DRAFT OMB SUPPORTING STATEMENT
FOR
10 CFR PART 52,
LICENSES, CERTIFICATIONS, AND APPROVALS FOR
NUCLEAR POWER PLANTS

(3150-0151)

EXTENSION

Description of the Information Collection

In accordance with its mission, the U.S. Nuclear Regulatory Commission (NRC) protects the health and safety of the public and the environment by regulating the design, siting, construction, and operation of new commercial nuclear power facilities. For new reactor facilities, the NRC reviews applications submitted by prospective licensees, and (when appropriate) issues standard design certifications, early site permits, limited work authorizations, construction permits, operating licenses, and combined licenses.

The licensing processes in Title 10 of the *Code of Federal Regulations* (10 CFR) Part 52 provide for issuance of early site permits (ESPs), standard design approvals (SDAs) and certifications, manufacturing licenses (MLs), and licenses which combine construction permits (CPs) and conditional operating licenses (OLs), e.g. combined licensees (COLs), for commercial nuclear power reactors. These licensing procedures are options to the two-step licensing process in 10 CFR Part 50, which provides for a CP and an OL. Part 52 reduces the overall paperwork burden borne by applicants for CPs and OLs because Part 52 only requires a single application and provides options for referencing standardized designs.

The NRC information collection in Part 52 includes applications for ESPs, design certifications (DCs), COLs, SDAs and MLs. The applicants submit updated reports, applications for renewals, exemption requests and maintain records of changes to the facility and records of detailed design related information.

A. Justification

1. Need for and Practical Utility of the Collection of Information

The information in 10 CFR Part 52 is needed by the agency to assess the adequacy and suitability of an applicant's site, plant design, construction, training and experience, plans and procedures for the protection of public health and safety.

Pursuant to the Atomic Energy Act of 1954 (AEA), as amended, and Title II of the Energy Reorganization Act (ERA) of 1974, the Commission issues licenses for the use of nuclear material in commercial power plants. These licenses are issued in accordance with such conditions as the NRC may by rule or regulation establish to effectuate the purposes and provisions of the statutes. Prior to the issuance of Part 52, the regulations provided for a two-step process of licensing in Part 50. Under the Part 50 process, an applicant first applied for a CP, providing only preliminary design information. Then, as construction neared completion and design information became

final, the applicant applied for an OL. This process, involving two separate applications and two submittals of design information, was cumbersome. The burden on both the applicant and the agency was compounded by the fact that most of the plants brought forward for licensing were custom-designed. Thus, information already in the possession of the agency was frequently resubmitted for agency review.

The regulations in 10 CFR Part 52 reduced these licensing burdens in principally two ways: first, by providing for the certification by rulemaking of standardized reactor designs, thus making it possible to use the same design information for the licensing of several plants; second, by providing for the issuance of a single license for both operation and construction, thus doing away with the necessity for two applications and two submittals of design information. The principal aim of Part 52 is to enhance safety through the use of standardized designs. Such designs focus the review and allow the industry to more easily transfer experience in maintenance and operation from one plant to another. A secondary objective was to reduce the licensing burdens on both the industry and the agency. Thus, the information collection requirements in Part 52 will in most cases reduce the information collection burden borne by the industry.

A complete description of all Part 52 information collection requirements is located in at the end of this supporting statement. Each major Part 52 process which requires information collection is discussed. Compared to the previous process, Part 52, as noted above, for the most part does not add to burdens, but reallocates those burdens to earlier stages in the licensing process, or reduces them through the use of standardized designs. Thus, Part 52 often incorporates by reference information collection requirements set forth in 10 CFR Part 50 and other Parts of Title 10, Chapter I, of the CFR.

2. Agency Use of Information

In general, the information submitted pursuant to the sections enumerated above is reviewed by various NRC offices charged with the responsibility of ensuring that licensed activities are conducted in accordance with the AEA, the ERA and the National Environmental Policy Act. The information collected is used to assess the adequacy and suitability of the applicant's site, plant design, construction, training and experience, and plans and procedures for the protection of public health and safety. The NRC review of such information, and the findings derived from that information, will form the basis for Commission decisions and actions concerning the issuance, modification, or revocation of licenses, certifications, and approvals for nuclear power reactor plants.

3. Reduction of Burden Through Information Technology

There are no legal obstacles to reducing the burden associated with this information collection. The NRC encourages respondents to use information technology when it would be beneficial to them The NRC has issued *Guidance for Electronic Submissions to the NRC* which provides direction for the electronic transmission and submittal of documents to the NRC. Electronic transmission and submittal of documents can be accomplished via the following avenues: the Electronic Information Exchange (EIE)

process, which is available from the NRC's "Electronic Submittals" Web page, by Optical Storage Media (OSM) (e.g. CD-ROM, DVD), by facsimile or by e-mail. It is estimated that 100% of the potential responses are filed electronically.

4. Effort to Identify Duplication and Use Similar Information
No sources of similar information are available. There is no duplication of requirements.

5. Effort to Reduce Small Business Burden

The information collections required by this regulation will not be a burden to small businesses because only large companies have the technical and financial resources to support the large capital investment required to design and construct NPPs. Therefore, small businesses will not be seeking the permits, certifications, and licenses made available by this regulation.

6. Consequences to Federal Program or Policy Activities if the Collection is not Conducted or is Conducted Less Frequently

Applications are required only when licensing action is sought. The NRC cannot collect the information any less frequently or it would compromise its ability to make appropriate licensing decisions, and would adversely affect the administration of the duties of the Commission to protect public health and safety.

7. Circumstances Which Justify Variation from OMB Guidelines

For the recordkeeping requirement of 10 CFR 52.63(b)(2), the retention period is "until the date of termination of the license" to ensure that the health and safety of the public will not be affected adversely by design changes that could impact the operation of the facility. The 10 CFR Part 52 process provides for a standard design approval, which is subsequently referenced in a final standard design certification rule, and that standard design certification is, in turn, referenced in a combined license issued by the NRC. The NRC imposes longer retention times for records associated with Part 52 licensing because of the potentially longer "regulatory life" of a referenced license, standard design approval or standard design certification. Therefore, those entities providing a certified design or design approval shall retain any notifications sent to purchasers and affected licensees for a minimum of 5 years after the date of the notification, and retain a record of the purchasers for 15 years after delivery of the design which is the subject of the design approval or service associated with the design.

8. Consultation Outside the Agency

Opportunity for public comment on the information collection requirements for this clearance package has been published in the *Federal Register*.

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of Information

Confidential and proprietary information is protected in accordance with NRC regulations at 10 CFR 9.17(a) and 10 CFR 2.390(b). However, no information normally considered confidential or proprietary is requested.

11. Justification for Sensitive Questions

No sensitive questions are asked in 10 CFR Part 52.

12. Estimate of Industry Burden and Burden Hour Cost

The overall burden is estimated to be 243,854 hours (220,414 reporting, 23,440 recordkeeping), as reflected in Tables 1 and 2 based on the information available to the NRC from potential and current applicants and licensees on their plans to submit applications or other license related information.

The NRC expects to review applications for, two COLs and one ESP over the next 3 years. The NRC also expects to issue seven licenses.

Number of Respondents: 25
Number of Responses: 1,075 (1,050 reporting responses plus 25 recordkeepers)

Total Reporting Burden: 220,414 hours
Total Recordkeeping Burden: 23,440 hours
Total Burden Hours: 243,854 hours
Total Burden Cost (at $265/hr): $64,621,310

13. Estimate of Other Additional Costs

The NRC has determined that the records storage cost is roughly proportional to the recordkeeping burden cost. Based on a typical clearance, the recordkeeping storage cost has been estimated to be equal to 0.0004 times the recordkeeping burden cost. Therefore the recordkeeping storage cost for this clearance is estimated to be $2,485 (23,440 hours x 0.0004 x $265/hour).

14. Estimated Annualized Cost to the Federal Government

The NRC estimates that the NRC staff will spend approximately 32,960 hours annually over the next 3 years to review the 3 expected submissions (1 submission annually) associated with the requirements of the Part 52 rule. The cost to the NRC for reviewing these submissions will be $8,734,400 which is NRC's cost per hour for reactors ($265) times the number of hours (32,960). These costs are fully recovered through fee assessments to NRC licensees pursuant to 10 CFR Part 170 and/or 171.

15. Reasons for Change in Burden

The estimated annual burden for Part 52 will increase by 44,628 hours from 199,226 hours to 243,854hours.

Each year, the NRC solicits information from potential new reactor applicants using a Regulatory Issue Summary (OMB Clearance #3150-0228, "Voluntary Reporting of Planned New Reactor Applications.") The information provided assists the NRC in determining resource and budget needs as well as aligning the proper allocation and utilization of resources to support applicant submittals, future construction-related activities, and other anticipated licensing and design certification rulemaking actions. The NRC staff used the information provided by potential applicants to develop estimates for this clearance package. The increase in estimated reporting burden is a result of changes in the number of anticipated applications and other licensing actions under Part 52.

The burden for reporting increased from 195,208 hours to 220,414.00 (an increase of 25,206 hours). The largest changes in reporting burden result from a change in the number of anticipated applications and the number of COLs under construction. Three notable changes in reporting burden were:

- 3 DC applications are anticipated over the next three years (1 annually) compared to 4 in the last clearance period, which resulted in a reporting decrease of -35,298 hours
- More COL applications are anticipated under Subpart C compared to the prior clearance period (1 new COL and 4 under construction compared to 0 new COLs and 4 under construction), resulting in an increase of 53,565 hours)One ESP application is anticipated over the next three years, whereas no ESPs were anticipated in the last clearance period. This change resulted in an increase of 2,020 hours of reporting burden.

Recordkeeping burden increased from 4,018 hours to 23,440 hours (an increase of 19,422). One primary reason for the increase in recordkeeping is that in this renewal, the NRC staff corrected the method for estimating recordkeeping burden. In the previous submission, the number of recordkeepers was "annualized," (divided by 3) assuming the recordkeeping was performed as a one-time activity over the course of the three year clearance period. In this submission, the NRC staff identified that some records require ongoing maintenance (such as 52.63(b)(2), requiring licensees who reference a standard DC to maintain records of all changes to the facility). As a result, the number of recordkeepers for ongoing activities was not annualized (divided by 3) in this submission. In addition, staff reviewed and updated the estimated number of ongoing recordkeepers under this section. For 52.63.(b)(2), the number of recordkeepers increased from 4 (annualized to 1.33 recordkeepers) to 14 recordkeepers annually, with a an increase in estimated burden of 19,000 hours. The total number of recordkeepers for this renewal is 25, compared to 10 in the previous submission.

In addition, the estimated burden cost per hour has decreased from $272/hr to $265/hr based on a reduction in the NRC fee rate.

16. Publication for Statistical Use

This information will not be published for statistical use.

17. Reason for Not Displaying the Expiration Date

The recordkeeping and reporting requirement for this information collection are associated with regulations and are not submitted on instruments such as forms or surveys. For this reason, there are no data instruments on which to display an OMB expiration date. Further, amending the regulatory text of the CFR to display information that, in an annual publication, could become obsolete would be unduly burdensome and too difficult to keep current.

18. Exceptions to the Certification Statement

None.

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

Statistical methods are not used in this information collection.

DESCRIPTION OF INFORMATION COLLECTION REQUIREMENTS

10 CFR PART 52, LICENSES, CERTIFICATIONS, AND APPROVALS FOR NUCLEAR POWER PLANTS

(3150-0151)

General Provisions

The General Provisions of Part 52 include provisions on the scope of Part 52 requirements; definitions used in Part 52; interpretations of Part 52 requirements; written communications required by Part 52; deliberate misconduct by applicants or licensees; protection of applicant or licensee employees from discrimination for engaging in certain protected activities; completeness and accuracy of applicant and licensee information; exemptions to Part 52 requirements; NRC's ability to combine licenses; jurisdictional limits regarding Part 52 licenses, certifications, and approvals; protection against the effects of attacks and destructive acts; and information collection requirements contained in Part 52.

Section 52.7. This section allows interested persons to apply to the Commission for specific exemptions from the requirements of Part 52. The Commission may grant these exemptions from the requirements of this part upon application or upon its own initiative.

Subpart A – Early Site Permits

Subpart A of 10 CFR Part 52 sets forth the requirements for ESPs, which represent Commission approval of sites for use for commercial nuclear power plants (NPPs). These approvals are available to applicants in advance of submittal of the preliminary design information which 10 CFR Part 50 requires of applicants for CPs.

Sections 52.15(b), 52.16, and 52.17. These sections set forth the requirements for the contents of applications for ESPs.

Section 52.15(b). This section states that any person who may apply for a CP under 10 CFR Part 50, or for a CP under Part 52, may file an application for an ESP. An ESP application may be filed notwithstanding the fact that an application for a CP or a COL has not been filed in connection with the site for which a permit is sought. ESP applicants will submit the information required by 10 CFR 50.30 according to the criteria listed in 10 CFR 52.3.

Section 52.16. This section requires that the application contain all of the information required by 10 CFR 50.33(a) through (d) and (j); i.e., the name, address of the applicant, a description of the business or occupation of applicant, if the applicant is an individual, their citizenship, and if the applicant is a partnership, the name, citizenship and address of each partner and the principal location where the partnership does business.

Section 52.17. This section requires from ESP applicants much of the technical information which 10 CFR Part 50 requires of applicants for CPs.

Section 52.17(a)(1). This section requires the applicant to submit a site safety analysis report (SAR) that includes information about the site location and proposed facilities for which the site may be used. The site SAR must contain information such as the number, type, and thermal power level of the facilities for which the site may be used; anticipated maximum levels of radiological and thermal effluents each facility will produce; type of cooling systems associated with each facility; boundaries of the site; proposed general location of each facility on the site; seismic, meteorological, hydrologic, and geologic characteristics of the proposed site; location of nearby industrial, military, or transportation facilities and routes; existing and projected population profiles of the area around the site; and description and safety assessment of the site. The assessment must also contain an analysis and evaluation of the major structures, systems, and components (SSCs) of the facility that bear significantly on the acceptability of the site. Improved document control practices, allowing for electronic rather than hard-copy submittals, have resulted in significant burden savings under this section.

Section 52.17(a)(2). This section requires ESP applicants to submit an environmental report in accordance with 10 CFR 51.50(b).

Section 52.17(b)(1). This section requires an ESP applicant to identify physical characteristics of the proposed site that could pose a significant impediment to the development of emergency plans. This section also requires that, if such physical characteristics are identified, the applicant identifies measures that would, when implemented, mitigate or eliminate the significant impediment.

Sections 52.17(b)(2)(i) and 52.17(b)(3). These sections allow an applicant to propose major features of the emergency plans in the site SAR, in accordance with the pertinent standards of 10 CFR 50.47, and the requirements of Appendix E to 10 CFR Part 50. If the applicant chooses to submit this information, Section 52.17(b)(3) requires that it may also include the proposed inspections, tests, and analyses that the holder of a COL referencing the ESP shall perform, and the acceptance criteria that are necessary and sufficient to provide reasonable assurance that, if the inspections, tests, and analyses are performed and the acceptance criteria met, the facility has been constructed and will operate in conformity with the license, the provisions of the AEA, and the NRC's regulations.

Sections 52.17(b)(2)(ii) and 52.17(b)(3). Alternatively, these sections allow an ESP applicant to propose complete and integrated emergency plans in the site SAR for review and approval by the NRC, in consultation with the Department of Homeland Security, in accordance with the applicable standards of 10 CFR 50.47, and the requirements of Appendix E to 10 CFR Part 50. To the extent approval of emergency plans is sought, the application must contain the information required by '' 50.33(g) and (j).

If the applicant chooses to submit this information, Section 52.17(b)(3) requires that it must also include the proposed inspections, tests, and analyses that the holder of a COL referencing the ESP shall perform, and the acceptance criteria that are necessary and sufficient to provide reasonable assurance that, if the inspections, tests, and analyses are performed and the acceptance criteria met, the facility has been constructed and will operate in conformity with the license, the provisions of the AEA, and the NRC's regulations.

Section 52.17(b)(4). This section requires that, under Sections 52.17(b)(1) and (b)(2)(i), the application must include a description of contacts and arrangements made with Federal, State, and local governmental agencies with emergency planning responsibilities. This section also requires that, under Section 52.17(b)(2)(ii), the applicant make good faith efforts to obtain from the same governmental agencies certifications that: (i) the proposed emergency plans are practicable; (ii) these agencies are committed to participating in any further development of the plans, including any required field demonstrations, and (iii) that these agencies are committed to executing their responsibilities under the plans in the event of an emergency.

Section 52.17(c). This section requires that if the applicant wishes to obtain a limited work authorization (LWA), then the information required by Section 50.10(d)(3) must be included in the ESP application. ESP applications submitted before and pending as of November 8, 2007, are to follow requirements under the former Section 52.17(c). This information is needed by the NRC in its determination of whether to issue the LWA.

The information required by Sections 52.15(b), 52.16, and 52.17 is needed by the Commission to perform its statutory duty of assessing and ensuring an acceptable environmental effect of the NPP at the site, the suitability of the subject site from a safety standpoint, and the adequacy of emergency planning and preparedness, in accordance with the applicable standards set forth in 10 CFR Parts 50 and 100, and the Appendices thereto.

Section 52.27. This section allows an ESP holder to request a LWA in accordance with Section 50.10 and clarifies how an ESP holder would request a LWA.

Section 52.29(a). This section contains requirements for a renewal application of any ESP previously issued by the Commission. It requires the updating of information contained in the original application. This information is needed for the same reasons and purposes set out above with respect to the applicant's original filing under Sections 52.15, 52.16, and 52.17.

Section 52.35. This section, while permitting the holder of an ESP to put the site to non-nuclear use during the term of the permit, requires the holder to notify the agency of the non-nuclear use. This information is necessary so that the NRC may determine whether the non-nuclear use is consistent with the terms of the permit.

Section 52.39(b). This section requires applicants for a CP, OL, or COL who have filed an application referencing an ESP to update their emergency preparedness information provided under 52.17(b), and discuss whether the updated information materially

changes the bases for compliance with applicable NRC requirements. This information is needed to ensure that any changes to emergency planning information approved at the ESP stage would not affect the conclusions drawn by the NRC regarding the suitability of the site from an emergency preparedness standpoint.

Section 52.39(d). This section states that an applicant referencing an ESP may include in its application a request for a variance from one or more site characteristics, design parameters, or terms and conditions of the ESP, or from the site SAR. A variance will not be issued once the CP, OL, or COL is issued. The NRC would use the information in an applicant's request for a variance to determine if the information that did not conform to the ESP was in conformance with the NRC's regulations.

Section 52.39(e). This section states that the holder of an ESP may not make changes to the ESP, including the site analysis safety report, without prior Commission approval. The request for an ESP change must be in the form of an application for a license amendment, and must meet the requirements of Sections 50.90 and 50.92.

Subpart B - Standard Design Certifications

Subpart B of Part 52 provides for certification of a standardized design without specifying a particular site, the goal of which is to resolve all design issues that are technically relevant and not site-specific. Once certified, the design can be referenced in any number of applications for CPs or COLs, thus making one submittal of design information serve for several licensing reviews.

Section 52.45. This section states that an application for DC may be filed even if an application for a CP or COL for such a facility has not been filed. The application must comply with the applicable filing requirements of 52.3 and 2.811 through 2.819.

Sections 52.46 and 52.47. These sections set forth the requirements for the contents of applications for the certification of a standard plant design. The information required is generally the same design information required of applicants for OLs under 10 CFR Parts 20, 50, 73, and 100, plus some additional information. Until the Commission makes its final decision on all safety questions associated with the design, procurement specifications and construction and installation specifications must be retained.

Section 52.46. This section requires DC applicants to submit the information required by 10 CFR 50.33, which includes information of a general nature such as name of and address of the applicant, a description of the business, whether the applicant is an individual, partnership, or corporation, and the citizenship of the individual, the members of the partnership, or the owners of the corporation.

Section 52.47. The introductory paragraph to Section 52.47 requires that information normally contained in certain procurement specifications and construction and installation specifications be completed and available for audit if the information is necessary for the Commission to make its safety determination.

Section 52.47(a). This section requires that a DC application contain a Final Safety Analysis Report (FSAR) that describes the facility; presents the design bases and the limits on its operation; presents a safety analysis of the SSCs and of the facility as a whole; and contains the interface requirements to be met by those portions of the plant for which the application does not seek certification, including justification that compliance with the interface requirements is verifiable through inspection, testing, or analysis. Section 52.47(a)(27) accounts for the majority of the burden under 10 CFR 52.47. It requires a DC application to contain a FSAR that describes the design-specific probabilistic risk assessment (PRA) and its results. Improved document control practices, allowing for electronic rather than hard-copy submittals, have resulted in significant burden savings under this section.

Section 52.47(b). This section requires that a DC application contain: (1) the proposed inspections, tests, analyses, and acceptance criteria (ITAAC) that are necessary and sufficient to provide reasonable assurance that, if the inspections, tests, and analyses are performed and the acceptance criteria met, a plant that incorporates the DC is built and will operate in accordance with the DC, the provisions of the Act, and the Commission's regulations; and (2) an evaluation report as required by 10 CFR 51.55. Improved document control practices, allowing for electronic rather than hard-copy submittals, have resulted in significant burden savings under this section.

Section 52.47(c)(1). This section requires that an application for certification of a nuclear power reactor design that is an evolutionary change from light-water reactor (LWA) designs of plants must provide an essentially complete NPP design except for site-specific elements.

Section 52.47(c)(2). This section requires that an application for certification of a nuclear power reactor design that differs significantly from the LWA designs described in paragraph (c)(1) or uses simplified, inherent, passive, or other innovative means to accomplish its safety functions must provide an essentially complete nuclear power reactor design except for site-specific elements and meet the requirements of 10 CFR 50.43(e).

Section 52.47(c)(3). This section requires that an application for certification of a modular nuclear power reactor design describe the various options for the configuration of the plant and site, including variations in, or sharing of, common systems, interface requirements, and system interactions. This section also requires that the final safety analysis account for differences among the various options, including any restrictions that will be necessary during the construction and startup of a given module to ensure the safe operation of any module already operating.

The information required by Sections 52.45, 52.46, and 52.47 is needed by the Commission to perform its statutory duty of reaching a final conclusion on all safety questions associated with the design before the certification is granted and assessing the applicant's proposed means of assuring that construction conforms to the design, in accordance with the standards set out in 10 CFR Parts 20, 50 and its appendices, 51, 73, and 100. The information is also needed to ensure the NRC meets its obligations under National Environmental Policy Act (NEPA).

Section 52.51. The requirement in the current information collection under this section that applicants for DC must submit a design control document (DCD) prior to completing a proposed rule for certifying a standard design by rulemaking is essentially the same requirement of Section 52.47(a). The burden for submitting a DCD is now covered under Section 52.47(a).

Section 52.57(a). This section provides a procedure for application for renewal of a DC. The regulation requires updating any of the information that was submitted under Sections 52.46 and 52.47. The Commission will require, before renewal of certification, that information normally contained in certain procurement specification and construction and installation specifications be completed and available for audit if the information is necessary for the Commission to make its safety determination. This updating of information is required by the Commission staff to make the determinations under Section 52.48.

Section 52.63(b)(1). This sections states that an applicant or licensee who references a standard design certification rule may request an exemption from one or more elements of the DC information. Information submitted with an exemption request would be used to determine if the exemption is authorized by law, will not present an undue risk to public health and safety, and is consistent with the common defense and security, or if other special circumstances are present requiring consideration of the exemption request.

Section 52.63(b)(2). This section requires that licensees who reference a standard DC must maintain records of all changes to the facility, and these records must be available for audit until the date of termination of the license. Retention of this information is necessary to ensure that the NRC has the opportunity to review any changes to the referenced certified design made after NRC's review and approval of the license referencing the certified design.

Section 52.63(c). This section requires applicants for CPs, OLs, or COLs who reference standard DCs to acquire or complete, and make available for audit, detailed design-related information normally contained in procurement, construction, and installation specifications. This information must be retained until the Commission makes its safety determination. This information is necessary to provide the NRC with access to more detailed design information that it may need in order to make its safety determination during the review of the DC application.

Subpart C - Combined Licenses

Subpart C of Part 52 sets forth requirements for COLs, which Section 161h of the AEA makes available. Section 161(h) says that the Commission may combine in a single license activities licensed separately; Part 52 does so for CPs and OLs. It thus requires that the design information normally not submitted until construction is complete be submitted before construction begins. Once submitted and approved, this design information does not have to be reconsidered when construction is nearing completion. Ideally, the applicant for this COL would incorporate by reference both an ESP and a

certified design and thus have to submit only a fraction of the information submitted for a CP and OL under Part 50.

Section 52.73(b). This section requires applicants for a COL who reference standard DCs, SDAs, or MLs to acquire or complete, and make available for audit, detailed design-related information normally contained in procurement, construction, and installation specifications. This information must be retained until the Commission makes its safety determination.

Sections 52.75, 52.77, 52.79, and 52.80. These sections set forth requirements for content of applications for COLs.

Section 52.75. This section requires COL applicants to submit the information required by 10 CFR 50.30 according to the criteria listed in 10 CFR 52.3.

Section 52.77. This section requires COL applicants to submit the information required by 10 CFR 50.33.

Section 52.79(a). This section addresses a COL application that does not reference any other type of Part 52 license, certification, or approval. It requires that a COL application contain a FSAR that describes the facility; presents the design bases and the limits on its operation; and presents a safety analysis of the SSCs of the facility as a whole. Section 52.79(a)(46) accounts for the majority of the burden under 10 CFR 52.79. It requires a COL application to contain a FSAR that describes the plant-specific probabilistic risk assessment or analysis (PRA) and its results. Section 52.79(a) requires that the FSAR shall include a level of information sufficient to enable the Commission to reach a final conclusion on all safety matters that must be resolved by the Commission before issuance of a COL.

Section 52.79(b). This section addresses a COL application that references an ESP and states that the FSAR need not contain information or analyses submitted to the Commission in connection with the ESP, provided; however, that the FSAR must either include or incorporate by reference the ESP site SAR and must contain, in addition to the information and analyses otherwise required, information sufficient to demonstrate that the design of the facility falls within the site characteristics and design parameters specified in the ESP.

Section 52.79(c). This section addresses a COL application that references a design approval and states that the FSAR need not contain information or analyses submitted to the Commission in connection with the design approval, provided; however, that the FSAR must either include or incorporate by reference the SDA FSAR and must contain, in addition to the information and analyses otherwise required, information sufficient to demonstrate that the characteristics of the site fall within the site parameters specified in the design approval.

Section 52.79(d). This section addresses a COL application that references a DC and states that the FSAR need not contain information or analyses submitted to the Commission in connection with the DC, provided; however, that the FSAR must either

include or incorporate by reference the standard DC FSAR and must contain, in addition to the information and analyses otherwise required, information sufficient to demonstrate that the characteristics of the site fall within the site parameters specified in the DC. Improved document control practices, allowing for electronic rather than hard-copy submittals, have resulted in significant burden savings under this section.

Section 52.79(e). This section addresses a COL application that references a manufactured reactor licensed under Subpart F of 10 CFR Part 52 and states that the FSAR need not contain information or analyses submitted to the Commission in connection with the ML provided; however, that the FSAR must either include or incorporate by reference the ML FSAR and must contain, in addition to the information and analyses otherwise required, information sufficient to demonstrate that the site parameters for the manufactured reactor are bounded by the site where the manufactured reactor is to be installed and used.

Section 52.80(a). This section requires that a COL application contain the proposed inspections, tests, and analyses, including those applicable to emergency planning, that the licensee shall perform, and the acceptance criteria which are necessary and sufficient to provide reasonable assurance that, if the inspections, tests, and analyses are performed and the acceptance criteria met, the facility has been constructed and will operate in conformity with the COL, the provisions of the AEA, and the NRC's regulations.

Sections 52.80(b). This section states that an environmental report is required in accordance with 10 CFR 51.50(c) if a LWA is not requested in conjunction with a COL application, or in accordance with Sections 51.49 and 51.50(c) if a LWA is requested in conjunction with a COL application. The information in paragraph (b) is needed by the NRC to assess the environmental impacts associated with the COL application.

Section 52.80 (c). This section states that if the applicant is requesting that the LWA be issued before issuance of a COL, the LWA application must include the information otherwise required by 10 CFR 50.10. The information in paragraph (c) is needed by the NRC to evaluate the safety and environmental aspects of the proposed LWA activities.

The information required by Sections 52.75, 52.77, 52.79, and 52.80 is needed by the Commission to perform its statutory duty of assessing and ensuring an acceptable environmental effect of the NPP at the site, the suitability of the subject site from a safety standpoint, the adequacy of emergency planning and preparedness, the adequacy of the proposed design, and the acceptability of the proposed design at the selected site in accordance with the applicable standards set forth in 10 CFR Parts 20, 50, 51, 73, and 100, and the Appendices thereto.

Section 52.93(a). This section allows applicants for a COL under this subpart, or any amendment to a COL, to include in the application a request for an exemption from one or more of the Commission's regulations. Information submitted with an exemption request would be used to determine if the exemption is authorized by law, will not present an undue risk to public health and safety, and is consistent with the common

defense and security, or if other special circumstances are present requiring consideration of the exemption request.

Section 52.93(b). This section allows applicants for a COL referencing an ESP to include in the application a request for a variance from one or more site characteristics, design parameters, or terms and conditions of the permit, or from the site SAR. The NRC would use the information in an applicant's request for a variance to determine if the information that did not conform to the ESP was in conformance with the NRC's regulations.

Section 52.93(c). This section allows applicants for a COL referencing a nuclear power reactor manufactured under a ML to include in the application a request for a departure from one or more design characteristics, site parameters, terms and conditions, or approved design of the manufactured reactor. The NRC would use the information in an applicant's request for a departure to determine if the information that did not conform to the ML or approved design of the manufactured reactor was in conformance with the NRC's regulations.

Section 52.99(a). This section requires licensees to submit to the NRC, no later than 1 year after issuance of a COL, a detailed schedule for completing the inspections, tests, or analyses in the ITAAC. Licensees are required to submit updates to the ITAAC schedule every 6 months thereafter and, within 1 year of their scheduled date for initial loading of fuel, licensee must submit updates to the ITAAC schedule every 30 days until the final ITAAC is completed or until the final notification is provided to the NRC under paragraph 52.99(c). Submittal of the schedule and updates required by this section is necessary to ensure the NRC has sufficient information to plan all of the activities necessary for the NRC to support the Commission's finding whether all of the ITAAC have been met prior to the licensee's scheduled date for fuel load.

Section 52.99(c). Paragraph (c)(1) of this section requires that, after issuance of the COL, the licensee notify the NRC that the inspections, tests, or analyses in the ITAAC have been successfully completed and that the corresponding acceptance criteria have been met. Paragraph (c)(2) requires that the licensee notify the NRC in a timely manner of new information that materially alters the basis for determining that either inspections, tests, or analyses were performed as required, or that acceptance criteria are met. The notification must contain sufficient information to demonstrate that, notwithstanding the new information, the prescribed inspections, tests, or analyses have been performed as required, and the prescribed acceptance criteria are met. Paragraph (c)(3) requires that, if the licensee has not provided, by the date 225 days before the scheduled date for initial loading of fuel, the notification required by paragraph (c)(1) of this section for all ITAAC, then the licensee must notify the NRC that the inspections, tests, or analyses for all uncompleted ITAAC will be successfully completed and all acceptance criteria will be met prior to operation. The notification must provide sufficient information to demonstrate that the inspections, tests, or analyses will be successfully completed and the acceptance criteria for the uncompleted ITAAC will be met, including, but not limited to, a description of the specific procedures and analytical methods to be used for performing the inspections, tests, and analyses and determining that the acceptance criteria have been met. The information required by this section is needed so that the

NRC can determine what activities it will need to undertake to determine if the acceptance criteria for each of the ITAAC have been met. In addition, the requirements in paragraphs (c)(1) and (c)(2) are needed to ensure that interested persons will be able to meet the AEA, Section 189.a(1), threshold for requesting a hearing with respect to both completed and as-yet uncompleted ITAAC. Paragraph (c)(4) requires that the licensee to notify the NRC that all ITAAC are complete (All ITAAC Complete Notification). When the licensee submits the all ITAAC complete notification, the NRC expects that all activities requiring ITAAC post-closure letters have been completed, that the associated ITAAC determination bases have been updated, and that all required notifications under paragraph (c)(2) have been made.

Sections 52.99 (d)(1) and (d)(2). These sections states that in the event that an activity is subject to an ITAAC derived from a referenced ESP or standard DC and the licensee has not demonstrated that the ITAAC has been met, the licensee may take corrective actions to successfully complete that ITAAC, request a variance from the ESP ITAAC, or request an exemption from the standard DC ITAAC, as applicable. In the event that an activity is subject to an ITAAC not derived from a referenced ESP or standard DC and the licensee has not demonstrated that the ITAAC has been met, the licensee may take corrective actions to successfully complete that ITAAC or request a license amendment under ' 52.98(f). The information submitted under this section would be used by the NRC to determine if the applicant met the NRC's requirements related to the particular ITAAC that had not been successfully completed.

Section 52.103(a). This section requires that the licensee shall notify the NRC of its scheduled date for initial loading of fuel no later than 270 days before the scheduled date and shall notify the NRC of updates to its schedule every 30 days thereafter. This information is necessary to facilitate timely NRC publication of the hearing notice required under Section 52.103(a) and NRC staff scheduling of inspection and audit activities to support NRC staff determinations of the successful completion of ITAAC under Section 52.99.

Section 52.110(a). This section requires that, when a licensee has determined to permanently cease operations, the licensee, within 30 days, must submit a written certification to the NRC consistent with the requirements of section 52.3(b)(8). In addition, once fuel has been permanently removed from the reactor vessel, the licensee shall submit a written certification to the NRC that meets the requirements of section 52.3(b)(9). This information is necessary to alert the NRC to a licensee's intention to stop operating so that the NRC can prepare for decommissioning of the facility.

Section 52.110(d). This section requires that, before or within 2 years following permanent cessation of operations, the licensee submit a post-shutdown decommissioning activities report (PSDAR) to the NRC, and a copy to the affected State(s). This information is needed for the NRC to assess the adequacy of the licensees decommissioning activities.

Section 52.110(g). This section requires that, in taking actions permitted under 10 CFR 50.59 (changes, tests, and experiments) following submittal of the post-shutdown decommissioning activities report, the licensee shall notify the NRC in

writing and send a copy to the affected State(s), before performing any decommissioning activity inconsistent with, or making any significant schedule change from, those actions and schedules described in the PSDAR, including changes that significantly increase the decommissioning cost. This information is necessary for the NRC to assess the adequacy of any proposed changes to its decommissioning plans.

Section 52.110(h)(3). This section requires that within 2 years following permanent cessation of operations, if not already submitted, the licensee shall submit a site-specific decommissioning cost estimate. This information is necessary for the NRC to assess the adequacy of the decommissioning plan cost estimate.

Section 52.110(h)(4). This section requires that for decommissioning activities that delay completion of decommissioning by including a period of storage or surveillance, the licensee shall provide a means of adjusting cost estimates and associated funding levels over the storage or surveillance period. This information is necessary to allow the NRC to assess the adequacy of the revised decommissioning plan cost estimate.

Subpart E - Standard Design Approvals

Subpart E of 10 CFR Part 52 provides for NRC staff approval of a standardized design for a nuclear power reactor without specifying a particular site. An applicant for a CP or COL may reference a SDA.

Sections 52.135, 52.136, and 52.137. These sections set forth the requirements for the contents of applications for SDAs.

Section 52.135. This section states that any person may submit a proposed standard design for a nuclear power reactor of the type described in 10 CFR 50.22 to the NRC staff for its review. The submittal may consist of either the final design for the entire facility or the final design of major portions thereof, and must be made in the same manner as provided in 10 CFR 50.30 and 52.3 for license applications.

Section 52.136. This section requires design approval applicants to submit the information required by 10 CFR 50.33(a) through (d) and (j).

Section 52.137(a). This section requires that a design approval application contain a FSAR that describes the facility; presents the design bases and the limits on its operation; and presents a safety analysis of the SSCs and of the facility as a whole. This section also requires a description, analysis, and evaluation of the interfaces between the standard design and the balance of the NPP. Section 52.137(a)(25) accounts for the majority of the burden under 10 CFR 52.137. It requires a design approval application to contain a FSAR that describes the design-specific PRA and its results.

The information required by Sections 52.135, 52.136, and 52.137 is needed by the NRC staff to reach a final conclusion on all safety questions associated with the design before the approval is granted, in accordance with the standards set out in 10 CFR Parts 20, 50 and its appendices, 73, and 100.

Subpart F - Manufacturing Licenses

Subpart F of 10 CFR Part 52 sets out the requirements and procedures applicable to Commission issuance of a license authorizing manufacture of nuclear power reactors to be installed at sites not identified in the ML application. A nuclear power reactor manufactured under a ML issued may only be transported to and installed at a site for which either a CP under 10 CFR Part 50 or a COL under 10 CFR Part 52 has been issued.

Sections 52.155, 52.156, 52.157, and 52.158. These sections set forth the requirements for the contents of applications for MLs.

Section 52.155. This section requires ML applicants to submit the information required by 10 CFR Sections 52.3 and 50.30.

Section 52.156. This section requires ML applicants to submit the information required by 10 CFR 50.33(a) through (d), and (j),

Section 52.157. This section requires that a ML application contain a FSAR containing a level of design information sufficient to enable the Commission to judge the applicant's proposed means of assuring that the manufacturing conforms to the design and to reach a final conclusion on all safety questions associated with the design, permit the preparation of construction and installation specifications by an applicant who seeks to use the manufactured reactor, and permit the preparation of acceptance and inspection requirements by the NRC. Section 52.157(f)(31) accounts for the majority of the burden under 10 CFR 52.157. It requires a ML application to contain a FSAR that describes the design-specific PRA and its results.

Sections 52.158(a). These sections require that a ML application contain the proposed inspections, tests and analyses that the licensee who will be operating the reactor shall perform, and the acceptance criteria which are necessary and sufficient to provide reasonable assurance that: (1) if the inspections, tests, and analyses are performed and the acceptance criteria met the reactor has been manufactured in conformance with the ML, the provisions of the AEA, and the NRC's regulations; and (2) the reactor will operate in conformity with design characteristics in the ML, any license authorizing operation of the reactor as part of a NPP, the provisions of the Act, and the NRC's regulations.

The information required by Sections 52.155, 52.156, and 52.157 is needed by the NRC staff to reach a final conclusion on all safety questions associated with the design and manufacturing process before the ML is granted, in accordance with the standards set out in 10 CFR Parts 20, 50 and its appendices, 73, and 100.

Section 52.158(b). This section requires that a ML application contain an ER as required by 10 CFR 51.54. This information is needed to ensure the NRC meets its obligations under NEPA.

Section 52.171(b). This section requires that a change to the design must be in the form of an application for a license amendment, and must meet the requirements of 10 CFR 50.90 through 50.92. An applicant or licensee who references or uses a nuclear power reactor manufactured under a ML under this subpart may also request a departure from the design characteristics, site parameters, terms and conditions, or approved design of the manufactured reactor. The NRC would use the information in an applicant's request for a departure to determine if the information that did not conform to the ML or approved design of the manufactured reactor was in conformance with the NRC's regulations.

Section 52.177. This section contains requirements for renewal of an application for a ML previously issued by the NRC. An application for renewal requires the updating of information contained in the original application. The need for the information is a renewal application is the same as the need for the information in the original application.

Appendices A through E - Design Certification Rule

These appendices to 10 CFR Part 52 constitute the standard DCs for the U.S. Advanced Boiling Water Reactor, System 80+, AP600, AP1000 and ESBWR designs, in accordance with Part 52, Subpart B, and allow interested parties to reference one of these designs in an application for a COL.

Section IX.A.2. This section requires the licensee who references this DC to notify the NRC when inspections, tests, or analyses have been successfully completed and the corresponding acceptance criteria have been met. The NRC needs this information in order to fulfill its obligations under 52.99.

Section X.A.1. Section X.A.1 of each of the DCRs requires that the applicant for the DC maintain a copy of the generic DCD and maintain the proprietary and safeguards information referenced in the generic DCD for the period that the appendix may be referenced. This requirement is necessary to ensure that the DCD and other certification information are available to any applicant that wants to reference the DC.

Section X.A.2. Section X.A.2 of each of the DCRs requires that an applicant or licensee who references the appendix maintain the plant-specific DCD to accurately reflect both generic changes to the generic DCD and plant specific departures made pursuant to Section VIII of the appendix, throughout the period of application and for the term of the license (including any period of renewal). This requirement is necessary to ensure there is an accurate record of any changes made to the certified design so that the NRC can review those records if needed.

Section X.A.3. Section X.A.3 of each of the DCRs requires that an applicant or licensee who references the appendix prepare and maintain written evaluations, which provide the bases for the determinations required by Section VIII of the appendix, and the

evaluations must be retained throughout the period of application and for the term of the license (including any period of renewal). This requirement is necessary to ensure there is an accurate record of the bases for any changes made to the certified design so that the NRC can review those records if needed.

Section X.A.4.a. Requires the applicant for the amendment to the U.S. ABWR design to maintain a copy of the aircraft impact assessment performed to comply with the requirements of 10 CFR 50.150(a) for the term of the certification (including any period of renewal). This provision facilitates any NRC inspections of the assessment that the NRC decides to conduct. As noted in the statements of consideration for the AIA rule, the aircraft impact assessment is subject to inspection by the NRC and, therefore, must be maintained by the applicant along with the rest of the information that forms the basis for the relevant application (74 FR 28112; June 12, 2009, at 28120, first column). This rule is approved under (3150-0210).

Section X.A.4.b requires an applicant or licensee who references the STPNOC certified design option to maintain a copy of the aircraft impact assessment performed to comply with the requirements of 10 CFR 50.150(a) throughout the pendency of the application and for the term of the license (including any period of renewal). For all applicants and licensees, the supporting documentation retained onsite should describe the methodology used in performing the assessment, including the identification of potential design features and functional capabilities to show that the acceptance criteria in 10 CFR 50.150(a)(1) are met. The addition of these paragraphs is consistent with the NRC's intent when it issued the AIA rule in 2009, as noted in the statements of consideration for that rule (74 FR 28112; June 12, 2009, at 28121, second column). This rule is approved under (3150-0210).

Section X.B.1. This section requires applicants or licensees who reference the DC to submit reports on plant-specific departures from the DCD. This information is necessary for the NRC to determine if any plant-specific departures from the DCD continue to meet NRC requirements.

Section X.B.2. This section requires applicants or licensees who reference this DC to submit updates to its DCD. This section is similar to the filing requirements applicable to FSAR in 10 CFR 52.3 and 50.71(e). The volume of written information in DCD is large. By the time a power reactor has been in operation for a few years, much of the information in the original DCD may be modified, supplemented or superseded. This comes about by the applicant's submittal of designs and analyses supporting requested license amendments, replies to regulatory requests, incident reports, and reports describing design changes. Consequently, without an updated DCD, it would be difficult for anyone, including an NRC staff member, the licensee, or the public to be certain of the current status of a facility's design and supporting analyses. To properly execute their respective responsibilities, the NRC staff and the licensee must work with accurate information. The updated DCD is a reference document used in recurring safety analyses performed by the licensee, the Commission, and other interested parties. Thus, it is essential that supplements and amendments to the original information be appropriately incorporated into the original DCD.

Section X.B.3. Section X.B.3 of each of the DCRs in Appendices A, B, C, and D requires that the reports and updates required by paragraphs X.B.1 and X.B.2 must be submitted as follows: (a) on the date that an application for a license referencing this appendix is submitted, the application must include the report and any updates to the generic DCD; (b) during the interval from the date of application for a license to the date the Commission makes the finding required by 10 CFR 52.103(g), the report must be submitted semi-annually; and (c) after the Commission makes the finding required by 10 CFR 52.103(g), the reports and updates to the plant-specific DCD must be submitted, along with updates to the site-specific portion of the FSAR for the facility, at the intervals required by 10 CFR 50.59(d)(2) and 50.71(e)(4), respectively, or at shorter intervals as specified in the license.

Appendix N Standardization of Nuclear Power Plant Designs: Combined Licenses to Construct and Operate Nuclear Power Reactors of Identical Design at Multiple Sites

This appendix sets out requirements applicable to situations in which applications for COLs under Subpart C of Part 52 are filed by one or more applicants for licenses to construct and operate nuclear power reactors of identical design (A common design@) to be located at multiple sites. The information required by paragraphs 2, 3, and 4, is necessary for the NRC staff to assess the adequacy of the applicants' safety and environmental evaluations in support of their application to construct and operate plants of identical design at multiple sites.

Paragraph 2. This paragraph requires that each COL application submitted pursuant to this appendix be submitted as specified in 52.75 and 10 CFR 2.101. It also requires that each application state that the applicant wishes to have the application considered under 10 CFR Part 52, Appendix N, and list each of the applications to be treated together under this appendix.

Paragraph 3. This paragraph requires that each application include the information required by 52.77, 52.79, and 52.80(a) and that the application must identify the common design, and, if applicable, reference a standard DC under Subpart B of this part, or the use of a reactor manufactured under Subpart F of this part. This section also requires that the FSAR for each application either incorporate by reference or include the final safety analysis of the common design, including, if applicable, the FSAR for the referenced DC or the manufactured reactor.

Paragraph 4. This paragraph requires that each COL application submitted pursuant to this appendix contain an ER as required by 52.80(b), and which complies with the applicable provisions of 10 CFR Part 51 and states that the application may incorporate by reference a single ER on the environmental impacts of the common design.