) analyses to help standardize the production of robust analytical results. This application could have a public-facing component modeled along the lines of EPA's NEPAssist,[104] which would aid prospective project sponsors with site selection and project design and increase public transparency. The application could link to the Permitting Dashboard to help facilitate project tracking and flexibilities under §§ 1506.5 and 1506.6. CEQ invited comment on this proposal, including comment on whether additional regulatory changes could help facilitate streamlined GIS analysis to help agencies comply with NEPA. While some commenters supported the development of a single NEPA application, others identified challenges to ensuring databases are useful, as well as privacy and security concerns. CEQ did not receive sufficient comment to lead CEQ to make additional regulatory changes to facilitate streamlined GIS analysis to help agencies comply with NEPA, and the final rule does not contain any changes from the proposal.

J. Revisions to Definitions (Part 1508)

NEPA does not itself include a set of definitions provided by Congress. CEQ, in the 1978 regulations, established a set of definitions for NEPA and the CEQ regulations. In this final rule, CEQ has clarified or supplemented the definitions as discussed below and further described in the Final Rule Response to Comments at section K. As noted above, *see Public Citizen,* 541 U.S. at 757; *Methow Valley,* 490 U.S. at 355 (citing *Andrus,* 442 U.S. at 358); *Brand X,* 545 U.S. at 980–86; and *Mead Corp.,* 533 U.S. at 227–30, CEQ has the authority to interpret NEPA. *See, e.g., Barnhart* v. *Walton,* 535 U.S. 212, 218 (2002) (''[S]ilence, after all, normally creates ambiguity. It does not resolve it.''). Existing NEPA case law inevitably rests directly on interpretive choices made in the 1978 regulations or on cases that themselves through some chain of prior cases also trace to the 1978 regulations. Yet consistent with *Chevron,* CEQ's NEPA regulations are subject to change. *See also Brand X,* 545 U.S. 967.

CEQ's intention to make use of its interpretive authority under *Chevron* is particularly applicable as to part 1508 where CEQ defines or revises key terms in the NEPA statute and the CEQ regulations. As a result, this confers on CEQ an even greater degree of latitude to elucidate the meaning of the statute's terms in these regulations—the same basic authority exercised by CEQ back in 1978 in the original form of the NEPA regulations. *See, e.g., Demski* v. *U.S. Dep't of Labor,* 419 F.3d 488, 491 (6th Cir. 2005) (''In the absence of a congressional definition or an explicit delegation of congressional authority to the agency, we determine how the agency responsible for implementing the statute . . . understands the term, and, under *Chevron* . . . we determine whether such an understanding is a 'reasonable interpretation' of the statute.'' (citing *Chevron,* 467 U.S. at 844)); *London* v. *Polishook,* 189 F.3d 196, 200 (2d Cir. 1999) (''[J]udicial deference does apply to the guidelines that [the] Department's Office of Labor–Management Standards Enforcement has developed and set out in its LMRDA Interpretive Manual § 030.425—guidelines to which [the D.C. Circuit in *Martoche*] deferred in the absence of a clear definition of 'political subdivision' in the Act or in its legislative history.''); *Hawaii Gov't Employees Ass'n, Am. Fed'n of State, Cty. & Mun. Employees, Local 152* v. *Martoche,* 915 F.2d 718, 721 (D.C. Cir. 1990) (''With some imprecision in the statutory text [as to an undefined term] and a nearly total lack of elucidation in the legislative history, the situation is squarely one in which Congress implicitly left a gap for the agency to fill.'') (internal citation and quotation marks omitted). *See also Perez* v. *Commissioner,* 144 T.C. 51, 59 (2015); *Saha Thai Steel Pipe (Pub.) Co.* v. *United States,* 33 C.I.T. 1541, 1547 (Ct. of Int'l Trade 2009).[105] In promulgating new or revised definitions and other changes to the NEPA regulations, CEQ has considered the ordinary meaning of the terms used by Congress in the statute.

As discussed in the NPRM, CEQ proposed significant revisions to part 1508. CEQ proposed to move the operative language, which is regulatory language that provides instruction or guidance, included throughout the regulations in this section to the relevant substantive sections of the regulations. Consistent with this change, CEQ proposed to retitle part 1508 from ''Terminology and Index'' to ''Definitions.'' [106] CEQ also proposed to clarify the definitions of a number of key NEPA terms in order to reduce ambiguity, both through modification of existing definitions and the addition of new definitions. CEQ proposed to eliminate individual section numbers for each term in favor of a single section of defined terms in the revised § 1508.1. Finally, CEQ proposed to remove citations to the specific definition sections throughout the rule. CEQ makes these changes in the final rule.

1. Clarifying the Meaning of ''Act''

CEQ proposed in paragraph (a) to add ''NEPA'' as a defined term with the same meaning as ''Act.'' CEQ makes this change in the final rule.

2. Definition of ''Affecting''

CEQ did not propose to make any change to the defined term ''affecting'' in paragraph (b). CEQ does not make any changes to this definition in the final rule.

3. New Definition of ''Authorization''

CEQ proposed to define the term ''authorization'' in paragraph (c) to refer to the types of activities that might be required for permitting a proposed action, in particular infrastructure projects. This definition is consistent with the definition included in FAST–41 and E.O. 13807. CEQ proposed to replace the word ''entitlement'' with ''authorization'' throughout the rule. CEQ adds this definition and makes these changes in the final rule.

4. Clarifying the Meaning of ''Categorical Exclusion''

CEQ proposed to revise the definition of ''categorical exclusion'' in paragraph (d) by inserting ''normally'' to clarify that there may be situations where an action may have significant effects on account of extraordinary circumstances.

[104] *https://nepassisttool.epa.gov/nepassist/nepamap.aspx. See also* the Marine Cadastre, which provides consolidated GIS information for offshore actions, *https://marinecadastre.gov/.*

[105] ''Although NEPA's statutory text specifies *when* an agency must comply with NEPA's procedural mandate; it is the Council on Environmental Quality Regulations ('CEQ') regulations which dictate the *how,* providing the framework by which all [F]ederal agencies comply with NEPA.'' *Dine' Citizens Against Ruining Our Environment* v. *Klein,* 747 F. Supp. 2d 1234, 1248 (D. Colo. 2010) (emphasis in original).

[106] CEQ has maintained an index in the Code of Federal Regulations, but this is not a part of the regulations. CEQ does not intend to continue to maintain such an index because it is no longer necessary given that the regulations are typically accessed electronically and the regulations' organization has been significantly improved.

CEQ also proposed to strike ''individually or cumulatively'' for consistency with the proposed revisions to the definition of ''effects'' as discussed in this section. CEQ proposed conforming edits in §§ 1500.4(a) and 1500.5(a). As noted in section II.I.3, CEQ proposed to move the requirement to provide for extraordinary circumstances in agency procedures to § 1507.3(d)(2)(ii) (§ 1507.3(e)(2)(ii) in the final rule). CEQ makes these changes in the final rule. CEQ notes that the definition of ''categorical exclusion'' only applies to those CEs created by an agency in its agency NEPA procedures and does not apply to ''legislative'' CEs created by Congress, which are governed by the terms of the specific statute and statutory interpretation of the agency charged with the implementation of the statute.

5. Clarifying the Meaning of ''Cooperating Agency''

CEQ proposed to amend the definition of ''cooperating agency'' in paragraph (e) to make clear that a State, Tribal, or local agency may be a cooperating agency when the lead agency agrees, and to move the corresponding operative language allowing a State, Tribal, or local agency to become a cooperating agency with the lead agency's agreement to paragraph (a) of § 1501.8, ''Cooperating agencies.'' CEQ also proposed to remove the sentence cross-referencing the cooperating agency section in part 1501 and stating that the selection and responsibilities of a cooperating agency are described there because it is unnecessary and does not define the term. CEQ makes these changes in the final rule.

6. Definition of ''Council''

CEQ did not propose any changes to the definition of ''Council'' in paragraph (f). CEQ also invited comment on whether to update references to ''Council'' in the regulations to ''CEQ'' throughout the rule. CEQ did not receive sufficient comments on this proposal; therefore, CEQ does not make this change in the final rule.

7. Definition of ''Cumulative Impact'' and Clarifying the Meaning of ''Effects''

CEQ proposed to remove the definition of ''cumulative impact'' and revise the definition of ''effects'' in paragraph (g). As noted in the NPRM, many commenters to the ANPRM urged CEQ to refine the definition based on concerns that it creates confusion, and that the terms ''indirect'' and ''cumulative'' have been interpreted expansively resulting in excessive documentation about speculative effects and leading to frequent litigation. Commenters also raised concerns that this has expanded the scope of NEPA analysis without serving NEPA's purpose of informed decision making. Commenters stressed that the focus of the effects analysis should be on those effects that are reasonably foreseeable, related to the proposed action under consideration, and subject to the agency's jurisdiction and control. Commenters also noted that NEPA practitioners often struggle with describing cumulative impacts despite a number of publications that address the topic.

While NEPA refers to environmental impacts and environmental effects, it does not subdivide the terms into direct, indirect, or cumulative. Nor are the terms ''direct,'' ''indirect,'' or ''cumulative'' included in the text of the statute. CEQ created those concepts and included them in the 1978 regulations.

To address commenters' concerns and reduce confusion and unnecessary litigation, CEQ proposed to simplify the definition of effects by striking the specific references to direct, indirect, and cumulative effects and providing clarity on the bounds of effects consistent with the Supreme Court's holding in *Public Citizen,* 541 U.S. at 767–68. Under the proposed definition, effects must be reasonably foreseeable and have a reasonably close causal relationship to the proposed action or alternatives; a ''but for'' causal relationship is insufficient to make an agency responsible for a particular effect under NEPA. This close causal relationship is analogous to proximate cause in tort law. *Id.* at 767; *see also Metro. Edison Co.,* 460 U.S. at 774 (interpreting section 102 of NEPA to require ''a reasonably close causal relationship between a change in the physical environment and the effect at issue'' and stating ''[t]his requirement is like the familiar doctrine of proximate cause from tort law.''). CEQ sought comment on whether to include in the definition of effects the concept that the close causal relationship is ''analogous to proximate cause in tort law,'' and if so, how CEQ could provide additional clarity regarding the meaning of this phrase.

In the final rule, CEQ revises the definition of effects consistent with the proposal, with some additional edits. First, to eliminate the circularity in the definition, CEQ changes the beginning of the definition from ''means effects of'' to ''means changes to the human environment from'' the proposed action or alternatives. This change also associates the definition of effects with the definition of human environment, which continues to cross-reference to the definition of effects in the final rule. It also makes clear that, when the regulations use the term ''effects,'' it means effects on the human environment. This responds to comments suggesting CEQ add ''on the human environment'' after ''effects'' in various sections of the rule.

The final rule also consolidates the first two sentences of the definition to clarify that, for purposes of this definition, ''effects that occur'' at the ''same time and place as the proposed action or alternatives,'' or that ''are later in time or farther removed in distance'' must nevertheless be reasonably foreseeable and have a reasonably close causal relationship to the proposed action or alternatives. As a separate sentence that only referenced reasonable foreseeability, there was ambiguity as to whether a reasonably close causal relationship was required. Additionally, the final rule adds a clause to clarify that the consideration of time and place or distance are relative to the proposed action or alternatives.

CEQ proposed to strike the definition of ''cumulative impact'' and the terms ''direct'' and ''indirect'' in order to focus agency time and resources on considering whether the proposed action causes an effect rather than on categorizing the type of effect. As stated in the NPRM, CEQ intends the revisions to simplify the definition to focus agencies on consideration of effects that are reasonably foreseeable and have a reasonably close causal relationship to the proposed action. In practice, agencies have devoted substantial resources to categorizing effects as direct, indirect, or cumulative, which, as noted above, are not terms referenced in the NEPA statute. CEQ eliminates these references in the final rule.

To further assist agencies in their assessment of significant effects, CEQ also proposed to clarify that agencies should not consider effects significant if they are remote in time, geographically remote, or the result of a lengthy causal chain. *See, e.g., Pub. Citizen,* 541 U.S. at 767–68 (''In particular, 'courts must look to the underlying policies or legislative intent in order to draw a manageable line between those causal changes that may make an actor responsible for an effect and those that do not.' '' (quoting *Metro. Edison Co.,* 460 U.S. at 774 n.7)); *Metro. Edison Co.,* 460 U.S. at 774 (noting effects may not fall within section 102 of NEPA because ''the causal chain is too attenuated''). CEQ revises this sentence in the final rule to add ''generally'' to reflect the fact that there may occasionally be a

circumstance where an effect that is remote in time, geographically remote, or the product of a lengthy causal chain is reasonably foreseeable and has a reasonably close causal relationship to the proposed action.

Further, CEQ proposed to codify a key holding of *Public Citizen* relating to the definition of effects to make clear that effects do not include effects that the agency has no authority to prevent or that would happen even without the agency action, because they would not have a sufficiently close causal connection to the proposed action. For example, this would include effects that would constitute an intervening and superseding cause under familiar principles of tort law. *See, e.g., Sierra Club* v. *FERC,* 827 F.3d 36, 47–48 (D.C. Cir. 2016) (NEPA case incorporating these principles) (''[C]ritical to triggering that chain of events is the intervening action of the Department of Energy in granting an export license. The Department's independent decision to allow exports—a decision over which the Commission has no regulatory authority—breaks the NEPA causal chain and absolves the Commission of responsibility to include in its NEPA analysis considerations that it 'could not act on' and for which it cannot be 'the legally relevant cause.''' (quoting *Pub. Citizen,* 541 U.S. at 769)). As discussed in the NPRM, this clarification will help agencies better understand what effects they need to analyze and discuss, helping to reduce delays and paperwork with unnecessary analyses. CEQ includes this language in the final rule as proposed.

In addition, CEQ proposed a change in position to state that analysis of cumulative effects, as defined in the 1978 regulations, is not required under NEPA. Categorizing and determining the geographic and temporal scope of such effects has been difficult and can divert agencies from focusing their time and resources on the most significant effects. Past CEQ guidance has not been successful in dispelling ambiguity. Excessively lengthy documentation that does not focus on the most meaningful issues for the decision maker's consideration can lead to encyclopedic documents that include information that is irrelevant or inconsequential to the decision-making process. Instead, agencies should focus their efforts on analyzing effects that are most likely to be potentially significant and effects that would occur as a result of the agency's decision, rather than effects that would be the result of intervening and superseding causes. Agencies are not expected to conduct exhaustive research on identifying and categorizing actions beyond the agency's control.

CEQ intended the proposed elimination of the definition of cumulative impact to focus agencies on analysis of effects that are reasonably foreseeable and have a reasonably close causal relationship to the proposed action. Cumulative effects analysis has been interpreted so expansively as to undermine informed decision making, and led agencies to conduct analyses to include effects that are not reasonably foreseeable or do not have a reasonably close causal relationship to the proposed action or alternatives. CEQ also invited comment on whether to include an affirmative statement that consideration of indirect effects is not required; the final rule does not include additional direction to agencies specific to indirect effects.

CEQ received many comments on cumulative effects. In the final rule, to provide further clarification, CEQ includes a new provision at paragraph (g)(3) that states that the analysis of effects shall be consistent with the definition of effects, and that cumulative impact, defined in 40 CFR 1508.7 (1978), is repealed. This language explains how agencies should apply the definition of effects with respect to environmental documents and other provisions in the final rule. Specifically, analyses are bound by the definition of effects as set forth in § 1508.1(g)(1) and (2) and should not go beyond the definition of effects set forth in those two paragraphs. The final rule provides considerable flexibility to agencies to structure the analysis of effects based on the circumstances of their programs.

In response to the NPRM, commenters stated that agencies would no longer consider the impacts of a proposed action on climate change. The rule does not preclude consideration of the impacts of a proposed action on any particular aspect of the human environment. The analysis of the impacts on climate change will depend on the specific circumstances of the proposed action. As discussed above, under the final rule, agencies will consider predictable trends in the area in the baseline analysis of the affected environment.

8. Clarifying the Meaning of ''Environmental Assessment''

CEQ proposed to revise the definition of ''environmental assessment'' in paragraph (h), describing the purpose for the document and moving all of the operative language setting forth the requirements for an EA from the definition to proposed § 1501.5. CEQ makes this change in the final rule.

9. Clarifying the Meaning of ''Environmental Document''

CEQ proposed to remove the cross-references from the definition of ''environmental document'' in paragraph (i). CEQ makes this change in the final rule.

10. Clarifying the Meaning of ''Environmental Impact Statement''

CEQ proposed to change ''the Act'' to ''NEPA'' in the definition of ''environmental impact statement'' in paragraph (j). CEQ makes this change in the final rule.

11. Clarifying the Meaning of ''Federal Agency''

CEQ proposed to amend the definition of ''Federal agency'' in paragraph (k) to broaden it to include States, Tribes, and units of local government to the extent that they have assumed NEPA responsibilities from a Federal agency pursuant to statute. As stated in the NPRM, since the issuance of the CEQ regulations, Congress has authorized assumption of NEPA responsibilities in other contexts besides the Housing and Community Development Act of 1974, Public Law 93–383, sec. 104(h), 88 Stat. 633, 640, 42 U.S.C. 5304. *See, e.g.,* Surface Transportation Project Delivery Program, 23 U.S.C. 327. This change acknowledges these programs and helps clarify roles and responsibilities. CEQ makes this change and minor clarifying edits in the final rule.

12. Clarifying the Meaning of ''Finding of No Significant Impact''

CEQ proposed to revise the definition of ''finding of no significant impact'' in paragraph (l) to insert the word ''categorically'' into the phrase ''not otherwise excluded,'' change the cross-reference to the new section addressing CEs at § 1501.4, and move the operative language requiring a FONSI to include an EA or a summary of it and allowing incorporation by reference of the EA to § 1501.6, which addresses the requirements of a FONSI. CEQ makes these revisions in the final rule.

13. Clarifying the Meaning of ''Human Environment''

CEQ proposed to change ''people'' to ''present and future generations of Americans'' consistent with section 101(a) of NEPA to the definition of human environment in paragraph (m). CEQ also proposed to move the operative language stating that economic or social effects by themselves

do not require preparation of an EIS to § 1502.16(b), which is the section of the regulations that addresses when agencies should consider economic or social effects in an EIS. CEQ makes these changes in the final rule to assist agencies in understanding and implementing the statute and regulations.

14. Definition of ''Jurisdiction by Law''

The NPRM did not propose any changes to the definition of jurisdiction by law in paragraph (n). CEQ did not revise this definition in the final rule.

15. Clarifying the Meaning of ''Lead Agency''

CEQ proposed to amend the definition of lead agency in paragraph (o) to clarify that this term includes joint lead agencies, which are an acceptable practice. CEQ makes this change in the final rule.

16. Clarifying the Meaning of ''Legislation''

CEQ proposed to move the operative language regarding the test for significant cooperation and the principle that only the agency with primary responsibility will prepare a legislative EIS to § 1506.8. CEQ also proposed to strike the example of treaties, because the President is not a Federal agency, and therefore a request for ratification of a treaty would not be subject to NEPA. CEQ makes these changes in the final rule, striking the references to ''significant cooperation and support,'' in paragraph (p) to narrow the definition to comport with the NEPA statute, as discussed in section II.H.8.

17. Clarifying the Meaning of ''Major Federal Action''

CEQ received many comments on the ANPRM requesting clarification of the definition of major Federal action. For example, CEQ received comments proposing that non-Federal projects should not be considered major Federal actions based on a very minor Federal role. Commenters also recommended that CEQ clarify the definition to exclude decisions where agencies do not have discretion to consider and potentially modify their actions based on the environmental review.

CEQ proposed to amend the first sentence of the definition in paragraph (q) to clarify that an action meets the definition if it is subject to Federal control and responsibility, and it has effects that may be significant. CEQ proposed to replace ''major'' effects with ''significant'' in this sentence to align with the NEPA statute. In the final rule, CEQ revises the definition to remove reference to significance. CEQ also revises the definition to remove the circularity in the definition, changing ''means an action'' to ''means an activity or decision'' that is subject to Federal control and responsibility.

i. Independent Meaning of ''Major''

CEQ proposed to strike the second sentence of the definition, which provides ''Major reinforces but does not have a meaning independent of significantly.'' CEQ makes this change in the final rule. This is a change in position as compared to CEQ's earlier interpretation of NEPA and, in finalizing this change, CEQ intends to correct this longstanding misconstruction of the NEPA statute. The statutory aim of NEPA is to focus on ''major Federal actions significantly affecting the quality of the human environment,'' 42 U.S.C. 4332(2)(C), rather than on non-major Federal actions that simply have some degree of Federal involvement. Under the 1978 regulations, however, the word ''major'' was rendered virtually meaningless.

CEQ makes this change because all words of a statute must be given meaning consistent with longstanding principles of statutory interpretation. *See, e.g., Bennett,* 520 U.S. at 173 (''It is the cardinal principle of statutory construction . . . that it is our duty to give effect, if possible, to every clause and word of a statute . . . rather than to emasculate an entire section.'') (internal quotations and citations omitted) (quoting *United States* v. *Menasche,* 348 U.S. 528, 538 (1955)). Although the 1978 regulations treated the terms ''major'' and ''significantly'' as interchangeable, there is an important distinction between the two terms and how they apply in the NEPA process. ''Major'' refers to the type of action, including the role of the Federal agency and its control over any environmental impacts. ''Significant'' relates to the effects stemming from the action, including consideration of the affected area, resources, and the degree of the effects. In the statute, ''major'' occurs twice, and in both instances is a modifier of ''Federal action''—in section 102(2)(C) in the phrase ''other major Federal actions significantly affecting the quality of the human environment,'' and section 102(2)(D) in the phrase, ''any major Federal action funded under a program of grants to States.'' NEPA also uses ''significant'' or ''significantly'' twice as a modifier of the similar words ''affecting'' in section 102(2)(C) and ''impacts'' in section 102(2)(D)(iv).

The legislative history of NEPA also reflects that Congress used the term ''major'' independent of ''significantly,'' and provided that, for major actions, agencies should make a determination as to whether the proposal would have a significant environmental impact. Specifically, the Senate Report for the National Environmental Policy Act of 1969 (Senate Report) states, ''*Each agency which proposes any major actions,* such as project proposals, proposals for new legislation, regulations, policy statements, or expansion or revision of ongoing programs, *shall make a determination as to whether the proposal would have a significant effect upon the quality of the human environment.*'' S. Rep. No. 91–296, at 20 (1969) (emphasis added).[107] Further, the Senate Report shows that OMB's predecessor, the Bureau of the Budget, submitted comments on the legislation to provide the views of the Executive Office of the President and recommended that Congress revise the text of the bill to include two separate modifiers: ''major'' before Federal actions and ''significantly'' before affecting the quality of the human environment. *See id.* at 30 (Bureau of the Budget's markup returned to the Senate on July 7, 1969). The enacted legislation included these revisions. While CEQ followed the Eight Circuit's approach in *Minnesota Public Interest Research Group* v. *Butz,* 498 F.2d 1314, 1321–22 (8th Cir. 1974), in the 1978 regulations, other courts had interpreted ''major'' and ''significantly'' as having independent meaning before CEQ issued its 1978 regulations. *See NAACP* v. *Med. Ctr., Inc.,* 584 F.2d 619, 629 (3d Cir. 1978) (analyzing the Secretary's ministerial approval of a capital expenditure under a framework that first considered whether there had been agency action, and then whether that action was ''major''); *Hanly* v. *Mitchell,* 460 F.2d 640, 644–45 (2d Cir. 1972) (''There is no doubt that the Act contemplates some agency action that does not require an impact statement because the action is minor and has so little effect on the environment as to be insignificant.'' (internal citations omitted)); *Scherr* v. *Volpe,* 466 F.2d 1027, 1033 (7th Cir. 1972) (finding that a highway project qualifies as major before turning to the second step of whether the project would have a significant effect); *Julius* v. *City of Cedar Rapids,* 349 F. Supp. 88, 90 (N.D. Iowa 1972) (finding that a lane widening project was not a major Federal action); *Goose Hollow Foothills League* v. *Romney,* 334 F. Supp. 877, 879 (D. Or. 1971) (discussing whether a proposed

[107] *https://ceq.doe.gov/docs/laws-regulations/Senate-Report-on-NEPA.pdf.*

building project was ''major''); *SW Neighborhood Assembly* v. *Eckard,* 445 F. Supp. 1195, 1199 (D.D.C. 1978) (''The phrase 'major Federal action' has been construed by the Courts to require an inquiry into such questions as the amount of federal funds expended by the action, the number of people affected, the length of time consumed, and the extent of government planning involved.'' (citing *Hanly,* 460 F.2d at 644)); *Nat. Res. Def. Council* v. *Grant,* 341 F. Supp. 356, 366 (E.D.N.C. 1972) (''Certainly, an administrative agency [such] as the Soil Conservation Service may make a decision that a particular project is not major, or that it does not significantly affect the quality of the human environment, and, that, therefore, the agency is not required to file an impact statement.''). Moreover, as discussed further below, over the past four decades, in a number of cases, courts have determined that NEPA does not apply to actions with minimal Federal involvement or funding. Under the revised definition, these would be non-major Federal actions.

In the final rule, CEQ reorganizes the remainder of the definition of major Federal action into subordinate paragraphs. Paragraph (q)(1) provides a list of activities or decisions that are not included within the definition.

ii. Extraterritoriality

In the NPRM, CEQ requested comment on whether to clarify that major Federal action does not include extraterritorial actions because NEPA does not apply extraterritorially, consistent with *Kiobel* v. *Royal Dutch Petroleum Co.,* 569 U.S. 108, 115–16 (2013), in light of the ordinary presumption against extraterritorial application when a statute does not clearly indicate that extraterritorial application is intended by Congress. In the final rule, CEQ revises the definition of ''Major Federal action'' in a new paragraph (q)(1)(i) to exclude extraterritorial activities or decisions, which mean activities or decisions with effects located entirely outside the jurisdiction of the United States.[108]

The Supreme Court has stated that ''[i]t is a longstanding principle of American law 'that legislation of Congress, unless a contrary intent appears, is meant to apply only within the territorial jurisdiction of the United States.' '' *EEOC* v. *Arabian Am. Oil Co. (Aramco),* 499 U.S. 244, 248 (1991) (quoting *Foley Bros.* v. *Filardo, Inc.,* 336 U.S. 281, 285 (1949)). During the past decade, the Supreme Court has considered the application of the presumption to a variety of Federal statutes.[109] As the Supreme Court has stated, the presumption ''rests on the perception that Congress ordinarily legislates with respect to domestic, not foreign matters.'' *Morrison,* 561 U.S. at 255 (citing *Smith* v. *United States,* 507 U.S. 197, 204 n.5 (1993)). ''Thus, 'unless there is the affirmative intention of the Congress clearly expressed' to give a statute extraterritorial effect, 'we must presume it is primarily concerned with domestic conditions.' '' *Morrison,* 561 U.S. at 255 (citing *Aramco,* 499 U.S. at 248). The Supreme Court has held, including in more recent decisions, that the presumption applies regardless of whether there is a risk of conflict between the U.S. statute and a foreign law. *Morrison,* 561 U.S. at 255 (citing *Sale* v. *Haitian Ctrs. Council, Inc.,* 509 U.S. 155, 173–74 (1993)); *RJR Nabisco,* 136 S. Ct. at 2100; *see also Smith,* 507 U.S. at 204 n.5.

The Supreme Court has established a two-step framework for analyzing whether the presumption against extraterritoriality applies to a Federal statute.[110] Under this framework, the first step is to ask whether the presumption against extraterritoriality has been rebutted because ''the statute gives a clear, affirmative indication that it applies extraterritorially.'' *RJR Nabisco,* 136 S. Ct. at 2101. If the presumption has not been rebutted, the second step is to determine whether the case involves a domestic application of the statute, and courts have done this by looking to the statute's ''focus.'' [111]

Under the two-step framework, CEQ has determined that because the legislative history and statutory text of section 102(2)(C) gives no clear indication that it applies extraterritorially, the presumption against extraterritoriality has not been rebutted. The plain language of section 102(2)(C) does not require it to be applied to actions occurring outside the jurisdiction of the United States.[112] The only reference in the Act to international considerations is in section 102(2)(F), which refers to ''international cooperation'' and the ''worldwide and long-range character of environmental problems,'' and directs agencies to ''where consistent with the foreign policy of the United States, lend appropriate support to initiatives, resolutions, and programs designed to maximize international cooperation'' to protect the environment. 42 U.S.C. 4332(2)(F). International cooperation is inherently voluntary and not part of the mandatory analysis required under the statute, and this provision does not indicate in any way that the requirements of section 102(2)(C) to prepare detailed statements applies outside of U.S. territorial jurisdiction. The limited legislative history of section 102(2)(C) similarly does not include discussion of application of the requirements of section 102(2)(C) to extraterritorial actions.[113]

Under the two-step framework, CEQ has also considered the purpose of section 102(2)(C), which is to ensure that a Federal agency, as part of its decision making process, considers the potential environmental impacts of proposed actions. The focus of congressional concern is the proposed action and its potential environmental effects. The effects of a proposed action may occur both within U.S. territorial jurisdiction as well as outside that jurisdiction. To the extent effects of a proposed action occur entirely outside the territorial jurisdiction of the United States, the application of section 102(2)(C) would not be permissible, consistent with the Supreme Court's holding that where the conduct relevant to the statute's focus occurred in the United States, then ''the case involves a

[108] The Restatement of Foreign Relations Law provides that the areas within the territorial jurisdiction of the United States include ''its land, internal waters, territorial sea, the adjacent airspace, and other places over which the United States has sovereignty or some measure of legislative control.'' Restatement (Fourth) of Foreign Relations Law sec. 404 (2018).

[109] *See RJR Nabisco, Inc.* v. *European Cmty.,* 136 S. Ct. 2090 (2016) (Racketeer Influenced and Corrupt Organizations Act); *Kiobel,* 569 U.S. at 115–16 (Alien Tort Statute); *Morrison* v. *Nat'l Austl. Bank Ltd.,* 561 U.S. 247, 255 (2010) (Securities and Exchange Act of 1934); *WesternGeco LLC* v. *ION Geophysical Corp.,* 138 S. Ct. 2129 (2018) (Patent Act).

[110] *See RJR Nabisco,* 136 S. Ct. at 2101 (citing *Morrison,* 561 U.S. at 267 n.9; *Kiobel,* 569 U.S. 108); *see also WesternGeco LLC,* 138 S. Ct. 2129.

[111] *Id.* (''If the conduct relevant to the statute's focus occurred in the United States, then the case involves a permissible domestic application even if other conduct occurred abroad; but if the conduct relevant to the focus occurred in a foreign country, then the case involves an impermissible extraterritorial application regardless of any other conduct that occurred in U.S. territory.''). This two-step framework for analyzing extraterritoriality issues is also reflected in the Restatement of Foreign Relations Law. *See* Restatement (Fourth) of Foreign Relations Law sec. 404 (2018).

[112] Section 102(2)(C) directs Federal agencies to provide a detailed statement for major Federal actions significantly affecting the quality of the human environment, and requires the responsible official to consult with and obtain the comments of Federal agencies with jurisdiction or special expertise, as well as to make copies of the statement and comments and views of Federal, state and local agencies available to the President, CEQ and the public. 42 U.S.C. 4332(2)(C). Nothing in the text states that this section was intended to require the preparation of detailed statements for actions located outside the United States.

[113] *See also Nat. Res. Def. Council* v. *Nuclear Regulatory Comm'n,* 647 F. 2d 1345, 1367 (D.C. Cir. 1981) (''NEPA's legislative history illuminates nothing in regard to extraterritorial application.'').

permissible domestic application even if other conduct occurred abroad; but if the conduct relevant to the focus occurred in a foreign country, then the case involves an impermissible extraterritorial application regardless of any other conduct that occurred in U.S. territory.'' *RJR Nabisco,* 136 S. Ct. at 2101. Therefore, CEQ provides in paragraph (q)(1)(i) of the final rule that NEPA does not apply to ''agency activities or decisions with effects located entirely outside of the jurisdiction of the United States.''

iii. Non-Discretionary Activities or Decisions

In the NPRM, CEQ proposed to clarify that the definition does not include non-discretionary activities or decisions made in accordance with the agency's statutory authority. The Supreme Court has held that analysis of a proposed action's effects under NEPA is not required where an agency has limited statutory authority and ''simply lacks the power to act on whatever information might be contained in the EIS.'' *Pub. Citizen,* 541 U.S. at 768; *see also South Dakota,* 614 F.2d at 1193 (holding that the Department of the Interior's issuance of a mineral patent that was a ministerial act did not come within NEPA); *Milo Cmty. Hosp.* v. *Weinberger,* 525 F.2d 144, 148 (1st Cir. 1975) (NEPA analysis of impacts not required when agency was under a statutory duty to take the proposed action of terminating a hospital). CEQ includes this clarification in paragraph (q)(1)(ii).

iv. Final Agency Action and Failure To Act

CEQ proposed to strike the statement that major Federal action includes a failure to act and instead clarify that the definition excludes activities or decisions that do not result in final agency action under the APA. The basis for including only final agency actions is the statutory text of the APA, which provides a right to judicial review of all ''final agency action[s] for which there is no other adequate remedy in a court.'' 5 U.S.C. 704. CEQ includes this clarification in paragraph (q)(1)(iii) of the final rule and includes ''or other statute that also includes a finality requirement'' because CEQ recognizes that other statutes may also contain finality requirements beyond those of the APA. As the NPRM noted, NEPA applies when agencies are considering a proposal for decision. In the case of a ''failure to act,'' there is no proposed action and therefore there are no alternatives that the agency may consider. *S. Utah Wilderness All.,* 542 U.S. at 70–73. Judicial review is available only when an agency fails to take a discrete action it is required to take. *Id.* In omitting the reference to a failure to act from the definition of ''major Federal action,'' CEQ does not contradict the definition of ''agency action'' under the APA at 5 U.S.C. 551(13), and recognizes that the APA may compel agency action that is required but has been unreasonably withheld. If an agency is compelled to take such agency action, it should prepare a NEPA analysis at that time, as appropriate.

v. Enforcement Actions

In the final rule, CEQ moves the exclusion of judicial or administrative civil or criminal enforcement actions from 40 CFR 1508.18(a) to paragraph (q)(1)(iv) of § 1508.1. CEQ did not propose changes to this language in the NPRM. In the final rule, CEQ moves this language and revises it consistent with the format of the list in paragraph (q)(1).

vi. General Revenue Sharing Funds

CEQ proposed to strike the specific reference to the State and Local Fiscal Assistance Act of 1972 from 40 CFR 1508.18(a) and clarify that general revenue sharing funds do not meet the definition of major Federal action because the agency has no discretion. CEQ includes this change in paragraph (q)(1)(v) in the final rule.

vii. Minimal Federal Funding or Involvement

CEQ proposed to clarify that non-Federal projects with minimal Federal funding or minimal Federal involvement such that the agency cannot control the outcome of the project are not major Federal actions. The language in paragraph (q)(1)(vi) of the final rule is consistent with the holdings of relevant circuit court cases that have addressed this issue. *See Rattlesnake Coal.* v. *U.S. EPA,* 509 F.3d 1095, 1101 (9th Cir. 2007) (Federal funding comprising six percent of the estimated implementation budget not enough to federalize implementation of entire project); *New Jersey Dep't of Envtl. Prot. & Energy* v. *Long Island Power Auth.,* 30 F.3d 403, 417 (3d Cir. 1994) (''Federal approval of a private party's project, where that approval is not required for the project to go forward, does not constitute a major Federal action.''); *United States* v. *S. Fla. Water Mgmt. Dist.,* 28 F.3d 1563, 1572 (11th Cir. 1994) (''The touchstone of major [F]ederal activity constitutes a [F]ederal agency's authority to influence nonfederal activity. 'The [F]ederal agency must possess actual power to control the nonfederal activity.' '' (quoting *Sierra Club* v. *Hodel,* 848 F.2d 1068, 1089 (10th Cir. 1988), *overruled on other grounds by Vill. of Los Ranchos de Albuquerque* v. *Marsh,* 956 F.2d 970 (10th Cir. 1992)); *Sugarloaf Citizens Ass'n* v. *FERC,* 959 F.2d 508, 512 (4th Cir. 1992); *Save Barton Creek Ass'n* v. *Fed. Highway Admin.,* 950 F.2d 1129, 1134–35 (5th Cir. 1992); *Macht* v. *Skinner,* 916 F.2d 13, 20 (D.C. Cir. 1990) (funding for planning and studies not enough to federalize a project); *Vill. of Los Ranchos de Albuquerque* v. *Barnhart,* 906 F.2d 1477, 1482 (10th Cir. 1990); *Sierra Club* v. *Penfold,* 857 F.2d 1307, 1314 (9th Cir. 1998) (finding that the Bureau of Land Management's review of Notice mines, which do not require agency approval before commencement of mining, is ''only a marginal [F]ederal action rather than a major action''); *Winnebago Tribe of Neb.* v. *Ray,* 621 F. 2d 269, 272 (8th Cir. 1980) (''Factual or veto control, however, must be distinguished from legal control or 'enablement'' (citing *Med. Ctr., Inc.,* 584 F.2d 619)); *Atlanta Coal. on the Transp. Crisis* v. *Atlanta Reg'l Comm'n,* 599 F.2d 1333, 1347 (5th Cir. 1979); *Ctr. for Biological Diversity* v. *HUD,* 541 F. Supp. 2d 1091, 1099 (D. Ariz. 2008), *aff'd, Ctr. for Biological Diversity* v. *HUD,* No. 09–16400, 359 Fed. Appx. 781, 2009 WL 4912592 (9th Cir. Nov. 25, 2009) (unreported); *see also Touret* v. *NASA,* 485 F. Supp. 2d 38 (D.R.I. 2007).

As discussed in the NPRM, in these circumstances, there is no practical reason for an agency to conduct a NEPA analysis because the agency could not influence the outcome of its action to address the effects of the project. For example, this might include a very small percentage of Federal funding provided only to help design an infrastructure project that is otherwise funded through private or local funds. This change would help to reduce costs and delays by more clearly defining the kinds of actions that are appropriately within the scope of NEPA. The final rule includes these criteria in paragraph (q)(1)(vi) to make clear that these projects are ones where the agency does not exercise sufficient control and responsibility over the outcome of the project.

CEQ expects that agencies will further define these non-major actions, for which the agency does not exercise sufficient control and responsibility over the outcome of the project, in their agency NEPA procedures pursuant to § 1507.3(d)(4). For example, agencies that exercise trust responsibilities over activities or decisions that occur on or involve land held in trust by the United

States for the benefit of an Indian Tribe, or are held in fee subject to a restriction against alienation, may define those activities or decisions that involve minimal Federal funding or involvement. In such circumstances, the Federal Government does not exercise sufficient control and responsibility over the effects of actions on Indian lands, and a ''but for'' causal relationship of requiring Federal approval for such actions is insufficient to make an agency responsible for any particular effects from such actions.

In the NPRM, CEQ also invited comment on whether there should be a threshold (percentage or dollar figure) for ''minimal Federal funding,'' and if so, what would be an appropriate threshold and the basis for such a threshold. CEQ did not receive sufficient information to establish such a threshold in the final rule.

viii. Loans and Loan Guarantees

CEQ also proposed to exclude loans, loan guarantees, and other forms of financial assistance where the Federal agency does not exercise sufficient control and responsibility over the effects of the action. CEQ includes this in the final rule in paragraph (q)(1)(vii), changing ''action'' to ''such assistance'' to remove the ambiguity with the use of the defined term in the definition. CEQ proposed to also exclude the farm ownership and operating loan guarantees provided by the Farm Service Agency (FSA) of the U.S. Department of Agriculture pursuant to 7 U.S.C. 1925 and 1941 through 1949, and the business loan guarantee programs of the Small Business Administration (SBA), 15 U.S.C. 636(a), 636(m), and 695 through 697f. CEQ includes these as examples of loan guarantees in paragraph (q)(1)(vii) and makes one correction to the citation to SBA's business loan guarantee programs, changing the final section cited from 697f to 697g.

By guaranteeing loans, FSA is not lending Federal funds; a ''guaranteed loan'' under FSA regulations is defined in 7 CFR 761.2(b) as a ''loan made and serviced by a lender for which the Agency has entered into a Lender's Agreement and for which the Agency has issued a Loan Guarantee.'' The FSA loan guarantees are limited statutorily to an amount not to exceed $1.75 million (with allowance for inflation). *See* 7 U.S.C. 1925 and 1943. For fiscal year 2019, the average loan amount for a guaranteed operating loan is $289,393; and the average for a guaranteed farm ownership loan is $516,859.[114] The relatively modest amounts of these loan guarantees suggest that these are not ''major'' within the meaning of the NEPA statute and for that reason CEQ makes this result clear in a specific application of its definition of ''major Federal action.'' In determining whether Federal funding federalizes a non-Federal action, courts have considered whether the proportion of Federal funds in relation to funds from other sources is ''significant.'' *See, e.g., Ka Makani 'O Kohala Ohana Inc.* v. *Dep't of Water Supply,* 295 F.3d 955, 960 (9th Cir. 2002) (''While significant [F]ederal funding can turn what would otherwise be a [S]tate or local project into a major Federal action, consideration must be given to a great disparity in the expenditures forecast for the [S]tate [and county] and [F]ederal portions of the entire program. . . . In the present case, the sum total of all of the [F]ederal funding that was ever offered . . . is less than two percent of the estimated total project cost.'' (alteration in original) (internal quotation marks and citation omitted)); *Friends of the Earth, Inc.* v. *Coleman,* 518 F.2d 323, 329 (9th Cir. 1975) (holding Federal funding amounting to 10 percent of the total project cost not adequate to federalize project under NEPA); *Sancho* v. *Dep't of Energy,* 578 F. Supp. 2d 1258, 1266–68 (D. Haw. 2008) (Federal provision of less than 10 percent of project costs not sufficient to federalize project); *Landmark West!* v. *U.S. Postal Serv.,* 840 F. Supp. 994, 1009 (S.D.N.Y. 1993), *aff'd,* 41 F.3d 1500 (2d Cir. 1994) (holding U.S. Postal Service's role in private development of new skyscraper was not sufficient to federalize the project).

Furthermore, FSA loan guarantee programs do not provide any Federal funding to the participating borrower. Rather, FSA's role is limited to providing a guaranty to the private lender; no Federal funds are expended unless the borrower defaults on the private third-party loan, and the lender is unable to recover its debt through foreclosure of its collateral. In the event of default, the guarantee is paid to the lender, not to lender's borrower. FSA rarely makes guaranteed loan loss claim payments because delinquency rates are very low, ranging from between 0.98 and 1.87 percent from 2005 to 2019, and 1.62 percent in 2019.[115] The FSA guaranteed loan loss rates have ranged between 0.2 and 0.6 percent during the same time period.[116]

For purposes of triggering NEPA, ''[t]he mere possibility of [F]ederal funding in the future is too tenuous to convert a local project into [F]ederal action.'' *Pres. Pittsburgh* v. *Conturo,* 2011 U.S. Dist. LEXIS 101756, at *13 (W.D. Pa. 2011). Indeed, in *Sancho,* the court observed that ''analysis of the 'major Federal action' requirement in NEPA must focus upon [F]ederal funds that have already been distributed. Federal funds that have only been budgeted or allocated toward a project cannot be considered because they are not an 'irreversible and irretrievable commitment of resources.' '' *Sancho,* 578 F. Supp. 2d at 1267 (internal citation omitted). The court further stated that ''[t]he expectation of receiving future funds will not transform a local or state project into a federal project. . . . Regardless of the percentage, consideration of the budgeted future federal funds is not ripe for consideration in the 'major Federal action' analysis.'' *Id.* Other district courts have also found that, to federalize a project, the Federal funding must be more than ''the passive deferral of a payment'' and must be provided ''primarily to directly further a policy goal of the funding agency.'' *Hamrick* v. *GSA,* 107 F. Supp. 3d 910, 926 (C.D. Ill. 2015) (citing *Landmark West!,* 840 F. Supp. at 1007).

FSA's role is to protect the financial interests of the United States, and its relationship is with the lender not the borrower. 7 CFR 762.103(a). FSA's involvement is primarily to ensure the financial stability of the loan and ensure proper loan servicing by the lender. Therefore, the context of these FSA regulations does not involve NEPA and is not compliance-driven but only meant to ensure that, in the event of a default, the loan proceeds are disbursed by the lender, used properly, and that the project is completed and operating so as to produce income necessary for the loan to be repaid.

If a lender violates one of FSA's regulations, FSA's only remedy is not to pay the loss claim in the event of a liquidation. FSA does not possess control or actual decision-making authority over the lender's issuance of the loan, the funded facility, or operations of the borrower. Courts have

[114] *See* Executive Summary for Farm Loan Programs in Fiscal Year 2019, *https://www.fsa.usda.gov/Assets/USDA-FSA-Public/usdafiles/Farm-Loan-Programs/pdfs/program-data/FY2019_Executive_Summary.pdf. See generally https://www.fsa.usda.gov/programs-and-services/farm-loan-programs/program-data/index.*

[115] *See* Guaranteed Loan Executive Summary, as of FY 2019, *https://www.fsa.usda.gov/Assets/USDA-FSA-Public/usdafiles/Farm-Loan-Programs/pdfs/program-data/FLP_Guaranteed_Loan_Servicing_Executive_Summary.pdf.*

[116] *Id.*

recognized Federal agencies do not have sufficient control over loan guarantees to trigger NEPA. *See, e.g., Ctr. for Biological Diversity,* 541 F. Supp. 2d 1091, *aff'd, Ctr. for Biological Diversity,* No. 08–16400, 359 F. Appx. 781 (''The agencies guarantee loans issued by private lenders to qualified borrowers, but do not approve or undertake any of the development projects at issue. The agencies' loan guarantees have such a remote and indirect relationship to the watershed problems allegedly stemming from the urban development that they cannot be held to be a legal cause of any effects on the protected species for purposes of either the ESA or the NEPA.'' *Ctr. for Biological Diversity,* No. 08–16400, 359 F. Appx. at 783). ''The [F]ederal agency must possess actual power to control the nonfederal activity.'' *Hodel*, 848 F.2d at 1089, *overruled on other grounds by Vill. of Los Ranchos de Albuquerque* v. *Marsh,* 956 F.2d 970.

SBA's business loan programs include general business loan programs (7(a) Program), authorized by section 7(a) of the Small Business Act, 15 U.S.C. 636(a); the microloan demonstration loan program (Microloan Program), authorized by section 7(m) of the Small Business Act, 15 U.S.C. 636(m); and the development company program (504 Program), which is a jobs-creation program, authorized by Title V of the Small Business Investment Act of 1958, 15 U.S.C. 695–697g. Under all of these programs, SBA does not recruit or work with the borrower, or service the loan unless, following a default in payment, the lender has collected all that it can under the loan.

Under the 7(a) Program, SBA guarantees a percentage of the loan amount extended by a commercial lender to encourage such lenders to make loans to eligible small businesses. The lender seeks and receives the guaranty, not the applicant small business. In over 80 percent of loans stemming from the 7(a) Program, the lender approves the loan without SBA's prior review and approval through the 7(a) Program's Preferred Lender Program (''PLP program'').[117] Further, SBA does not expend Federal funds unless there is a default by the borrower in paying the loan; in such cases, SBA reimburses the lender in accordance with SBA's guarantee percentage. The maximum amount for a standard loan under the 7(a) program is $5 million, while various 7(a) loans have lesser maximum amounts of $500,000 or less.[118]

Under the Microloan Program, recipient entities can obtain loans, up to $50,000, for certain, limited purposes. SBA provides funds to designated intermediary lenders, which are non-profit, community-based organizations. Each of the lenders has its own lending and credit requirements, and the lenders extend the microloan financing. Recipients only may use the funds for working capital, inventory or supplies, furniture or fixtures, or machinery or equipment. They cannot purchase real estate or pay existing debt.

Under the 504 Program, small businesses can obtain long-term, fixed-rate financing to acquire or improve capital assets. Certified Development Companies (CDCs), which are private, mostly non-profit, corporations certified by SBA to promote local and community economic development, implement the program. Typically, a 504 Program project is funded by three sources: (1) A loan, secured with a senior lien, from a private-sector lender for 50 percent of the project costs; (2) an equity contribution from the borrower of at least 10 percent of the project costs; and (3) a loan covering up to 40 percent of the total costs, which is funded by proceeds from the sale to investors of an SBA-guaranteed debenture issued by a CDC.[119] The 504's Premier Certified Lender Program (''PCLP program'') provides for only limited SBA review of eligibility, and SBA delegates the responsibility to CDCs to issue an SBA guarantee of debenture for eligible loans without prior approval by SBA. 15 U.S.C. 697e.[120] Under the 504 program, the maximum loan amount is $5 million, although small manufacturers or certain energy projects, including energy efficiency or renewable generation projects, may qualify for a $5.5 million debenture.[121] SBA does not expend Federal funds unless there is a default by the borrower in paying the debenture-funded loan, in which case SBA pays the outstanding balance owed on the debenture to the investors. SBA expends Federal funds on its loan guarantee programs only when expected losses from defaults exceed expected fee collections. Section 7(a) and 504 loan program delinquency rates are 0.8 percent and 0.7 percent as of July 2019 respectively.[122]

CEQ has determined that FSA and SBA do not have sufficient control and responsibility over the underlying activities to meet the definition of major Federal action. The issuance of loan guarantees to a non-Federal lender to back a percentage of a loan that the lender decides to make to a private, third-party borrower is insufficient control or authority over the underlying project. *See Rattlesnake Coal.,* 509 F.3d at 1102 (''The United States must maintain decision making authority over the local plan in order for it to become a major [F]ederal action.''); *Ka Makani,* 295 F.3d at 961 (''Because the final decision-making power remained at all times with [the State agency], we conclude that the [Federal agency] involvement was not sufficient to constitute 'major [F]ederal action.' '' (quoting *Barnhart,* 906 F.2d at 1482)); *S. Fla. Water Mgmt. Dist.,* 28 F.3d at 1572 (''The [F]ederal agency must possess actual power to control the nonfederal activity.'' (citation omitted)).

CEQ also invited comment on whether any other types of financial instruments should be considered non-major Federal actions and the basis for such exclusion. CEQ did not receive sufficient comments to make any additional changes to the definition of major Federal action with respect to other financial instruments.

ix. Other Changes to Major Federal Action

In the final rule, paragraphs (q)(2) and (3) include the examples of activities and decisions that are in 40 CFR 1508.18(a) and (b). CEQ invited comment on whether it should change ''partly'' to ''predominantly'' in paragraph (q)(2) for consistency with the edits to the introductory text regarding ''minimal Federal funding.'' CEQ does not make this change in the final rule. CEQ notes that ''continuing'' activities in paragraph (q)(2) refers to situations where a major Federal action remains to occur, consistent with § 1502.9(d) and *Norton* v. *Southern Utah Wilderness Alliance.* 542 U.S. at 73.

[117] Pursuant to the Small Business Act, under the PLP program, SBA delegates responsibility to experienced and qualified lenders to issue an SBA guarantee on a loan without prior approval by SBA. The PLP program is defined as a ''program established by the Administrator . . . under which a written agreement between the lender and the Administration delegates to the lender . . . complete authority to make and close loans with a guarantee from the Administration without obtaining the prior specific approval of the Administration . . . .'' 15 U.S.C. 636(a)(2)(C)(iii). Thus, PLP program lenders have delegated authority to make SBA-guaranteed loans without any approval from SBA.

[118] 15 U.S.C. 636(a).

[119] In the 504 program, SBA guarantees payments of debentures, which are bonds sold to investors. The proceeds from the sale of the debentures are used to fund the underlying loans to borrowers.

[120] Congress has mandated that guaranteed loans made by PCLPs shall not include SBA ''review of decisions by the lender involving creditworthiness, loan closing, or compliance with legal requirements imposed by law or regulation.'' 15 U.S.C. 697e(e)(2).

[121] 15 U.S.C. 696(2)(A).

[122] *See* SBA Fiscal Year 2019 Agency Financial Report at 22, *available at https://www.sba.gov/document/report--agency-financial-report.*

CEQ proposed to insert ''implementation of'' before ''treaties'' in proposed paragraph (q)(2)(i) to clarify that the major Federal action is not the treaty itself, but rather an agency's action to implement that treaty. CEQ makes this change in § 1508.1(q)(3)(i) of the final rule and clarifies that this includes an agency's action to implement a treaty pursuant to statute or regulation. CEQ also changes ''pursuant to'' to ''under'' the APA and adds a reference to ''other statutes'' after the APA. While agencies conduct the rulemaking process pursuant to the APA, they also may do so under the authority of the specific statutes.

CEQ proposed to strike ''guide'' from proposed paragraph (q)(2)(ii) because guidance is non-binding. CEQ makes this change in the final rule in § 1508.1(q)(3)(ii).

Finally, CEQ invited comment in the NPRM on whether CEQ should further revise the definition of ''major Federal action'' to exclude other *per se* categories of activities or to further address what NEPA analysts have called ''the small handle problem.'' [123] CEQ did not receive sufficient information to make any additional changes.

18. Definition of ''Matter''

The NPRM did not propose any changes to the definition of matter in paragraph (r). CEQ did not revise this definition in the final rule.

19. Clarifying the Meaning of ''Mitigation''

CEQ proposed to amend the definition of ''mitigation'' to define the term and clarify that NEPA does not require adoption of any particular mitigation measure, consistent with *Methow Valley,* 490 U.S. at 352–53. In *Methow Valley,* the Supreme Court held that NEPA and the CEQ regulations require ''that mitigation be discussed in sufficient detail to ensure that environmental consequences have been fairly evaluated,'' but do not establish ''a substantive requirement that a complete mitigation plan be actually formulated and adopted'' before the agency can make its decision. *Id.* at 352.

CEQ also proposed to amend the definition of ''mitigation'' to make clear that mitigation must have a nexus to the effects of the proposed action, is limited to those actions that have an effect on the environment, and does not include actions that do not have an effect on the environment. This change will make the NEPA process more effective by clarifying that mitigation measures must actually be designed to mitigate the effects of the proposed action. This amended definition is consistent with CEQ's Mitigation Guidance, *supra* note 29.

Under that guidance, if an agency believes that the proposed action will provide net environmental benefits through use of compensatory mitigation, the agency should incorporate by reference the documents that demonstrate that the proposed mitigation will be new or in addition to actions that would occur under the no-action alternative, and the financial, legal, and management commitments for the mitigation. Use of well-established mitigation banks and similar compensatory mitigation legal structures should provide the necessary substantiation for the agency's findings on the effectiveness (nexus to effects of the action, proportionality, and durability) of the mitigation. Other actions may be effectively mitigated through use of environmental management systems that provide a structure of procedures and policies to systematically identify, evaluate, and manage environmental impacts of an action during its implementation.[124]

CEQ makes the proposed changes in the final rule with minor edits to improve clarity. Specifically, CEQ replaces ''reasonably foreseeable impacts to the human environment'' with ''effects'' to more precisely refer to the defined term ''effects.'' In response to comments, CEQ also adds ''or alternatives'' after ''proposed action'' to clarify that mitigation measures mean measures to avoid, minimize, or compensate for effects caused by a proposed action or its alternatives. CEQ also replaces ''the effects of a proposed action'' with ''those effects'' to reduce wordiness and provide additional clarity.

20. Definition of ''NEPA Process''

The NPRM did not propose any changes to the definition of NEPA process in paragraph (t). CEQ did not revise this definition in the final rule.

21. Clarifying the Meaning of ''Notice of Intent''

CEQ proposed to revise the definition of ''notice of intent'' in paragraph (u) to move the operative requirements for what agencies must include in the notices to § 1501.9(d) and add the word ''public'' to clarify that the NOI is a public notice. CEQ makes these changes in the final rule.

22. New Definition of ''Page''

CEQ proposed a new definition of ''page'' in paragraph (v) to provide a word count (500 words) for a more standard functional definition of ''page'' for page count and other NEPA purposes. CEQ adds this definition as proposed to the final rule. As discussed in the NPRM, this change updates NEPA for modern electronic publishing and internet formatting, in which the number of words per page can vary widely depending on format. It also ensures some uniformity in document length while allowing unrestricted use of the graphic display of quantitative information, tables, photos, maps, and other geographic information that can provide a much more effective means of conveying information about environmental effects. This change supports the original CEQ page limits as a means of ensuring that environmental documents are readable and useful to decision makers.

23. New Definition of ''Participating Agency''

CEQ proposed to add the concept of a participating agency to the CEQ regulations in paragraph (w). CEQ proposed to define participating agency consistent with the definition in FAST–41 and 23 U.S.C. 139. CEQ proposed to add participating agencies to § 1501.7(i) regarding the schedule and replace the term ''commenting'' agencies with ''participating'' agencies throughout. CEQ adds this definition as proposed to the final rule.

24. Clarifying the Meaning of ''Proposal''

CEQ proposed clarifying edits to the definition of proposal in paragraph (x) and to strike the operative language regarding timing of an EIS because it is already addressed in § 1502.5. CEQ makes these changes in the final rule.

25. New Definition of ''Publish and Publication''

CEQ proposed to define publish and publication in paragraph (y) to provide agencies with the flexibility to make environmental reviews and information available to the public by electronic means. The 1978 regulations predate personal computers and a wide range of technologies now used by agencies such as the modern internet and GIS mapping tools. To ensure that agencies do not exclude the affected public from the NEPA process due to a lack of resources (often referred to as the ''digital

[123] *See* Daniel R. Mandelker et al., NEPA Law and Litigation, sec. 8:20 (2d ed. 2019) (''This problem is sometimes called the 'small handle' problem because [F]ederal action may be only be a 'small handle' on a non[-F]ederal project.'').

[124] *See* Council on Environmental Quality, Aligning National Environmental Policy Act Processes with Environmental Management Systems (Apr. 2007), *https://ceq.doe.gov/docs/ceq-publications/NEPA_EMS_Guide_final_Apr2007.pdf.*

divide''), the definition retains a provision for printed environmental documents where necessary for effective public participation. CEQ adds this definition as proposed in the final rule.

26. New Definition of ''Reasonable Alternatives''

Several ANPRM commenters asked CEQ to include a new definition of ''reasonable alternatives'' in the regulations with emphasis on how technical and economic feasibility should be evaluated. CEQ proposed a new definition of ''reasonable alternatives'' in paragraph (z) to provide that reasonable alternatives must be technically and economically feasible and meet the purpose and need of the proposed action. *See, e.g., Vt. Yankee,* 435 U.S. at 551 (''alternatives must be bounded by some notion of feasibility''). CEQ also proposed to define reasonable alternatives as ''a reasonable range of alternatives'' to codify Questions 1a and 1b in the Forty Questions, *supra* note 2. Agencies are not required to give detailed consideration to alternatives that are unlikely to be implemented because they are infeasible, ineffective, or inconsistent with the purpose and need for agency action.

Finally, CEQ proposed to clarify that a reasonable alternative must also consider the goals of the applicant when the agency's action involves a non-Federal entity. These changes will help reduce paperwork and delays by helping to clarify the range of alternatives that agencies must consider. Where the agency action is in response to an application for permit or other authorization, the agency should consider the applicant's goals based on the agency's statutory authorization to act, as well as other congressional directives, in defining the proposed action's purpose and need. CEQ adds this definition as proposed in the final rule.

27. New Definition of ''Reasonably Foreseeable''

CEQ received comments on the ANPRM requesting that the regulations provide a definition of ''reasonably foreseeable.'' CEQ proposed to define ''reasonably foreseeable'' in paragraph (aa) consistent with the ordinary person standard—that is what a person of ordinary prudence in the position of the agency decision maker would consider in reaching a decision. *Sierra Club* v. *Marsh,* 976 F.2d 763, 767 (1st Cir. 1992). CEQ adds this definition as proposed in the final rule.

28. Definition of ''Referring Agency''

CEQ proposed a grammatical edit to the definition of referring agency in paragraph (bb). CEQ makes this change in the final rule.

29. Definition of ''Scope''

CEQ proposed to move the operative language from paragraph (cc), which tells agencies how to determine the scope of an EIS, to § 1501.9(e). CEQ makes this change in the final rule.

30. New Definition of ''Senior Agency Official''

CEQ proposed to define the new term ''senior agency official'' in paragraph (dd) to provide for agency officials that are responsible for the agency's NEPA compliance. As reflected in comments, implementation of NEPA can require significant agency resources. Without senior agency official leadership and effective management of NEPA reviews, the process can be lengthy, costly, and subject to uncertainty and delays. CEQ seeks to advance efficiencies to ensure that agencies use their limited resources to effectively consider environmental impacts and support timely and informed decision making by the Federal Government. CEQ adds this definition with some changes in the final rule. Specifically, CEQ does not include the phrase ''and representing agency analysis of the effects of agency actions on the human environmental in agency decision-making processes'' because the duties and responsibilities of the ''senior agency official,'' including representing the agency, are discussed in various provisions of the subchapter. *See* §§ 1501.5(f), 1501.7(d), 1501.8(b)(6) and (c), 1501.10, 1502.7, 1507.2.

31. Definition of ''Special Expertise''

The NPRM did not propose any changes to the definition of special expertise in paragraph (ee). CEQ did not revise this definition in the final rule.

32. Striking the Definition of ''Significantly''

Because 40 CFR 1508.27 did not define ''significantly,'' but rather set out factors for agencies to consider in assessing whether a particular effect is significant, CEQ proposed to strike this definition and discuss significance in § 1501.3(b), as described in section II.C.3. CEQ makes this change in the final rule.

33. Clarifying the Meaning of ''Tiering''

CEQ proposed to amend the definition of ''tiering'' in paragraph (ff) to make clear that agencies may use EAs at the programmatic stage as well as the subsequent stages. This clarifies that agencies have flexibility in structuring programmatic NEPA reviews and associated tiering. CEQ proposed to move the operative language describing how any agency determines when and how to tier from 40 CFR 1508.28 to § 1501.11(b). CEQ makes these changes in the final rule.

K. CEQ Guidance Documents

In the proposed rule, CEQ stated that if the proposal was adopted as a final rule, it would supersede any previous CEQ NEPA guidance and handbooks. With this final rule, CEQ clarifies that it will provide notice in the **Federal Register** listing withdrawn guidance. CEQ will issue updated or new guidance consistent with Presidential directives. CEQ also intends to update the Citizen's Guide to NEPA.[125]

III. Rulemaking Analyses and Notices

A. Executive Order 12866, Regulatory Planning and Review and Executive Order 13563, Improving Regulation and Regulatory Review

E.O. 12866[126] directs agencies to assess all costs and benefits of available regulatory alternatives, and if regulation is necessary, to select regulatory approaches that maximize net benefits, including potential economic, environmental, public health and safety effects, and other advantages; distributive impacts; and equity. E.O. 13563[127] reaffirms E.O. 12866, and directs agencies to use a process that provides for public participation in developing rules; promotes coordination, simplification, and harmonization; and reduces burdens and maintains flexibility.

Section 3(f) of E.O. 12866 sets forth the four categories of regulatory action that meet the definition of a significant regulatory action. The first category includes rules that have an annual effect on the economy of $100 million or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, Tribal, or local governments or communities. Some commenters stated that this rulemaking would have such an effect, and therefore CEQ should have prepared a regulatory impact statement. Commenters noted, for example, proposed changes to the definition of effects, alternatives analysis, and overall effect on the number of Federal actions subject to NEPA as examples of impacts

[125] *Supra* note 29.

[126] 58 FR 51735 (Oct. 4, 1993).

[127] 76 FR 3821 (Jan. 21, 2011).

contributing to an impact of over $100 million on the public.

CEQ agrees that this an economically significant action. However, many of the changes made in this rule codify long-standing practices and case law that have developed since CEQ issued the 1978 regulations. Under OMB Circular A–4, ''Regulatory Analysis'' (Sept. 17, 2003),[128] the ''no action'' baseline is ''what the world will be like if the proposed rule is not adopted.'' Changes to the regulations based on long-standing guidance and Supreme Court case law would be included in the baseline for the rule; therefore, their codification would generate marginal cost savings. Similarly, changes that clarify or otherwise improve the ability to interpret and implement the regulations would have little to no quantifiable impact. The appendix to the Regulatory Impact Analysis for the Final Rule, Update to the Regulations Implementing the Procedural Provisions of the National Environmental Policy Act[129] (''RIA Appendix'') provides a summary of the anticipated economic and environmental impacts associated with the changes in the final rule. In evaluating economic and environmental impacts, CEQ has considered the statute and Supreme Court case law, and the 1978 regulations. As discussed throughout Section II and the Final Rule Response to Comments, CEQ has made revisions to better align the regulations with the statute, codify Supreme Court case law and current agency practice, improve the timeliness and efficiency of the NEPA process, and make other changes to improve the clarity and readability of the regulations.

The revisions to CEQ's regulations are anticipated to significantly lower administrative costs as a result of changes to reduce unnecessary paperwork. Government-wide, the average number of pages for a final EIS is approximately 661 pages. The final rule includes numerous changes to reduce the duplication of paperwork and establishes presumptive page limits for EAs of 75 pages, and for EISs of 150 pages (or 300 pages for proposals of unusual scope or complexity).[130] However, agencies may request longer page limits with approval from a senior agency official and include additional material as appendices. The final rule also makes numerous changes to improve the efficiency of the NEPA process and establishes presumptive time limits for EAs of one year and for EISs of two years, which may be extended with approval of a senior agency official. CEQ expects the final rule to reduce the length of EAs and EISs, and the time for completing and these analyses, and to lower administrative costs government-wide.

A total of 1,276 EISs were completed from 2010 through 2018, and the median EIS completion time was 3.5 years with only 257 EISs completed in 2 years or less.[131] Based on the efficiencies and presumptive time limit for EISs in the final rule, the length of time to complete the 1019 EISs that took longer than 2 years could be reduced by 58 percent, assuming a 2-year completion time for all of those actions. Applying this potential time savings to the total administrative cost to prepare those EISs taking in excess of 2 years could result in roughly $744 million in savings over the 9-year time period for an annualized savings of roughly $83 million (2016 adjusted dollars).[132] The amount of time required to prepare an EIS does not necessarily correlate with the total cost. However, for those EISs taking over two years to prepare, comparing the anticipated time savings with the respective administrative costs provides insight into the potential cost savings that an agency may generate under the final rule. Additionally, CEQ notes that there may be cost savings related to the preparation of EAs and application of CEs. While the cost of these actions is significantly lower, agencies conduct such reviews in much larger numbers than EISs.

Agencies have not routinely tracked costs of completing NEPA analyses.[133] With implementation of this final rule, in particular § 1502.11(g), agencies will be required to provide the estimated total cost of preparing an EIS. CEQ expects this will begin to address the data gap that currently exists relating to the administrative costs of NEPA compliance.

CEQ expects these and other changes in the final rule to catalyze economic benefits by expediting some reviews, including through improved coordination and management and less focus on non-significant impacts. Commenters from industry on both the ANPRM and proposed rule frequently discussed that delays under the 1978 regulations resulted in higher costs; however, these costs are difficult to quantify. One estimate in 2015 found that the cost of a 6-year delay in infrastructure projects across the electricity transmission, power generation, inland waterways, roads and bridges, rail, and water (both drinking and wastewater) sectors is $3.7 trillion,[134] which was subsequently updated to $3.9 trillion in 2018.[135] There may be underlying permits and consultations (*e.g.,* the Endangered Species Act) and other issues that contribute to a delay and therefore allocating a portion of the cost to the NEPA process would be challenging.

NEPA is a procedural statute requiring agencies to disclose and consider potential environmental effects in their decision-making processes. The final rule does not alter any substantive environmental law or regulation such as the Clean Air Act, the Clean Water Act, and the Endangered Species Act. Under the final rule, agencies will continue to consider all significant impacts to the environment. Although some may view the changes in the final rule as reducing the number or scope of analyses, CEQ has determined that, using a baseline of the statutory requirements of NEPA and Supreme Court case law, there are no adverse environmental impacts (see RIA Appendix).

OMB has determined that this final rule is an economically significant regulatory action because it may have an annual effect on the economy of $100 million or more associated with lower administrative costs and reduced paperwork and delays in the environmental review process. This rule sets forth the government-wide process for implementing NEPA in a consistent and coordinated manner. The rule will also require agencies to update their existing NEPA procedures for

[128] 68 FR 58366 (Oct. 10, 2003).

[129] The Regulatory Impact Analysis for the Final Rule, Update to the Regulations Implementing the Procedural Provisions of the National Environmental Policy Act is available under ''Supporting Documents'' in the docket on *regulations.gov* under docket ID CEQ–2019–0003.

[130] The 1978 regulations recommended the same page limits for EISs but did not include provisions requiring agencies to meet those page limits. 40 CFR 1502.7.

[131] *See* Council on Environmental Quality, *EIS Timeline Data Excel Workbook,* (June 12, 2020), *https://ceq.doe.gov/docs/nepa-practice/CEQ_EIS_Timeline_Data_2020-6-12.xlsx.*

[132] This calculation uses the mid-point ($1.125 million) of the $250,000 to $2 million cost range found in the NEPA Task Force report and assumes a 58 percent reduction in costs for those EISs taking longer than 2 years. NEPA Task Force Report, *supra,* note 28. This number is similar to the cost data from the Department of Energy, which found a median EIS cost of $1.4 million. GAO NEPA Report, *supra,* note 91.

[133] As noted above, a 2014 U.S. Government Accountability Office report found that Federal agencies do not routinely track data on the cost of completing NEPA analyses, and that the cost can vary considerably, depending on the complexity and scope of the project. GAO NEPA Report, *supra* note 91.

[134] Two Years, Not Ten, *supra* note 4.

[135] Press Release, Common Good, Common Good Updates the Cost of US Infrastructure Delays Costs Have Risen $200 Billion Over Five Years to Nearly $3.9 Trillion (May 2018), *https://www.commongood.org/wp-content/uploads/2018/05/Two-Years-Update.pdf.*

consistency with the changes set forth in this final rule.

B. Executive Order 13771, Reducing Regulation and Controlling Regulatory Costs

Under E.O. 13771,[136] agencies must identify for elimination two prior regulations for every one regulation issued, and promulgate regulations consistent with a regulatory budget. This rule is a deregulatory action under E.O. 13771 and OMB's guidance implementing E.O. 13771, titled ''Reducing Regulation and Controlling Regulatory Costs'' (April 5, 2017).[137] CEQ anticipates that the changes made in this rule will reduce unnecessary paperwork and expedite some reviews through improved coordination and management.

C. Regulatory Flexibility Act and Executive Order 13272, Proper Consideration of Small Entities in Agency Rulemaking

The Regulatory Flexibility Act, as amended, (RFA), 5 U.S.C. 601 *et seq.,* and E.O. 13272 [138] require agencies to assess the impacts of proposed and final rules on small entities. Under the RFA, small entities include small businesses, small organizations, and small governmental jurisdictions. An agency must prepare a regulatory flexibility analysis at the proposed and final rule stages unless it determines and certifies that the rule, if promulgated, would not have a significant economic impact on a substantial number of small entities. 5 U.S.C. 605(b). An agency need not perform an analysis of small entity impacts when a rule does not directly regulate small entities. *See Mid-Tex Electric Coop., Inc.* v. *FERC,* 773 F.2d 327 (D.C. Cir. 1985). This rule does not directly regulate small entities. Rather, it applies to Federal agencies and sets forth the process for their compliance with NEPA. As noted above, NEPA is a procedural statute requiring agencies to disclose and consider potential environmental effects in their decision-making processes, and does not alter any substantive environmental law or regulation. Under the final rule, agencies will continue to consider all significant impacts to the environment.

A few commenters asserted that the rule would impact small entities, including small businesses that provide services relating to the preparation of NEPA documents, outdoor recreation businesses, and other related small businesses. To the extent that the rule may affect small entities, this rulemaking will make the NEPA process more efficient and consistent and clarify the procedural requirements, which CEQ expects to directly benefit Federal agencies and indirectly benefit all other entities engaged in the process, including applicants seeking a Federal permit and those engaged in NEPA compliance activities. In addition, CEQ expects that small businesses and farmers seeking SBA or FSA guaranteed loans will indirectly benefit from the clarifying revisions in the final rule to the definition of major Federal action. Accordingly, CEQ hereby certifies that the rule will not have a significant economic impact on a substantial number of small entities.

D. Congressional Review Act

Before a rule can take effect, the Congressional Review Act (CRA) requires agencies to submit to the House of Representatives, Senate, and Comptroller General a report containing a copy of the rule and a statement identifying whether it is a ''major rule.'' 5 U.S.C. 801. OMB determines if a final rule constitutes a major rule. The CRA defines a major rule as any rule that the Administrator of OMB's Office of Information and Regulatory Affairs finds has resulted in or is likely to result in—(A) an annual effect on the economy of $100,000,000 or more; (B) a major increase in costs or prices for consumers, individual industries, Federal, State, or local government agencies, or geographic regions, or (C) significant adverse effects on competition, employment, investment, productivity, innovation, or on the ability of United States-based enterprises to compete with foreign-based enterprises in domestic and export markets. 5 U.S.C. 804(2).

OMB has determined that this final rule is a major rule for purposes of the Congressional Review Act. CEQ will submit a report, including the final rule, to both houses of Congress and the Government Accountability Office for review.

E. National Environmental Policy Act

Under the CEQ regulations, major Federal actions may include regulations. When CEQ issued regulations in 1978, it prepared a ''special environmental assessment'' for illustrative purposes pursuant to E.O. 11991. 43 FR at 25232. The NPRM for the 1978 regulations stated ''the impacts of procedural regulations of this kind are not susceptible to detailed analysis beyond that set out in the assessment.'' *Id.* Similarly, in 1986, while CEQ stated in the final rule that there were ''substantial legal questions as to whether entities within the Executive Office of the President are required to prepare environmental assessments,'' it also prepared a special environmental assessment. 51 FR at 15619. The special environmental assessment issued in 1986 made a finding of no significant environmental impact, and there was no finding made for the assessment of the 1978 regulations.

Some commenters expressed the view that CEQ failed to comply with NEPA when publishing the proposed rule that precedes this final rule, and CEQ should have prepared an EA or EIS. The commenters stated that section 102(2)(C) of NEPA requires environmental review of major Federal actions. By not conducting an environmental review under NEPA, commenters stated that CEQ violated its own regulations and past practices in prior regulations. Other commenters stated that NEPA review was required if the proposed rule ''created the possibility'' of significant impacts on the environment. They asserted that the proposed rule was a ''sweeping re-write'' of the 1978 regulations that would alter Federal agencies' consideration of environmental effects of proposed projects. Aspects of the proposed rule that were referenced in this regard include expanded use of CEs, narrow definitions of significance and effects, weakened alternatives analysis, and reduced public participation and agency accountability. Commenters asserted that the consequence of these changes is truncated analysis, a less informed public, and less mitigation.

CEQ disagrees with commenters. CEQ prepared a special assessment on its prior rules for illustrative purposes. Those long-prior voluntary decisions do not forever establish that CEQ has an obligation to apply the CEQ's regulations to changes to those regulations. As noted above, CEQ has the authority to promulgate and revise its regulations consistent with *Chevron* and other applicable case law.

This rule would not authorize any activity or commit resources to a project that may affect the environment. Similar to the 1978 regulations, these regulations do not concern any particular environmental media, nor are the regulations tied to a specific environmental setting. Rather, these regulations apply generally to Federal actions affecting the environment. No action under the regulations or specific issue or problem is singled out for special consideration. *See* Council on Environmental Quality, Special

[136] 82 FR 9339 (Feb. 3, 2017).

[137] *Available at https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/memoranda/2017/M-17-21-OMB.pdf.*

[138] 67 FR 53461 (Aug. 16, 2002).

Environmental Assessment of Regulations Proposed Under E.O. 11991 to Implement the Procedural Provisions of the National Environmental Policy Act, p. 6 (1978). Further, as stated by CEQ when it proposed the regulations in 1978, procedural rules of this kind are not susceptible to detailed analysis. 43 FR at 25232.

Even if CEQ were required to prepare an EA, it likely would result in a FONSI. CEQ has reviewed the changes made in this final rule and determined that they would not result in environmental impacts. *See* RIA Appendix. For reasons explained in the respective areas of this preamble and further summarized in the RIA Appendix, CEQ disagrees that the clarifications and changes to the processes that Federal agencies follow when relying on CEs, analyzing alternatives, and engaging the public will themselves result in any environmental impacts, let alone potentially significant impacts. This thorough review, in combination with the aforementioned circumstances of the special environmental assessments prepared for the 1978 and 1986 regulations, and the procedural nature of these regulations, reinforces CEQ's view that an EA is neither required nor necessary.

Moreover, preparing an EA for the final rule would not meaningfully inform CEQ or the public. The clarifications and changes in the final rule are entirely procedural and will help to inform the processes used by Federal agencies to evaluate the environmental effects of their proposed actions in the future.

For reasons explained in the respective areas of this preamble and further summarized in the RIA Appendix, CEQ disagrees that changes relating to CEs, analysis of alternatives, public participation, and agency responsibilities will have environmental impacts, let alone potentially significant ones.

In addition, commenters referenced several court opinions in support of their view that an agency's interpretation of a statute can be subject to NEPA review when that interpretation can lead to subsequent, significant effects on the environment, including *Citizens for Better Forestry* v. *U.S. Dep't of Agric.,* 481 F. Supp. 2d 1059 (N.D. Cal. 2007) and *Sierra Club* v. *Bosworth,* 510 F. 3d 1016 (9th Cir. 2007). Commenters stated that CEQ was required to request comment on the appropriate scope of the environmental review of the proposed rule and then prepare, and notice for public comment, an EIS before or in tandem with its publication.

The circumstances in this rule are distinctly different from the case law referenced by commenters. *Citizens for Better Forestry* pertains to the misapplication of an existing CE, where the court found that the agency improperly expanded the scope of an existing CE when applying it to a National Forest Management Act rulemaking. 481 F. Supp. at 1086. In *Sierra Club* v. *Bosworth,* the court agreed with previous cases finding that the promulgation of agency NEPA procedures, including the establishment of new CEs, did not itself require preparation of an EA or EIS, but that agencies need only comply with CEQ regulations setting forth procedural requirements, including consultation with CEQ, and **Federal Register** publication for public comment (40 CFR 1507.3). 510 F.3d at 1022. The court, however, found that the record relied on by the U.S. Forest Service to develop and justify a CE was deficient. *Id.* at 1026–30. Neither of the circumstances in those cases is comparable to the circumstances of this rule. Further, in another relevant case, *Heartwood* v. *U.S. Forest Service,* the court found that neither NEPA nor the CEQ regulations required the agency to conduct an EA or an EIS prior to the promulgation of its procedures creating a CE. 230 F.3d 947, 954–55 (7th Cir. 2000).

This rule serves as the primary regulation from which agencies develop procedures to implement the statute. To prepare an EIS, as some commenters had requested, would necessitate that CEQ apply the 1978 regulations to a rule that revises those same regulations. There is no indication that the statute contemplated such circumstances, and CEQ is not aware of other examples in law where the revisions to procedural rules were subject to the requirements of the rule that those same rules replaced. Further, the 1978 regulations do not require agencies to prepare a NEPA analysis before establishing or updating agency procedures for implementing NEPA. Since this rule would not authorize any activity or commit resources to a project that may affect the environment, preparation of an environmental review is not required.

F. Endangered Species Act

Under the ESA, the promulgation of regulations can be a discretionary agency action subject to section 7 of the ESA. CEQ has determined that updating its regulations implementing the procedural provisions of NEPA has ''no effect'' on listed species and critical habitat. Therefore, ESA section 7 consultation is not required.

Commenters stated that consultation with the Fish and Wildlife Service and the National Marine Fisheries Service is required because the rule may affect or may adversely affect species listed under the ESA. In support of this point, commenters referenced proposed changes to the definition of ''effects'' and ''significantly,'' development of alternatives, and obligations for agencies to obtain information. Commenters noted that a programmatic consultation may be appropriate where an agency promulgates regulations that may affect endangered species. Other commenters believe that the rule is contrary to section 7(a)(1) of ESA, which imposes a specific obligation upon all federal agencies to carry out programs to conserve endangered and threatened species. Commenters stated that the proposed changes eliminate or otherwise weaken requirements pertaining to the assessment of impacts and, in doing so, CEQ fails to satisfy responsibilities under section 7(a)(1).

CEQ disagrees that the aforementioned regulatory changes ''may affect'' listed species or critical habitat. Initially, it is important to note that commenters are conflating ESA and NEPA. As courts have stated numerous times, these are two different statutes with different standards and definitions and, in fact, different underlying policies. As discussed in section II.B.1, the Supreme Court has stated that NEPA is a procedural statute. In contrast, the ESA is principally focused on imposing substantive duties on Federal agencies and the public. Regardless of how definitions or other procedures under NEPA are changed under this regulation or any other regulatory process, it will not change the requirements for Federal agencies under the ESA or its implementing regulations.

This rulemaking is procedural in nature, and therefore does not make any final determination regarding the level of NEPA analysis required for particular actions. CEQ's approach is consistent with the approach taken by other Federal agencies that similarly make determinations of no effect on listed species and critical habitat when establishing or updating agency NEPA procedures. CEQ also notes that neither the 1978 regulations nor the 1986 amendments indicate that CEQ consulted under ESA section 7(a)(2). Setting aside the procedural nature of this rule, CEQ reviewed it to determine if it ''may affect'' listed species or their designated critical habitat. CEQ has closely reviewed the impacts of all the changes made to the 1978 regulations, as summarized in the RIA Appendix and described in greater detail in the

respective responses to comments. None of the changes to the 1978 regulations are anticipated to have environmental impacts, including potential effects to listed species and critical habitat. For example, under § 1501.3 of the final rule, agencies should continue to consider listed species and designated habitat when making a determination of significance with respect to the level of NEPA review.

Contrary to several comments, the final rule does not ignore cumulative effects on listed species. Rather, the final rule includes a definition of effects that comports with Supreme Court case law to encompass all effects that are reasonably foreseeable and have a reasonably close causal relationship to the proposed action or alternatives. In general, the changes improve the timeliness and efficiency of the NEPA process while retaining requirements to analyze all activities and environmental impacts covered within the scope of the statute. To the extent the rule modifies the 1978 regulations, the changes do not diminish the quality and depth of environmental review relative to the baseline, which is defined as how NEPA is conducted under applicable Supreme Court case law.

Neither the ESA regulations nor the ESA Section 7 Consultation Handbook (1998) require the action agency to request concurrence from the Fish and Wildlife Service and National Marine Fisheries Service for determinations that an action will have no effect on listed species or their critical habitat. The final rule does not change the obligations of Federal agencies under the ESA; as noted above, importantly, all of the requirements under section 7 and associated implementing regulations and policies continue to apply regardless of whether NEPA analysis is triggered or the form of the NEPA documentation. For the aforementioned reasons, CEQ has determined that the final rule will have no effect on ESA listed species and designated critical habitat.

To the extent commenters imply that, under the authority of ESA section 7(a)(1), CEQ can regulate Federal action agencies with regard to the ESA, this is not accurate. For example, CEQ does not have the authority, under the guise of NEPA, to dictate to Federal action agencies that they may only choose an alternative that has the most conservation value for listed species or designated critical habitat.

All Federal agencies continue to be subject to the ESA and its requirements. Further, as described in detail in the RIA Appendix and in Final Rule Response to Comments on specific changes, none of the changes to the 1978 regulations are anticipated to have environmental impacts, including potential effects to listed species and critical habitat. In general, the changes improve the timeliness and efficiency of the NEPA process while retaining requirements to analyze all environmental impacts covered within the ambit of the statute. CEQ notes that the rulemaking is procedural in nature, and therefore does not make any final determination regarding the level of NEPA analysis required for particular actions.

G. Executive Order 13132, Federalism

E.O. 13132 requires agencies to develop an accountable process to ensure meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications.[139] Policies that have federalism implications include regulations that have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. This rule does not have federalism implications because it applies to Federal agencies, not States. However, CEQ notes that States may elect to assume NEPA responsibilities under Federal statutes. CEQ received comments in response to the NPRM from a number of States, including those that have assumed NEPA responsibilities, and considered these comments in development of the final rule.

H. Executive Order 13175, Consultation and Coordination With Indian Tribal Governments

E.O. 13175 requires agencies to have a process to ensure meaningful and timely input by Tribal officials in the development of policies that have Tribal implications.[140] Such policies include regulations that have substantial direct effects on one or more Indian Tribes, on the relationship between the Federal Government and Indian Tribes, or on the distribution of power and responsibilities between the Federal Government and Indian Tribes. While the rule is not a regulatory policy that has Tribal implications, the rule does, in part, respond to Tribal government comments concerning Tribal sovereign rights, interests, and the expertise of Tribes in the NEPA process and the CEQ regulations implementing NEPA.

Several commenters stated that it is inaccurate for CEQ to conclude that the rule ''is not a regulatory policy that has Tribal implications,'' under E.O. 13175. Commenters noted that NEPA uniquely and substantially impacts Tribes, and Tribal lands are ordinarily held in Federal trust. Commenters also stated that through NEPA and its implementing regulations, Tribes often engage with the Federal agency on projects located within the Tribes' ancestral lands, including on projects that may affect cultural resources, sacred sites, and other resources. Commenters noted Tribal nations routinely participate in the NEPA process as participating, cooperating, or sometimes lead agencies. Further, the proposed regulations specifically contain provisions that explicitly reference Tribal nations.

Commenters stated that consultation is required by the Presidential Memorandum for the Heads of Executive Departments and Agencies on Tribal Consultation dated November 5, 2009,[141] which supplements E.O. 13175 and requested formal consultation and additional meetings in their region with CEQ on the proposed rule. Commenters stated that the Tribal meetings CEQ held were insufficient in number or capacity for meaningful consultation. Other commenters stated that consultation should start at the outset of the process, and some reference comments provided on the need for consultation during the ANPRM process. Some commenters stated that CEQ should withdraw the proposed rule, and others asked that CEQ postpone or extend the comment period for the rulemaking in order to engage in consultation with Tribal governments in order to make the regulatory framework more responsive to Tribal needs.

The final rule does not meet the criteria in E.O. 13175 that require government-to-government consultation. This rule does not impose substantial direct compliance costs on Tribal governments (section 5(b)) and does not preempt Tribal law (section 5(c)). However, CEQ solicited and received numerous Tribal governmental and organizational public comments during the rulemaking process. The comments received through the ANPRM informed the development of CEQ's proposed rule. For the proposed rule, CEQ provided for a 60-day public comment period, which is consistent with the length of the comment period provided by CEQ for the original 1978 proposed regulations, as well as the APA and E.O. 12866. CEQ notified all

[139] *Supra* note 75.

[140] *Supra* note 69.

[141] 74 FR 57881 (Nov. 9, 2009).

Tribal leaders of federally recognized Tribes by email or mail of the proposed rule and invited comments. CEQ conducted additional Tribal outreach to solicit comments from Tribal leaders and members through three listening sessions held in Denver, Colorado, Anchorage, Alaska, and Washington, DC. CEQ made information to aid the Tribes and the public's review available on its websites at *www.whitehouse.gov/ceq* and *www.nepa.gov,* including a redline version of the proposed changes, a presentation on the proposed rule, and other background information.

One commenter argued that CEQ made a ''substantive'' decision to forego Tribal consultation that it must support with substantial evidence in the administrative record under the APA. While compliance with E.O. 13175 is not subject to judicial review, the final rule explains how CEQ received meaningful and timely input from Tribal leaders and members.

In its ANPRM, CEQ included a specific question regarding the representation of Tribal governments in the NEPA process. *See* ANPRM Question 18 (''Are there ways in which the role of [T]ribal governments in the NEPA process should be clarified in CEQ's NEPA regulations, and if so, how?''). More generally, CEQ's ANPRM sought the views of Tribal governments and others on regulatory revisions that CEQ could propose to improve Tribal participation in Federal NEPA processes. *See* ANPRM Question 2 (''Should CEQ's NEPA regulations be revised to make the NEPA process more efficient by better facilitating agency use of environmental studies, analysis, and decisions conducted in earlier Federal, State, Tribal or local environmental reviews or authorization decisions, and if so, how?''). As discussed in section II.A, CEQ is amending its regulations in the final rule to further support coordination with Tribal governments and agencies and analysis of a proposed action's potential effects on Tribal lands, resources, or areas of historic significance as an important part of Federal agency decision making.

I. Executive Order 12898, Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations

E.O. 12898 requires agencies to make achieving environmental justice part of their missions by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations.[142] CEQ has analyzed this final rule and determined that it would not cause disproportionately high and adverse human health or environmental effects on minority populations and low-income populations. This rule would set forth implementing regulations for NEPA; it is in the agency implementation of NEPA when conducting reviews of proposed agency actions where agencies can consider, as needed, environmental justice issues.

Several commenters disagreed with CEQ's determination that the proposed rule would not cause disproportionately high and adverse human health or environmental effects on minority populations and low-income populations. Commenters stated NEPA's mandate to consider environmental effects, E.O. 12898, agency guidance, and case law establish that agencies cannot ignore the impacts of their actions on low-income and minority communities, and that CEQ is relinquishing its responsibility to oversee compliance with E.O. 12898 and NEPA. Further, commenters contended that CEQ's failure to analyze how the proposed rule and its implementation would affect E.O. 12898's mandates would render the regulations arbitrary and capricious, and exceed the agency's statutory authority.

Commenters stated that CEQ provided no explanation or analysis of how the development and implementation of this rule would affect implementation of E.O. 12898 and, consequently, environmental justice communities. Commenters noted the fundamental proposed changes to nearly every step of the NEPA review process will disproportionately impact environmental justice communities and will reduce or limit opportunities for such communities to understand the effects of proposed projects and to participate in the NEPA review process.

NEPA is a procedural statute that does not presuppose any particular substantive outcomes. In addition, CEQ has reviewed the changes in this final rule and has determined that they would not result in environmental impacts. *See* RIA Appendix. CEQ disagrees that the final rule will have disproportionately high and adverse human health or environmental effects on minority populations and low-income population. Rather, the final rule modernizes and clarifies the procedures that NEPA contemplates. Among other things, this will give agencies greater flexibility to design and customize public involvement to best address the specific circumstances of their proposed actions. The final rule expands the already wide range of tools agencies may use when providing notice to potentially affected communities and inviting public involvement. CEQ has made further changes to § 1506.6 in the final rule to clarify that agencies should consider the public's access to electronic media when selecting appropriate methods for providing public notice and involvement. The final rule also better informs the public by extending the scoping period so that it may occur prior to publication of the NOI, where appropriate, and increasing the specificity of the NOI.

Commenters also raised concerns that CEQ did not follow the E.O. 12898 directive to ensure that environmental justice communities can meaningfully participate in public processes and Federal agency decision making, including making public information and hearings ''readily accessible.'' Commenters stated that CEQ failed to follow this directive in designing its rulemaking process, and in fact, excluded environmental justice communities from the process. Further, commenters stated that, over 20 years ago, CEQ acknowledged that traditional notice and comment procedures may be insufficient to engage environmental justice communities. These barriers may range from agency failure to provide translation of documents to the scheduling of meetings at times and in places that are not convenient to working families. Commenters stated that CEQ failed to mention environmental justice communities in its opening statement during the Washington, DC hearing.

Commenters also stated that CEQ failed to take note of the thousands of comments submitted in response to the ANPRM raising concerns about the health and environment of environmental justice communities that could come from limiting opportunities to gain access to information about projects and to comment. Commenters stated that if CEQ's rulemaking process was more inclusive and expansive it would enable some valuable clarifications in the regulations of how environmental justice impacts should be taken more definitively into account in NEPA reviews. Commenters also stated that the proposed rule changes show no particular interest in better clarifying this important aspect of environmental review, and show no evidence of interest in bettering environmental justice impact assessment.

In response to the ANPRM, CEQ received over 12,500 comments, including from those representing

[142] 59 FR 7629 (Feb. 16, 1994).

environmental justice organizations. The diverse range of public comments informed CEQ's development of the proposed rule to improve interagency coordination in the environmental review process, promote earlier public involvement, increase transparency, and enhance the participation of States, Tribes, and localities.

In issuing the NPRM, CEQ took a number of further actions to hear from the public and to encourage all interested stakeholders to submit comments. These actions included notifying and inviting comment from all federally recognized Tribes and over 400 interested groups, including States, localities, environmental organizations, trade associations, NEPA practitioners, and other interested members of the public, representing a broad range of diverse views. Additionally, CEQ made information to aid the public's review available on its websites at *www.whitehouse.gov/ceq* and *www.nepa.gov,* including a redline version of the proposed changes to the regulations, along with a presentation on the proposed rule and other background information.

CEQ engaged in extensive public outreach with the benefit of modern technologies and rulemaking procedures. CEQ held two public hearings each with morning, afternoon, and evening sessions, in Denver, Colorado on February 11, 2020, and in Washington, DC on February 25, 2020. Both hearings had diverse representation from stakeholders, including many speaking on behalf of environmental justice communities or about their concerns. CEQ also attended the National Environmental Justice Advisory Committee (NEJAC) meeting in Jacksonville, Florida to brief NEJAC members and the public on the proposed rule and to answer questions. CEQ also conducted additional public outreach to solicit comments and receive input, including Tribal engagement in Denver, Colorado, Anchorage, Alaska and Washington, DC.

J. Executive Order 13211, Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

Agencies must prepare a Statement of Energy Effects for significant energy actions under E.O. 13211.[143] This final rule is not a ''significant energy action'' because it is not likely to have a significant adverse effect on the supply, distribution, or use of energy.

[143] 66 FR 28355 (May 22, 2001).

K. Executive Order 12988, Civil Justice Reform

Under section 3(a) E.O. 12988,[144] agencies must review their proposed regulations to eliminate drafting errors and ambiguities, draft them to minimize litigation, and provide a clear legal standard for affected conduct. Section 3(b) provides a list of specific issues for review to conduct the reviews required by section 3(a). CEQ has conducted this review and determined that this final rule complies with the requirements of E.O. 12988.

L. Unfunded Mandates Reform Act

Section 201 of the Unfunded Mandates Reform Act of 1995 (2 U.S.C. 1531) requires Federal agencies to assess the effects of their regulatory actions on State, Tribal, and local governments, and the private sector to the extent that such regulations incorporate requirements specifically set forth in law. Before promulgating a rule that may result in the expenditure by a State, Tribal, or local government, in the aggregate, or by the private sector of $100 million, adjusted annually for inflation, in any one year, an agency must prepare a written statement that assesses the effects on State, Tribal, and local governments and the private sector. 2 U.S.C. 1532. This final rule applies to Federal agencies and would not result in expenditures of $100 million or more for State, Tribal, and local governments, in the aggregate, or the private sector in any 1 year. This action also does not impose any enforceable duty, contain any unfunded mandate, or otherwise have any effect on small governments subject to the requirements of 2 U.S.C. 1531–38.

M. Paperwork Reduction Act

This final rule does not impose any new information collection burden that would require additional review or approval by OMB under the Paperwork Reduction Act (PRA), 44 U.S.C. 3501 *et seq.*

List of Subjects

40 CFR Parts 1500, 1501, 1502, 1503, 1504, 1505, 1506, 1507, and 1508

Administrative practice and procedure, Environmental impact statements, Environmental protection, Natural resources.

40 CFR Part 1515

Freedom of information.

40 CFR Part 1516

Privacy.

[144] 61 FR 4729 (Feb. 7, 1996).

40 CFR Part 1517

Sunshine Act.

40 CFR Part 1518

Accounting, Administrative practice and procedure, Environmental impact statements.

Mary B. Neumayr,

Chairman.

For the reasons stated in the preamble, and under the authority of 42 U.S.C. 4321–4347; 42 U.S.C. 4371–4375; 42 U.S.C. 7609; E.O. 11514, 35 FR 4247, 3 CFR, 1966–1970, Comp., p. 902, as amended by E.O. 11991, 42 FR 26967, 3 CFR, 1977 Comp., p. 123; and E.O. 13807, 82 FR 40463, 3 CFR, 2017, Comp., p. 369, the Council on Environmental Quality amends chapter V in title 40 of the Code of Federal Regulations as follows:

PARTS 1500 THROUGH 1508 [DESIGNATED AS SUBCHAPTER A]

■ 1. Designate parts 1500 through 1508 as subchapter A and add a heading for newly designated subchapter A to read as follows:

Subchapter A—National Environmental Policy Act Implementing Regulations

■ 2. Revise part 1500 to read as follows:

PART 1500—PURPOSE AND POLICY

Sec.

Authority: 42 U.S.C. 4321–4347; 42 U.S.C. 4371–4375; 42 U.S.C. 7609; E.O. 11514, 35 FR 4247, 3 CFR, 1966–1970, Comp., p. 902, as amended by E.O. 11991, 42 FR 26967, 3 CFR, 1977 Comp., p. 123; and E.O. 13807, 82 FR 40463, 3 CFR, 2017, Comp., p. 369.

§ 1500.1 Purpose and policy.

(a) The National Environmental Policy Act (NEPA) is a procedural statute intended to ensure Federal agencies consider the environmental impacts of their actions in the decision-making process. Section 101 of NEPA establishes the national environmental policy of the Federal Government to use all practicable means and measures to foster and promote the general welfare, create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans. Section 102(2) of NEPA establishes the procedural requirements to carry out the policy stated in section 101 of NEPA. In

particular, it requires Federal agencies to provide a detailed statement on proposals for major Federal actions significantly affecting the quality of the human environment. The purpose and function of NEPA is satisfied if Federal agencies have considered relevant environmental information, and the public has been informed regarding the decision-making process. NEPA does not mandate particular results or substantive outcomes. NEPA's purpose is not to generate paperwork or litigation, but to provide for informed decision making and foster excellent action.

(b) The regulations in this subchapter implement section 102(2) of NEPA. They provide direction to Federal agencies to determine what actions are subject to NEPA's procedural requirements and the level of NEPA review where applicable. The regulations in this subchapter are intended to ensure that relevant environmental information is identified and considered early in the process in order to ensure informed decision making by Federal agencies. The regulations in this subchapter are also intended to ensure that Federal agencies conduct environmental reviews in a coordinated, consistent, predictable and timely manner, and to reduce unnecessary burdens and delays. Finally, the regulations in this subchapter promote concurrent environmental reviews to ensure timely and efficient decision making.

§ 1500.2 [Reserved]

§ 1500.3 NEPA compliance.

(a) *Mandate.* This subchapter is applicable to and binding on all Federal agencies for implementing the procedural provisions of the National Environmental Policy Act of 1969, as amended (Pub. L. 91–190, 42 U.S.C. 4321 *et seq.*) (NEPA or the Act), except where compliance would be inconsistent with other statutory requirements. The regulations in this subchapter are issued pursuant to NEPA; the Environmental Quality Improvement Act of 1970, as amended (Pub. L. 91–224, 42 U.S.C. 4371 *et seq.*); section 309 of the Clean Air Act, as amended (42 U.S.C. 7609); Executive Order 11514, Protection and Enhancement of Environmental Quality (March 5, 1970), as amended by Executive Order 11991, Relating to the Protection and Enhancement of Environmental Quality (May 24, 1977); and Executive Order 13807, Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects (August 15, 2017). The regulations in this subchapter apply to the whole of section 102(2) of NEPA. The provisions of the Act and the regulations in this subchapter must be read together as a whole to comply with the law.

(b) *Exhaustion.* (1) To ensure informed decision making and reduce delays, agencies shall include a request for comments on potential alternatives and impacts, and identification of any relevant information, studies, or analyses of any kind concerning impacts affecting the quality of the human environment in the notice of intent to prepare an environmental impact statement (§ 1501.9(d)(7) of this chapter).

(2) The draft and final environmental impact statements shall include a summary of all alternatives, information, and analyses submitted by State, Tribal, and local governments and other public commenters for consideration by the lead and cooperating agencies in developing the draft and final environmental impact statements (§ 1502.17 of this chapter).

(3) For consideration by the lead and cooperating agencies, State, Tribal, and local governments and other public commenters must submit comments within the comment periods provided, and comments shall be as specific as possible (§§ 1503.1 and 1503.3 of this chapter). Comments or objections of any kind not submitted, including those based on submitted alternatives, information, and analyses, shall be forfeited as unexhausted.

(4) Informed by the submitted alternatives, information, and analyses, including the summary in the final environmental impact statement (§ 1502.17 of this chapter) and the agency's response to comments in the final environmental impact statement (§ 1503.4 of this chapter), together with any other material in the record that he or she determines relevant, the decision maker shall certify in the record of decision that the agency considered all of the alternatives, information, and analyses, and objections submitted by States, Tribal, and local governments and other public commenters for consideration by the lead and cooperating agencies in developing the environmental impact statement (§ 1505.2(b) of this chapter).

(c) *Review of NEPA compliance.* It is the Council's intention that judicial review of agency compliance with the regulations in this subchapter not occur before an agency has issued the record of decision or taken other final agency action. It is the Council's intention that any allegation of noncompliance with NEPA and the regulations in this subchapter should be resolved as expeditiously as possible. Consistent with their organic statutes, and as part of implementing the exhaustion provisions in paragraph (b) of this section, agencies may structure their procedures to include an appropriate bond or other security requirement.

(d) *Remedies.* Harm from the failure to comply with NEPA can be remedied by compliance with NEPA's procedural requirements as interpreted in the regulations in this subchapter. It is the Council's intention that the regulations in this subchapter create no presumption that violation of NEPA is a basis for injunctive relief or for a finding of irreparable harm. The regulations in this subchapter do not create a cause of action or right of action for violation of NEPA, which contains no such cause of action or right of action. It is the Council's intention that any actions to review, enjoin, stay, vacate, or otherwise alter an agency decision on the basis of an alleged NEPA violation be raised as soon as practicable after final agency action to avoid or minimize any costs to agencies, applicants, or any affected third parties. It is also the Council's intention that minor, non-substantive errors that have no effect on agency decision making shall be considered harmless and shall not invalidate an agency action.

(e) *Severability.* The sections of this subchapter are separate and severable from one another. If any section or portion therein is stayed or determined to be invalid, or the applicability of any section to any person or entity is held invalid, it is the Council's intention that the validity of the remainder of those parts shall not be affected, with the remaining sections to continue in effect.

§ 1500.4 Reducing paperwork.

Agencies shall reduce excessive paperwork by:

(a) Using categorical exclusions to define categories of actions that normally do not have a significant effect on the human environment and therefore do not require preparation of an environmental impact statement (§ 1501.4 of this chapter).

(b) Using a finding of no significant impact when an action not otherwise excluded will not have a significant effect on the human environment and therefore does not require preparation of an environmental impact statement (§ 1501.6 of this chapter).

(c) Reducing the length of environmental documents by means such as meeting appropriate page limits (§§ 1501.5(f) and 1502.7 of this chapter).

(d) Preparing analytic and concise environmental impact statements (§ 1502.2 of this chapter).

(e) Discussing only briefly issues other than significant ones (§ 1502.2(b) of this chapter).

(f) Writing environmental impact statements in plain language (§ 1502.8 of this chapter).

(g) Following a clear format for environmental impact statements (§ 1502.10 of this chapter).

(h) Emphasizing the portions of the environmental impact statement that are useful to decision makers and the public (*e.g.,* §§ 1502.14 and 1502.15 of this chapter) and reducing emphasis on background material (§ 1502.1 of this chapter).

(i) Using the scoping process, not only to identify significant environmental issues deserving of study, but also to deemphasize insignificant issues, narrowing the scope of the environmental impact statement process accordingly (§ 1501.9 of this chapter).

(j) Summarizing the environmental impact statement (§ 1502.12 of this chapter).

(k) Using programmatic, policy, or plan environmental impact statements and tiering from statements of broad scope to those of narrower scope, to eliminate repetitive discussions of the same issues (§§ 1501.11 and 1502.4 of this chapter).

(l) Incorporating by reference (§ 1501.12 of this chapter).

(m) Integrating NEPA requirements with other environmental review and consultation requirements (§ 1502.24 of this chapter).

(n) Requiring comments to be as specific as possible (§ 1503.3 of this chapter).

(o) Attaching and publishing only changes to the draft environmental impact statement, rather than rewriting and publishing the entire statement when changes are minor (§ 1503.4(c) of this chapter).

(p) Eliminating duplication with State, Tribal, and local procedures, by providing for joint preparation of environmental documents where practicable (§ 1506.2 of this chapter), and with other Federal procedures, by providing that an agency may adopt appropriate environmental documents prepared by another agency (§ 1506.3 of this chapter).

(q) Combining environmental documents with other documents (§ 1506.4 of this chapter).

§ 1500.5 Reducing delay.

Agencies shall reduce delay by:

(a) Using categorical exclusions to define categories of actions that normally do not have a significant effect on the human environment (§ 1501.4 of this chapter) and therefore do not require preparation of an environmental impact statement.

(b) Using a finding of no significant impact when an action not otherwise excluded will not have a significant effect on the human environment (§ 1501.6 of this chapter) and therefore does not require preparation of an environmental impact statement.

(c) Integrating the NEPA process into early planning (§ 1501.2 of this chapter).

(d) Engaging in interagency cooperation before or as the environmental assessment or environmental impact statement is prepared, rather than awaiting submission of comments on a completed document (§§ 1501.7 and 1501.8 of this chapter).

(e) Ensuring the swift and fair resolution of lead agency disputes (§ 1501.7 of this chapter).

(f) Using the scoping process for an early identification of what are and what are not the real issues (§ 1501.9 of this chapter).

(g) Meeting appropriate time limits for the environmental assessment and environmental impact statement processes (§ 1501.10 of this chapter).

(h) Preparing environmental impact statements early in the process (§ 1502.5 of this chapter).

(i) Integrating NEPA requirements with other environmental review and consultation requirements (§ 1502.24 of this chapter).

(j) Eliminating duplication with State, Tribal, and local procedures by providing for joint preparation of environmental documents where practicable (§ 1506.2 of this chapter) and with other Federal procedures by providing that agencies may jointly prepare or adopt appropriate environmental documents prepared by another agency (§ 1506.3 of this chapter).

(k) Combining environmental documents with other documents (§ 1506.4 of this chapter).

(l) Using accelerated procedures for proposals for legislation (§ 1506.8 of this chapter).

§ 1500.6 Agency authority.

Each agency shall interpret the provisions of the Act as a supplement to its existing authority and as a mandate to view policies and missions in the light of the Act's national environmental objectives, to the extent consistent with its existing authority. Agencies shall review their policies, procedures, and regulations accordingly and revise them as necessary to ensure full compliance with the purposes and provisions of the Act as interpreted by the regulations in this subchapter. The phrase ''to the fullest extent possible'' in section 102 of NEPA means that each agency of the Federal Government shall comply with that section, consistent with § 1501.1 of this chapter. Nothing contained in the regulations in this subchapter is intended or should be construed to limit an agency's other authorities or legal responsibilities.

■ 3. Revise part 1501 to read as follows:

PART 1501—NEPA AND AGENCY PLANNING

Sec.

Authority: 42 U.S.C. 4321–4347; 42 U.S.C. 4371–4375; 42 U.S.C. 7609; E.O. 11514, 35 FR 4247, 35 FR 4247, 3 CFR, 1966–1970, Comp., p. 902, as amended by E.O. 11991, 42 FR 26967, 3 CFR, 1977 Comp., p. 123; and E.O. 13807, 82 FR 40463, 3 CFR, 2017, Comp., p. 369.

§ 1501.1 NEPA thresholds.

(a) In assessing whether NEPA applies or is otherwise fulfilled, Federal agencies should determine:

(1) Whether the proposed activity or decision is expressly exempt from NEPA under another statute;

(2) Whether compliance with NEPA would clearly and fundamentally conflict with the requirements of another statute;

(3) Whether compliance with NEPA would be inconsistent with Congressional intent expressed in another statute;

(4) Whether the proposed activity or decision is a major Federal action;

(5) Whether the proposed activity or decision, in whole or in part, is a non-discretionary action for which the agency lacks authority to consider environmental effects as part of its decision-making process; and

(6) Whether the proposed action is an action for which another statute's requirements serve the function of agency compliance with the Act.

(b) Federal agencies may make determinations under this section in their agency NEPA procedures (§ 1507.3(d) of this chapter) or on an individual basis, as appropriate.

(1) Federal agencies may seek the Council's assistance in making an individual determination under this section.

(2) An agency shall consult with other Federal agencies concerning their concurrence in statutory determinations made under this section where more than one Federal agency administers the statute.

§ 1501.2 Apply NEPA early in the process.

(a) Agencies should integrate the NEPA process with other planning and authorization processes at the earliest reasonable time to ensure that agencies consider environmental impacts in their planning and decisions, to avoid delays later in the process, and to head off potential conflicts.

(b) Each agency shall:

(1) Comply with the mandate of section 102(2)(A) of NEPA to utilize a systematic, interdisciplinary approach which will ensure the integrated use of the natural and social sciences and the environmental design arts in planning and in decision making which may have an impact on man's environment, as specified by § 1507.2(a) of this chapter.

(2) Identify environmental effects and values in adequate detail so the decision maker can appropriately consider such effects and values alongside economic and technical analyses. Whenever practicable, agencies shall review and publish environmental documents and appropriate analyses at the same time as other planning documents.

(3) Study, develop, and describe appropriate alternatives to recommended courses of action in any proposal that involves unresolved conflicts concerning alternative uses of available resources as provided by section 102(2)(E) of NEPA.

(4) Provide for actions subject to NEPA that are planned by private applicants or other non-Federal entities before Federal involvement so that:

(i) Policies or designated staff are available to advise potential applicants of studies or other information foreseeably required for later Federal action.

(ii) The Federal agency consults early with appropriate State, Tribal, and local governments and with interested private persons and organizations when their involvement is reasonably foreseeable.

(iii) The Federal agency commences its NEPA process at the earliest reasonable time (§§ 1501.5(d) and 1502.5(b) of this chapter).

§ 1501.3 Determine the appropriate level of NEPA review.

(a) In assessing the appropriate level of NEPA review, Federal agencies should determine whether the proposed action:

(1) Normally does not have significant effects and is categorically excluded (§ 1501.4);

(2) Is not likely to have significant effects or the significance of the effects is unknown and is therefore appropriate for an environmental assessment (§ 1501.5); or

(3) Is likely to have significant effects and is therefore appropriate for an environmental impact statement (part 1502 of this chapter).

(b) In considering whether the effects of the proposed action are significant, agencies shall analyze the potentially affected environment and degree of the effects of the action. Agencies should consider connected actions consistent with § 1501.9(e)(1).

(1) In considering the potentially affected environment, agencies should consider, as appropriate to the specific action, the affected area (national, regional, or local) and its resources, such as listed species and designated critical habitat under the Endangered Species Act. Significance varies with the setting of the proposed action. For instance, in the case of a site-specific action, significance would usually depend only upon the effects in the local area.

(2) In considering the degree of the effects, agencies should consider the following, as appropriate to the specific action:

(i) Both short- and long-term effects.

(ii) Both beneficial and adverse effects.

(iii) Effects on public health and safety.

(iv) Effects that would violate Federal, State, Tribal, or local law protecting the environment.

§ 1501.4 Categorical exclusions.

(a) For efficiency, agencies shall identify in their agency NEPA procedures (§ 1507.3(e)(2)(ii) of this chapter) categories of actions that normally do not have a significant effect on the human environment, and therefore do not require preparation of an environmental assessment or environmental impact statement.

(b) If an agency determines that a categorical exclusion identified in its agency NEPA procedures covers a proposed action, the agency shall evaluate the action for extraordinary circumstances in which a normally excluded action may have a significant effect.

(1) If an extraordinary circumstance is present, the agency nevertheless may categorically exclude the proposed action if the agency determines that there are circumstances that lessen the impacts or other conditions sufficient to avoid significant effects.

(2) If the agency cannot categorically exclude the proposed action, the agency shall prepare an environmental assessment or environmental impact statement, as appropriate.

§ 1501.5 Environmental assessments.

(a) An agency shall prepare an environmental assessment for a proposed action that is not likely to have significant effects or when the significance of the effects is unknown unless the agency finds that a categorical exclusion (§ 1501.4) is applicable or has decided to prepare an environmental impact statement.

(b) An agency may prepare an environmental assessment on any action in order to assist agency planning and decision making.

(c) An environmental assessment shall:

(1) Briefly provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact; and

(2) Briefly discuss the purpose and need for the proposed action, alternatives as required by section 102(2)(E) of NEPA, and the environmental impacts of the proposed action and alternatives, and include a listing of agencies and persons consulted.

(d) For applications to the agency requiring an environmental assessment, the agency shall commence the environmental assessment as soon as practicable after receiving the application.

(e) Agencies shall involve the public, State, Tribal, and local governments, relevant agencies, and any applicants, to the extent practicable in preparing environmental assessments.

(f) The text of an environmental assessment shall be no more than 75 pages, not including appendices, unless a senior agency official approves in writing an assessment to exceed 75 pages and establishes a new page limit.

(g) Agencies may apply the following provisions to environmental assessments:

(1) Section 1502.21 of this chapter—Incomplete or unavailable information;

(2) Section 1502.23 of this chapter—Methodology and scientific accuracy; and

(3) Section 1502.24 of this chapter—Environmental review and consultation requirements.

§ 1501.6 Findings of no significant impact.

(a) An agency shall prepare a finding of no significant impact if the agency

determines, based on the environmental assessment, not to prepare an environmental impact statement because the proposed action will not have significant effects.

(1) The agency shall make the finding of no significant impact available to the affected public as specified in § 1506.6(b) of this chapter.

(2) In the following circumstances, the agency shall make the finding of no significant impact available for public review for 30 days before the agency makes its final determination whether to prepare an environmental impact statement and before the action may begin:

(i) The proposed action is or is closely similar to one that normally requires the preparation of an environmental impact statement under the procedures adopted by the agency pursuant to § 1507.3 of this chapter; or

(ii) The nature of the proposed action is one without precedent.

(b) The finding of no significant impact shall include the environmental assessment or incorporate it by reference and shall note any other environmental documents related to it (§ 1501.9(f)(3)). If the assessment is included, the finding need not repeat any of the discussion in the assessment but may incorporate it by reference.

(c) The finding of no significant impact shall state the authority for any mitigation that the agency has adopted and any applicable monitoring or enforcement provisions. If the agency finds no significant impacts based on mitigation, the mitigated finding of no significant impact shall state any enforceable mitigation requirements or commitments that will be undertaken to avoid significant impacts.

§ 1501.7 Lead agencies.

(a) A lead agency shall supervise the preparation of an environmental impact statement or a complex environmental assessment if more than one Federal agency either:

(1) Proposes or is involved in the same action; or

(2) Is involved in a group of actions directly related to each other because of their functional interdependence or geographical proximity.

(b) Federal, State, Tribal, or local agencies, including at least one Federal agency, may act as joint lead agencies to prepare an environmental impact statement or environmental assessment (§ 1506.2 of this chapter).

(c) If an action falls within the provisions of paragraph (a) of this section, the potential lead agencies shall determine, by letter or memorandum, which agency will be the lead agency and which will be cooperating agencies. The agencies shall resolve the lead agency question so as not to cause delay. If there is disagreement among the agencies, the following factors (which are listed in order of descending importance) shall determine lead agency designation:

(1) Magnitude of agency's involvement.

(2) Project approval or disapproval authority.

(3) Expertise concerning the action's environmental effects.

(4) Duration of agency's involvement.

(5) Sequence of agency's involvement.

(d) Any Federal agency, or any State, Tribal, or local agency or private person substantially affected by the absence of lead agency designation, may make a written request to the senior agency officials of the potential lead agencies that a lead agency be designated.

(e) If Federal agencies are unable to agree on which agency will be the lead agency or if the procedure described in paragraph (c) of this section has not resulted in a lead agency designation within 45 days, any of the agencies or persons concerned may file a request with the Council asking it to determine which Federal agency shall be the lead agency. A copy of the request shall be transmitted to each potential lead agency. The request shall consist of:

(1) A precise description of the nature and extent of the proposed action; and

(2) A detailed statement of why each potential lead agency should or should not be the lead agency under the criteria specified in paragraph (c) of this section.

(f) Any potential lead agency may file a response within 20 days after a request is filed with the Council. As soon as possible, but not later than 20 days after receiving the request and all responses to it, the Council shall determine which Federal agency will be the lead agency and which other Federal agencies will be cooperating agencies.

(g) To the extent practicable, if a proposal will require action by more than one Federal agency and the lead agency determines that it requires preparation of an environmental impact statement, the lead and cooperating agencies shall evaluate the proposal in a single environmental impact statement and issue a joint record of decision. To the extent practicable, if a proposal will require action by more than one Federal agency and the lead agency determines that it requires preparation of an environmental assessment, the lead and cooperating agencies should evaluate the proposal in a single environmental assessment and, where appropriate, issue a joint finding of no significant impact.

(h) With respect to cooperating agencies, the lead agency shall:

(1) Request the participation of each cooperating agency in the NEPA process at the earliest practicable time.

(2) Use the environmental analysis and proposals of cooperating agencies with jurisdiction by law or special expertise, to the maximum extent practicable.

(3) Meet with a cooperating agency at the latter's request.

(4) Determine the purpose and need, and alternatives in consultation with any cooperating agency.

(i) The lead agency shall develop a schedule, setting milestones for all environmental reviews and authorizations required for implementation of the action, in consultation with any applicant and all joint lead, cooperating, and participating agencies, as soon as practicable.

(j) If the lead agency anticipates that a milestone will be missed, it shall notify appropriate officials at the responsible agencies. As soon as practicable, the responsible agencies shall elevate the issue to the appropriate officials of the responsible agencies for timely resolution.

§ 1501.8 Cooperating agencies.

(a) The purpose of this section is to emphasize agency cooperation early in the NEPA process. Upon request of the lead agency, any Federal agency with jurisdiction by law shall be a cooperating agency. In addition, upon request of the lead agency, any other Federal agency with special expertise with respect to any environmental issue may be a cooperating agency. A State, Tribal, or local agency of similar qualifications may become a cooperating agency by agreement with the lead agency. An agency may request that the lead agency designate it a cooperating agency, and a Federal agency may appeal a denial of its request to the Council, in accordance with § 1501.7(e).

(b) Each cooperating agency shall:

(1) Participate in the NEPA process at the earliest practicable time.

(2) Participate in the scoping process (described in § 1501.9).

(3) On request of the lead agency, assume responsibility for developing information and preparing environmental analyses, including portions of the environmental impact statement or environmental assessment concerning which the cooperating agency has special expertise.

(4) On request of the lead agency, make available staff support to enhance

the lead agency's interdisciplinary capability.

(5) Normally use its own funds. To the extent available funds permit, the lead agency shall fund those major activities or analyses it requests from cooperating agencies. Potential lead agencies shall include such funding requirements in their budget requests.

(6) Consult with the lead agency in developing the schedule (§ 1501.7(i)), meet the schedule, and elevate, as soon as practicable, to the senior agency official of the lead agency any issues relating to purpose and need, alternatives, or other issues that may affect any agencies' ability to meet the schedule.

(7) Meet the lead agency's schedule for providing comments and limit its comments to those matters for which it has jurisdiction by law or special expertise with respect to any environmental issue consistent with § 1503.2 of this chapter.

(8) To the maximum extent practicable, jointly issue environmental documents with the lead agency.

(c) In response to a lead agency's request for assistance in preparing the environmental documents (described in paragraph (b)(3), (4), or (5) of this section), a cooperating agency may reply that other program commitments preclude any involvement or the degree of involvement requested in the action that is the subject of the environmental impact statement or environmental assessment. The cooperating agency shall submit a copy of this reply to the Council and the senior agency official of the lead agency.

§ 1501.9 Scoping.

(a) *Generally.* Agencies shall use an early and open process to determine the scope of issues for analysis in an environmental impact statement, including identifying the significant issues and eliminating from further study non-significant issues. Scoping may begin as soon as practicable after the proposal for action is sufficiently developed for agency consideration. Scoping may include appropriate pre-application procedures or work conducted prior to publication of the notice of intent.

(b) *Invite cooperating and participating agencies.* As part of the scoping process, the lead agency shall invite the participation of likely affected Federal, State, Tribal, and local agencies and governments, the proponent of the action, and other likely affected or interested persons (including those who might not be in accord with the action), unless there is a limited exception under § 1507.3(f)(1) of this chapter.

(c) *Scoping outreach.* As part of the scoping process the lead agency may hold a scoping meeting or meetings, publish scoping information, or use other means to communicate with those persons or agencies who may be interested or affected, which the agency may integrate with any other early planning meeting. Such a scoping meeting will often be appropriate when the impacts of a particular action are confined to specific sites.

(d) *Notice of intent.* As soon as practicable after determining that a proposal is sufficiently developed to allow for meaningful public comment and requires an environmental impact statement, the lead agency shall publish a notice of intent to prepare an environmental impact statement in the **Federal Register**, except as provided in § 1507.3(f)(3) of this chapter. An agency also may publish notice in accordance with § 1506.6 of this chapter. The notice shall include, as appropriate:

(1) The purpose and need for the proposed action;

(2) A preliminary description of the proposed action and alternatives the environmental impact statement will consider;

(3) A brief summary of expected impacts;

(4) Anticipated permits and other authorizations;

(5) A schedule for the decision-making process;

(6) A description of the public scoping process, including any scoping meeting(s);

(7) A request for identification of potential alternatives, information, and analyses relevant to the proposed action (*see* § 1502.17 of this chapter); and

(8) Contact information for a person within the agency who can answer questions about the proposed action and the environmental impact statement.

(e) *Determination of scope.* As part of the scoping process, the lead agency shall determine the scope and the significant issues to be analyzed in depth in the environmental impact statement. To determine the scope of environmental impact statements, agencies shall consider:

(1) Actions (other than unconnected single actions) that may be connected actions, which means that they are closely related and therefore should be discussed in the same impact statement. Actions are connected if they:

(i) Automatically trigger other actions that may require environmental impact statements;

(ii) Cannot or will not proceed unless other actions are taken previously or simultaneously; or

(iii) Are interdependent parts of a larger action and depend on the larger action for their justification.

(2) Alternatives, which include the no action alternative; other reasonable courses of action; and mitigation measures (not in the proposed action).

(3) Impacts.

(f) *Additional scoping responsibilities.* As part of the scoping process, the lead agency shall:

(1) Identify and eliminate from detailed study the issues that are not significant or have been covered by prior environmental review(s) (§ 1506.3 of this chapter), narrowing the discussion of these issues in the statement to a brief presentation of why they will not have a significant effect on the human environment or providing a reference to their coverage elsewhere.

(2) Allocate assignments for preparation of the environmental impact statement among the lead and cooperating agencies, with the lead agency retaining responsibility for the statement.

(3) Indicate any public environmental assessments and other environmental impact statements that are being or will be prepared and are related to but are not part of the scope of the impact statement under consideration.

(4) Identify other environmental review, authorization, and consultation requirements so the lead and cooperating agencies may prepare other required analyses and studies concurrently and integrated with the environmental impact statement, as provided in § 1502.24 of this chapter.

(5) Indicate the relationship between the timing of the preparation of environmental analyses and the agencies' tentative planning and decision-making schedule.

(g) *Revisions.* An agency shall revise the determinations made under paragraphs (b), (c), (e), and (f) of this section if substantial changes are made later in the proposed action, or if significant new circumstances or information arise which bear on the proposal or its impacts.

§ 1501.10 Time limits.

(a) To ensure that agencies conduct NEPA reviews as efficiently and expeditiously as practicable, Federal agencies should set time limits appropriate to individual actions or types of actions (consistent with the time intervals required by § 1506.11 of this chapter).

(b) To ensure timely decision making, agencies shall complete:

(1) Environmental assessments within 1 year unless a senior agency official of the lead agency approves a longer

period in writing and establishes a new time limit. One year is measured from the date of agency decision to prepare an environmental assessment to the publication of an environmental assessment or a finding of no significant impact.

(2) Environmental impact statements within 2 years unless a senior agency official of the lead agency approves a longer period in writing and establishes a new time limit. Two years is measured from the date of the issuance of the notice of intent to the date a record of decision is signed.

(c) The senior agency official may consider the following factors in determining time limits:

(1) Potential for environmental harm.

(2) Size of the proposed action.

(3) State of the art of analytic techniques.

(4) Degree of public need for the proposed action, including the consequences of delay.

(5) Number of persons and agencies affected.

(6) Availability of relevant information.

(7) Other time limits imposed on the agency by law, regulations, or Executive order.

(d) The senior agency official may set overall time limits or limits for each constituent part of the NEPA process, which may include:

(1) Decision on whether to prepare an environmental impact statement (if not already decided).

(2) Determination of the scope of the environmental impact statement.

(3) Preparation of the draft environmental impact statement.

(4) Review of any comments on the draft environmental impact statement from the public and agencies.

(5) Preparation of the final environmental impact statement.

(6) Review of any comments on the final environmental impact statement.

(7) Decision on the action based in part on the environmental impact statement.

(e) The agency may designate a person (such as the project manager or a person in the agency's office with NEPA responsibilities) to expedite the NEPA process.

(f) State, Tribal, or local agencies or members of the public may request a Federal agency to set time limits.

§ 1501.11 Tiering.

(a) Agencies should tier their environmental impact statements and environmental assessments when it would eliminate repetitive discussions of the same issues, focus on the actual issues ripe for decision, and exclude from consideration issues already decided or not yet ripe at each level of environmental review. Tiering may also be appropriate for different stages of actions.

(b) When an agency has prepared an environmental impact statement or environmental assessment for a program or policy and then prepares a subsequent statement or assessment on an action included within the entire program or policy (such as a project- or site-specific action), the tiered document needs only to summarize and incorporate by reference the issues discussed in the broader document. The tiered document shall concentrate on the issues specific to the subsequent action. The tiered document shall state where the earlier document is available.

(c) Tiering is appropriate when the sequence from an environmental impact statement or environmental assessment is:

(1) From a programmatic, plan, or policy environmental impact statement or environmental assessment to a program, plan, or policy statement or assessment of lesser or narrower scope or to a site-specific statement or assessment.

(2) From an environmental impact statement or environmental assessment on a specific action at an early stage (such as need and site selection) to a supplement (which is preferred) or a subsequent statement or assessment at a later stage (such as environmental mitigation). Tiering in such cases is appropriate when it helps the lead agency to focus on the issues that are ripe for decision and exclude from consideration issues already decided or not yet ripe.

§ 1501.12 Incorporation by reference.

Agencies shall incorporate material, such as planning studies, analyses, or other relevant information, into environmental documents by reference when the effect will be to cut down on bulk without impeding agency and public review of the action. Agencies shall cite the incorporated material in the document and briefly describe its content. Agencies may not incorporate material by reference unless it is reasonably available for inspection by potentially interested persons within the time allowed for comment. Agencies shall not incorporate by reference material based on proprietary data that is not available for review and comment.

■ 4. Revise part 1502 to read as follows:

PART 1502—ENVIRONMENTAL IMPACT STATEMENT

Authority: 42 U.S.C. 4321–4347; 42 U.S.C. 4371–4375; 42 U.S.C. 7609; E.O. 11514, 35 FR 4247, 3 CFR, 1966–1970, Comp., p. 902, as amended by E.O. 11991, 42 FR 26967, 3 CFR, 1977 Comp., p. 123; and E.O. 13807, 82 FR 40463, 3 CFR, 2017, Comp., p. 369.

§ 1502.1 Purpose of environmental impact statement.

The primary purpose of an environmental impact statement prepared pursuant to section 102(2)(C) of NEPA is to ensure agencies consider the environmental impacts of their actions in decision making. It shall provide full and fair discussion of significant environmental impacts and shall inform decision makers and the public of reasonable alternatives that would avoid or minimize adverse impacts or enhance the quality of the human environment. Agencies shall focus on significant environmental issues and alternatives and shall reduce paperwork and the accumulation of extraneous background data. Statements shall be concise, clear, and to the point, and shall be supported by evidence that the agency has made the necessary environmental analyses. An environmental impact statement is a document that informs Federal agency decision making and the public.

§ 1502.2 Implementation.

(a) Environmental impact statements shall not be encyclopedic.

(b) Environmental impact statements shall discuss impacts in proportion to their significance. There shall be only brief discussion of other than significant issues. As in a finding of no significant impact, there should be only enough discussion to show why more study is not warranted.

(c) Environmental impact statements shall be analytic, concise, and no longer than necessary to comply with NEPA and with the regulations in this subchapter. Length should be proportional to potential environmental effects and project size.

(d) Environmental impact statements shall state how alternatives considered in it and decisions based on it will or will not achieve the requirements of sections 101 and 102(1) of NEPA as interpreted in the regulations in this subchapter and other environmental laws and policies.

(e) The range of alternatives discussed in environmental impact statements shall encompass those to be considered by the decision maker.

(f) Agencies shall not commit resources prejudicing selection of alternatives before making a final decision (*see also* § 1506.1 of this chapter).

(g) Environmental impact statements shall serve as the means of assessing the environmental impact of proposed agency actions, rather than justifying decisions already made.

§ 1502.3 Statutory requirements for statements.

As required by section 102(2)(C) of NEPA, environmental impact statements are to be included in every Federal agency recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment.

§ 1502.4 Major Federal actions requiring the preparation of environmental impact statements.

(a) Agencies shall define the proposal that is the subject of an environmental impact statement based on the statutory authorities for the proposed action. Agencies shall use the criteria for scope (§ 1501.9(e) of this chapter) to determine which proposal(s) shall be the subject of a particular statement. Agencies shall evaluate in a single environmental impact statement proposals or parts of proposals that are related to each other closely enough to be, in effect, a single course of action.

(b) Environmental impact statements may be prepared for programmatic Federal actions, such as the adoption of new agency programs. When agencies prepare such statements, they should be relevant to the program decision and timed to coincide with meaningful points in agency planning and decision making.

(1) When preparing statements on programmatic actions (including proposals by more than one agency), agencies may find it useful to evaluate the proposal(s) in one of the following ways:

(i) Geographically, including actions occurring in the same general location, such as body of water, region, or metropolitan area.

(ii) Generically, including actions that have relevant similarities, such as common timing, impacts, alternatives, methods of implementation, media, or subject matter.

(iii) By stage of technological development including Federal or federally assisted research, development or demonstration programs for new technologies that, if applied, could significantly affect the quality of the human environment. Statements on such programs should be available before the program has reached a stage of investment or commitment to implementation likely to determine subsequent development or restrict later alternatives.

(2) Agencies shall as appropriate employ scoping (§ 1501.9 of this chapter), tiering (§ 1501.11 of this chapter), and other methods listed in §§ 1500.4 and 1500.5 of this chapter to relate programmatic and narrow actions and to avoid duplication and delay. Agencies may tier their environmental analyses to defer detailed analysis of environmental impacts of specific program elements until such program elements are ripe for final agency action.

§ 1502.5 Timing.

An agency should commence preparation of an environmental impact statement as close as practicable to the time the agency is developing or receives a proposal so that preparation can be completed in time for the final statement to be included in any recommendation or report on the proposal. The statement shall be prepared early enough so that it can serve as an important practical contribution to the decision-making process and will not be used to rationalize or justify decisions already made (§§ 1501.2 of this chapter and 1502.2). For instance:

(a) For projects directly undertaken by Federal agencies, the agency shall prepare the environmental impact statement at the feasibility analysis (go/no-go) stage and may supplement it at a later stage, if necessary.

(b) For applications to the agency requiring an environmental impact statement, the agency shall commence the statement as soon as practicable after receiving the application. Federal agencies should work with potential applicants and applicable State, Tribal, and local agencies and governments prior to receipt of the application.

(c) For adjudication, the final environmental impact statement shall normally precede the final staff recommendation and that portion of the public hearing related to the impact study. In appropriate circumstances, the statement may follow preliminary hearings designed to gather information for use in the statements.

(d) For informal rulemaking, the draft environmental impact statement shall normally accompany the proposed rule.

§ 1502.6 Interdisciplinary preparation.

Agencies shall prepare environmental impact statements using an interdisciplinary approach that will ensure the integrated use of the natural and social sciences and the environmental design arts (section 102(2)(A) of NEPA). The disciplines of the preparers shall be appropriate to the scope and issues identified in the scoping process (§ 1501.9 of this chapter).

§ 1502.7 Page limits.

The text of final environmental impact statements (paragraphs (a)(4) through (6) of § 1502.10) shall be 150 pages or fewer and, for proposals of unusual scope or complexity, shall be 300 pages or fewer unless a senior agency official of the lead agency approves in writing a statement to exceed 300 pages and establishes a new page limit.

§ 1502.8 Writing.

Agencies shall write environmental impact statements in plain language and may use appropriate graphics so that decision makers and the public can readily understand such statements. Agencies should employ writers of clear prose or editors to write, review, or edit statements, which shall be based upon the analysis and supporting data from the natural and social sciences and the environmental design arts.

§ 1502.9 Draft, final, and supplemental statements.

(a) *Generally.* Except for proposals for legislation as provided in § 1506.8 of this chapter, agencies shall prepare environmental impact statements in two stages and, where necessary,

supplement them, as provided in paragraph (d)(1) of this section.

(b) *Draft environmental impact statements.* Agencies shall prepare draft environmental impact statements in accordance with the scope decided upon in the scoping process (§ 1501.9 of this chapter). The lead agency shall work with the cooperating agencies and shall obtain comments as required in part 1503 of this chapter. To the fullest extent practicable, the draft statement must meet the requirements established for final statements in section 102(2)(C) of NEPA as interpreted in the regulations in this subchapter. If a draft statement is so inadequate as to preclude meaningful analysis, the agency shall prepare and publish a supplemental draft of the appropriate portion. At appropriate points in the draft statement, the agency shall discuss all major points of view on the environmental impacts of the alternatives including the proposed action.

(c) *Final environmental impact statements.* Final environmental impact statements shall address comments as required in part 1503 of this chapter. At appropriate points in the final statement, the agency shall discuss any responsible opposing view that was not adequately discussed in the draft statement and shall indicate the agency's response to the issues raised.

(d) *Supplemental environmental impact statements.* Agencies:

(1) Shall prepare supplements to either draft or final environmental impact statements if a major Federal action remains to occur, and:

(i) The agency makes substantial changes to the proposed action that are relevant to environmental concerns; or

(ii) There are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts.

(2) May also prepare supplements when the agency determines that the purposes of the Act will be furthered by doing so.

(3) Shall prepare, publish, and file a supplement to a statement (exclusive of scoping (§ 1501.9 of this chapter)) as a draft and final statement, as is appropriate to the stage of the statement involved, unless the Council approves alternative procedures (§ 1506.12 of this chapter).

(4) May find that changes to the proposed action or new circumstances or information relevant to environmental concerns are not significant and therefore do not require a supplement. The agency should document the finding consistent with its agency NEPA procedures (§ 1507.3 of this chapter), or, if necessary, in a finding of no significant impact supported by an environmental assessment.

§ 1502.10 Recommended format.

(a) Agencies shall use a format for environmental impact statements that will encourage good analysis and clear presentation of the alternatives including the proposed action. Agencies should use the following standard format for environmental impact statements unless the agency determines that there is a more effective format for communication:

(1) Cover.

(2) Summary.

(3) Table of contents.

(4) Purpose of and need for action.

(5) Alternatives including the proposed action (sections 102(2)(C)(iii) and 102(2)(E) of NEPA).

(6) Affected environment and environmental consequences (especially sections 102(2)(C)(i), (ii), (iv), and (v) of NEPA).

(7) Submitted alternatives, information, and analyses.

(8) List of preparers.

(9) Appendices (if any).

(b) If an agency uses a different format, it shall include paragraphs (a)(1) through (8) of this section, as further described in §§ 1502.11 through 1502.19, in any appropriate format.

§ 1502.11 Cover.

The cover shall not exceed one page and include:

(a) A list of the responsible agencies, including the lead agency and any cooperating agencies.

(b) The title of the proposed action that is the subject of the statement (and, if appropriate, the titles of related cooperating agency actions), together with the State(s) and county(ies) (or other jurisdiction(s), if applicable) where the action is located.

(c) The name, address, and telephone number of the person at the agency who can supply further information.

(d) A designation of the statement as a draft, final, or draft or final supplement.

(e) A one-paragraph abstract of the statement.

(f) The date by which the agency must receive comments (computed in cooperation with EPA under § 1506.11 of this chapter).

(g) For the final environmental impact statement, the estimated total cost to prepare both the draft and final environmental impact statement, including the costs of agency full-time equivalent (FTE) personnel hours, contractor costs, and other direct costs. If practicable and noted where not practicable, agencies also should include costs incurred by cooperating and participating agencies, applicants, and contractors.

§ 1502.12 Summary.

Each environmental impact statement shall contain a summary that adequately and accurately summarizes the statement. The summary shall stress the major conclusions, areas of disputed issues raised by agencies and the public, and the issues to be resolved (including the choice among alternatives). The summary normally will not exceed 15 pages.

§ 1502.13 Purpose and need.

The statement shall briefly specify the underlying purpose and need for the proposed action. When an agency's statutory duty is to review an application for authorization, the agency shall base the purpose and need on the goals of the applicant and the agency's authority.

§ 1502.14 Alternatives including the proposed action.

The alternatives section should present the environmental impacts of the proposed action and the alternatives in comparative form based on the information and analysis presented in the sections on the affected environment (§ 1502.15) and the environmental consequences (§ 1502.16). In this section, agencies shall:

(a) Evaluate reasonable alternatives to the proposed action, and, for alternatives that the agency eliminated from detailed study, briefly discuss the reasons for their elimination.

(b) Discuss each alternative considered in detail, including the proposed action, so that reviewers may evaluate their comparative merits.

(c) Include the no action alternative.

(d) Identify the agency's preferred alternative or alternatives, if one or more exists, in the draft statement and identify such alternative in the final statement unless another law prohibits the expression of such a preference.

(e) Include appropriate mitigation measures not already included in the proposed action or alternatives.

(f) Limit their consideration to a reasonable number of alternatives.

§ 1502.15 Affected environment.

The environmental impact statement shall succinctly describe the environment of the area(s) to be affected or created by the alternatives under consideration, including the reasonably foreseeable environmental trends and planned actions in the area(s). The environmental impact statement may

combine the description with evaluation of the environmental consequences (§ 1502.16), and it shall be no longer than is necessary to understand the effects of the alternatives. Data and analyses in a statement shall be commensurate with the importance of the impact, with less important material summarized, consolidated, or simply referenced. Agencies shall avoid useless bulk in statements and shall concentrate effort and attention on important issues. Verbose descriptions of the affected environment are themselves no measure of the adequacy of an environmental impact statement.

§ 1502.16 Environmental consequences.

(a) The environmental consequences section forms the scientific and analytic basis for the comparisons under § 1502.14. It shall consolidate the discussions of those elements required by sections 102(2)(C)(i), (ii), (iv), and (v) of NEPA that are within the scope of the statement and as much of section 102(2)(C)(iii) of NEPA as is necessary to support the comparisons. This section should not duplicate discussions in § 1502.14. The discussion shall include:

(1) The environmental impacts of the proposed action and reasonable alternatives to the proposed action and the significance of those impacts. The comparison of the proposed action and reasonable alternatives shall be based on this discussion of the impacts.

(2) Any adverse environmental effects that cannot be avoided should the proposal be implemented.

(3) The relationship between short-term uses of man's environment and the maintenance and enhancement of long-term productivity.

(4) Any irreversible or irretrievable commitments of resources that would be involved in the proposal should it be implemented.

(5) Possible conflicts between the proposed action and the objectives of Federal, regional, State, Tribal, and local land use plans, policies and controls for the area concerned. (§ 1506.2(d) of this chapter)

(6) Energy requirements and conservation potential of various alternatives and mitigation measures.

(7) Natural or depletable resource requirements and conservation potential of various alternatives and mitigation measures.

(8) Urban quality, historic and cultural resources, and the design of the built environment, including the reuse and conservation potential of various alternatives and mitigation measures.

(9) Means to mitigate adverse environmental impacts (if not fully covered under § 1502.14(e)).

(10) Where applicable, economic and technical considerations, including the economic benefits of the proposed action.

(b) Economic or social effects by themselves do not require preparation of an environmental impact statement. However, when the agency determines that economic or social and natural or physical environmental effects are interrelated, the environmental impact statement shall discuss and give appropriate consideration to these effects on the human environment.

§ 1502.17 Summary of submitted alternatives, information, and analyses.

(a) The draft environmental impact statement shall include a summary that identifies all alternatives, information, and analyses submitted by State, Tribal, and local governments and other public commenters during the scoping process for consideration by the lead and cooperating agencies in developing the environmental impact statement.

(1) The agency shall append to the draft environmental impact statement or otherwise publish all comments (or summaries thereof where the response has been exceptionally voluminous) received during the scoping process that identified alternatives, information, and analyses for the agency's consideration.

(2) Consistent with § 1503.1(a)(3) of this chapter, the lead agency shall invite comment on the summary identifying all submitted alternatives, information, and analyses in the draft environmental impact statement.

(b) The final environmental impact statement shall include a summary that identifies all alternatives, information, and analyses submitted by State, Tribal, and local governments and other public commenters for consideration by the lead and cooperating agencies in developing the final environmental impact statement.

§ 1502.18 List of preparers.

The environmental impact statement shall list the names, together with their qualifications (expertise, experience, professional disciplines), of the persons who were primarily responsible for preparing the environmental impact statement or significant background papers, including basic components of the statement. Where possible, the environmental impact statement shall identify the persons who are responsible for a particular analysis, including analyses in background papers. Normally the list will not exceed two pages.

§ 1502.19 Appendix.

If an agency prepares an appendix, the agency shall publish it with the environmental impact statement, and it shall consist of:

(a) Material prepared in connection with an environmental impact statement (as distinct from material that is not so prepared and is incorporated by reference (§ 1501.12 of this chapter)).

(b) Material substantiating any analysis fundamental to the impact statement.

(c) Material relevant to the decision to be made.

(d) For draft environmental impact statements, all comments (or summaries thereof where the response has been exceptionally voluminous) received during the scoping process that identified alternatives, information, and analyses for the agency's consideration.

(e) For final environmental impact statements, the comment summaries and responses consistent with § 1503.4 of this chapter.

§ 1502.20 Publication of the environmental impact statement.

Agencies shall publish the entire draft and final environmental impact statements and unchanged statements as provided in § 1503.4(c) of this chapter. The agency shall transmit the entire statement electronically (or in paper copy, if so requested due to economic or other hardship) to:

(a) Any Federal agency that has jurisdiction by law or special expertise with respect to any environmental impact involved and any appropriate Federal, State, Tribal, or local agency authorized to develop and enforce environmental standards.

(b) The applicant, if any.

(c) Any person, organization, or agency requesting the entire environmental impact statement.

(d) In the case of a final environmental impact statement, any person, organization, or agency that submitted substantive comments on the draft.

§ 1502.21 Incomplete or unavailable information.

(a) When an agency is evaluating reasonably foreseeable significant adverse effects on the human environment in an environmental impact statement, and there is incomplete or unavailable information, the agency shall make clear that such information is lacking.

(b) If the incomplete but available information relevant to reasonably foreseeable significant adverse impacts is essential to a reasoned choice among alternatives, and the overall costs of obtaining it are not unreasonable, the agency shall include the information in the environmental impact statement.

(c) If the information relevant to reasonably foreseeable significant adverse impacts cannot be obtained because the overall costs of obtaining it are unreasonable or the means to obtain it are not known, the agency shall include within the environmental impact statement:

(1) A statement that such information is incomplete or unavailable;

(2) A statement of the relevance of the incomplete or unavailable information to evaluating reasonably foreseeable significant adverse impacts on the human environment;

(3) A summary of existing credible scientific evidence that is relevant to evaluating the reasonably foreseeable significant adverse impacts on the human environment; and

(4) The agency's evaluation of such impacts based upon theoretical approaches or research methods generally accepted in the scientific community.

(d) For the purposes of this section, ''reasonably foreseeable'' includes impacts that have catastrophic consequences, even if their probability of occurrence is low, provided that the analysis of the impacts is supported by credible scientific evidence, is not based on pure conjecture, and is within the rule of reason.

§ 1502.22 Cost-benefit analysis.

If the agency is considering a cost-benefit analysis for the proposed action relevant to the choice among alternatives with different environmental effects, the agency shall incorporate the cost-benefit analysis by reference or append it to the statement as an aid in evaluating the environmental consequences. In such cases, to assess the adequacy of compliance with section 102(2)(B) of NEPA (ensuring appropriate consideration of unquantified environmental amenities and values in decision making, along with economical and technical considerations), the statement shall discuss the relationship between that analysis and any analyses of unquantified environmental impacts, values, and amenities. For purposes of complying with the Act, agencies need not display the weighing of the merits and drawbacks of the various alternatives in a monetary cost-benefit analysis and should not do so when there are important qualitative considerations. However, an environmental impact statement should at least indicate those considerations, including factors not related to environmental quality, that are likely to be relevant and important to a decision.

§ 1502.23 Methodology and scientific accuracy.

Agencies shall ensure the professional integrity, including scientific integrity, of the discussions and analyses in environmental documents. Agencies shall make use of reliable existing data and resources. Agencies may make use of any reliable data sources, such as remotely gathered information or statistical models. They shall identify any methodologies used and shall make explicit reference to the scientific and other sources relied upon for conclusions in the statement. Agencies may place discussion of methodology in an appendix. Agencies are not required to undertake new scientific and technical research to inform their analyses. Nothing in this section is intended to prohibit agencies from compliance with the requirements of other statutes pertaining to scientific and technical research.

§ 1502.24 Environmental review and consultation requirements.

(a) To the fullest extent possible, agencies shall prepare draft environmental impact statements concurrent and integrated with environmental impact analyses and related surveys and studies required by all other Federal environmental review laws and Executive orders applicable to the proposed action, including the Fish and Wildlife Coordination Act (16 U.S.C. 661 *et seq.*), the National Historic Preservation Act of 1966 (54 U.S.C. 300101 *et seq.*), and the Endangered Species Act of 1973 (16 U.S.C. 1531 *et seq.*).

(b) The draft environmental impact statement shall list all Federal permits, licenses, and other authorizations that must be obtained in implementing the proposal. If it is uncertain whether a Federal permit, license, or other authorization is necessary, the draft environmental impact statement shall so indicate.

■ 5. Revise part 1503 to read as follows:

PART 1503—COMMENTING ON ENVIRONMENTAL IMPACT STATEMENTS

Sec.

Authority: 42 U.S.C. 4321–4347; 42 U.S.C. 4371–4375; 42 U.S.C. 7609; E.O. 11514, 35 FR 4247, 3 CFR, 1966–1970, Comp., p. 902, as amended by E.O. 11991, 42 FR 26967, 3 CFR, 1977 Comp., p. 123; E.O. 13807, 82 FR 40463, 3 CFR, 2017, Comp., p. 369.

§ 1503.1 Inviting comments and requesting information and analyses.

(a) After preparing a draft environmental impact statement and before preparing a final environmental impact statement the agency shall:

(1) Obtain the comments of any Federal agency that has jurisdiction by law or special expertise with respect to any environmental impact involved or is authorized to develop and enforce environmental standards.

(2) Request the comments of:

(i) Appropriate State, Tribal, and local agencies that are authorized to develop and enforce environmental standards;

(ii) State, Tribal, or local governments that may be affected by the proposed action;

(iii) Any agency that has requested it receive statements on actions of the kind proposed;

(iv) The applicant, if any; and

(v) The public, affirmatively soliciting comments in a manner designed to inform those persons or organizations who may be interested in or affected by the proposed action.

(3) Invite comment specifically on the submitted alternatives, information, and analyses and the summary thereof (§ 1502.17 of this chapter).

(b) An agency may request comments on a final environmental impact statement before the final decision and set a deadline for providing such comments. Other agencies or persons may make comments consistent with the time periods under § 1506.11 of this chapter.

(c) An agency shall provide for electronic submission of public comments, with reasonable measures to ensure the comment process is accessible to affected persons.

§ 1503.2 Duty to comment.

Cooperating agencies and agencies that are authorized to develop and enforce environmental standards shall comment on statements within their jurisdiction, expertise, or authority within the time period specified for comment in § 1506.11 of this chapter. A Federal agency may reply that it has no comment. If a cooperating agency is satisfied that the environmental impact statement adequately reflects its views, it should reply that it has no comment.

§ 1503.3 Specificity of comments and information.

(a) To promote informed decision making, comments on an environmental impact statement or on a proposed action shall be as specific as possible, may address either the adequacy of the statement or the merits of the alternatives discussed or both, and shall

provide as much detail as necessary to meaningfully participate and fully inform the agency of the commenter's position. Comments should explain why the issues raised are important to the consideration of potential environmental impacts and alternatives to the proposed action, as well as economic and employment impacts, and other impacts affecting the quality of the human environment. Comments should reference the corresponding section or page number of the draft environmental impact statement, propose specific changes to those parts of the statement, where possible, and include or describe the data sources and methodologies supporting the proposed changes.

(b) Comments on the submitted alternatives, information, and analyses and summary thereof (§ 1502.17 of this chapter) should be as specific as possible. Comments and objections of any kind shall be raised within the comment period on the draft environmental impact statement provided by the agency, consistent with § 1506.11 of this chapter. If the agency requests comments on the final environmental impact statement before the final decision, consistent with § 1503.1(b), comments and objections of any kind shall be raised within the comment period provided by the agency. Comments and objections of any kind not provided within the comment period(s) shall be considered unexhausted and forfeited, consistent with § 1500.3(b) of this chapter.

(c) When a participating agency criticizes a lead agency's predictive methodology, the participating agency should describe the alternative methodology that it prefers and why.

(d) A cooperating agency shall specify in its comments whether it needs additional information to fulfill other applicable environmental reviews or consultation requirements and what information it needs. In particular, it shall specify any additional information it needs to comment adequately on the draft statement's analysis of significant site-specific effects associated with the granting or approving by that cooperating agency of necessary Federal permits, licenses, or authorizations.

(e) When a cooperating agency with jurisdiction by law specifies mitigation measures it considers necessary to allow the agency to grant or approve applicable permit, license, or related requirements or concurrences, the cooperating agency shall cite to its applicable statutory authority.

§ 1503.4 Response to comments.

(a) An agency preparing a final environmental impact statement shall consider substantive comments timely submitted during the public comment period. The agency may respond to individual comments or groups of comments. In the final environmental impact statement, the agency may respond by:

(1) Modifying alternatives including the proposed action.

(2) Developing and evaluating alternatives not previously given serious consideration by the agency.

(3) Supplementing, improving, or modifying its analyses.

(4) Making factual corrections.

(5) Explaining why the comments do not warrant further agency response, recognizing that agencies are not required to respond to each comment.

(b) An agency shall append or otherwise publish all substantive comments received on the draft statement (or summaries thereof where the response has been exceptionally voluminous).

(c) If changes in response to comments are minor and are confined to the responses described in paragraphs (a)(4) and (5) of this section, an agency may write any changes on errata sheets and attach the responses to the statement instead of rewriting the draft statement. In such cases, only the comments, the responses, and the changes and not the final statement need be published (§ 1502.20 of this chapter). The agency shall file the entire document with a new cover sheet with the Environmental Protection Agency as the final statement (§ 1506.10 of this chapter).

■ 6. Revise part 1504 to read as follows:

PART 1504—PRE–DECISIONAL REFERRALS TO THE COUNCIL OF PROPOSED FEDERAL ACTIONS DETERMINED TO BE ENVIRONMENTALLY UNSATISFACTORY

Sec.

Authority: 42 U.S.C. 4321–4347; 42 U.S.C. 4371–4375; 42 U.S.C. 7609; E.O. 11514, 35 FR 4247, 3 CFR, 1966–1970, Comp., p. 902, as amended by E.O. 11991, 42 FR 26967, 3 CFR, 1977 Comp., p. 123; E.O. 13807, 82 FR 40463, 3 CFR, 2017, Comp., p. 369.

§ 1504.1 Purpose.

(a) This part establishes procedures for referring to the Council Federal interagency disagreements concerning proposed major Federal actions that might cause unsatisfactory environmental effects. It provides means for early resolution of such disagreements.

(b) Section 309 of the Clean Air Act (42 U.S.C. 7609) directs the Administrator of the Environmental Protection Agency to review and comment publicly on the environmental impacts of Federal activities, including actions for which agencies prepare environmental impact statements. If, after this review, the Administrator determines that the matter is ''unsatisfactory from the standpoint of public health or welfare or environmental quality,'' section 309 directs that the matter be referred to the Council (hereafter ''environmental referrals'').

(c) Under section 102(2)(C) of NEPA (42 U.S.C. 4332(2)(C)), other Federal agencies may prepare similar reviews of environmental impact statements, including judgments on the acceptability of anticipated environmental impacts. These reviews must be made available to the President, the Council, and the public.

§ 1504.2 Criteria for referral.

Environmental referrals should be made to the Council only after concerted, timely (as early as practicable in the process), but unsuccessful attempts to resolve differences with the lead agency. In determining what environmental objections to the matter are appropriate to refer to the Council, an agency should weigh potential adverse environmental impacts, considering:

(a) Possible violation of national environmental standards or policies;

(b) Severity;

(c) Geographical scope;

(d) Duration;

(e) Importance as precedents;

(f) Availability of environmentally preferable alternatives; and

(g) Economic and technical considerations, including the economic costs of delaying or impeding the decision making of the agencies involved in the action.

§ 1504.3 Procedure for referrals and response.

(a) A Federal agency making the referral to the Council shall:

(1) Notify the lead agency at the earliest possible time that it intends to refer a matter to the Council unless a satisfactory agreement is reached;

(2) Include such a notification whenever practicable in the referring agency's comments on the environmental assessment or draft environmental impact statement;

(3) Identify any essential information that is lacking and request that the lead agency make it available at the earliest possible time; and

(4) Send copies of the referring agency's views to the Council.

(b) The referring agency shall deliver its referral to the Council no later than 25 days after the lead agency has made the final environmental impact statement available to the Environmental Protection Agency, participating agencies, and the public, and in the case of an environmental assessment, no later than 25 days after the lead agency makes it available. Except when the lead agency grants an extension of this period, the Council will not accept a referral after that date.

(c) The referral shall consist of:

(1) A copy of the letter signed by the head of the referring agency and delivered to the lead agency informing the lead agency of the referral and the reasons for it; and

(2) A statement supported by factual evidence leading to the conclusion that the matter is unsatisfactory from the standpoint of public health or welfare or environmental quality. The statement shall:

(i) Identify any disputed material facts and incorporate (by reference if appropriate) agreed upon facts;

(ii) Identify any existing environmental requirements or policies that would be violated by the matter;

(iii) Present the reasons for the referral;

(iv) Contain a finding by the agency whether the issue raised is of national importance because of the threat to national environmental resources or policies or for some other reason;

(v) Review the steps taken by the referring agency to bring its concerns to the attention of the lead agency at the earliest possible time; and

(vi) Give the referring agency's recommendations as to what mitigation alternative, further study, or other course of action (including abandonment of the matter) are necessary to remedy the situation.

(d) No later than 25 days after the referral to the Council, the lead agency may deliver a response to the Council and the referring agency. If the lead agency requests more time and gives assurance that the matter will not go forward in the interim, the Council may grant an extension. The response shall:

(1) Address fully the issues raised in the referral;

(2) Be supported by evidence and explanations, as appropriate; and

(3) Give the lead agency's response to the referring agency's recommendations.

(e) Applicants may provide views in writing to the Council no later than the response.

(f) No later than 25 days after receipt of both the referral and any response or upon being informed that there will be no response (unless the lead agency agrees to a longer time), the Council may take one or more of the following actions:

(1) Conclude that the process of referral and response has successfully resolved the problem.

(2) Initiate discussions with the agencies with the objective of mediation with referring and lead agencies.

(3) Obtain additional views and information.

(4) Determine that the issue is not one of national importance and request the referring and lead agencies to pursue their decision process.

(5) Determine that the referring and lead agencies should further negotiate the issue, and the issue is not appropriate for Council consideration until one or more heads of agencies report to the Council that the agencies' disagreements are irreconcilable.

(6) Publish its findings and recommendations (including, where appropriate, a finding that the submitted evidence does not support the position of an agency).

(7) When appropriate, submit the referral and the response together with the Council's recommendation to the President for action.

(g) The Council shall take no longer than 60 days to complete the actions specified in paragraph (f)(2), (3), or (5) of this section.

(h) The referral process is not intended to create any private rights of action or to be judicially reviewable because any voluntary resolutions by the agency parties do not represent final agency action and instead are only provisional and dependent on later consistent action by the action agencies.

■ 7. Revise part 1505 to read as follows:

PART 1505—NEPA AND AGENCY DECISION MAKING

Sec.

Authority: 42 U.S.C. 4321–4347; 42 U.S.C. 4371–4375; 42 U.S.C. 7609; E.O. 11514, 35 FR 4247, 3 CFR, 1966–1970, Comp., p. 902, as amended by E.O. 11991, 42 FR 26967, 3 CFR, 1977 Comp., p. 123; and E.O. 13807, 82 FR 40463, 3 CFR, 2017, Comp., p. 369.

§ 1505.1 [Reserved]

§ 1505.2 Record of decision in cases requiring environmental impact statements.

(a) At the time of its decision (§ 1506.11 of this chapter) or, if appropriate, its recommendation to Congress, each agency shall prepare and timely publish a concise public record of decision or joint record of decision. The record, which each agency may integrate into any other record it prepares, shall:

(1) State the decision.

(2) Identify alternatives considered by the agency in reaching its decision, specifying the alternative or alternatives considered environmentally preferable. An agency may discuss preferences among alternatives based on relevant factors including economic and technical considerations and agency statutory missions. An agency shall identify and discuss all such factors, including any essential considerations of national policy, that the agency balanced in making its decision and state how those considerations entered into its decision.

(3) State whether the agency has adopted all practicable means to avoid or minimize environmental harm from the alternative selected, and if not, why the agency did not. The agency shall adopt and summarize, where applicable, a monitoring and enforcement program for any enforceable mitigation requirements or commitments.

(b) Informed by the summary of the submitted alternatives, information, and analyses in the final environmental impact statement (§ 1502.17(b) of this chapter), together with any other material in the record that he or she determines to be relevant, the decision maker shall certify in the record of decision that the agency has considered all of the alternatives, information, analyses, and objections submitted by State, Tribal, and local governments and public commenters for consideration by the lead and cooperating agencies in developing the environmental impact statement. Agency environmental impact statements certified in accordance with this section are entitled to a presumption that the agency has considered the submitted alternatives, information, and analyses, including the summary thereof, in the final environmental impact statement (§ 1502.17(b)).

§ 1505.3 Implementing the decision.

Agencies may provide for monitoring to assure that their decisions are carried out and should do so in important cases. Mitigation (§ 1505.2(a)(3)) and other conditions established in the environmental impact statement or during its review and committed as part of the decision shall be implemented by the lead agency or other appropriate consenting agency. The lead agency shall:

(a) Include appropriate conditions in grants, permits, or other approvals.

(b) Condition funding of actions on mitigation.

(c) Upon request, inform cooperating or participating agencies on progress in carrying out mitigation measures that they have proposed and were adopted by the agency making the decision.

(d) Upon request, publish the results of relevant monitoring.

■ 8. Revise part 1506 to read as follows:

PART 1506—OTHER REQUIREMENTS OF NEPA

Sec.

Authority: 42 U.S.C. 4321–4347; 42 U.S.C. 4371–4375; 42 U.S.C. 7609; E.O. 11514, 35 FR 4247, 3 CFR, 1966–1970, Comp., p. 902, as amended by E.O. 11991, 42 FR 26967, 3 CFR, 1977 Comp., p. 123; and E.O. 13807, 82 FR 40463, 3 CFR, 2017, Comp., p. 369.

§ 1506.1 Limitations on actions during NEPA process.

(a) Except as provided in paragraphs (b) and (c) of this section, until an agency issues a finding of no significant impact, as provided in § 1501.6 of this chapter, or record of decision, as provided in § 1505.2 of this chapter, no action concerning the proposal may be taken that would:

(1) Have an adverse environmental impact; or

(2) Limit the choice of reasonable alternatives.

(b) If any agency is considering an application from a non-Federal entity and is aware that the applicant is about to take an action within the agency's jurisdiction that would meet either of the criteria in paragraph (a) of this section, then the agency shall promptly notify the applicant that the agency will take appropriate action to ensure that the objectives and procedures of NEPA are achieved. This section does not preclude development by applicants of plans or designs or performance of other activities necessary to support an application for Federal, State, Tribal, or local permits or assistance. An agency considering a proposed action for Federal funding may authorize such activities, including, but not limited to, acquisition of interests in land (*e.g.,* fee simple, rights-of-way, and conservation easements), purchase of long lead-time equipment, and purchase options made by applicants.

(c) While work on a required programmatic environmental review is in progress and the action is not covered by an existing programmatic review, agencies shall not undertake in the interim any major Federal action covered by the program that may significantly affect the quality of the human environment unless such action:

(1) Is justified independently of the program;

(2) Is itself accompanied by an adequate environmental review; and

(3) Will not prejudice the ultimate decision on the program. Interim action prejudices the ultimate decision on the program when it tends to determine subsequent development or limit alternatives.

§ 1506.2 Elimination of duplication with State, Tribal, and local procedures.

(a) Federal agencies are authorized to cooperate with State, Tribal, and local agencies that are responsible for preparing environmental documents, including those prepared pursuant to section 102(2)(D) of NEPA.

(b) To the fullest extent practicable unless specifically prohibited by law, agencies shall cooperate with State, Tribal, and local agencies to reduce duplication between NEPA and State, Tribal, and local requirements, including through use of studies, analysis, and decisions developed by State, Tribal, or local agencies. Except for cases covered by paragraph (a) of this section, such cooperation shall include, to the fullest extent practicable:

(1) Joint planning processes.

(2) Joint environmental research and studies.

(3) Joint public hearings (except where otherwise provided by statute).

(4) Joint environmental assessments.

(c) To the fullest extent practicable unless specifically prohibited by law, agencies shall cooperate with State, Tribal, and local agencies to reduce duplication between NEPA and comparable State, Tribal, and local requirements. Such cooperation shall include, to the fullest extent practicable, joint environmental impact statements. In such cases, one or more Federal agencies and one or more State, Tribal, or local agencies shall be joint lead agencies. Where State or Tribal laws or local ordinances have environmental impact statement or similar requirements in addition to but not in conflict with those in NEPA, Federal agencies may cooperate in fulfilling these requirements, as well as those of Federal laws, so that one document will comply with all applicable laws.

(d) To better integrate environmental impact statements into State, Tribal, or local planning processes, environmental impact statements shall discuss any inconsistency of a proposed action with any approved State, Tribal, or local plan or law (whether or not federally sanctioned). Where an inconsistency exists, the statement should describe the extent to which the agency would reconcile its proposed action with the plan or law. While the statement should discuss any inconsistencies, NEPA does not require reconciliation.

§ 1506.3 Adoption.

(a) *Generally.* An agency may adopt a Federal draft or final environmental impact statement, environmental assessment, or portion thereof, or categorical exclusion determination provided that the statement, assessment, portion thereof, or determination meets the standards for an adequate statement, assessment, or determination under the regulations in this subchapter.

(b) *Environmental impact statements.* (1) If the actions covered by the original environmental impact statement and the proposed action are substantially the same, the adopting agency shall republish it as a final statement consistent with § 1506.10. If the actions are not substantially the same, the adopting agency shall treat the statement as a draft and republish it, consistent with § 1506.10.

(2) Notwithstanding paragraph (b)(1) of this section, a cooperating agency may adopt in its record of decision without republishing the environmental impact statement of a lead agency when, after an independent review of the statement, the cooperating agency concludes that its comments and suggestions have been satisfied.

(c) *Environmental assessments.* If the actions covered by the original environmental assessment and the proposed action are substantially the same, the adopting agency may adopt the environmental assessment in its finding of no significant impact and provide notice consistent with § 1501.6 of this chapter.

(d) *Categorical exclusions.* An agency may adopt another agency's determination that a categorical exclusion applies to a proposed action if the action covered by the original categorical exclusion determination and the adopting agency's proposed action are substantially the same. The agency shall document the adoption.

(e) *Identification of certain circumstances.* The adopting agency

shall specify if one of the following circumstances is present:

(1) The agency is adopting an assessment or statement that is not final within the agency that prepared it.

(2) The action assessed in the assessment or statement is the subject of a referral under part 1504 of this chapter.

(3) The assessment or statement's adequacy is the subject of a judicial action that is not final.

§ 1506.4 Combining documents.

Agencies should combine, to the fullest extent practicable, any environmental document with any other agency document to reduce duplication and paperwork.

§ 1506.5 Agency responsibility for environmental documents.

(a) *Responsibility.* The agency is responsible for the accuracy, scope (§ 1501.9(e) of this chapter), and content of environmental documents prepared by the agency or by an applicant or contractor under the supervision of the agency.

(b) *Information.* An agency may require an applicant to submit environmental information for possible use by the agency in preparing an environmental document. An agency also may direct an applicant or authorize a contractor to prepare an environmental document under the supervision of the agency.

(1) The agency should assist the applicant by outlining the types of information required or, for the preparation of environmental documents, shall provide guidance to the applicant or contractor and participate in their preparation.

(2) The agency shall independently evaluate the information submitted or the environmental document and shall be responsible for its accuracy, scope, and contents.

(3) The agency shall include in the environmental document the names and qualifications of the persons preparing environmental documents, and conducting the independent evaluation of any information submitted or environmental documents prepared by an applicant or contractor, such as in the list of preparers for environmental impact statements (§ 1502.18 of this chapter). It is the intent of this paragraph (b)(3) that acceptable work not be redone, but that it be verified by the agency.

(4) Contractors or applicants preparing environmental assessments or environmental impact statements shall submit a disclosure statement to the lead agency that specifies any financial or other interest in the outcome of the action. Such statement need not include privileged or confidential trade secrets or other confidential business information.

(5) Nothing in this section is intended to prohibit any agency from requesting any person, including the applicant, to submit information to it or to prohibit any person from submitting information to any agency for use in preparing environmental documents.

§ 1506.6 Public involvement.

Agencies shall:

(a) Make diligent efforts to involve the public in preparing and implementing their NEPA procedures (§ 1507.3 of this chapter).

(b) Provide public notice of NEPA-related hearings, public meetings, and other opportunities for public involvement, and the availability of environmental documents so as to inform those persons and agencies who may be interested or affected by their proposed actions. When selecting appropriate methods for providing public notice, agencies shall consider the ability of affected persons and agencies to access electronic media.

(1) In all cases, the agency shall notify those who have requested notice on an individual action.

(2) In the case of an action with effects of national concern, notice shall include publication in the **Federal Register**. An agency may notify organizations that have requested regular notice.

(3) In the case of an action with effects primarily of local concern, the notice may include:

(i) Notice to State, Tribal, and local agencies that may be interested or affected by the proposed action.

(ii) Notice to interested or affected State, Tribal, and local governments.

(iii) Following the affected State or Tribe's public notice procedures for comparable actions.

(iv) Publication in local newspapers (in papers of general circulation rather than legal papers).

(v) Notice through other local media.

(vi) Notice to potentially interested community organizations including small business associations.

(vii) Publication in newsletters that may be expected to reach potentially interested persons.

(viii) Direct mailing to owners and occupants of nearby or affected property.

(ix) Posting of notice on and off site in the area where the action is to be located.

(x) Notice through electronic media (*e.g.,* a project or agency website, email, or social media).

(c) Hold or sponsor public hearings, public meetings, or other opportunities for public involvement whenever appropriate or in accordance with statutory requirements applicable to the agency. Agencies may conduct public hearings and public meetings by means of electronic communication except where another format is required by law. When selecting appropriate methods for public involvement, agencies shall consider the ability of affected entities to access electronic media.

(d) Solicit appropriate information from the public.

(e) Explain in its procedures where interested persons can get information or status reports on environmental impact statements and other elements of the NEPA process.

(f) Make environmental impact statements, the comments received, and any underlying documents available to the public pursuant to the provisions of the Freedom of Information Act, as amended (5 U.S.C. 552).

§ 1506.7 Further guidance.

(a) The Council may provide further guidance concerning NEPA and its procedures consistent with Executive Order 13807, Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects (August 5, 2017), Executive Order 13891, Promoting the Rule of Law Through Improved Agency Guidance Documents (October 9, 2019), and any other applicable Executive orders.

(b) To the extent that Council guidance issued prior to September 14, 2020 is in conflict with this subchapter, the provisions of this subchapter apply.

§ 1506.8 Proposals for legislation.

(a) When developing legislation, agencies shall integrate the NEPA process for proposals for legislation significantly affecting the quality of the human environment with the legislative process of the Congress. Technical drafting assistance does not by itself constitute a legislative proposal. Only the agency that has primary responsibility for the subject matter involved will prepare a legislative environmental impact statement.

(b) A legislative environmental impact statement is the detailed statement required by law to be included in an agency's recommendation or report on a legislative proposal to Congress. A legislative environmental impact statement shall be considered part of the formal transmittal of a legislative proposal to Congress; however, it may be transmitted to Congress up to 30 days

later in order to allow time for completion of an accurate statement that can serve as the basis for public and Congressional debate. The statement must be available in time for Congressional hearings and deliberations.

(c) Preparation of a legislative environmental impact statement shall conform to the requirements of the regulations in this subchapter, except as follows:

(1) There need not be a scoping process.

(2) Agencies shall prepare the legislative statement in the same manner as a draft environmental impact statement and need not prepare a final statement unless any of the following conditions exist. In such cases, the agency shall prepare and publish the statements consistent with §§ 1503.1 of this chapter and 1506.11:

(i) A Congressional committee with jurisdiction over the proposal has a rule requiring both draft and final environmental impact statements.

(ii) The proposal results from a study process required by statute (such as those required by the Wild and Scenic Rivers Act (16 U.S.C. 1271 *et seq.*)).

(iii) Legislative approval is sought for Federal or federally assisted construction or other projects that the agency recommends be located at specific geographic locations. For proposals requiring an environmental impact statement for the acquisition of space by the General Services Administration, a draft statement shall accompany the Prospectus or the 11(b) Report of Building Project Surveys to the Congress, and a final statement shall be completed before site acquisition.

(iv) The agency decides to prepare draft and final statements.

(d) Comments on the legislative statement shall be given to the lead agency, which shall forward them along with its own responses to the Congressional committees with jurisdiction.

§ 1506.9 Proposals for regulations.

Where the proposed action is the promulgation of a rule or regulation, procedures and documentation pursuant to other statutory or Executive order requirements may satisfy one or more requirements of this subchapter. When a procedure or document satisfies one or more requirements of this subchapter, the agency may substitute it for the corresponding requirements in this subchapter and need not carry out duplicative procedures or documentation. Agencies shall identify which corresponding requirements in this subchapter are satisfied and consult with the Council to confirm such determinations.

§ 1506.10 Filing requirements.

(a) Agencies shall file environmental impact statements together with comments and responses with the Environmental Protection Agency (EPA), Office of Federal Activities, consistent with EPA's procedures.

(b) Agencies shall file statements with the EPA no earlier than they are also transmitted to participating agencies and made available to the public. EPA may issue guidelines to agencies to implement its responsibilities under this section and § 1506.11.

§ 1506.11 Timing of agency action.

(a) The Environmental Protection Agency shall publish a notice in the **Federal Register** each week of the environmental impact statements filed since its prior notice. The minimum time periods set forth in this section are calculated from the date of publication of this notice.

(b) Unless otherwise provided by law, including statutory provisions for combining a final environmental impact statement and record of decision, Federal agencies may not make or issue a record of decision under § 1505.2 of this chapter for the proposed action until the later of the following dates:

(1) 90 days after publication of the notice described in paragraph (a) of this section for a draft environmental impact statement.

(2) 30 days after publication of the notice described in paragraph (a) of this section for a final environmental impact statement.

(c) An agency may make an exception to the rule on timing set forth in paragraph (b) of this section for a proposed action in the following circumstances:

(1) Some agencies have a formally established appeal process after publication of the final environmental impact statement that allows other agencies or the public to take appeals on a decision and make their views known. In such cases where a real opportunity exists to alter the decision, the agency may make and record the decision at the same time it publishes the environmental impact statement. This means that the period for appeal of the decision and the 30-day period set forth in paragraph (b)(2) of this section may run concurrently. In such cases, the environmental impact statement shall explain the timing and the public's right of appeal and provide notification consistent with § 1506.10; or

(2) An agency engaged in rulemaking under the Administrative Procedure Act or other statute for the purpose of protecting the public health or safety may waive the time period in paragraph (b)(2) of this section, publish a decision on the final rule simultaneously with publication of the notice of the availability of the final environmental impact statement, and provide notification consistent with § 1506.10, as described in paragraph (a) of this section.

(d) If an agency files the final environmental impact statement within 90 days of the filing of the draft environmental impact statement with the Environmental Protection Agency, the decision-making period and the 90-day period may run concurrently. However, subject to paragraph (e) of this section, agencies shall allow at least 45 days for comments on draft statements.

(e) The lead agency may extend the minimum periods in paragraph (b) of this section and provide notification consistent with § 1506.10. Upon a showing by the lead agency of compelling reasons of national policy, the Environmental Protection Agency may reduce the minimum periods and, upon a showing by any other Federal agency of compelling reasons of national policy, also may extend the minimum periods, but only after consultation with the lead agency. The lead agency may modify the minimum periods when necessary to comply with other specific statutory requirements. (§ 1507.3(f)(2) of this chapter) Failure to file timely comments shall not be a sufficient reason for extending a period. If the lead agency does not concur with the extension of time, EPA may not extend it for more than 30 days. When the Environmental Protection Agency reduces or extends any period of time it shall notify the Council.

§ 1506.12 Emergencies.

Where emergency circumstances make it necessary to take an action with significant environmental impact without observing the provisions of the regulations in this subchapter, the Federal agency taking the action should consult with the Council about alternative arrangements for compliance with section 102(2)(C) of NEPA. Agencies and the Council will limit such arrangements to actions necessary to control the immediate impacts of the emergency. Other actions remain subject to NEPA review.

§ 1506.13 Effective date.

The regulations in this subchapter apply to any NEPA process begun after September 14, 2020. An agency may apply the regulations in this subchapter to ongoing activities and environmental

documents begun before September 14, 2020.

■ 9. Revise part 1507 to read as follows:

PART 1507—AGENCY COMPLIANCE

Sec.
1507.1 Compliance.
1507.2 Agency capability to comply.
1507.3 Agency NEPA procedures.
1507.4 Agency NEPA program information.

Authority: 42 U.S.C. 4321–4347; 42 U.S.C. 4371–4375; 42 U.S.C. 7609; E.O. 11514, 35 FR 4247, 3 CFR, 1966–1970, Comp., p. 902, as amended by E.O. 11991, 42 FR 26967, 3 CFR, 1977 Comp., p. 123; and E.O. 13807, 82 FR 40463, 3 CFR, 2017, Comp., p. 369.

§ 1507.1 Compliance.

All agencies of the Federal Government shall comply with the regulations in this subchapter.

§ 1507.2 Agency capability to comply.

Each agency shall be capable (in terms of personnel and other resources) of complying with the requirements of NEPA and the regulations in this subchapter. Such compliance may include use of the resources of other agencies, applicants, and other participants in the NEPA process, but the agency using the resources shall itself have sufficient capability to evaluate what others do for it and account for the contributions of others. Agencies shall:

(a) Fulfill the requirements of section 102(2)(A) of NEPA to utilize a systematic, interdisciplinary approach that will ensure the integrated use of the natural and social sciences and the environmental design arts in planning and in decision making that may have an impact on the human environment. Agencies shall designate a senior agency official to be responsible for overall review of agency NEPA compliance, including resolving implementation issues.

(b) Identify methods and procedures required by section 102(2)(B) of NEPA to ensure that presently unquantified environmental amenities and values may be given appropriate consideration.

(c) Prepare adequate environmental impact statements pursuant to section 102(2)(C) of NEPA and cooperate on the development of statements in the areas where the agency has jurisdiction by law or special expertise or is authorized to develop and enforce environmental standards.

(d) Study, develop, and describe alternatives to recommended courses of action in any proposal that involves unresolved conflicts concerning alternative uses of available resources, consistent with section 102(2)(E) of NEPA.

(e) Comply with the requirements of section 102(2)(H) of NEPA that the agency initiate and utilize ecological information in the planning and development of resource-oriented projects.

(f) Fulfill the requirements of sections 102(2)(F), 102(2)(G), and 102(2)(I), of NEPA, Executive Order 11514, Protection and Enhancement of Environmental Quality, section 2, as amended by Executive Order 11991, Relating to Protection and Enhancement of Environmental Quality, and Executive Order 13807, Establishing Discipline and Accountability in the Environmental Review and Permitting for Infrastructure Projects.

§ 1507.3 Agency NEPA procedures.

(a) Where existing agency NEPA procedures are inconsistent with the regulations in this subchapter, the regulations in this subchapter shall apply, consistent with § 1506.13 of this chapter, unless there is a clear and fundamental conflict with the requirements of another statute. The Council has determined that the categorical exclusions contained in agency NEPA procedures as of September 14, 2020 are consistent with this subchapter.

(b) No more than 12 months after September 14, 2020, or 9 months after the establishment of an agency, whichever comes later, each agency shall develop or revise, as necessary, proposed procedures to implement the regulations in this subchapter, including to eliminate any inconsistencies with the regulations in this subchapter. When the agency is a department, it may be efficient for major subunits (with the consent of the department) to adopt their own procedures. Except for agency efficiency (see paragraph (c) of this section) or as otherwise required by law, agency NEPA procedures shall not impose additional procedures or requirements beyond those set forth in the regulations in this subchapter.

(1) Each agency shall consult with the Council while developing or revising its proposed procedures and before publishing them in the **Federal Register** for comment. Agencies with similar programs should consult with each other and the Council to coordinate their procedures, especially for programs requesting similar information from applicants.

(2) Agencies shall provide an opportunity for public review and review by the Council for conformity with the Act and the regulations in this subchapter before adopting their final procedures. The Council shall complete its review within 30 days of the receipt of the proposed final procedures. Once in effect, the agency shall publish its NEPA procedures and ensure that they are readily available to the public.

(c) Agencies shall adopt, as necessary, agency NEPA procedures to improve agency efficiency and ensure that agencies make decisions in accordance with the Act's procedural requirements. Such procedures shall include:

(1) Designating the major decision points for the agency's principal programs likely to have a significant effect on the human environment and assuring that the NEPA process begins at the earliest reasonable time, consistent with § 1501.2 of this chapter, and aligns with the corresponding decision points.

(2) Requiring that relevant environmental documents, comments, and responses be part of the record in formal rulemaking or adjudicatory proceedings.

(3) Requiring that relevant environmental documents, comments, and responses accompany the proposal through existing agency review processes so that decision makers use the statement in making decisions.

(4) Requiring that the alternatives considered by the decision maker are encompassed by the range of alternatives discussed in the relevant environmental documents and that the decision maker consider the alternatives described in the environmental documents. If another decision document accompanies the relevant environmental documents to the decision maker, agencies are encouraged to make available to the public before the decision is made any part of that document that relates to the comparison of alternatives.

(5) Requiring the combination of environmental documents with other agency documents. Agencies may designate and rely on one or more procedures or documents under other statutes or Executive orders as satisfying some or all of the requirements in this subchapter, and substitute such procedures and documentation to reduce duplication. When an agency substitutes one or more procedures or documents for the requirements in this subchapter, the agency shall identify the respective requirements that are satisfied.

(d) Agency procedures should identify those activities or decisions that are not subject to NEPA, including:

(1) Activities or decisions expressly exempt from NEPA under another statute;

(2) Activities or decisions where compliance with NEPA would clearly

and fundamentally conflict with the requirements of another statute;

(3) Activities or decisions where compliance with NEPA would be inconsistent with Congressional intent expressed in another statute;

(4) Activities or decisions that are non-major Federal actions;

(5) Activities or decisions that are non-discretionary actions, in whole or in part, for which the agency lacks authority to consider environmental effects as part of its decision-making process; and

(6) Actions where the agency has determined that another statute's requirements serve the function of agency compliance with the Act.

(e) Agency procedures shall comply with the regulations in this subchapter except where compliance would be inconsistent with statutory requirements and shall include:

(1) Those procedures required by §§ 1501.2(b)(4) (assistance to applicants) and 1506.6(e) of this chapter (status information).

(2) Specific criteria for and identification of those typical classes of action:

(i) Which normally do require environmental impact statements.

(ii) Which normally do not require either an environmental impact statement or an environmental assessment and do not have a significant effect on the human environment (categorical exclusions (§ 1501.4 of this chapter)). Any procedures under this section shall provide for extraordinary circumstances in which a normally excluded action may have a significant environmental effect. Agency NEPA procedures shall identify when documentation of a categorical exclusion determination is required.

(iii) Which normally require environmental assessments but not necessarily environmental impact statements.

(3) Procedures for introducing a supplement to an environmental assessment or environmental impact statement into its formal administrative record, if such a record exists.

(f) Agency procedures may:

(1) Include specific criteria for providing limited exceptions to the provisions of the regulations in this subchapter for classified proposals. These are proposed actions that are specifically authorized under criteria established by an Executive order or statute to be kept secret in the interest of national defense or foreign policy and are in fact properly classified pursuant to such Executive order or statute. Agencies may safeguard and restrict from public dissemination environmental assessments and environmental impact statements that address classified proposals in accordance with agencies' own regulations applicable to classified information. Agencies should organize these documents so that classified portions are included as annexes, so that the agencies can make the unclassified portions available to the public.

(2) Provide for periods of time other than those presented in § 1506.11 of this chapter when necessary to comply with other specific statutory requirements, including requirements of lead or cooperating agencies.

(3) Provide that, where there is a lengthy period between the agency's decision to prepare an environmental impact statement and the time of actual preparation, the agency may publish the notice of intent required by § 1501.9(d) of this chapter at a reasonable time in advance of preparation of the draft statement. Agency procedures shall provide for publication of supplemental notices to inform the public of a pause in its preparation of an environmental impact statement and for any agency decision to withdraw its notice of intent to prepare an environmental impact statement.

(4) Adopt procedures to combine its environmental assessment process with its scoping process.

(5) Establish a process that allows the agency to use a categorical exclusion listed in another agency's NEPA procedures after consulting with that agency to ensure the use of the categorical exclusion is appropriate. The process should ensure documentation of the consultation and identify to the public those categorical exclusions the agency may use for its proposed actions. Then, the agency may apply the categorical exclusion to its proposed actions.

§ 1507.4 Agency NEPA program information.

(a) To allow agencies and the public to efficiently and effectively access information about NEPA reviews, agencies shall provide for agency websites or other means to make available environmental documents, relevant notices, and other relevant information for use by agencies, applicants, and interested persons. Such means of publication may include:

(1) Agency planning and environmental documents that guide agency management and provide for public involvement in agency planning processes;

(2) A directory of pending and final environmental documents;

(3) Agency policy documents, orders, terminology, and explanatory materials regarding agency decision-making processes;

(4) Agency planning program information, plans, and planning tools; and

(5) A database searchable by geographic information, document status, document type, and project type.

(b) Agencies shall provide for efficient and effective interagency coordination of their environmental program websites, including use of shared databases or application programming interface, in their implementation of NEPA and related authorities.

■ 10. Revise part 1508 to read as follows:

PART 1508—DEFINITIONS

Sec.

Authority: 42 U.S.C. 4321–4347; 42 U.S.C. 4371–4375; 42 U.S.C. 7609; E.O. 11514, 35 FR 4247, 3 CFR, 1966–1970, Comp., p. 902, as amended by E.O. 11991, 42 FR 26967, 3 CFR, 1977 Comp., p. 123; and E.O. 13807, 82 FR 40463, 3 CFR, 2017, Comp., p. 369.

§ 1508.1 Definitions.

The following definitions apply to the regulations in this subchapter. Federal agencies shall use these terms uniformly throughout the Federal Government.

(a) *Act* or *NEPA* means the National Environmental Policy Act, as amended (42 U.S.C. 4321, *et seq.*).

(b) *Affecting* means will or may have an effect on.

(c) *Authorization* means any license, permit, approval, finding, determination, or other administrative decision issued by an agency that is required or authorized under Federal law in order to implement a proposed action.

(d) *Categorical exclusion* means a category of actions that the agency has determined, in its agency NEPA procedures (§ 1507.3 of this chapter), normally do not have a significant effect on the human environment.

(e) *Cooperating agency* means any Federal agency (and a State, Tribal, or local agency with agreement of the lead agency) other than a lead agency that has jurisdiction by law or special expertise with respect to any environmental impact involved in a proposal (or a reasonable alternative) for legislation or other major Federal action that may significantly affect the quality of the human environment.

(f) *Council* means the Council on Environmental Quality established by title II of the Act.

(g) *Effects* or *impacts* means changes to the human environment from the proposed action or alternatives that are reasonably foreseeable and have a reasonably close causal relationship to the proposed action or alternatives, including those effects that occur at the same time and place as the proposed action or alternatives and may include effects that are later in time or farther removed in distance from the proposed action or alternatives.

(1) Effects include ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic (such as the effects on employment), social, or health effects. Effects may also include those resulting from actions that may have both beneficial and detrimental effects, even if on balance the agency believes that the effect will be beneficial.

(2) A ''but for'' causal relationship is insufficient to make an agency responsible for a particular effect under NEPA. Effects should generally not be considered if they are remote in time, geographically remote, or the product of a lengthy causal chain. Effects do not include those effects that the agency has no ability to prevent due to its limited statutory authority or would occur regardless of the proposed action.

(3) An agency's analysis of effects shall be consistent with this paragraph (g). Cumulative impact, defined in 40 CFR 1508.7 (1978), is repealed.

(h) *Environmental assessment* means a concise public document prepared by a Federal agency to aid an agency's compliance with the Act and support its determination of whether to prepare an environmental impact statement or a finding of no significant impact, as provided in § 1501.6 of this chapter.

(i) *Environmental document* means an environmental assessment, environmental impact statement, finding of no significant impact, or notice of intent.

(j) *Environmental impact statement* means a detailed written statement as required by section 102(2)(C) of NEPA.

(k) *Federal agency* means all agencies of the Federal Government. It does not mean the Congress, the Judiciary, or the President, including the performance of staff functions for the President in his Executive Office. For the purposes of the regulations in this subchapter, Federal agency also includes States, units of general local government, and Tribal governments assuming NEPA responsibilities from a Federal agency pursuant to statute.

(l) *Finding of no significant impact* means a document by a Federal agency briefly presenting the reasons why an action, not otherwise categorically excluded (§ 1501.4 of this chapter), will not have a significant effect on the human environment and for which an environmental impact statement therefore will not be prepared.

(m) *Human environment* means comprehensively the natural and physical environment and the relationship of present and future generations of Americans with that environment. (*See also* the definition of ''effects'' in paragraph (g) of this section.)

(n) *Jurisdiction by law* means agency authority to approve, veto, or finance all or part of the proposal.

(o) *Lead agency* means the agency or agencies, in the case of joint lead agencies, preparing or having taken primary responsibility for preparing the environmental impact statement.

(p) *Legislation* means a bill or legislative proposal to Congress developed by a Federal agency, but does not include requests for appropriations or legislation recommended by the President.

(q) *Major Federal action* or *action* means an activity or decision subject to Federal control and responsibility subject to the following:

(1) Major Federal action does not include the following activities or decisions:

(i) Extraterritorial activities or decisions, which means agency activities or decisions with effects located entirely outside of the jurisdiction of the United States;

(ii) Activities or decisions that are non-discretionary and made in accordance with the agency's statutory authority;

(iii) Activities or decisions that do not result in final agency action under the Administrative Procedure Act or other statute that also includes a finality requirement;

(iv) Judicial or administrative civil or criminal enforcement actions;

(v) Funding assistance solely in the form of general revenue sharing funds with no Federal agency control over the subsequent use of such funds;

(vi) Non-Federal projects with minimal Federal funding or minimal Federal involvement where the agency does not exercise sufficient control and responsibility over the outcome of the project; and

(vii) Loans, loan guarantees, or other forms of financial assistance where the Federal agency does not exercise sufficient control and responsibility over the effects of such assistance (for example, action does not include farm ownership and operating loan guarantees by the Farm Service Agency pursuant to 7 U.S.C. 1925 and 1941 through 1949 and business loan guarantees by the Small Business Administration pursuant to 15 U.S.C. 636(a), 636(m), and 695 through 697g).

(2) Major Federal actions may include new and continuing activities, including projects and programs entirely or partly financed, assisted, conducted, regulated, or approved by Federal agencies; new or revised agency rules, regulations, plans, policies, or procedures; and legislative proposals (§ 1506.8 of this chapter).

(3) Major Federal actions tend to fall within one of the following categories:

(i) Adoption of official policy, such as rules, regulations, and interpretations adopted under the Administrative Procedure Act, 5 U.S.C. 551 *et seq.* or other statutes; implementation of treaties and international conventions or agreements, including those implemented pursuant to statute or regulation; formal documents establishing an agency's policies which will result in or substantially alter agency programs.

(ii) Adoption of formal plans, such as official documents prepared or approved by Federal agencies, which prescribe alternative uses of Federal resources, upon which future agency actions will be based.

(iii) Adoption of programs, such as a group of concerted actions to implement a specific policy or plan; systematic and connected agency decisions allocating agency resources to implement a specific statutory program or executive directive.

(iv) Approval of specific projects, such as construction or management activities located in a defined geographic area. Projects include actions approved by permit or other regulatory decision as well as Federal and federally assisted activities.

(r) *Matter* includes for purposes of part 1504 of this chapter:

(1) With respect to the Environmental Protection Agency, any proposed legislation, project, action or regulation as those terms are used in section 309(a) of the Clean Air Act (42 U.S.C. 7609).

(2) With respect to all other agencies, any proposed major Federal action to which section 102(2)(C) of NEPA applies.

(s) *Mitigation* means measures that avoid, minimize, or compensate for effects caused by a proposed action or alternatives as described in an environmental document or record of decision and that have a nexus to those effects. While NEPA requires consideration of mitigation, it does not mandate the form or adoption of any mitigation. Mitigation includes:

(1) Avoiding the impact altogether by not taking a certain action or parts of an action.

(2) Minimizing impacts by limiting the degree or magnitude of the action and its implementation.

(3) Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.

(4) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.

(5) Compensating for the impact by replacing or providing substitute resources or environments.

(t) *NEPA process* means all measures necessary for compliance with the requirements of section 2 and title I of NEPA.

(u) *Notice of intent* means a public notice that an agency will prepare and consider an environmental impact statement.

(v) *Page* means 500 words and does not include explanatory maps, diagrams, graphs, tables, and other means of graphically displaying quantitative or geospatial information.

(w) *Participating agency* means a Federal, State, Tribal, or local agency participating in an environmental review or authorization of an action.

(x) *Proposal* means a proposed action at a stage when an agency has a goal, is actively preparing to make a decision on one or more alternative means of accomplishing that goal, and can meaningfully evaluate its effects. A proposal may exist in fact as well as by agency declaration that one exists.

(y) *Publish* and *publication* mean methods found by the agency to efficiently and effectively make environmental documents and information available for review by interested persons, including electronic publication, and adopted by agency NEPA procedures pursuant to § 1507.3 of this chapter.

(z) *Reasonable alternatives* means a reasonable range of alternatives that are technically and economically feasible, meet the purpose and need for the proposed action, and, where applicable, meet the goals of the applicant.

(aa) *Reasonably foreseeable* means sufficiently likely to occur such that a person of ordinary prudence would take it into account in reaching a decision.

(bb) *Referring agency* means the Federal agency that has referred any matter to the Council after a determination that the matter is unsatisfactory from the standpoint of public health or welfare or environmental quality.

(cc) *Scope* consists of the range of actions, alternatives, and impacts to be considered in an environmental impact statement. The scope of an individual statement may depend on its relationships to other statements (§ 1501.11 of this chapter).

(dd) *Senior agency official* means an official of assistant secretary rank or higher (or equivalent) that is designated for overall agency NEPA compliance, including resolving implementation issues.

(ee) *Special expertise* means statutory responsibility, agency mission, or related program experience.

(ff) *Tiering* refers to the coverage of general matters in broader environmental impact statements or environmental assessments (such as national program or policy statements) with subsequent narrower statements or environmental analyses (such as regional or basin-wide program statements or ultimately site-specific statements) incorporating by reference the general discussions and concentrating solely on the issues specific to the statement subsequently prepared.

§ 1508.2 [Reserved]

PARTS 1515 THROUGH 1518 [DESIGNATED AS SUBCHAPTER B]

■ 11. Designate parts 1515 through 1518 as subchapter B and add a heading for newly designated subchapter B to read as follows:

Subchapter B—Administrative Procedures and Operations

[FR Doc. 2020–15179 Filed 7–15–20; 4:15 pm]

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