From: Christian Araguas
To: "Milton Concepcion-Robles" <MCR1@nrc.gov>
Date: 6/6/2007 2:38:37 PM
Subject: LWA Rulemaking

See attached.

Hearing Identifier: Vogtle_Non_Public
Email Number: 4858

Mail Envelope Properties (468A2DA6.HQGWDO01.TWGWPO04.200.2000007.1.9ED3D.1)

Subject: LWA Rulemaking
Creation Date: 6/6/2007 2:38:37 PM
From: Christian Araguas

Created By: CJA2@nrc.gov

Recipients
"Milton Concepcion-Robles" <MCR1@nrc.gov>

Post Office	**Route**
TWGWPO04.HQGWDO01	nrc.gov

Files	**Size**	**Date & Time**
MESSAGE	15	6/6/2007 2:38:37 PM
LWARule.pdf	610397	7/3/2007 11:06:14 AM

Options
Priority: Standard
Reply Requested: No
Return Notification: None
None

Concealed Subject: No
Security: Standard

RULEMAKING ISSUE
(Affirmation)

February 7, 2007 SECY-07-0030

FOR: The Commissioners

FROM: Luis A. Reyes
Executive Director for Operations /RA/

Karen D. Cyr
General Counsel /RA/

SUBJECT: FINAL RULEMAKING ON LIMITED WORK AUTHORIZATIONS

PURPOSE:

To seek Commission approval to publish in the Federal Register a final limited work authorization (LWA) rule. The final LWA rule will revise the definition of construction and reform the limited work authorization (LWA) process in 10 CFR 50.10(e) by removing the need for construction permit and combined license applicants, and holders of early site permits, to obtain a limited work authorization, construction permit or combined license to conduct certain preconstruction activities. These preconstruction activities include site clearing, transmission line routing, and road building. In addition, construction of certain structures, systems and components (SSCs) not essential to public health and safety or common defense and security could proceed without NRC review or approval. However, construction of SSCs delineated in the rule would require some form of NRC approval *(i.e.*, LWA, construction permit, or combined license). The final rule will allow the applicant to submit the LWA information in advance of submission of the underlying construction permit or combined license application, and will also allow the LWA applicant to submit information on site suitability and obtain an early NRC decision on site suitability under Subpart F of 10 CFR Part 2. However, the final rule does not require the NRC to make a finding of site suitability before issuing an LWA (unless the LWA applicant requests such a finding).

CONTACTS: Geary Mizuno, OGC
301-415-1639

Jerry Bonanno, OGC
301-415-1328

Dave Matthews, NRO
301-415-1199

SUMMARY:

The Nuclear Regulatory Commission (NRC) staff and the Office of the General Counsel (OGC) have prepared a final rulemaking that revises the NRC's regulations governing the construction activities for which NRC review and approval are necessary, and simplifies the LWA process, which allows the Commission to approve the conduct of certain construction activities in advance of the issuance of a construction permit or combined license. These changes will enhance the efficiency of the NRC's licensing and approval process for production and utilization facilities, including new nuclear power reactors.

BACKGROUND:

On March 13, 2006, the Commission published a proposed rule which would substantially amend 10 CFR Part 52.71 FR 12782. During the period leading to the March 2006 proposed rule, industry stakeholders did not raise issues with either the "limited work authorization" (LWA) process in § 50.10, or more generally, with the definition of "construction" in that section.[1] Hence, the 2006 proposed rule contained no substantive provisions amending § 50.10. In a May 25, 2006 letter and attachment commenting on the 2006 proposed rule, NEI recommended that the Commission make substantial changes to § 50.10, in order to minimize the time interval between an applicant's decision to proceed with a combined license application, and the start of commercial operation. NEI stated that the current LWA process adds 18 months to the estimated construction schedule if an early site permit with LWA authority is not referenced. Separately, in a March 31, 2006 memorandum, the Commission directed the staff and OGC to prepare a notice and comment rulemaking to limit the scope of the environmental review for requests for limited work authorizations submitted in conjunction with a limited class of combined license applications. These combined license applications are for sites for which the AEC/NRC had previously prepared an environmental impact statement (EIS) and issued a construction permit for one or more units that were ultimately not built. The SRM directed that this proposed rulemaking be provided to the Commission by the end of December 2006.

Upon consideration of the NEI comment, and to implement the Commission's March 31, 2006 memorandum, the NRC staff and OGC prepared a supplemental proposed rule that would significantly revise the LWA process in § 50.10, and make conforming changes in Parts 2, 51 and 52. *See* SECY-06-0180 (August 14, 2006). In an October 2, 2006 SRM, the Commission approved the publication of the proposed rule, and the proposed rule was published in the

---

[1] In particular, the Nuclear Energy Institute (NEI) letter to the Chairman, dated December 14, 2005, did not discuss changes to the limited work authorization process in 10 CFR § 50.10.

Federal Register on October 17, 2006 (71 FR 61330). The key elements of the proposed rule were:

1. Redefining "construction" of a nuclear power plant to be largely consistent with the current § 50.10(b) definition of construction for other production and utilization facilities.

2. Eliminating the requirement for NRC authorization in the form of a "LWA-1" to conduct most all of the activities that are listed in current paragraph (e)(1).

3. Requiring NRC authorization in the form of an LWA to conduct excavation, the setting of piles, and foundation construction, for any structure which is required to be described in the Standard Safety Analysis Report (SSAR), Preliminary Safety Analysis Report, or Final Safety Analysis Report (FSAR).

4. Allowing an LWA application to be submitted in advance of a complete application for either a construction permit or combined license, and requiring - regardless of whether the LWA is submitted in advance of, or as part of a complete application - that the presiding officer issue a partial initial decision on the LWA, and the Director of the Office of Nuclear Reactor Regulation complete his or her consideration of the LWA request. Thus, an LWA under the proposed rule would not require a finding of site suitability (although the applicant could choose to have site suitability submitted as part of the LWA application and seek early NRC determination of that matter under Subpart F of Part 2).

5. Specifying the preparation of an EIS for a LWA request, which may be (at the applicant's option) limited to consideration of the activities to be authorized. Inasmuch as this limited-scope EIS for the LWA would be issued prior to the EIS for the construction permit or combined license application, the main EIS for the construction permit or combined license would be treated as a supplement to the LWA EIS. However, no updating of the earlier information in the LWA EIS would be required. However, the EIS for the underlying construction permit or combined license must consider the impacts of LWA activities as described in the LWA EIS.

6. Allowing an LWA applicant at a site for which an EIS was prepared, but construction was not completed under a construction permit, to reference the earlier EIS in its environmental report (ER), and for the NRC to incorporate by reference the earlier EIS in the EIS prepared for the LWA.

To assist the NRC in preparing and adopting a final LWA rule, the statement of considerations (SOC) for the proposed rule raised three specific questions for which public comment was requested (71 FR at 61340, second column).

DISCUSSION*:*

Public comments on proposed rule

The NRC received thirteen (13) public comments[2] on the supplemental proposed rule. Ten (10) of the 13 public comments were from external industry stakeholders, consisting of NEI and seven (7) nuclear power plant licensees - including the three applicants for early site permits (ESPs) whose applications are currently pending before the NRC, and two companies who have applied (or are expected to apply) for standard design certifications (GE Nuclear and Areva NP-application expected 12-2007). One (1) commenter, Diane Curran, submitted a comment on behalf of Public Citizen, a consumer advocacy organization, and the Nuclear Information and Resource Service (NIRS), an information and networking organization for organizations concerned about nuclear issues and energy sustainability. One (1) comment was received from the U.S. Environmental Protection Agency (EPA), and one (1) comment was received from an NRC staff individual.

NEI supported the general approach and objective of the supplemental proposed rule, but raised three key issues on the supplemental proposed rule: (i) inclusion of excavation in the definition of "construction;" (ii) designation of SSCs "required to be described" in the SSAR or FSAR as a key element of the definition of "construction;" and (iii) limiting submittal of LWA applications within twelve (12) months in advance of a combined license application. NEI also proposed a number of changes to the supplemental proposed rule to address three less-significant areas of concern: (i) an LWA applicant's reliance on an earlier EIS for an unconstructed facility; (ii) LWA applicant's ability to take advantage of the provisions of § 2.101(a)(9) for an accelerated hearing schedule when submitting an LWA application in advance of a combined license application; and (iii) the need for "grandfathering" of current ESP applicants. Finally, NEI suggested that § 2.101(a)(5) be modified from the March 2006 proposed rule, in order to allow one part of a combined license application to precede or follow the other part of the application by no more than twelve (12) months. The other industry commenters, including GE Nuclear and Areva NP, generally supported the NEI comments, and in some cases provided additional discussion in support of one or more of NEI's specific comments. Areva suggested that the final rule be modified to allow an LWA applicant to both submit its LWA application in advance of the underlying construction permit or combined license, as well as seek an early agency determination of siting issues under Subpart F of Part 2. Public Citizen and NIRS opposed granting of an LWA in advance of issuance of a construction permit or combined license, in general because these commenters perceived the process as introducing additional complexity to the licensing process, and increasing the cost to individuals who wish to participate in the licensing process. However, these organizations supported the NRC's proposal to include excavation and the driving of piles in the definition of "construction." EPA indicated that it had no objections to the supplemental proposed LWA rule, stating that the supplemental rule would "enhance the efficiency of the NRC's LWA approval process, while maintaining appropriate consideration of environmental effects pursuant to

---

[2]A public comment dated November 7, 2006 from Westinghouse Electric Company LLC, on the main part 52 rulemaking, was erroneously designated as comment no. 1 on the supplemental proposed LWA rule. This number was later assigned to a comment filed by Mitch Lucas, TXU Power.

NEPA." In addition, NRC was advised by telephone that Council on Environmental Quality had no objection to the supplemental proposed LWA rule, and therefore would not submit a written comment on the rule. The NRC staff individual provided eight (8) numbered comments on the supplemental proposed LWA rule, in general focused on compliance with the National Environmental Policy Act (NEPA) and the potential adverse effect of the supplemental proposed rule on the NRC staff's resources. Only one commenter provided separate responses to the three Commission questions in the SOC for the proposed rule, and these responses were simply an abbreviated version of that commenter's comments.

Key issues/comments and their resolution

Compliance with NEPA

We believe that the final rule complies with NEPA, for the reasons originally set forth in the SOC for the proposed rule. No substantial adverse comments were received that lead to a determination that the legal bases for the rule, as described in the proposed rule's SOC, was substantially flawed or were otherwise subject to a substantial legal infirmity. Neither Public Citizen, NIRS, or the NRC individual provided any legal discussion demonstrating that the legal bases for the proposed rule was incorrect. These commenters identified policy considerations (*e.g.*, public confidence in NRC decisionmaking, complexity of licensing process, undue burden placed upon participation in NRC hearings) and NRC implementation considerations (*e.g.*, need to develop additional NRC guidance on LWA process) which they felt weighed against adoption of the rule in its proposed form. However, upon careful consideration, the staff and OGC believe that the commenters' policy arguments are not persuasive in favor of abandoning the proposed rule. Summaries and responses to each of these comments are set forth in the SOC for the final rule. No changes in the fundamental elements or the bases for this rulemaking are included in the final rule's SOC. However, upon consideration of the staff's needs for information in the environmental report to support the cumulative effects discussion, the final LWA rule has been revised to make clear that the ESP, construction permit and combined license, the applicant's ER must include information describing pre-construction impacts in sufficient detail to support the evaluation of the cumulative impacts of LWA, construction permit or combined license activities, when considered with the preconstruction activities.

Excavation

The staff's recommendation at the proposed rule stage of including excavation within the definition of construction was based upon the rationale that: (i) excavation activities in the past have uncovered potentially adverse geologic, soil and hydrological conditions not anticipated by the construction permit applicant, which have resulted in design changes; and (ii) excavation activities in the past have caused unanticipated damage to surrounding native rock, which had to be corrected by the construction permit holder. The staff believed that, in such situations, these considerations provided the "reasonable nexus to radiological health and safety and/or common defense and security" necessary to include excavation in the definition of construction. In addition, the staff also considered the potential reduction in confidence of the general public with respect to NRC's regulatory process if excavation - an intensive activity involving large machinery, substantial noise, and in some cases explosions - were to occur without the involvement of the NRC.

Upon consideration of stakeholder comments and further evaluation, the staff has determined that it is not necessary for the NRC to include excavation in the definition of construction, thus requiring some kind of NRC review and approval before undertaking excavation, to ensure public health and safety or common defense and security in the situations noted above. With respect to geologic, soils, and hydrological matters, prior NRC review and approval of excavation is not necessary to ensure that any adverse geologic, soil, or hydrological conditions that result in the need for design changes or some other form of mitigation are considered in NRC's review of the associated LWA, construction permit, or combined license application. In the situation where a potential applicant performs excavation activities prior to submitting its LWA, construction permit, or combined license application, 10 CFR 52.6(a) requires that information provided to the Commission by an applicant for a license be complete and accurate in all material respects. In the situation where an applicant performs excavation activities after submitting its LWA, construction permit, or combined license application, 10 CFR 52.6(b) requires the applicant to notify the Commission of information identified by the applicant as having, for the regulated activity, a significant implication for public health and safety or common defense and security. The staff believes that 10 CFR 52.6 provides an equally-acceptable way of ensuring public health and safety if excavation is eliminated from the definition of construction for those limited situations where excavation activities uncover potentially adverse geologic, soil and hydrological conditions not anticipated by the applicant or excavation activities cause unanticipated damage to surrounding native rock. The LWA, construction permit, and combined license applicant, as applicable, would be responsible - as is currently the case - for adequately describing the geologic, soil, and hydrologic conditions of the site. The difference with the approach in the final rule is that the approved site description would, in many cases, be based upon actual knowledge of the conditions as revealed or confirmed by the excavation activities, and not only on reasonable assumptions based upon extrapolations from test borings and other indirect information. Therefore, in many cases, the actual foundation and structural design to be approved at the construction permit or combined license stage would be based upon actual geologic, soils, and hydrological information as revealed or confirmed by the excavation.

With respect to the policy issue raised by commenters of potential adverse impact on public confidence, the staff acknowledges that some members of the public may have less confidence in the NRC's regulatory process for the reason stated above. However, this is probably a relatively small incremental decrease in public confidence for those stakeholders, given that the most publicly-visible and dramatic disturbance of a site will be the initial site clearing, grading, and construction of roads and support buildings - all of which may be accomplished without any NRC review and approval under the proposed (and final) rule. Excavation activities, in this context, may not be viewed as being different in kind from the preceding activities. Moreover, the staff believes that other segments of the public may have an enhanced view of the NRC's regulatory process. Setting aside the industry stakeholders, there are other segments of the public which are keenly concerned about energy independence, reduction in greenhouse gas generation, electric reliability, or reducing what are perceived as unnecessary governmental restrictions on private action. These stakeholders may view the exclusion of excavation from the definition of construction - to the extent that it may decrease the time needed to license and construct a nuclear power plant - as a positive regulatory change.

For these reasons, the staff believes that existing regulatory mechanisms provide reasonable assurance of public health and safety and common defense and security without imposition of

the regulatory mechanism of licensing these excavation activities. Accordingly, the final rule does not include excavation within the scope of construction.

With the exclusion of excavation from the definition of construction, the staff believes that the redress requirement should be altered to remove the requirement that redress achieve an "aesthetically acceptable site suitable for whatever non-nuclear use may conform with local zoning laws...." Redress would be limited to addressing the impacts of piles, and removing the foundation placed in the excavation, which are the only activities which may be accomplished under a LWA. Accordingly, the final LWA rule does not include that requirement, and the SOC has been modified to reflect the narrower scope of redress.

Structures, systems and components within the scope of "construction"

In the proposed rule, the definition of construction included any SSCs of a facility required by the Commission's rules and regulations to be described in the site safety analysis report or preliminary or final safety analysis report. This definition of construction included essentially all SSCs of a facility, except for those SSCs that were specifically excluded by the definition, *e.g.*, potable water systems. Some commenters claimed that the proposed definition was too broad and that some SSCs would not have a reasonable nexus to safety. Upon consideration of the industry comments and further evaluation, the staff agrees that there may be some SSCs that are described in the safety analysis report that do not have a reasonable nexus to radiological health and safety, or the common defense and security. Therefore, the final rule changes the scope of SSCs that fall within the definition of construction.

The revised scope is generally based upon the scope of SSCs required to be included in a licensee's program for monitoring the effectiveness of maintenance at nuclear power plants, as defined in 10 CFR 50.65(b). This scope is well understood by the staff and the industry, and there is a common understanding among these stakeholders regarding its implementation. The final rule has supplemented this definition in order to clearly identify the SSCs that have a reasonable nexus to radiological health and safety, or the common defense and security. The revised definition is discussed in detail in the SOC.

Differing construction concepts under section 50.10 and final Part 26 rule

In this final LWA rule, a definition of "construction" is included in sections 50.10 and 51.4, for purposes of determining when NRC authority (either in the form of LWA, construction permit, or combined license), is needed to undertake certain activities for certain SSCs (see 50.10(d)). Under an LWA, an entity may perform subsurface preparation up through installation of foundations of SSCs that fall within the definition of construction. Further erection of SSCs at their final "in-place" location would require a construction permit or a combined license. The scope of SSCs included in the definition of construction includes those SSCs within the Part 26 definition, as well as some additional SSCs. In the final rule for fitness-for-duty (SECY-06-0244), there is a definition of "constructing, or construction activities," which was developed for purposes of specifying that set of workers who are to be subject to NRC fitness for duty requirements. The definition includes both specification of certain SSCs (i.e., safety-related and security-related) as well as certain work activities (fabricating, erecting, integrating, and testing the nuclear power plant SSCs, and the installation of their foundations, including the placement of concrete).

The staff definition of "construction" in section 50.10 reflected the full scope of SSCs and activities for which NRC believes there is a reasonable nexus to radiological health and safety or the common defense and security. By contrast, the staff developed another term "constructing or construction activities" for Part 26 to be more focused on those SSCs and activities for which a fitness for duty program would be most effective in providing reasonable assurance of public health and safety.

Consideration of site suitability for LWA issuance

During the development of the draft final rule, the staff considered whether a key requirement in the current version of 10 CFR 50.10, which was proposed to be removed in the supplemental proposed rule, should be retained in the final LWA rule. This requirement, in current § 50.10(e)(2), provides that an LWA be granted only after the presiding officer in the proceeding on the construction permit application has determined that there is reasonable assurance that the proposed site is a suitable location for a reactor of the general size and type proposed from the standpoint of radiological health and safety considerations under the Act and rules and regulations promulgated by the Commission pursuant thereto. It could be argued that such a finding is appropriate because the Commission is authorizing construction of a nuclear power plant (albeit limited construction) when it issues an LWA. Under past requirements, the Commission did not authorize construction without determining whether a proposed site was suitable to host a nuclear power plant. The Commission's regulations regarding site suitability can be found mainly in 10 CFR Part 100. Section 100.2 states that the siting requirements in Part 100 apply to applications for site approval for the purpose of constructing and operating stationary power and testing reactors pursuant to the provisions of Part 50 or Part 52. It was also one of the main goals in promulgating 10 CFR Part 52 to resolve all safety and environmental issues before authorizing construction.

Notwithstanding these concerns, the final rule proposed to the Commission does not require a site suitability finding to be made prior to the issuance of an LWA. The staff recognizes that, under the revised definition of construction and revised requirements for activities that can be authorized under an LWA, the amount of construction work that can be done under an LWA is limited (driving of piles, subsurface preparation, placement of backfill, concrete, or permanent retaining walls within an excavation, and installation of the foundation). The LWA process requires that a safety review be performed for the requested foundation activities, including related site characteristics, and that a partial EIS be issued. As stated in the final rule (§ 50.10(f)), any activities undertaken under an LWA are entirely at the risk of the applicant and issuance of the LWA has no bearing on the issuance of the associated construction permit or combined license. The staff also notes that the applicant for an LWA has the option of requesting a site suitability determination. For these reasons, the final LWA rule does not require a determination of site suitability before issuance of an LWA.

Early consideration and decision on siting issues

Areva suggested that the proposed rule does not allow an LWA applicant to use both the two-part (phased) LWA process under § 2.101(a)(9), and the provisions allowing early consideration of site suitability under § 2.101(a)(5) and subpart F of part 2. The commenter believes that the additional flexibility afforded by allowing applicants to use both processes simultaneously would be helpful, and that the final rule should be modified to allow LWA applicants to utilize both approaches simultaneously. The staff and OGC believe that the proposed rule already permits what the commenter requested, *viz*., it allows, but does not require, the applicant to submit its LWA application in advance of the underlying construction permit or combined license, and to obtain an early NRC determination on site suitability (under § 2.101(a)(9), the applicant could submit an LWA application in advance of the underlying construction permit or combined license application without addressing siting issues/site suitability). Accordingly, the changes proposed by the commenter, which are somewhat ambiguous and problematic, are not included in the final rule. The section-by-section analysis for the final rule, as well as the comment response to this comment, expressly state that the commenter's approach is permitted by the final rule.

Rulemaking directed by Commission's March 31, 2006 Memorandum

No adverse comments were received on those aspects of the proposed rule directed at implementing the Commission's March 31, 2006 memorandum. However, one commenter suggested that an inconsistency in the applicability of this provision (to include issued construction permits where construction had not been completed) should be corrected. The commenter's suggestion is incorporated into the final rule.

One change in the final LWA rule has been made as a result of the resolution of NEPA compliance issues in the draft final Part 52 rulemaking (SECY-06-0180). In the draft final Part 52 rule, a combined license applicant referencing an Early site permit is required to, *inter alia*, describe the applicant's process for identifying new and significant information. The NRC staff believes that, as a matter of logic and consistency with the draft final Part 52 rulemaking, the combined license applicant referencing a construction permit where an EIS had been issued, but where facility construction was not completed, should also be required to describe its

process for identifying new and significant information. Accordingly, the draft final LWA rule includes such a requirement.

Regulatory procedure for final LWA rulemaking

In SECY-06-0180, OGC indicated that it intended to provide the final rule in the form of a replacement to the Part 52 Federal Register notice of final rule, in which the additional rulemaking elements on LWA (*e.g.*, discussion of basis, rule language) are integrated into the previously-provided version of the Federal Register notice. As a result, the final Part 52 rule would include the final rules on LWA. This was premised upon publication of the supplemental proposed rule in September 2006, the expectation that no significant comments on the supplemental rule would be raised, and the assumption that the draft final LWA rule would be provided to the Commission at a time when it was still considering the final Part 52 rule. Not all of these assumptions have been or will appear to be met. Accordingly, the staff and OGC have prepared a "standalone" final LWA rulemaking package.

To address the Paperwork Reduction Act, the staff has determined that the final LWA rule represents an insignificant change in burden, when compared to the (projected) final Part 52 rulemaking (SECY-06-0180). Assuming that OMB approves the Paperwork Reduction Act clearance for the final Part 52 rulemaking, the staff expects that there will be no issue raised by OMB with respect to obtaining Paperwork Reduction Act clearance for the final LWA rule.

RESOURCES

The staff projects that revision of staff guidance documents to reflect the final LWA rule will require the approximately 1 FTE and $760K, none of which is currently planned or budgeted. The work will need to be completed in FY07 so that it is available when applications arrive at the beginning of FY08. This activity would be in addition to work on guidance documents that was already planned and started, and assumes that some of the previously planned work is subsumed by the changes required by the rule. The resources for this new work would be reallocated from currently budgeted infrastructure work for Standard Review Plan updates which are taking less resources than anticipated. OGC projects that approximately .1 FTE will be required to support the staff's effort to revise the guidance.

COORDINATION

The Office of Chief Financial Officer has reviewed the final rule language and has no objections. Consistent with the discussion in SECY-06-0180 which transmitted the proposed LWA rule, the staff has not sought review of the final rulemaking package by either the CRGR or ACRS.

RECOMMENDATIONS:

We recommend that the Commission:

1. Approve publication of the Federal Register notice of final rulemaking.

2. Waive review of the final rulemaking package by the CRGR and the ACRS.

3. Certify that this rule, if promulgated, will not have a significant economic impact on a substantial number of small entities in order to satisfy the requirements of the Regulatory Flexibility Act, 5 U.S.C. 605(b).

4. Note that:
   a. The staff has prepared a final regulatory analysis for this rulemaking (Enclosure 2),

   b. The staff has determined that this action is not a “major rule,” as defined in the Congressional Review Act of 1996, 5 U.S.C. 804(2), and has confirmed this determination with the Office of Management and Budget (OMB).

   c. The appropriate Congressional committees will be informed.

   d. A press release will be issued by the Office of Public Affairs when the final rulemaking is filed with the office of the Federal Register.

/RA/

Luis A. Reyes
Executive Director
for Operations

/RA Stephen Burns Acting For/

Karen D. Cyr
General Counsel

Enclosures:
1. Federal Register Notice of Final Rulemaking
2. Final Regulatory Analysis

[7590-01-P]

NUCLEAR REGULATORY COMMISSION

10 CFR Parts 2, 50, 51 and 52

RIN 3150-AI05

Limited Work Authorizations for Nuclear Power Plants; Final Rule

AGENCY: Nuclear Regulatory Commission.

ACTION: Final rule.

SUMMARY: The Nuclear Regulatory Commission (NRC) is amending the NRC's regulations applicable to limited work authorizations (LWAs), which allow certain construction activities on production and utilization facilities to commence before a construction permit or combined license is issued. This final rule modifies the scope of activities that are considered construction for which a construction permit, combined license or LWA is necessary, specifies the scope of construction activities that may be performed under a LWA, and changes the review and approval process for LWA requests. The NRC is adopting these changes to enhance the efficiency of its licensing and approval process for production and utilization facilities, including new nuclear power reactors.

DATE: The effective date is **[insert date 30 days after publication in the *Federal Register.]***

FOR FURTHER INFORMATION CONTACT: Mr. Geary Mizuno, Office of the General Counsel, U.S. Nuclear Regulatory Commission, Washington DC 20555-0001; telephone (301) 415-1639; e-mail: GSM@nrc.gov.

SUPPLEMENTARY INFORMATION:

I. Background

I. Background.

A. Development of the Supplemental Proposed Limited Work Authorization Rule

1. 10 CFR part 52 rulemaking

This LWA rulemaking originated as a supplement to a NRC rulemaking effort to revise 10 CFR part 52. The NRC issued 10 CFR part 52 on April 18, 1989 (54 FR 15372), to reform its licensing process for future nuclear power plants. 10 CFR part 52 added alternative licensing processes in 10 CFR part 52 for early site permits (ESPs), standard design certifications, and combined licenses. These were additions to the two-step licensing process that already existed in 10 CFR part 50. The processes in 10 CFR part 52 allow for resolving safety and environmental issues early in the licensing proceedings and were intended to enhance the safety and reliability of nuclear power plants through standardization.

The NRC had planned to update 10 CFR part 52 after using the standard design certification process. The proposed rulemaking action began with the issuance of SECY-98-282, "Part 52 Rulemaking Plan," on December 4, 1998. The Commission issued a staff requirements memorandum on January 14, 1999 (SRM on SECY-98-282), approving the NRC staff's plan for revising 10 CFR part 52. Subsequently, the NRC obtained considerable stakeholder comment on its planned action, conducted three public meetings on the proposed rulemaking, and twice posted draft rule language on the NRC's rulemaking web site before issuance of the initial proposed rule on July 3, 2003 (68 FR 40026). However, a number of factors, including the experience gained in using the 10 CFR part 52 early site permit process, led the NRC to question whether the July 2003 proposed rule would meet the NRC's objective of improving the effectiveness of its processes for licensing future nuclear power plants (71 FR 12782). As a result, the NRC decided that a substantial rewrite and expansion of the original proposed rulemaking was desirable so that the agency may more effectively and efficiently implement the licensing and approval processes for future nuclear power plants under part 52. Accordingly, the Commission decided to revise the July 2003 proposed rule and published the

revised proposed rule for public comment on March 13, 2006 (71 FR 12782). The public comment period on the March 2006 proposed rule ended on May 30, 2006.

2. Industry Stakeholder Comments Seeking Changes to LWA Process

In a May 25, 2006 comment letter[1], the Nuclear Energy Institute (NEI) suggested modifications to the NRC's LWA process including: (1) that non-safety related "LWA-1" activities, currently reflected in § 50.10(c)and § 50.10(e)(1), be allowed to proceed without prior authorization from the NRC, and (2) that the approval process for safety-related "LWA-2" activities be accelerated. NEI's comment also stated that the current definition of construction in § 50.10(b) reflects the correct interpretation of the Commission's licensing authority under the Atomic Energy Act of 1954, as amended.

NEI supported its suggested changes to the LWA process, stating that the business environment requires that new plant applicants seek to minimize the time interval between a decision to proceed with a combined license application and the start of commercial operation. In order to achieve this goal, NEI states that non safety-related "LWA-1" activities would need to be initiated up to two years before the activities currently defined as "construction" in § 50.10(b). In NEI's view, the current LWA approval process would constrain the industry's ability to use modern construction practices and needlessly add eighteen (18) months to estimated construction schedules for new plants that did not reference an early site permit with LWA authority. NEI's comment letter stated that "[t]o the extent the NRC determines that these LWA issues cannot be addressed in the current rulemaking, we ask that the Commission initiate an expedited rulemaking."

---

[1] *See* Letter from Adrian P. Heymer, Nuclear Energy Institute to Annette L. Vietti-Cook, Secretary, U.S. Nuclear Regulatory Commission, *Pre-Licensing Construction Activity and Limited Work Authorization Issues relating to NRC Proposed Rule, "Licenses, Certifications and Approvals for Nuclear Power Plants," 71 FR 12, 782 (March 13, 2006)(RIN 3150-AG24)* (May 25, 2006) (ADAMS ML061500249).

The NRC determined that the changes suggested in the NEI letter could not be incorporated into the final Part 52 rule without re-noticing, but that the NEI letter met the sufficiency requirements for a petition for rulemaking as described in 10 CFR 2.802(c). Therefore, the NRC elected to treat the letter as a petition for rulemaking (PRM-50-82), and the Commission approved issuance of a supplemental proposed LWA rule in an October 2, 2006 Staff Requirements Memorandum (ADAMS No. ML062750047).

B. Publication of Supplemental Proposed LWA Rule and External Stakeholder Interactions During the Public Comment Period

The supplemental proposed LWA rule was published in the Federal Register on October 17, 2006 (71 FR 61330) for a thirty (30) day public comment period which ended November 16, 2006. During the public comment period, the NRC held a public meeting on November 1, 2006, in order to answer external stakeholders questions about the supplemental proposed LWA rule. A transcript of the public meeting was made (ML063190396), and a meeting summary was prepared (ML062970517). Both the transcript and the meeting summary can be viewed at, and downloaded from, the NRC Website.

In addition, the NRC informally contacted several federal agencies that traditionally have been interested in environmental impacts statements (EISs) prepared by the NRC prior to the issuance of LWAs and construction permits, for the purpose of seeking their comments on the supplemental proposed LWA rule. These federal agencies were the Council on Environmental Quality (CEQ), the U.S. Environmental Protection Agency (EPA), the Federal Energy Regulatory Commission (FERC), and the U.S. Department of the Interior, Fish and Wildlife Service (FWS).

Finally, the Commission held a public meeting on November 9, 2006 on the overall part 52 rulemaking, at which time industry stakeholders presented additional information on the supplemental proposed LWA rule.

C. Description of Supplemental Proposed LWA Rule

The supplemental proposed LWA rule would narrow the scope of activities requiring permission from the NRC in the form of a LWA by eliminating the concept of "commencement of construction" currently described in § 50.10(c)and the authorization described in § 50.10(e)(1). Instead, under the supplemental proposed rule, NRC authorization would only be required before undertaking activities that have a reasonable nexus to radiological health and safety and/or common defense and security (i.e. excavation, subsurface preparation, installation of the foundation, and on-site, in-place fabrication, erection, integration or testing, for any structure, system or component of a facility required by the Commission's rules and regulations to be described in the site safety analysis report or preliminary or final safety analysis report). While the proposed redefinition of "construction" would result in fewer activities requiring NRC permission in the form of a LWA, it would also redefine certain activities (such as the driving of piles) that are currently excluded from the regulatory definition of construction given in § 50.10(b), as construction requiring a LWA.

Further, the supplemental proposed LWA rule provided an optional, phased application and approval procedure for construction permit and combined license applicants to obtain LWAs. The supplemental proposed rule provided for an environmental review and approval process for LWA requests that would allow the NRC to grant an applicant permission to engage in LWA activities after completion of a environmental impact statement (EIS) addressing those activities, but before completion of the comprehensive EIS addressing the underlying request for a construction permit or combined license. The supplemental proposed rule also delineated

the environmental review required in situations where the LWA activities are to be conducted at sites for which the Commission has previously prepared an EIS for the construction and operation of a nuclear power plant, and for which a construction permit was issued, but construction of the plant was never completed.

II. Public Comments

A. Overview of Public Comments

The NRC received thirteen (13) public comments[2] on the supplemental proposed rule. Ten (10) of the 13 public comments were from external industry stakeholders, consisting of NEI and seven (7) nuclear power plant licensees - including the three applicants for early site permit (ESP) whose applications are currently pending before the NRC, and two companies who have applied (or are expected to apply) for standard design certifications (GE Nuclear and Areva NP - application). One (1) commenter, Dianne Curran submitted a comment on behalf of Public Citizen, a consumer advocacy organization, and the Nuclear Information and Resource Service (NIRS), an information and networking organization for organizations concerned about nuclear issues and energy sustainability. One (1) comment was received from the EPA, and one (1) comment was received from an NRC staff individual.

NEI supported the general approach and objective of the supplemental proposed rule, but raised three key issues on the supplemental proposed rule: (i) inclusion of excavation in the definition of "construction;" (ii) designation of structures, systems and components (SSCs) "required to be described" in the Standard Safety analysis Report or Final Safety Analysis Report (FSAR) as a key element of the definition of "construction;" and (iii) limiting submittal of

---

[2]A public comment dated November 7, 2006 from Westinghouse Electric Company LLC, on the main part 52 rulemaking, was erroneously designated as comment no. 1 on the supplemental proposed LWA rule. This number was later assigned to a comment filed by Diane Curran on behalf of Public Citizen and the Nuclear Information and Resource Service (NIRS).

LWA applications up to twelve (12) months in advance of a combined license application. NEI also proposed a number of changes to the supplemental proposed rule to address three less-significant areas of concern: (i) an LWA applicant's reliance on an earlier EIS for an unconstructed facility; (ii) LWA applicant's ability to take advantage of the provisions of § 2.101(a)(9) for an accelerated hearing schedule when submitting an LWA application in advance of a combined license application; and (iii) the need for "grandfathering" of current ESP applicants. Finally, NEI suggested that § 2.101(a)(5) be modified from the March 2006 proposed rule, in order to allow one part of a combined license application to precede or follow the other part of the application by no more than twelve (12) months. The other industry commenters, including GE Nuclear and Areva NP, generally supported the NEI comments, and in some cases provided additional discussion in support of one or more of NEI's specific comments.

Public Citizen and NIRS opposed granting of an LWA in advance of issuance of a construction permit or combined license, in general because these commenters perceived the process as introducing additional complexity to the licensing process, and increasing the cost to individuals who wish to participate in the licensing process. These organizations supported the NRC's proposal to include excavation and the driving of piles in the definition of "construction."

EPA indicated that it had no objections to the supplemental proposed LWA rule, stating that the supplemental rule would "enhance the efficiency of the NRC's LWA approval process, while maintaining appropriate consideration of environmental effects pursuant to NEPA [National environmental Policy Act of 1969, as amended]." In addition, NRC was advised by telephone that CEQ had no objection to the supplemental proposed LWA rule, and therefore would not submit a written comment on the rule.

The NRC staff individual provided 8 numbered comments on the supplemental proposed LWA rule, in general focused on compliance with the NEPA and the potential adverse effect of the supplemental proposed rule on the NRC staff's resources.

B. NRC response to Public Comments

The NRC has carefully considered the stakeholder comments, and is adopting a final LWA rule which differs in some respects from the supplemental proposed LWA rule. The final rule is described and discussed in more detail below in *III. Discussion*, and *IV. Section-by-Section Analysis*.

The NRC is adopting the LWA rule as a separate final rule, rather than incorporating its provisions into the final part 52 rule. Incorporating the provisions of the final LWA rule into the final part 52 rulemaking would have resulted in a delay in publication of the final part 52 rule, because of the additional time needed for NRC consideration and resolution of the substantial issues raised in the public comments on the supplemental proposed LWA rule. Accordingly, the NRC has adopted the final part 52 rulemaking in a separate action, in advance of this final LWA rule.

1. Commission Questions

In the statement of considerations (SOC) for the supplementary proposed LWA rule, the Commission posed three questions, as follows (71 FR at 61340, second column):

> *As explained above, this supplemental proposed rule would impact the types of activities that could be undertaken without prior approval from the NRC, with NRC approval in the form of a LWA, and with NRC approval in the form of a construction permit or combined license. Therefore, in addition to the general invitation to submit comments on the proposed rule, the NRC also requests comments on the following questions:*
>
> *1. What types of activities should be permitted without prior NRC approval?*

2. *What types of activities should be permitted under a LWA?*

3. *What types of activities should only be permitted after issuance of a construction permit or combined license?*

Only one commenter provided separate responses to these three Commission questions; but the responses were simply an abbreviated version of the comments. The remaining commenters addressed the issues raised in these questions in the course of the commenters' discussion on the supplementary proposed LWA rule. Accordingly, the NRC is not providing a separate discussion of these questions and commenters' responses. Instead, the NRC is responding to these issues in the NRC's responses to specific comments.

2. *LWA Process*

Comment: *The Commission should adopt the LWA final rule as a necessary improvement to the existing LWA process. (NEI, Dominion Nuclear North Anna, Duke Energy, Florida Power and Light, Progress Energy, Southern Company, Unistar, Areva, GE Nuclear)*

NRC Response: The NRC agrees with the commenters that the former NRC provisions on LWAs should be amended, in order to improve the LWA process.

Comment: *The Commission should not adopt regulations that allow approval of LWA activities in advance of issuance of a construction permit or combined license. Allowing LWA activities before a plant is licensed would confirm to the public that the licensing process is a sham. The LWA process represents a further segmentation of the licensing process, which will add complexity to the licensing process, and result in further disenfranchisement of the public. (Public Citizen/NIRS 1)*

NRC Response: The NRC disagrees with the commenters. The commenters' position fails to recognize that the LWA process has been utilized by the agency for over 30 years, and therefore the proposed changes to the LWA process would not add to complexity, or otherwise represent further segmentation. The LWA process has been utilized by the agency for decades, and the agency's rules included several longstanding requirements directed at avoiding concerns about NEPA segmentation. These requirements are retained in their essential form in the final LWA rulemaking.

The NRC does not believe that the final LWA rule adds any further complexity to the licensing process, or otherwise results in further "disenfranchisement" of the public. As stated above, the NRC's regulatory regime already includes the LWA process, and the rule does not modify or change the public's ability to participate in the licensing process. Indeed, rather than "disenfranchising" the public, the LWA rule may have the effect of enhancing the ability of external stakeholders to participate in a hearing to resolve their issues with respect to a particular nuclear power plant. Many public stakeholders have expressed their concern that, because of the broad range of issues addressed by the NRC at each stage of licensing, it is difficult for them to pursue the full range of issues that they are interested in seeking resolution in an NRC hearing, because of the resource limitations of these stakeholders. For these stakeholders, the LWA process - by separating out a defined set of issues to be resolved in advance of the underlying combined license or construction permit proceeding - allows public stakeholders to focus their resources in the relevant issues in a LWA hearing. The "complexity" of the process provides an orderly sequencing of the overall set of issues that must be resolved, without introducing unlawful segmentation. The NRC believes that, if these public stakeholders consider the revised process in this light, they should conclude that the LWA

process enhances, rather than detracts from, participation in the licensing process by interested members of the public who are resource-limited.

The NRC does not believe that the NRC's proposed redefinition of "construction" constitutes unlawful "segmentation" which results in noncompliance with NEPA. Segmentation, as discussed elsewhere in this SOC, embraces the situation where a federal agency divides what would otherwise be regarded as a single, integrated federal action into separate, smaller federal actions, for the purpose of avoiding compliance with NEPA, or otherwise minimizing the apparent impact of the single, integrated federal action. The NRC's redefinition of construction is not motivated by a desire to avoid compliance with NEPA, nor will it result in a single federal action being divided into smaller, sequential federal actions. Rather, the NRC's redefinition reflects its reconsideration of the proper regulatory jurisdiction of the agency, and properly divides what was considered a single federal action into private action for which the NRC has no statutory basis for regulation, and the federal action (licensing of construction activities with a reasonable nexus to radiological health and safety or common defense and security, for which no other regulatory approach is acceptable) which will require compliance with NEPA.

3. SSCs within scope of "construction"

Comment: *The scope of SSCs that must be described in the FSAR is not always clear, even under the words of existing NRC regulations, e.g., 10 CFR 50.34(b)(2)(i), which requires discussion of certain systems "insofar as they are pertinent." (Areva 1, 2)*

NRC response: The NRC agrees, in part, with these comments and has revised the scope of SSCs that fall within the definition of construction to clearly identify the SSCs that have a reasonable nexus to radiological health and safety, or the common defense and security.

Comment: *The NRC's description of activities constituting "construction," which require a combined license or construction permit (71 FR 61337), should be modified to refer to the "installation or integration of that structure, system or component into its final* ***plant*** *location and* ***elevation****...." (Progress Energy 4)*

NRC Response: The NRC agrees in part with the commenter, and the corresponding language of this statement of considerations has been modified to state "into its final plant location would require . . ."

4. Excavation

Comment: *It is not necessary to define construction as including excavation of portions of the nuclear power plant facility having a "reasonable nexus to radiological health and safety." Problems identified during excavation should be identified as part of the site characterization and investigation required for preparing a combined license or construction permit. NRC Regulatory Guide (RG) 1.165, "Identification and Characterization of Seismic Sources and Determination of Safe Shutdown Earthquake Ground Motion," was updated in 1997 to provide that COL [Combined License] applicants' FSARs should include a commitment to geologically map all excavations and notify the NRC when excavations are open for inspection. For safety related SSCs, these excavations and characterization/investigation activities would be conducted under the applicant's quality assurance (QA) program. This could result in relocation of such SSCs. This provides a better process for ensuring safety and would better support an effective licensing process. In addition, NRC will be involved in pre-application activities and may elect to conduct oversight of any activity involving site characterization and site preparation. The examples cited by the NRC in the*

public meeting as a basis for including excavation within the definition of "construction" did not involve questions about the safety of the excavation activities themselves, but rather the conditions that were identified as the result of excavation. In such cases, the commitments to geologic mapping and notification of the NRC are sufficient to meet the NRC's regulatory interests. Accordingly, § 50.10(b) and 51.4 should be revised in the final rule to exclude excavation from the definition of construction, provided that the entity conducting excavation geologically maps the excavations and the NRC staff is notified when the excavations are opened for inspection. (NEI 1; GE Nuclear; Progress Energy 1)

NRC Response: The NRC agrees, in part, with this comment and has deleted excavation from the definition of construction in 10 CFR 50.10(a). A construction permit or combined license applicant is responsible, under the current regulations, to demonstrate that the site conditions are acceptable for the proposed facility design. This responsibility exists regardless of whether or not the NRC reviews and approve the proposed excavation activities and inspects the excavation activities as they are accomplished. Inasmuch as NRC inspection and regulatory oversight of the excavation are not necessary for reasonable assurance of adequate protection to public health and safety or common defense and security, and because the applicant bears the burden for accurately characterizing the parent material, the NRC concludes that excavation may be excluded from the definition of construction.

Comment: *Excavation and the driving of piles should be considered "construction." Prior agency experience has shown that safety issues have been identified during excavation, citing to the experience of North Anna, as well as a nuclear power plant in the Midwest where soil conditions identified during excavation*

necessitated a change in foundation design. Neither the public nor a reviewing court would think that the NRC would be able to make the underlying licensing decision (i.e., granting a construction permit or a combined license) in an unbiased fashion if excavation proceeded in advance of the underlying licensing decision. (Public Citizen/NIRS 2)

NRC Response: The NRC disagrees, in part, with this comment. As discussed in the response immediately above, the NRC concludes that excavation may be excluded from the definition of construction. However, the driving of piles and any other foundation work is defined as construction.

Comment: *The SOC for the final rule should specify that excavation includes appropriate erosion control measures necessary to stabilize site excavations pending LWA or license (i.e., combined license or construction permit) approval of construction activities. (NEI 1.5)*

NRC Response: The NRC agrees, in part, with this comment. The NRC's definition of construction in the final LWA rule includes: (i) any change made to the parent material in which the excavation occurs, *e.g.*, soil compaction, rock grouting; and (ii) the placement of permanent SSCs that are put into the excavation during or after the excavation, *e.g.*, installation of permanent drainage systems, or placement of mudmats. If the erosion control measures are conducted outside of the excavated hole and do not cover up the exposed soil conditions, then those activities would be allowed under 50.10(a). However, under the final LWA rule, the placement of temporary SSCs in the excavation, such as retaining walls, drainage systems and erosion control barriers, all of which are to be removed before fuel load, would not be considered construction.

Comment: *"Construction" should be limited to **above-ground** installation of certain SSCs. (Areva 1)*

NRC Response: The NRC disagrees. Even under the former provisions of § 50.10(e)(3), construction included the setting of foundations and other work accomplished below grade. The commenter provided no basis for limiting the definition of construction to the above-grade installation of SSCs of interest. No change was made in the final rule as the result of this comment.

Comment: *Temporary building, structures and roads, may be located in the eventual location of SSCs for which an LWA is required for excavation under the supplemental proposed LWA rule. If excavation is required for the temporary buildings, structures, and roads, the supplemental proposed rule would appear to prohibit such excavation. The final rule should make clear that excavation for SSCs outside the scope of an LWA, such as temporary buildings, structures and roads, should be excluded from the definition of "construction." (Areva 3)*

NRC Response: As discussed above, the NRC has decided to exclude all excavation from the definition of "construction." In addition, the NRC notes that under the final LWA rule, SSCs that are not within the scope of construction may be installed prior to receipt of an LWA, construction permit, or combined license. Accordingly, the final rule resolves the commenter's issue.

5. Compliance with NEPA

Comment: *The impacts of the construction activities you now propose to exclude from NRC regulations have been a part of the NRC regulations since 1972. What has changed that you now have decided they will no longer be part of your environmental review? Has NRC been doing it wrong for more than 30 years*

(including the 3 Early Site Permits that are either completed or near completion)? (Kugler 1)

NRC Response: As discussed in the "Discussion" section of this final rule (as well as the supplemental proposed rule), the 1972 amendment to the definition of construction in 10 CFR 50.10 was made early in the federal government's implementation of then-new NEPA. Since that time, the federal case law on NEPA has evolved, with several U.S. Supreme Court decisions on the requirements of NEPA. In addition, in preparing for the expected next generation of nuclear power plant construction applications, the nuclear power industry has reviewed the overall construction process based upon lessons learned from the construction and licensing process used for currently operating reactors. The industry submitted what is essentially a petition for rulemaking seeking changes to the LWA process, reflecting those lessons learned and their understanding of the current state of NEPA law. The NRC has reviewed the applicable law, and for the reasons stated elsewhere in this SOC, agrees with the petitioner that the current definition of "construction" and the current LWA requirements in § 50.10 are not compelled by NEPA or the Atomic Energy Act of 1954, as amended. While the agency's regulations on "construction" and LWAs were a reasonable implementation of NEPA as understood in 1972, the NRC believes that, with more than 30 years experience in implementing NEPA and the evolving jurisprudence, the time is appropriate for reconsideration and revamping of these NRC requirements.

Comment: *The impacts of the construction of a nuclear power plant that you now propose to exclude from NRC regulations are probably 90 percent of the true environmental impacts of construction. Before even talking to the NRC, a power company can clear and grade the land, build roads and railroad spurs, erect permanent and temporary buildings, build numerous plant structures (e.g., cooling water intake*

and discharge, cooling towers), and build switchyards and transmission lines. After potentially doing all of that, THEN the company would come to the NRC and ask permission to build the power plant for which all of this work was done. How does this comply with NEPA? You're going to ignore almost all of the construction impacts of the proposed action. (Kugler 2)

NRC Response: The commenter assumes that, if a private action is preparatory to federal action, then NEPA provides a statutory basis for the agency to extend its otherwise limited jurisdiction under the AEA to those private, preparatory actions, solely for the purpose of agency consideration of the environmental impacts under NEPA. The commenter has not pointed to, and the NRC has not identified, federal case law that supports such a position. Indeed, even in a case where the federal agency had unequivocal statutory authority to grant or deny a federal permit, the U.S. Supreme Court specifically held that the federal agency was not compelled to require mitigation based upon environmental considerations identified in the NEPA review. *Robertson v. Methow Valley Citizens Council*, 490 US 332 (1989).

The commenter also asserts that the NRC is going to "ignore all the [pre-]construction impacts of the proposed action." On the contrary, as stated elsewhere in this SOC, the pre-construction private actions of clearing, grading, access road construction, *etc*., will be considered in the cumulative impacts analysis in the LWA EIS as the baseline for analyzing the environmental impacts associated with the federal action authorizing LWA activities. This information will be used when evaluating the environmental impacts of construction and operation of the proposed nuclear power plant.

Comment: *Your rule says you won't consider the sunk costs of all of this work in your decision whether to approve the request to build the plant. But you've allowed the company to do most of the environmental damage. Who cleans up the mess*

if you say no? Because you've excluded from your review all of this work that's specifically for the purpose of building the plant, you also can't require any redress plan for the site for those impacts. (Kugler 2.a)

NRC Response: The commenter appears to believe that the NRC has authority to exercise its regulatory jurisdiction in an area where it does not otherwise possess regulatory authority under its organic statute, solely for the purpose of ensuring environmental redress of private activities with significant environmental impacts. The NRC does not agree with the commenter's implicit suggestion. As discussed in response to the previous comment as well as elsewhere in this SOC, the NRC does not possess statutory authority to regulate activities that do not have an impact upon radiological health and safety or common defense and security, and NEPA does not provide independent statutory authority to extend the agency's jurisdiction, solely for the purpose of assuring that adverse environmental impacts are considered and mitigated. While this may be a worthy goal, the NRC may not lawfully act in such a manner, absent additional statutory authority which is not currently provided by either NEPA or the AEA.

Comment: *You say you won't consider the sunk costs in your review. But it also sounds like the "baseline" for your environmental review will include the environmental damage done by a company in terms of "pre-application" activities. In other words, if an applicant for an LWA, CP, or COL has done all of the things you'll now allow without NRC review, the condition of the cleared and partially built site is now you're (sic.) starting point for the environmental review. In terms of comparing this partially built site to any alternative site, you've essentially "pre-selected" the site chosen by the applicant. Clearly there will be less environmental impacts at a site that has already had most of the damage done to it as compared to any other site. So you've handed your responsibility for the*

site suitability determination over to the applicant. (Kugler 2.b)

NRC Response: The commenter makes two incorrect assumptions. First, the commenter implicitly assumes that environmental matters are the key determinants of site suitability. The NRC believes that, as a practical matter and as borne out by the history of site suitability determinations in the past, other factors, such as seismic activity and intensity, geological structures, meteorological factors, impediments to development of emergency plans, security issues, and demographics (population density and distance) from a safety perspective are at least as important, if not more important, than "environmental" matters as a key determinant of site suitability.

Second, the commenter assumes that clearing of a site will always tilt the environmental balance in favor of the applicant's "pre-selected site." This may not be true in most cases. For example, even an "obviously superior" site from the standpoint of environmental impacts on water - which is likely to be the determining "environmental" impact - will require grading and clearing in order to be utilized. If construction were to be abandoned at the applicant's "pre-selected site" and commenced at the "obviously superior site," the environmental impacts of pre-construction activities such as clearing and grading would still have to be performed at the "obviously superior" site. In essence, the "sunk environmental impacts" associated with preconstruction at the pre-selected site (which are to be redressed under the required redress plan) are balanced out by the "future" environmental impacts associated with preconstruction at the "obviously superior site. Thus, pre-construction at a "pre-selected" site could not, in and of itself, lead to automatic dismissal of otherwise "obviously superior" sites.

In any event, the issue of the "baseline" for purposes of alternative sites is not addressed directly in the final LWA rule and will be resolved in the development of NRC guidance on implementation of the final LWA rule. Furthermore, the NRC notes that

preconstruction impacts will be evaluated as part of the cumulative impacts analysis, which may render moot some aspects of the commenter's concerns in this area.

Comment: *How can NRC tell the world in an EIS that the only real impacts of construction of a nuclear power plant will be related to digging a big hole and a few other straggling items that will occur while the structures described in the FSAR are being built? (Kugler 2.c)*

NRC Response: The commenter appears to assert that the NRC's EIS for a combined license must attribute to the NRC's federal action all of the environmental impacts of constructing a nuclear power facility, including the private, pre-construction activities that may be accomplished by the applicant without any NRC approval. The commenter's implicit assertion is incorrect. The NRC's EIS need only describe the environmental impacts of the federal action as those construction activities, as defined under § 50.10, which can only be accomplished under a LWA and combined license or construction permit.

The environmental impacts of pre-construction activities will also be described in the NRC's EIS because such description is necessary to evaluate the cumulative impacts of the federal action, in light of the pre-existing impacts of the private, pre-construction action. The cumulative impacts discussion should provide information on the total environmental impacts of constructing the nuclear power plant to both the NRC decisionmaker and the general public.

The NRC notes that, under the final LWA rule, excavation for SSCs that are important from a radiological health and safety or common defense and security standpoint will not be treated as "construction." Therefore, the environmental effects of excavation would not be evaluated as a an impact attributable to the federal licensing action, but instead be added to the environmental baseline for a site.

Comment: *How are applicants and NRC going to divide impacts if some of the construction activities now out side (sic.) the NRC's scope are going on at the same time as activities inside NRC's scope. For example, traffic impacts of the construction workforce are often an issue. But how do you deal with it if part of the workforce is building cooling towers and intake systems, and part is building FSAR-listed structures? Another case is property taxes. The property taxes paid by the company are a significant item in the socioeconomic review. Is the applicant and the NRC now going to have to differentiate between taxes paid for FSAR-related facilities and taxes paid for other facilities? I'm pretty sure that's not possible. There are probably a number of examples like this. (Kugler 2.d)*

NRC Response: The commenter raises a number of detailed issues with respect to NRC implementation of the final rule in the course of preparing EISs. None of these matters appear to raise issues that are insurmountable or would be unusually difficult to resolve. For example, the need to apportion the taxes for FSAR-related SSCs, versus taxes on other portions of the facility whose construction does not require NRC approval could be resolved by simply treating all the taxes paid as a benefit of operation, and the impacts from all portions of the plant as an impact of operation. The NRC expects that the staff will develop supplemental guidance to the environmental Standard Review Plan on these and other implementation matters.

Comment: *The rule says that if an LWA is issued, the EIS to build and operate a nuclear power plant will be a supplement to the EIS for the LWA. In essence this means that the EIS that evaluates the impacts of building and operating a large commercial power plant will be a supplement to the EIS for digging a big hole. Now assuming the EIS for the big hole ignores all of the other impacts of construction that may already have taken place, it's going to be pretty limited in*

scope. So this EIS of very limited scope will now become the base document, and the EIS that considers ALL of the impacts of operations will be a supplement to it. Does this make sense to anybody? Does NEPA really allow this? (Kugler 3)

NRC Response: The NRC believes that the proposed rule is consistent with NEPA. The commenter presented no rationale why the NRC's proposal violates either NEPA or CEQ's implementing regulations. NEPA itself only requires that a statement be prepared addressing the environmental impacts and alternatives of major federal actions significantly affecting the environment. The statute does not contain any language specifically constraining the manner in which each EIS for two sequential federal actions must be prepared. Hence, the NRC is free to select a manner of NEPA compliance which best meets the agency's needs.

The commenter appears to be concerned that, if the LWA applicant chooses to submit an environmental report limited to LWA activities, then the LWA EIS would be a relatively narrow document which cannot be the basis for a supplemental EIS with a greatly expanded scope of subject matters addressed. The NRC does not believe that the commenter's concern is well-founded. First, the CEQ's regulations specifically permit "tiering" of EISs to "eliminate repetitive discussions of the same issues and to focus on the actual issue ripe for consideration at each level of the environmental review...." 40 CFR 1502.20. Although most of the tiering discussion refers to a broad initial EIS followed by more specific EIS tiering on the earlier EIS, 40 CFR 1502.20 also states, "Tiering may also be appropriate for *different stages of actions (emphasis added)*." The NRC believes that the LWA is a stage in the overall federal action of issuing a license for construction (and, in the case of a combined license under part 52, operation) of a nuclear power plant. It is logical to evaluate the environmental impacts of the activities that occur first (*i.e.*, LWA activities), followed by evaluation of the impacts of activities

that occur thereafter (*i.e.*, main construction and operation). The potential for segmentation of the federal impacts is minimized, as discussed above, by various provisions of the rule which, *inter alia*, prohibit NRC consideration of sunk costs, require consideration of all environmental impacts and benefits attributable to LWA activities in the supplemental EIS prepared for the underlying combined license or construction permit application, and require the applicant/licensee to develop and, if necessary, implement a redress plan. Second, the CEQ regulations also encourage agencies to incorporate by reference material into an EIS in order to cut down on bulk without impeding agency and public review of the action. Nothing in the CEQ regulations suggests that incorporation by reference is precluded where the material being incorporated is smaller in bulk than the EIS into which the material is being incorporated. In the NRC's view, the purpose of incorporation by reference is served by incorporating the LWA EIS into the supplemental EIS prepared at the combined license or construction permit stage.

Comment: *The LWA EIS, as I read it, will only be looking at the impacts of digging the big hole and pouring the foundation. So at what point does the staff evaluate the impacts of construction and operation to determine whether the site is SUITABLE for the construction and operation of a nuclear power plant? Is that done later? Does that mean you could authorize digging the hole at a site that could later be determined by NRC to be unsuitable? (Kugler 4)*

NRC Response: The NRC has decided that excavation should not be considered "construction," and that NRC permission is not required to undertake excavation activities. Accordingly, a response to this comment, to the extent that it is focused on NRC consideration of the impacts of excavation as an impact of the issuance of the LWA, construction permit or combined license, is unnecessary. As discussed elsewhere, the impacts of preconstruction activities performed by the ESP, construction permit, or combined license applicant must be described by

the applicant in its environmental report, and must be considered in the cumulative impacts analysis.

Under the final LWA rule, the NRC's evaluation of site suitability must be made when it issues a construction permit or combined license, unless the applicant seeks, either as part of a LWA or in advance of the issuance of the construction permit or combined license under subpart F of part 2, an early decision on site suitability and/or the environmental impacts of construction and operation .

Comment: *Have you discussed these changes with key stakeholders like EPA, CEQ, and FERC? What do they think of this change? This is a major shift by the NRC away from its NEPA responsibilities. And other agencies may have real problems with it beyond the basic NEPA issues. For example, will FERC commence a review for transmission lines if the power company hasn't even submitted an application to NRC to build the plant for which its needed? Similarly, will the Corps of Engineers issue Section 404 permits to damage wetlands and dredge if there's no request to build a plant yet? Has anybody talked to them? (Kugler 5)*

NRC Response: The NRC sought comments on the proposed rule from four federal agencies who have historically been interested in NRC construction licensing from an environmental standpoint. Advance copies of the proposed rule as approved by the Commission were provided to the CEQ, the EPA, FERC, and the U.S. Department of the Interior, FWS, and copies of the proposed rule as published in the *Federal Register* were electronically transmitted to cognizant individuals in these agencies on the date of publication of the proposed rule in the Federal Register (ML062840445, ML062910051, ML062910049). Additional telephone calls

were made in order to describe the proposed rule and to answer any questions from these agency officials. As discussed earlier, the NRC has received comments from EPA, which has no objection to the change. NRC was advised by telephone that CEQ had no objection to the supplemental proposed LWA rule. The NRC has been advised by FERC that it ordinarily would not review transmission line routings for lines commencing at nuclear power facilities. The NRC believes that it has made reasonable efforts to obtain input from other cognizant federal agencies, and none appear to share the concerns of the commenter. No change from the supplemental proposed LWA rule has been made as the result of this comment.

Comment: *How does this change affect the current early site permit applicants? For example, Exelon and Dominion submitted redress plans for all of the impacts of construction they'd be allowed to carry out before receiving a license to build and operate a plant. (What a concept!) I believe Southern did too. Future applicants won't have to do this. What happens to the Exelon and Dominion redress plans? Do they get out of them now? If so, how do you explain that to all of the folks involved in those reviews who relied on the NRC's representations that a redress plan was required (e.g., the public, Federal and State environmental regulatory agencies)? What happens to Southern, which is early in its review? (Kugler 6)*

NRC Response: The final rule does not affect the NRC staff's approval of a full-scope redress plan to support LWA activities under the former LWA provisions in §§ 50.10 and 52.17. The three applicants for ESP which are currently before the NRC are required to meet the NRC's requirements in effect at the time of the application, with respect to the content of the application. If the final rule is adopted before ESPs are issued to the current ESP applicants, then the applicant may (but is *not* required to) seek to revise its redress plan and seek NRC approval of a (narrowed) redress plan that meets the requirements of the final LWA rule. In

such a case, the NRC would advise other federal and state agencies of the change in NRC's regulatory requirements and any change in the scope of the approved redress plan which may be requested by the ESP applicant. Alternatively, upon issuance of the ESP, the ESP holder may request an amendment to its ESP, consistent with the recently-adopted revisions to 10 CFR part 52, to seek NRC approval of a (narrowed) redress plan which is consistent with the requirements of the final LWA rule. In such an event, the NRC would - as part of its routine procedures - consult with relevant federal agencies. No change from the supplemental proposed LWA rule was made as a result of this comment.

Comment: *Section 51.49(a)(2) should be revised to delete the requirement for an LWA applicant to state the need for an LWA. (Progress Energy 5)*

NRC Response: The NRC disagrees with the commenter's proposal. An EIS should state the purpose and need for a proposed action. 10 CFR part 51, appendix A, paragraph 4; 40 CFR 1502.13. Inasmuch as the NRC is acting on a private entity's request in a licensing action, the purpose and need should be, in the first instance, determined by the applicant and be adopted by the NRC. No change was made to the final rule as a result of this comment.

Comment: *Section 51.20(b)(1) and (5), and 51.76(b) and (e) should be revised to allow the NRC staff the option of preparing and issuing an environmental assessment (EA) if the environmental report shows no significant environmental impacts associated with LWA activities. (Progress Energy 6, 7, 8)*

NRC Response: The NRC disagrees with the commenter's proposal. In preparing the supplementary proposed rule, the NRC considered the approach recommended by the commenter. However, the NRC rejected proposing such an approach, since it would increase the perception of federal segmentation, without any significant countervailing benefits, in terms of resources or time necessary to complete the NEPA process. Furthermore, the tiering

concept, under CEQ regulations, involves sequential EISs rather than an EA followed by an EIS. The NRC believed that it would not be prudent to pursue a new approach to NEPA compliance, which may result in legal instability in an area of critical interest to industry stakeholders. The commenter presented no information in favor of its proposal. Accordingly, in the absence of new information suggesting that the Commission's initial determination should be revisited, the Commission declines to adopt the commenter's proposal. No change was made to the final rule as a result of this comment.

6. LWA application process

Comment: *The NRC expects over 15 applications for COLs in the next 3 years or so. Perhaps it can staff up to meet the challenge of preparing those 15 EISs. But can it possibly handle 30? If most or all of the COL applicants choose to submit an LWA application too, which would seem likely, the staff will have to prepare 2 EISs for each site. Has anybody considered the resource implications? (And if an applicant chooses to go the ESP route for some reason, there will be three EISs.) (Kugler 7)*

NRC Response: The commenter appears to believe that, under a revised LWA rule, the overall resources expended by the NRC in preparing EISs would increase over the current regulatory regime in a time frame that would exacerbate any problems that may be caused by limited NRC staff resources. The NRC disagrees with the commenter. The final LWA rule merely governs the timing of the NRC's environmental review of the overall action of licensing the construction and operation of a nuclear power plant, consistent with NEPA.

Taking the specific example identified by the commenter of a combined license applicant, who both seeks an LWA and references an ESP, it is possible - as the commenter correctly points out - that three EISs may be prepared in the worst case of a less than complete

ESP EIS.[3] However, the final LWA rule does not require the NRC staff to prepare entirely new, full-scope EISs at either the LWA or the combined license issuance stages. Instead, the EIS at the LWA stage would be limited to considering the environmental impacts of LWA activities only (assuming that the LWA ER is limited to providing information on the environmental impacts of LWA activities). This is consistent with NRC and CEQ regulations that allow incorporation by reference. Preparation of an LWA EIS limited to those subjects would not be redundant of the ESP EIS, inasmuch as the impacts of construction under this scenario were not addressed in the ESP EIS. Accordingly, there is no unnecessary expenditure of NRC resources attributable to anything in the LWA rule. When the combined license supplemental EIS is prepared, that EIS will be limited to considering new and significant information related to matters concerning construction and operation of the facility which was not addressed in the ESP EIS, unless the matter was discussed in the LWA EIS. In that limited case, the nature and description of the LWA construction impacts are deemed to be resolved, and these impacts would be considered in the overall balancing and decisionmaking on issuance of a combined license without the need to re-examine the nature and description of those LWA impacts. Again, the final LWA rule avoids redundant NRC review to the maximum extent practicable, inasmuch as the combined license EIS relies upon the determinations regarding the nature and impacts of construction and operation which were made at both the ESP and LWA stages. The overall scope of the NRC environmental review is not changed; it is merely the timing of the review for individual issues that is affected by the final LWA rule.

In sum, the NRC does not agree with the commenter that the LWA rule will, as the consequence of its provisions, result in an adverse impact upon the amount and timing of

---

[3]If a complete EIS were prepared at the ESP stage and the Commission concludes there is no new and significant information, then only an EA need be prepared at the LWA stage.

expenditure of NRC resources that cannot be managed in an effective manner. No change from the supplemental proposed LWA rule was made in response to this comment.

Comment: *It appears that this new process will require major changes to NRC guidance documents such as regulatory guides and the environmental standard review plan. Almost everything related to the impacts of construction will have to be completely rewritten. Has anybody thought about whether this can be done before the first applicant uses the new rule? (Kugler 8)*

NRC Response: The NRC agrees with the commenter that changes to the NRC regulatory guides and the environmental standard review plan will be necessary to provide complete guidance to potential applicants and the NRC review staff with respect to implementation of the new LWA process in the final LWA rule. However, the NRC does not agree with the commenter's implicit assertion that the guidance must be finalized before the first applicant (or several applicants) can use the new LWA process in an effective manner. The NRC has, in many other instances, adopted rules containing substantial changes to its technical and regulatory requirements applicable to nuclear power reactors. Although the NRC does not wish to understate the challenge of implementing new rules, it is confident that the NRC working level technical staff, under careful and timely oversight by NRC staff management, will be able to implement the final LWA rule in a timely, consistent, and effective manner.

6. LWA application process

Comment: *The supplemental proposed rule does not appear to allow an applicant to use both a phased LWA process and the hearing process for early partial decision on site suitability issues, thereby allowing an applicant who wishes to apply for an LWA to also submit the environmental information under § 2.101(a)(5) and proceed with an accelerated hearing on the full scope of environmental matters.*

The Commission should adopt changes in § 50.10(c)(2) and 2.101(a)(5) to allow an applicant to use both processes simultaneously. (NEI 5; Unistar 1)

NRC Response: The NRC believes that the commenters misunderstand the provisions of the supplemental proposed rule, inasmuch as it was - and continues to be - the NRC's intent that:

- Applicants may submit a two-part (phased) application for an LWA in advance of the application for the underlying combined license or construction permit, *see* § 2.101(a)(9).
- The environmental information submitted in the LWA portion of the application may either be limited to the LWA activities requested, or the full scope of construction and operation impacts, *see* § 51.49(b) and (f)).
- An LWA applicant may seek an early decision on siting and environmental matters. If the LWA is submitted in advance of the underlying construction permit or combined license application, the procedures in 10 CFR part 2, subpart F, §§ 2.641 through 2.649 apply. If the LWA is submitted as part of (or after) the construction permit or combined license application, then the procedures in subpart F, §§ 2.601-2.629 would apply inasmuch as this is the ordinary procedure for obtaining an early decision on siting and environmental matters under the existing provisions of subpart F.

The NRC does not believe the specific language changes to the proposed rule described by the commenters are necessary to accomplish these three objectives. Accordingly, the Commission declines to adopt the changes proposed by the commenters, and no change from the supplemental proposed LWA rule was made in response to this comment.

Comment: *One commenter proposed that the timing provisions in 10 CFR 2.101(a)(5), requiring that each part of a two-part combined license application be submitted*

within six (6) months of each other, should be revised to be consistent with 10 CFR 2.101(a)(9) of the supplemental proposed rule, which permits the LWA application to be submitted up to twelve (12) months in advance of the underlying combined license or construction permit. Additional conforming changes should be made to implement this concept, including changes in § 50.10(c)(2). (Unistar 2) Another commenter made the same proposal, but separately suggested that the overall time between parts of applications be lengthened to eighteen (18) months. (NEI 6).

NRC Response: The NRC agrees with the commenters that the timing provisions should be consistent. Furthermore, the NRC agrees with the second commenter (NEI) that the overall time between parts of applications may be lengthened to eighteen (18) months. The six (6) month limitation in former § 2.101(a)(5) for two-part applications was set many years ago and reflected internal NRC administrative considerations, including maximizing efficiency and ensuring continuity of review oversight. The twelve (12) month limitation between submission of the LWA application and the underlying combined license or construction permit application, as proposed in the supplemental proposed LWA rule, was based upon the same considerations, as well as environmental/NEPA considerations. The NRC did not want the time between initial submission of LWA environmental information, and the subsequent consideration of the overall environmental impacts to be lengthened to the point that there would be a substantial likelihood of new and significant information that would require updating. A 12-month limitation was established as a reasonable limitation. No consideration was given to having a consistent limitation in both existing paragraph (a)(5) and proposed paragraph (a)(9).

However, after further consideration based upon public comments, the NRC concludes that the 6-month limitation in paragraph (a)(5) and the proposed 12 month limitation in

paragraph (a)(9) are unduly restrictive. The NRC believes that administrative efficiency can be maintained with longer time periods between parts of applications, in view of modern information technology, NRC's restructuring of the licensing process in part 52, the NRC's recent adoption of changes to part 2, subpart D and part 52, Appendix N, and the NRC's projected use of design-centered reviews. In addition, the NRC understands, in response to informal inquiries with EPA, that 18 months is well within the time period considered by EPA to be acceptable for referencing a previously-prepared EIS without updating. For these reasons, the Commission is adopting an 18-month limitation in paragraphs (a)(5) and (a)(9) of § 2.101.

7. Other topics

Comment: *The NRC should include a "grandfathering" provision in the final rule to make clear that the final rule does not require any change to ESP applications filed before the effective date of the rule, such as supplementing the application to require a showing of technical qualifications. The NRC should also clarify that the final rule would not reduce or limit the authority that such applicants would be entitled to receive upon issuance of their ESPs under the current regulations, e.g., perform construction of nonsafety-related SSCs. (NEI 4, Dominion 1)*

NRC Response: The NRC agrees with the commenters that the final LWA rule does not require any change to ESP applications filed before the effective date of the rule, such as a supplementation of the application to require a showing of technical qualifications. Upon further consideration, the NRC has decided to include a "grandfathering" provision in the final rule which will provide that ESP applications which are under consideration as of the effective date of the final LWA rule, which include a request to conduct 50.10(e)(1) activities, need not comply with the "content of application" requirements in the final rule.

The NRC does not agree with the commenter's view that the final rule and/or the SOC for the final rule should clarify that the current ESP applicants should be provided with the authority to conduct LWA activities under the former provisions of § 50.10(e)(1), *i.e.*, not be bound by the final LWA rule's provisions. The final LWA rule does allow excavation without an LWA. However, the NRC continues to believe that pile driving and other subsurface preparation should be considered construction, inasmuch as none of the comments received addressed this matter or brought information to the NRC's attention that suggests that the NRC's regulatory basis for its position should be reconsidered (the public comments received only addressed excavation *per se*, and did not mention pile driving or other subsurface preparation). In addition, as discussed elsewhere in this SOC, the NRC has redefined and limited the SSCs whose construction requires an LWA, construction permit, or combined license. Thus, the NRC believes that the current ESP applicants will have sufficient authority and flexibility under the final rule, without any grandfathering of the LWA provisions. Furthermore, regulatory stability from the standpoint of backfitting is not relevant, inasmuch as it has been the Commission's longstanding position that backfitting does not protect an applicant from changes to regulatory requirements.

Comment: *Proposed § 50.10(c)(3)(i) requires the LWA application to: (i) describe the design and construction information otherwise required to be submitted for a combined license, but limited to the portions of the facility that are within the scope of the limited work authorization; and (ii) demonstrate compliance with "technically relevant Commission requirements in 10 CFR Chapter I" applicable to the design of those portions of the facility within the scope of the limited work authorization, is unduly vague. If specific technical requirements are deemed applicable, they should be justified and identified in the rule. (Dominion 3)*

NRC Response: The NRC disagrees with the commenter that the language of § 50.10(c)(3)(i) (§ 50.10(d)(3)(i) in the final LWA rule) is unnecessarily vague, or that it would be practical for the rule language to specify the technical requirements which are deemed applicable. The technical requirements that are applicable will depend upon the scope and nature of LWA activities requested. Furthermore, this regulatory requirement is modeled on the provisions of former § 50.10(e)(2), (e)(3)(i) and (e)(3)(ii), for which the NRC and the nuclear power industry has had decades of experience. The commenter did not present either alternative language that would address its concern with vagueness, or otherwise present of list of NRC technical requirements that should be specified as applicable. The original commenter whose submission led to this rulemaking did not identify this aspect of the former rule as presenting a problem which should be addressed as part of the reformulated rule. To modify the rule language to include a list of technically relevant requirements would likely require renoticing of this aspect of the rule for public comment, which would delay issuance of the rule with little benefit, given the 30+ years of experience in implementing analogous rule language in the former versions of § 50.10. Accordingly, the Commission declines to adopt the commenter's proposal, and no change from the supplemental proposed LWA rule was made in response to this comment.

Comment: *The finding of technical qualifications should be limited to LWA activities applicable to safety-related activities, because there are no design, construction, or technical requirements in the NRC's rules applicable to non-safety related construction work. (Dominion 4)*

NRC Response: The NRC disagrees with the commenter's proposal, inasmuch as it is based on the longstanding industry misconception that the NRC's regulations in Part 50 apply only to "safety-related" SSCs and activities relevant to those SSCs, as that term is defined in 10 CFR

50.2. This is not a correct understanding. For example, the General Design Criteria in 10 CFR Part 50, Appendix A, apply to SSCs "important to safety; that is, structures, systems and components that provide reasonable assurance that the facility can be operated without undue risk to the health and safety of the public." *Id*. (first introductory paragraph). There are numerous other regulations applicable to the design, construction and operation of a nuclear power facility whose applicability extends beyond "safety-related" SSCs. It is consistent with Section 182.a of the AEA and the NRC's past practice that a technical qualifications finding be made as part of the finding necessary for NRC issuance of an LWA. Accordingly, the NRC declines to adopt the commenter's proposal, and no change from the supplemental proposed LWA rule was made in response to this comment.

Comment: *The reference in § 50.10(d)(2) to § 52.17(c)should be changed to § 50.10(c)(3)(iii), inasmuch as the requirement for a redress plan has been removed from § 52.17(c)and relocated in § 50.19(c)(3)(iii). (Progress Energy 3)*

NRC Response: The NRC agrees with the substance of this comment. Inasmuch as the proposed rule has been reorganized in the final rule, the final rule refers to appropriate paragraph.

Comment: *An LWA is not the functional equivalent of an ESP. There are significant differences between them, and the time and level of NRC staff effort necessary to conduct a LWA review should not be as great as for an ESP review. The NRC should clarify the differences between an LWA and ESP in the SOC for the final rule. (Areva 4)*

NRC Response: NRC agrees with the commenter that there are some significant differences between an LWA review and an ESP. In particular, issuance of an LWA does not require the NRC to make a finding with respect to site suitability from either a safety or environmental

standpoint (although the LWA applicant may, under §§ 2.101(a)(9), 52.17 and 51.49 of the final rule, submit a environmental report addressing the issues of alternative, obviously superior sites, and the impacts of construction and operation of the nuclear power plant, in which case the NRC would make a finding on all environmental matters, including alternative, obviously superior sites). The NRC has modified the section-by-section discussion of the SOC to make clearer the requirements for obtaining an LWA .

Comment: *Proposed § 51.76(e) and § 51.49(e) are slightly inconsistent, in that the former refers to the LWA applicant's authority to incorporate by reference an earlier EIS prepared for the same site if a construction permit was issued but construction never* ***commenced****. By contrast, § 51.49(e) refers to the LWA applicant's environmental report to reference an earlier EIS prepared for the same site if a construction permit was issued but construction never was* ***completed****. Inasmuch as the NRC intended to adopt the more expansive concept embodied in § 51.49(e), the final rule should modify § 51.76(e) to be consistent to refer to construction not being "completed." (NEI 3)*

NRC Response: The NRC agrees, and the language of § 51.76(e) has been conformed in the final rule. In addition, conforming changes were made in the subtitles of § 51.49(e) and § 51.76(e), and the relevant SOC discussion.

III. Discussion

A. History of the NRC's Concept of Construction and the LWA

Section 101 of the AEA prohibits the manufacture, production, or use of a commercial nuclear power reactor, except where the manufacture, production or use is conducted under a license issued by the NRC. While construction of a nuclear power reactor is not mentioned in section 101, section 185 of the AEA requires that the NRC grant construction permits to

applicants for licenses to construct or modify production or utilization facilities, if the applications for such permits are acceptable to the NRC. However, the term construction is not defined anywhere in the AEA or in the legislative history of the Act.

To prevent the construction of production or utilization facilities before a construction permit is issued, the NRC proposed a regulatory definition of construction in 1960 (25 FR 1224; February 11, 1960). The definition of construction was adopted in a final rule that same year and codified in 10 CFR 50.10(b) (25 FR 8712; September 9, 1960). As promulgated, § 50.10(b) stated that no person shall begin the construction of a production or utilization facility on a site on which the facility is to be operated until a construction permit had been issued. Construction was defined in § 50.10(b) as including:

> pouring the foundation for, or the installation of, any portion of the permanent facility on the site; but [not to] include: (1) Site exploration, site excavation, preparation of the site for construction of the facility and construction of roadways, railroad spurs and transmission lines; (2) Procurement or manufacture of components of the facility; (3) Construction of non-nuclear facilities (such as turbo-generators and turbine buildings) and temporary buildings (such as construction equipment storage sheds) for use in connection with the construction of the facility; and (4) with respect to production or utilization facilities, other than testing facilities, required to be licensed pursuant to section 104a. or section 104c. of the Act, the construction of buildings which will be used for activities other than operation of a facility and which may also be used to house a facility. (For example, the construction of a college laboratory building with space for installation of a training reactor is not affected by this paragraph). (25 FR 8712; September 9, 1960)

The definition of construction remained unchanged until 1968, when the driving of piles was specifically excluded from the definition (33 FR 2381; January 31, 1968). This change was implemented by amending § 50.10(b)(1) to read: “Site exploration, site excavation, preparation of the site for construction of the reactor, *including the driving of piles*, and construction of roadways, railroad spurs, and transmission lines.” The rationale for this change, as articulated in the proposed rule (32 FR 11278; August 3, 1967), seems to have been that the driving of piles was closely related to “preparation of the site for construction” and that the performance of

this type of site preparation activity would not affect the NRC's subsequent decision to grant or deny the construction permit. With the exception of the exclusion of the driving of piles from the definition of construction in 1968, the NRC's interpretation of the scope of activities requiring a construction permit *under the AEA* has remained largely unchanged.

However, following the enactment of the NEPA, as amended, the NRC adopted a major amendment to the definition of construction in § 50.10 (37 FR 5745; March 21, 1972). In that rulemaking, the NRC adopted a much more expansive concept of construction. Specifically, a new § 50.10(c)was adopted stating that no person shall effect "commencement of construction" of a production or utilization facility on the site on which such facility will be constructed until a construction permit has been issued. "Commencement of construction" was defined as:

> any clearing of land, excavation or other substantial action that would adversely affect the natural environment of a site and construction of nonnuclear facilities (such as turbogenerators and turbine buildings) for use in connection with the facility, but does not mean: (1) Changes desirable for the temporary use of the land for public recreational uses, necessary boring to determine foundation conditions or other preconstruction monitoring to establish background information related to the suitability of the site or to the protection of environmental values; (2) Procurement or manufacture of components of the facility; and (3) With respect to production or utilization facilities, other than testing facilities, required to be licensed pursuant to section 104a or section 104c of the Act, the construction of buildings which will be used for activities other than operation of a facility and which may also be used to house a facility. . . . (37 FR 5748)

The NRC explained that expansion of the NRC's permitting authority was:

> [C]onsistent with the direction of the Congress, as expressed in section 102 of the NEPA, that, to the fullest extent possible, the policies, regulations and public laws of the United States shall be interpreted and administered in accordance with the policies set forth in that Act. Since site preparation constitutes a key point from the standpoint of environmental impact, in connection with the licensing of nuclear facilities and materials, these amendments will facilitate consideration and balancing of a broader range of realistic alternatives and provide a more significant mechanism for protecting the environment during the earlier stages of a project for which a facility or materials license is being sought. (37 FR 5746)

Thus, the NRC's interpretation of its responsibilities under NEPA, not the AEA, was the driving factor leading to its adoption of § 50.10(c).[4]

Two years after the expansion of the NRC's permitting authority resulting from the promulgation of § 50.10(c), the NRC promulgated § 50.10(e) (39 FR 14506; April 24, 1974). This provision created the current LWA process, which was added to allow site preparation, excavation and certain other on-site activities to proceed before issuance of a construction permit. Prior to the promulgation of § 50.10(e), NRC permission to engage in site preparation activities before a construction permit was issued could only be obtained via an exemption issued under § 50.12. The provisions of § 50.10(e) allowed the NRC to authorize the commencement of both safety-related (known as "LWA-2" activities) and non safety-related (known as "LWA-1" activities) on-site construction activities before issuance of a construction permit if the NRC had completed a site suitability report and a final environmental impact statement (FEIS) on the issuance of the construction permit and the presiding officer in the construction permit proceeding had made the requisite site suitability, environmental and, in the case of an LWA-II, safety-related findings.

B. NRC's Concept of Construction and the AEA

Industry stakeholders have stated that the business environment, today and in the foreseeable future, requires that new plant applicants minimize the time interval between a decision to proceed with the construction of a nuclear power plant and the start of commercial operation. In order to achieve that goal, these stakeholders have indicated that non safety-

---

[4] *See Carolina Power and Light Company* (Shearon Harris Nuclear Power Plant, Units 1, 2, 3 and 4), 7 AEC 939, 943 (June 11, 1974)(hereinafter *Shearon Harris*)("The regulations were revised in 1972, not because of any requirements of the Atomic Energy Act, but rather to implement the precepts of NEPA which had then recently been enacted."); *Kansas Gas and Electric Company* (Wolf Creek Nuclear Generating Station, Unit No. 1), 5 NRC 1, 5 (Jan. 12, 1977)(explaining that NEPA led the AEC to amend its regulations in several respects, including the changes to 50.10(c)).

related “LWA-1" activities would need to be initiated up to two years before the activities currently defined as “construction” in § 50.10(b). In NEI’s view, the current LWA approval process would constrain the nuclear industry’s ability to use modern construction/management practices and needlessly add eighteen (18) months to estimated construction schedules for new plants that did not reference an early site permit with LWA authority.

Based upon the representations of the industry, the NRC agrees that the agency’s regulatory processes should be revised and optimized to assure that these stakeholders needs are met, consistent with the NRC’s statutory obligations and in a manner that is fair to all stakeholders. Accordingly, the NRC is adopting this final LWA rule which revises the 10 CFR 50.10, and makes conforming changes in 10 CFR parts 2, 51 and 52. The final LWA rule narrows the scope of activities requiring permission from the NRC in the form of an LWA by eliminating the concept of “commencement of construction” formerly described in § 50.10(c)and the authorization formerly described in § 50.10(e)(1). Instead, under the final LWA rule, NRC authorization would only be required before undertaking activities that have a reasonable nexus to radiological health and safety and/or common defense and security for which regulatory oversight is necessary and/or most effective in ensuring reasonable assurance of adequate protection to public health and safety or common defense and security. While the NRC’s redefinition of “construction” will result in fewer activities requiring NRC permission in the form of a LWA, construction permit, or combined license, it will also define certain activities (such as the driving of piles) that are currently excluded from the regulatory definition of construction given in § 50.10(b), as construction requiring such NRC review and approval.

The final LWA rule also provides an optional, phased application and approval procedure for construction permit and combined license applicants to obtain LWAs. An applicant may either submit its LWA application jointly with a complete construction permit or

combined license application, or submit it in two parts, with the information relevant to issuance of an LWA submitted up to eighteen (18) months in advance of the remainder of the application addressing the underlying construction permit or combined license. Furthermore, under the final LWA rule, the NRC need not address the suitability of the site for the operation of a nuclear power plant before issuing an LWA. Site suitability will be addressed as part of the NRC's consideration of the underlying construction permit or combined license. Moreover, under the final LWA rule the applicant could seek a separate determination on site suitability issues under subpart F of 10 CFR part 2.

The phased approach in the final LWA rule also provides for an environmental review and approval process for LWA requests which allows the NRC to grant an applicant permission to engage in LWA activities after completion of a limited EIS addressing those activities, but before completion of the comprehensive EIS addressing the underlying request for a construction permit or combined license. The final LWA rule also delineates the environmental review required in situations where the LWA activities are to be conducted at sites for which the NRC has previously prepared an EIS for the construction and operation of a nuclear power plant, and for which a construction permit was issued, but construction of the plant was never completed.

The NRC concludes that the final LWA rule is fully consistent with the NRC's radiological health and safety and common defense and security responsibilities under the AEA.[5] As previously mentioned, the term "construction" is not defined in the AEA or in the legislative history of the AEA. Instead of expressly defining the term in the AEA, Congress entrusted the agency with the responsibility of determining what activities constitute

---

[5] *See State of New Hampshire v. Atomic Energy Commission*, 406 F.2d 170, 174-75 (1st Cir. 1969).

construction.[6] The NRC has determined that the site-preparation activities that would no longer be considered construction under this proposed rule do not have a reasonable nexus to radiological health and safety, or the common defense and security. Accordingly, the NRC concludes that its definition of the term, "construction," is reasonable and complies with the AEA.

The NRC also concludes that issuance of the LWA in advance of a consideration of site suitability is reasonable and complies with the AEA. Any work under the LWA is done at the risk of the LWA holder.

C. NRC's LWA Rule Complies With NEPA

1. NRC's Concept of Construction is Consistent with the Legal Effect of NEPA

The definition of construction in the final LWA rule is consistent with the legal effect of NEPA. Section 50.10(c)was originally added to part 50 due to the interpretation that the enactment of NEPA, not a change in the powers given to the agency in the AEA, required the NRC to expand its permitting/licensing authority. However, subsequent judicial decisions have made it clear that NEPA is a procedural statute and does not expand the jurisdiction delegated to an agency by its organic statute.[7] Therefore, while NEPA may require the NRC to consider the environmental effects caused by the exercise of its permitting/licensing authority, the statute cannot be the source of the expansion of the NRC's authority to require construction permits, combined licenses, or other forms of permission for activities that are not reasonably related to radiological health and safety or protection of the common defense and security. Since NEPA

---

[6] *Shearon Harris*, 7 AEC 939.

[7] *See,e.g., Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350-52 (1989); *Natural Resources Defense Counsel v. U.S. Environmental Protection Agency*, 822 F.2d 104, 129 (D.C. Cir 1987); *Kitchen v. Federal Communications Commission*, 464 F.2d 801, 802 (D.C. Cir. 1972).

cannot expand the NRC's permitting/licensing authority under the AEA, the elimination of the blanket inclusion of site preparation activities in the definition of construction under § 50.10(c)does not violate NEPA.

2. NRC's Concept of the "Major Federal Action" is Consistent with NEPA Law

Because the AEA does not authorize NRC to require an applicant to obtain permission before undertaking site preparation activities that do not implicate radiological health and safety or common defense and security, as a general matter the NRC considers these activities to involve "non-Federal action" for the purposes of implementing its NEPA responsibilities. Generally, non-Federal actions are not subject to the requirements of NEPA.[8] Further, the NRC believes that these non-Federal site preparation activities would not generally be "federalized" if the NRC were to ultimately grant a combined license or construction permit. The grant of a construction permit or combined license by the NRC is not a legal condition precedent to these non-Federal, site preparation activities. While the NRC recognizes that there may be a "but for" causal relationship between certain non-Federal site preparation activities and the major Federal action of issuing a construction permit or combined license, such a "but for" causal relationship is not sufficient to require non-Federal, site preparation activities to be treated as Federal action for the purposes of NEPA.[9]

In addition, under the narrowed definition of construction in the final LWA rule, the NRC concludes that it does not have the ability or discretion to influence or control the non-Federal, site preparation activities to the extent that its influence or control would constitute practical or factual veto power over the non-Federal action. Further, the NRC does not believe that

---

[8] *Save the Bay, Inc. v. U.S. Army Corps of Engineers*, 610 F.2d 322, 326 (5th Cir. 1980).

[9] *See Landmark West! v. U.S. Postal Service,* 840 F.Supp. 994, 1006 (S.D.N.Y. 1993)(citing cases).

allowing the non-Federal, site preparation activities to be undertaken would restrict its consideration of alternative sites or the need to assess whether there is an "obviously superior" site. Specifically, while the NRC recognizes that narrowing the definition of construction may result in substantial changes to the physical properties of a site, many of the fundamental elements that enter into a determination of the existence of an "obviously superior" site would not be affected by the changes to those physical properties. For example, seismology would not be affected in any significant way by the non-Federal site preparation activities. However, while the effects caused by the non-Federal, site preparation activities would not be considered effects of the NRC's licensing action, the effects of the non-Federal activities would be considered during any subsequent "cumulative impacts" analysis. Specifically, the effects of the non-Federal activities will be considered in order to establish a baseline against which the incremental effect of the NRC's major Federal action (i.e. issuing a LWA, construction permit or combined license) would be measured. These incremental impacts may be additive or synergistic. To ensure that the NRC has sufficient information to perform the cumulative impacts analysis in a timely fashion, the final LWA rule includes a requirement, in § 51.45(c), for the environmental report submitted by an applicant for an ESP, construction permit, or combined license to include a description of impacts of the applicant's preconstruction activities at the proposed site (*i.e.*, the activities listed in paragraph (b)(1) through (8) in the definition of construction contained in § 51.4) that are necessary to support the construction and operation of the facility which is the subject of the LWA, construction permit, or combined license application, and an analysis of the cumulative impacts of the activities to be authorized by the LWA, construction permit, or combined license in light of the preconstruction impacts.

3. NRC's Phased Approval Approach is not Illegal Segmentation Under NEPA

The phased application and approval of LWAs does not raise the concerns underlying

the prohibition of segmentation under NEPA law. Generally, the NEPA segmentation problem arises when the environmental impacts of projects are evaluated in a piecemeal fashion and, as a result, the comprehensive environmental impacts of the entire Federal action are never considered or are only considered after the agency has committed itself to continuation of the project. Another associated segmentation problem arises when pieces of a Federal action are evaluated separately and, as a result, none of the individual pieces are considered "major federal actions" requiring an EIS.[10]

Neither of these segmentation concerns are presented by the approach embodied in the final LWA rule. First, under both LWA application options under the final LWA rule, the environmental effects associated with the LWA activities and the project as a whole (*i.e*. issuance of a construction permit or combined license) would be evaluated in an EIS. Therefore, the segmentation problem of considering a project in phases, thereby avoiding completion of an EIS, is not an issue. In addition, all of the environmental impacts associated with the construction and operation of the proposed plant, *including the impacts associated with the LWA activities*, would be considered together, through incorporation by reference, in the EIS prepared on the construction permit or combined license application. This comprehensive consideration of environmental impacts would take place *before* the NRC is committed to issuing any construction permit or combined license. The fact that the NRC will not have prejudged the ultimate decision of whether to grant a construction permit or a combined license by issuing the LWA, coupled with the requirement that the site redress plan be implemented in the event that the permit or license is ultimately not issued, also ensures that issuance of the LWA would not foreclose reasonable alternatives.

In addition, the proposed application and approval process is consistent with the NRC's

---

[10]Daniel R. Mandelker, *NEPA Law and Litigation*, 9-25 (2nd ed. 2004).

previously expressed position that NEPA does not, as a general matter, prohibit an agency from undertaking part of a project without a complete environmental analysis of the whole project.[11] The key factors used to support the Commission's position in *Clinch River* were: (1) that the site preparation activities in that case would not result in irreversible or irretrievable commitments to the remaining portions of the project and (2) the environmental impacts of the site preparation activities allowed in that case were substantially redressable.[12]

These considerations are reflected in the provisions of the final LWA rule. Specifically, § 50.10(f) states that any activity undertaken pursuant to a LWA are entirely at the risk of the applicant, that the issuance of the LWA has no bearing on whether the construction permit or combined license should be issued, and that the EIS associated with the underlying request will not consider the sunk costs associated with the LWA activities. In addition, § 50.10(d)(3) requires an applicant requesting a LWA to submit a plan for redress of the activities permitted by the LWA, which would to be implemented in the event that the LWA holder is ultimately not issued a construction permit or combined license. The redress plan would achieve this objective by addressing impacts resulting from LWA activities - e.g., pile driving, placement of permanent retaining walls in excavations, and construction of foundations for SSCs within the scope of the final LWA rule. Impacts associated with pre-LWA activities would not be addressed in the redress plan. Further, § 50.10(f) requires that the site redress plan be implemented within a reasonable time and that the redress of the site occur within eighteen (18) months of the Commission's final decision denying a construction permit or combined license.

It should be noted that while redress of site impacts may have the practical effect of

---

[11] *See Tennessee Valley Authority* (Clinch River Breeder Reactor Plant), 16 NRC 412, 424 (Aug. 17, 1982)(hereinafter *Clinch River*).

[12] *Id*.

mitigating some environmental impacts, the redress plan is not a substitute for a thorough evaluation of environmental impacts, or development of mitigation measures that may be necessary to provide relief from environmental impacts associated with the proposed LWA activities. The primary purpose of the site redress plan is to ensure that impacts associated with any LWA activities performed at the site will not prevent the site from being utilized for a permissible, non-nuclear alternative use. In this way, the redress plan helps to preserve the NRC's ability to objectively evaluate an application for a construction permit or combined license, despite the fact that LWA activities have been undertaken at the site.

In sum, the final LWA rule does not constitute unlawful segmentation in view of the provisions ensuring that the issuance of an LWA does not predispose or bias the NRC's decision on the underlying construction permit or combined license application.

D. Consideration of Activities as "Construction"

1. Driving of Piles

A significant change proposed in this supplemental proposed rule is the inclusion of the driving of piles for certain SSCs in the definition of construction that are not currently defined as construction in § 50.10(b). Although the driving of piles was not expressly included in the definition of "construction" contained in § 50.10(b) before the amendment of § 50.10(b)(1) in 1968, this activity was generally considered to be encompassed in the existing definition of construction at that time (*See* 33 FR 2381; January 31, 1968). The 1967 proposed rule suggested that the driving of piles be expressly excluded from the definition of construction because that activity "is closely related to, and may be appropriately included in" site preparation activities, which were not considered construction (32 FR 11278; August 3, 1967).[13]

[13]The proposed rule language was promulgated without modification in the final rule. 33 FR 2381.

The rationale for non-inclusion of pile driving (and site preparation activities generally) in the definition of construction seems to have been that these activities would have no effect on the NRC's ultimate decision to grant or deny a construction permit, and that these activities were undertaken entirely at the applicant's risk. *See* 32 FR 11278.

The NRC does not believe that the exclusion of pile driving from the definition of construction should hinge on these factors. The Commission believes that the driving of piles for certain SSCs (as discussed separately below) has a reasonable nexus to radiological health and safety, and/or common defense and security and, therefore, is properly considered "construction" as that term is used in § 185 of the AEA. In addition, the inclusion of these activities in the definition of construction (i.e. requiring an LWA before they are undertaken), coupled with the phased approval process suggested in this supplemental proposed rule, would allow for early resolution of the safety issues associated with these activities. Early resolution of safety issues is consistent with the general rationale underlying the licensing and permitting processes provided in 10 CFR Part 52. Accordingly, the final rule's definition of "construction" includes the driving of piles for certain SSCs.

2. Excavation

The supplemental proposed LWA rule would have included excavation within the definition of construction. The inclusion of excavation within the ambit of construction was based upon two factors: (i) excavation activities in the past have uncovered potentially adverse geologic, soil and hydrological conditions not anticipated by the construction permit applicant, which have resulted in design changes; and (ii) excavation activities in the past have caused unanticipated damage to surrounding native rock, which had to be corrected by the construction permit holder. The NRC believed that, in such situations, these considerations provided the

"reasonable nexus to radiological health and safety and/or common defense and security" necessary to include excavation in the definition of construction.

Upon consideration of stakeholder comments and further evaluation, the NRC has determined that it is not necessary to include excavation within the definition of construction, thus requiring some kind of NRC review and approval before undertaking excavation, in order to ensure public health and safety or common defense and security in the situations noted above. With respect to geologic, soils, and hydrological matters, prior NRC review and approval of excavation is not necessary to ensure that any adverse geologic, soil, or hydrological conditions that result in the need for design changes or some other form of mitigation are considered in NRC's review of the associated LWA, construction permit, or combined license application. In the situation where a potential applicant performs excavation activities prior to submitting its LWA, construction permit, or combined license application, 10 CFR 52.6(a) requires that information provided to the Commission by an applicant for a license be complete and accurate in all material respects. In the situation where an applicant performs excavation activities after submitting its LWA, construction permit, or combined license application, 10 CFR 52.6(b) requires the applicant to notify the Commission of information identified by the applicant as having, for the regulated activity, a significant implication for public health and safety or common defense and security. The staff believes that 10 CFR 52.6 provides an equally-acceptable way of ensuring public health and safety if excavation is eliminated from the definition of construction for those limited situations where excavation activities uncover potentially adverse geologic, soil and hydrological conditions not anticipated by the applicant, or excavation activities cause unanticipated damage to surrounding native rock. The LWA, construction permit, and combined license applicant, as applicable, would be responsible - as is currently the case - for adequately describing the

geologic, soil, and hydrologic conditions of the site. The difference with the approach in the final rule is that the approved site description would, in many cases, be based upon actual knowledge of the conditions as revealed or confirmed by the excavation activities, and not only on reasonable assumptions based upon extrapolations from test borings and other indirect information. Therefore, in many cases, the actual foundation and structural design to be approved at the construction permit or combined license stage would be based upon actual geologic, soils, and hydrological information as revealed or confirmed by the excavation.

For these reasons, the Commission concludes that existing regulatory mechanisms provide reasonable assurance of public health and safety and common defense and security without imposition of the regulatory mechanism of prior NRC review and approval of excavation activities. Accordingly, the final LWA rule does not define excavation as being within the ambit of construction.

3. Temporary Structures and Activities in the Excavation

Construction, under the final LWA rule, includes the placement/installation of backfill, concrete, or permanent retaining walls within an excavation. These activities involve the placement/installation of permanent parts of the overall facility, and therefore are properly considered "construction." By contrast, the placement/installation of temporary structures, systems and components which will not become part of the final facility, and therefore are removed, should not be treated as "construction," inasmuch as they have no ongoing nexus to radiological health and safety or common defense and security. Accordingly, activities in the excavation for SSCs within the scope of construction, such as the placement/installation of temporary drainage, erosion control, retaining walls, environmental mitigation, are not considered to be within the purview of "construction," so long as these temporary items are removed from the excavation prior to fuel load. The NRC chose fuel loading as a convenient,

well understood and clear event for delineating the time by which temporary SSCs must be removed from the excavation, in order for those temporary SSCs to be excluded from the definition of construction.

4. Construction SSCs

The supplemental proposed LWA rule revised the current definition of construction in 10 CFR 50.10(c)to include the on-site, in-place fabrication, erection, integration, or testing of any SSC required by the Commission's rules and regulations to be described in the site safety analysis report, preliminary safety analysis report, or final safety analysis report. This definition of construction included basically all SSCs of a facility, except for those SSCs that were specifically excluded by the proposed definition, e.g. potable water systems. However, as stated in the proposed rule, the Commission has determined that construction should include all of the activities that have a reasonable nexus to radiological health and safety, or common defense and security.

Upon consideration of stakeholder comments and further evaluation, the NRC has determined that there may be some SSCs of a facility which are required to be described in the FSAR, but which do not have a reasonable nexus to radiological health and safety, or the common defense and security. These SSCs are those which are required to be described in the FSAR in order to provide contextual information for understanding the overall design and operation of the facility, but which do not actually directly affect the radiological health and safety of the public or the common defense and security, and their indirect effect on such health and safety or common defense and security is so low as to be considered negligible. The determination of SSCs which do not have a reasonable nexus to radiological health and safety or common defense and security depends on the design of the facility. An example SSC is the administration building. However, an administration building that include the technical support

center would fall within the scope of SSCs covered by the definition of construction. In sum, the NRC has clarified and narrowed the scope of SSCs falling within the scope of construction to exclude those SSCs which no reasonable nexus to radiological health and safety or common defense and security.

For the final LWA rule, the scope of SSCs falling within the definition of construction was derived from the scope of SSCs that are included in the program for monitoring the effectiveness of maintenance at nuclear power plants, as defined in 10 CFR 50.65(b). This definition is well understood and there is good agreement on its implementation. The NRC has supplemented the definition in § 50.65(b) to include the following additional SSCs. The SSCs that are necessary to comply with 10 CFR 50.48 and criterion 3 of 10 CFR part 50, appendix A; and the on-site emergency facilities, *i.e.*, technical support and operations support centers, that are necessary to comply with 10 CFR 50.47 and 10 CFR part 50, appendix E were added because they have a reasonable nexus to radiological health and safety. The SSCs that are necessary to comply with 10 CFR Part 73 were added because they are required for the common defense and security.

E. Phased Application and Approval Process

Another significant change in this final rule is the modification of the procedure for obtaining LWA approval by implementing an optional phased application and approval process. Specifically, § 2.101(a)(9) allows applicants for construction permits and combined licenses the option of submitting either: (1) a complete application or (2) a two part application with part one including information required for the NRC to make a decision on the applicant's request to undertake LWA activities and part two containing all other information required to obtain the underlying license or permit. The final rule allows the NRC to consider the environmental impacts attributable to the requested LWA activities separately, either as part of a

comprehensive EIS in the case where a complete application is submitted, or in a separate EIS addressing only the LWA activities in the case of a two-part application. After consideration of the environmental impacts and the relevant safety-related issues associated with the LWA activities, the NRC may allow the applicant to undertake the LWA activities, even if the EIS on the underlying request (i.e. construction permit or combined license) is not complete.

The NRC believes that this phased application/approval process is more efficient, because it prevents unnecessary delay in nuclear power plant construction schedules, which would result if issuance of a LWA for safety-related activities were delayed until the final EIS and adjudicatory hearing on the entire underlying license application were complete. In addition, the final rule's application/approval process should result in the timely resolution of relevant safety and environmental issues at an earlier stage in the licensing process. As previously discussed, the NRC believes that these efficiencies can be gained without compromising the agency's NEPA responsibilities, as the phased approach presented in this supplemental proposed rule does not constitute illegal segmentation.

F. EIS Prepared, but Facility Construction was not Completed

The final LWA rule also addresses the situation where a request is made to perform LWA activities at a site for which an EIS has previously been prepared for the construction and operation of a nuclear power plant, and a construction permit has been issued, but construction of the plant was never completed. In this special situation, the final rule allows an applicant to reference the previous EIS in its environmental report, but requires that the applicant identify any new and significant information material to the matters required to be addressed in the proposed § 51.49(a). Further, in these special cases the final rule provides that the NRC will incorporate the previous EIS by reference when preparing its draft EIS on the LWA activities. The draft EIS on the LWA request is limited to the consideration of any new and significant

information dealing with the environmental impacts of construction, relevant to the activities to be carried out under the LWA. Further, in a hearing on issuance of a LWA at such sites, the presiding officer is limited to determining whether there is new and significant information pertaining to the environmental impacts of the construction activities encompassed by the previous EIS that are analogous to the activities to be conducted under the LWA. The presiding officer would evaluate new and significant information in determining whether a LWA should be issued as proposed by either the Director of New Reactors or the Director of Nuclear Reactor Regulation, as applicable.

This provision is designed to gain efficiency by using existing EISs to evaluate the environmental impacts of activities to be performed under a LWA. The Commission believes that this practice is appropriate because the referenced environmental review will come in the form of a FEIS prepared by NRC staff for sites on which permission to construct a nuclear power plant was ultimately granted by the Commission. The Commission understands that the activities proposed in a current LWA request may be different from the activities proposed and analyzed in the previous FEIS referenced by an applicant and relied upon by NRC staff. However, it is the Commission's intent that if such differences will likely result in significant changes to the environmental impacts caused by the LWA activities currently proposed by the applicant, then the differences should be considered "new and significant information" material to the environmental impacts that may reasonably be expected to result from the LWA activities and, therefore, should be addressed in the applicant's environmental report, analyzed by the staff in a supplement to the existing FEIS, and considered by the presiding officer.

Further, for the reasons previously discussed in section C.3, the Commission does not believe that authorizing LWA activities before completion of the FEIS on the combined license

or construction permit will have the effect of prejudging the license/permit, or foreclosing reasonable alternatives.

G. Commission Action on PRM-50-82

As discussed above, the Commission is treating the May 25, 2006 comments of NEI on the March 2006 proposed part 52 rule as a petition for rulemaking, which has been designated PRM-50-82. The petition was effectively granted when the supplemental proposed LWA rule was published (71 FR 61330; October 17, 2006). With the adoption of this final LWA rule, the Commission has completed action on PRM-50-82.

IV. Section-by-Section Analysis

Part 2

Section 2.101 Filing of application

Section 2.101 is revised by adding a new paragraph (a)(9), which provides that an applicant for a construction permit or combined license may submit a request for an LWA either as part of a complete application under paragraphs (a)(1) through (4), or in two parts under this paragraph (*i.e.*, a "phased LWA application"). If the LWA application is submitted as part of a complete construction permit or combined license application, the application must include the information required by § 50.10(d)(3).

If the application is a phased LWA application, the first part must contain the information required by § 50.10(d)(3) on the LWA, as well as the general information required of all production and utilization facility applicants under § 50.33(a) through (f). The second part of the application must contain the remaining information otherwise required to be filed in a complete application under § 2.101(a)(1) thorough (4). However, the applicant would have the further option of submitting part two in additional subparts in accordance with § 2.101(a-1). The

second part (or the first subpart of multiple subparts under § 2.101(a-1)) must be filed no later than eighteen (18) months after the filing of part one. Part two of the application (or the first subpart of any additional subparts submitted in accordance with § 2.101(a-1)) must be submitted no later that eighteen (18) months after submission of part one of the application.

An applicant for an ESP may *not* submit its LWA application in advance of the underlying ESP application, and therefore is not permitted to use the procedures of Subpart F.

Section 2.102 Administrative review of application.

Paragraph (a) of § 2.102 is revised by adding a LWA to the list of docketed applications for which the NRC staff must establish a schedule for review of the application.

Section 2.104 Notice of hearing.

A new paragraph (d) is added to delineate the contents of a notice of hearing where an application for an LWA is submitted under § 2.101(a)(9). Former paragraphs (d), (e) and (f) in the 2007 final part 52 rulemaking are redesignated, without any change, as paragraphs (e), (f) and (g), respectively. Finally, paragraph (m)(1) is revised to require the relevant NRC Staff Director to transmit a copy of the notice of hearing for an application for a LWA to state and local officials. In many cases, this is a formality, inasmuch as pre-application interactions between the NRC and the potential LWA applicant will result in informal contacts with those state and local officials.

Subpart F

The title of Subpart F is revised to reflect the broader scope of matters covered under this section, as described under § 2.600.

Section 2.600 Scope of subpart

The statement of scope in § 2.600 is revised to reflect the new set of procedures for phased LWA applications in proposed §§ 2.641 through 2.649.

Section 2.606 Partial decision on site suitability issues

Paragraph (a) of § 2.606, which provides that a LWA may not be issued without completion of the "full review" required by NEPA, is revised to remove the reference to a LWA, inasmuch as LWAs are now covered in §§ 2.641 through 2.649.

Section 2.641 Filing fees

Section 2.641, which is comparable to current § 2.602, provides that a phased LWA application must be accompanied by the applicable filing fees in § 50.30(e) and part 170 of this chapter.

Section 2.643 Acceptance and docketing of application for limited work authorization

Section 2.643, which is comparable to current § 2.603, describes the acceptance and docketing requirements for phased LWA applications, and the requirement for publication in the Federal Register of a notice of docketing. Paragraph (a) provides that each part of the application, when first received, will be treated as a tendered application and assessed for sufficiency. If the submitted part of the application is determined to be incomplete, the relevant Director will inform the applicant. The determination of completeness will generally be made in 30 days, barring unusual circumstances.

Under paragraph (b), the Director will docket part one of the application only if that part is "complete." The NRC would use the existing guidelines and practices for determining the completeness of applications under this section, as are used in determining completeness under § 2.101. Upon docketing, the Director will assign a docket number that will be used throughout the entire proceeding (including that part of the proceeding on part two of the application). Under paragraph (c), the Director would make the designated distributions to the Governor of the state in which the nuclear power plant will be located, and publish a notice of

docketing in the Federal Register. Often in practice, the notice of hearing required by the AEA is included in the notice of docketing, but as with existing applications, this will remain a matter of discretion by the NRC, who will determine what is the most efficient course of action in this regard.

Paragraph (d) provides that part two of the application will be docketed, as with part one, when it is determined to be complete. The Commission reiterates that "part two" could be submitted in several subparts, if the applicant chose to take advantage of the provisions of § 2.101(a-1), which provides for submission of applications in three parts.

Finally, under paragraph (e), the Director is required to publish a second notice of docketing in the Federal Register, in this case for part two of the application. As with the notice of docketing for part one, the notice of docketing for part two may also include a notice of hearing on the second part of the application.

The NRC notes that nothing in § 2.101(a)(9), or any part of subpart F, requires that the hearing on part one of the application be completed and an initial decision issued by the presiding officer, before part two of the application is filed.

Section 2.645 Notice of hearing

Section 2.645, which is comparable to current § 2.604, sets forth the content of the notice of hearing for each of the two parts of the proceeding. Paragraph (a) provides that the notice of hearing for part one specify that the hearing will relate only to consideration of the matters related to § 50.33(a) through (f), and the LWA issues under review. Although not explicitly stated in this paragraph, interested persons who seek to intervene in the hearing on part one of the application must file a petition to intervene in accordance with the notice of hearing, and § 2.309.

Under paragraph (b), a supplementary notice of hearing will be published in the Federal Register when part two of the application is docketed. This provides a second opportunity for interested persons to file petitions to intervene with respect to the matters relevant to part two of the application. These petitions must be filed within the time period specified in the notice of hearing, and must meet the applicable requirements of subpart C of part 2, including the contention requirements in § 2.309.

Paragraph (c)of the proposed rule differs somewhat from § 2.604, in that the Commission proposes not to allow a party admitted in part one of the proceeding, who did not withdraw or was not otherwise dismissed, to automatically continue as a party in phase two of the proceeding. Instead, each party who wishes to participate in the second phase must submit a second petition to intervene in accordance with § 2.309, but the petition need not address the interest and standing requirements in § 2.309(d). The petition must be filed within the time period provided by the supplementary notice of hearing published in the Federal Register for part two of the application.

As noted in the section-by-section analysis for § 2.643, nothing in § 2.101(a)(9) or subpart F requires that the hearing on part one of the application be completed and an initial decision issued by the presiding officer, before part two of the application is filed. Thus, there may be simultaneous hearings on parts one and two of the application. However, as reflected in paragraph (e), the Commission's intent is that the membership of the Atomic Safety and Licensing Board designated for hearings under part one be the same as for the hearings under part two, to the extent practical and consistent with timely completion of each hearing.

Section 2.647 [Reserved]

This section is reserved for future use by the Commission.

Section 2.649 Partial decisions on limited work authorization

Section 2.649, which is comparable to § 2.606, denotes the provisions in subparts C and G relative to issues such as oral arguments, immediate effectiveness of the presiding officer's initial decision, and petitions for Commission review, that apply to partial initial decisions on a LWA rendered in accordance with this subpart. This section also states that the LWA may not be issued without completion of the environmental review required for LWAs under subpart A of part 51. Finally, this section provides that the time periods for the Commission to exercise its review and *sua sponte* authority are the same time periods provided for in part 2 with respect to a final decision on issuance of a construction permit or combined license.

Part 50

Section 50.10 License required; limited work authorization

Paragraph (a)

Paragraph (a), which is derived from former § 50.10(b), sets forth a new definition of "construction" for purposes of this section (the same definition is also used in part 51, *see* 10 CFR 51.4). The definition of construction has been substantially modified from the definition in former § 50.10(b) in both structure and content, and supersedes the definition of construction in former § 50.10(c). The new definition is divided into two parts, with the first specifying the activities deemed to constitute "construction," and the second part specifying activities which are excluded from the definition.

Under the new definition, excavation is excluded from construction. Excavation includes the removal of any soil, rock, gravel or other material below the final ground elevation to the final parent material. Thus, all these excavation activities may be conducted without an LWA, construction permit, or combined license. However, the placement of permanent, non-structural dewatering materials, mudmats and/or engineered backfill which are placed in advance of the

placement of the foundation and associated permanent retaining walls for SSCs within the scope fo the definition of construction are not excavation activities, but instead fall within the scope of construction. Any person or entity that conducts excavation, however, should be aware that the NRC expects any subsequent LWA, construction permit, or combined license application to accurately document and address the conditions exposed by excavation, to ensure that the NRC will have an adequate basis for evaluating the relevant portions of the LWA, construction permit, or combined license application.

Whereas former § 50.10(b) allowed the driving of piles for the facility without NRC approval, the final LWA rule does not permit driving of piles for SSCs described in the definition of construction, unless NRC permission is obtained in the form of a LWA, construction permit, or combined license. The "driving of piles" not related to ensuring the structural stability or integrity of any SSC within the scope of the definition of construction does not fall within the definition of construction in this paragraph, and therefore may be accomplished without an LWA, construction permit, or combined license. For example, piles driven to support the erection of a bridge for a temporary or permanent access road would not be considered "construction" under this section and may be performed without a LWA, construction permit, or combined license.

The SSCs which are within the scope of the definition of construction are set forth in paragraph (a)(1), and are those facility SSCs which have a reasonable nexus to radiological health and safety or common defense and security. This definition was derived from the scope of SSCs that are included in the program for monitoring the effectiveness of maintenance at nuclear power plants under 10 CFR 50.65, and supplemented with SSCs that are needed for fire protection, security, and on-site emergency facilities. There may be some SSCs of a facility which do not have a reasonable nexus to radiological health and safety or common defense

and security. The determination of the SSCs that do not have a reasonable nexus to radiological health and safety or common defense and security will be dependent upon the design of the facility. An example SSC that would not be within the scope of construction is a cooling tower that is used to cool the turbine condenser. However, a cooling system that is used for both safety and non-safety functions would fall within the definition of construction.

Construction, as defined in this paragraph includes installation of the foundation, including soil compaction; the installation of permanent drainage systems and geofabric; the placement of backfill, concrete (*e.g.*, "mudmats") or other materials which will not be removed prior to placement of the foundation of a structure; the placement and compaction of a subbase; the installation of reinforcing bars to be incorporated into the foundation of the structure; the erection of concrete forms for the foundations that will remain in-place permanently (even if non-structural); and placement of concrete or other material constituting the foundation of any SSC within scope of the definition of construction. Foundation installation activities will require a LWA, construction permit, or combined license. The term, "permanent" in this context, includes anything that will exist in its final, in-place plant location after fuel load. By contrast, the term, "temporary," means anything that will be removed from the excavation prior to fuel load.

The term, "on-site, in place, fabrication, erection, integration or testing " is intended to describe the historical process of constructing a nuclear power plant in its final, on-site plant location, where components or modules are integrated into the final, in-plant location. The definition is intended to exclude persons from having to obtain a LWA, construction permit, or combined license, in order to fabricate, assemble and test components and modules in a shop building, warehouse, or laydown area located on-site.

Construction also includes the "on-site, in-place," fabrication, erection, integration or

testing activities for any in-scope SSC. The use of the term, “on-site, in place,” is intended to allow such SSCs, including any “modules” and subassemblies, to be fabricated, assembled and tested in a shop building, warehouse, or laydown area located on-site without a LWA, construction permit, or combined license. However, the installation or integration of that SSC into its final plant location would require either a construction permit or combined license. The NRC notes that under §50.10(a)(2)(ix), construction does not include manufacturing of a nuclear power reactor under subpart F of part 52, even if the manufacturing is accomplished on-site, so long as the manufacturing is not done in-place, at the final (permanent) plant location on the site.

Paragraph (b)

This paragraph, which is derived from former § 50.10(a), prohibits any person within the United States from transferring or receiving in interstate commerce, manufacturing, producing, transferring, acquiring, possessing, or using any production or utilization facility except as authorized by a license issued by the Commission, or as provided in § 50.11.

Paragraph (c)

This paragraph, which is substantially modified from the former § 50.10(b), prohibits any person from beginning the “construction” of a production or utilization facility on a site on which the facility is to be operated until that person has been issued a construction permit, a combined license under part 52, or a LWA under paragraph (d) of this section.

Paragraph (d)

This paragraph, which is substantially modified from the former § 50.10(e), addresses the need for, nature and contents of an application for a LWA. Paragraph (c)(1) allows the Commission to issue an LWA in advance of a construction permit or combined license, authorizing the holder to perform certain delineated construction requirements.

Paragraph (c)(2) provides that an LWA application may be submitted as:

- Part of a complete application for a construction permit or combined license under § 2.101(a)(1) through (4).
- Part one of a phased application under § 2.101(a)(9).
- Part of a complete application for an ESP under § 2.101(a)(1) through (4).
- An amendment to an already-issued ESP

Paragraph (d)(3) establishes the requirements for the content of an LWA application. The application must include a safety analysis report, an environmental report, and a redress plan. The safety analysis report, which may be a stand-alone document or incorporated into the construction permit or combined license application's preliminary or FSAR, as applicable, must describe the LWA activities that the applicant seeks to perform, provide the final design for the structures to be constructed under the LWA and a safety analysis for those portions of the structure, and provide a safety analysis of the design demonstrating that the activities will be conducted in accordance with applicable Commission safety requirements.

The environmental report must meet the requirements of 10 CFR 51.49, which is discussed in more detail in the section by section analysis for that provision.

The redress plan must describe the activities that would be implemented by the LWA holder, should construction be terminated by the holder, the LWA is revoked by the NRC, or upon effectiveness of the Commission's final decision denying the associated operating license application or the underlying combined license application, as applicable. The primary purpose of the redress plan is to address the placement of piles and ensure removal of the foundation, which are the only activities which may be accomplished under an LWA. Redress of site impacts resulting from pre-LWA activities will not be required under the redress plan. In addition, while redress of LWA impacts may have the practical effect of mitigating some

environmental impacts, the redress plan is not a substitute for a thorough evaluation of environmental impacts, or development of mitigation measures that may be necessary to provide relief from environmental impacts associated with the proposed LWA activities.

Paragraph (d)

This paragraph generally addresses the requirements associated with issuance of a LWA. Paragraph (d)(1) sets forth the requirements for the appropriate Director to issue an LWA under this section. The Director may issue an LWA only after making the appropriate findings on: (i) necessary technical qualifications, and the matter of foreign ownership or control relevant to the information required by § 50.33(a) through (f), as mandated by sections 103.d. and 182.a. of the AEA; (ii) making the necessary findings on public health and safety and common defense and security with respect to the activities to be carried out under the LWA; (iii) NRC staff issuance of a final EIS on the LWA in accordance with the applicable requirements of part 51; and (iv) the presiding officer finding on the environmental issues relevant to the LWA in accordance with the applicable requirements of part 51, and a finding on the safety issues relevant to the LWA.

Paragraph (d)(2) requires that the LWA specify the activities that the holder is authorized to perform, consistent with the LWA application and as modified based upon the NRC's review. In addition, each LWA will be issued with a condition requiring implementation of the redress plan if the LWA holder terminates construction, the LWA is revoked, or upon effectiveness of the Commission's final decision denying the associated operating license application or the underlying combined license application, as applicable. As discussed in the analysis of paragraph (e), this condition survives the merging of the LWA into the underlying construction permit, ESP, or combined license.

Paragraph (e)

This paragraph, which is also derived from former § 50.10(e), addresses the legal effect of an issued LWA. Paragraph (e)(1) provides that any activities undertaken under a LWA shall be entirely at the risk of the applicant and, with exception of the matters determined under paragraph (d)(3)(ii) and (iii), the issuance of the LWA shall have no bearing on the issuance of a construction permit or combined license with respect to the requirements of the AEA, and rules, regulations, or orders promulgated pursuant thereto. Thus, this paragraph states that the EIS for a construction permit or combined license application for which a LWA was previously issued will not address, and the presiding officer will not consider, the sunk costs of the holder of the LWA in determining the proposed action (*i.e.*, issuance of the construction permit or combined license).

Paragraph (f)

This new paragraph requires the LWA holder to begin implementation of the redress plan in a reasonable time, and complete the redress no later than eighteen (18) months after termination of construction by the holder, revocation of the LWA, or upon effectiveness of the Commission's final decision denying the associated operating license application, or the underlying construction permit or the combined license application, as applicable.

Part 51

Section 51.4 Definitions.

Section 51.4 is revised by adding a new definition of "construction." This makes applicable throughout part 51 the definition of construction in proposed § 50.10(a), and has the effect of excluding from an EIS for any ESP, construction permit, combined license, or an LWA, any discussion, evaluation or consideration of the environmental impacts or benefits associated with non-construction activities as set forth in § 50.10(a). This also removes the need for the

NRC decision maker, including a presiding officer, to make a NEPA finding with respect to the environmental impacts or benefits associated with those non-construction activities.

Section 51.17 Information collection requirements; OMB approval

Paragraph (b) of § 51.17 of the 2007 final part 52 rule is further revised by adding a reference to a new § 51.49, which requires submission of an environmental report by LWA applicants. While § 51.49 contains a new information collection requirement, this will not result in a net increase in the burden placed on LWA applicants because the information required under this new section was formerly required to be submitted by such applicants as part of a complete environmental report for the underlying ESP, construction permit or combined license under § 51.50. The primary effect of this final rule would be to allow delayed submission of most of the environmental information to the time that the underlying construction permit or combined license application and environmental report is submitted. Thus, the environmental report submitted under § 51.49 at the LWA stage would, in most cases, be limited in scope to address environmental impacts of LWA activities only.

Section 51.20 Criteria for and identification of licensing and regulatory actions requiring environmental impact statements

Section 51.20 of the 2007 final part 52 rule is further revised by adding a new paragraph (b)(6), explicitly stating that issuance of a LWA under § 50.10 is one of the actions requiring the preparation of an EIS.

Section 51.45 Environmental report.

Paragraph (c)of the 2007 final part 52 rule is further revised by adding a new requirement requiring environmental reports for ESP, construction permits, and combined licenses to include a description of impacts of the applicant's preconstruction activities at the proposed site (*i.e.*, the activities listed in paragraph (b)(1) through (8) in the definition of

construction contained in § 51.4) that are necessary to support the construction and operation of the facility which is the subject of the LWA, construction permit, or combined license application, and an analysis of the cumulative impacts of the activities to be authorized by the LWA, construction permit, or combined license in light of the preconstruction impacts.

Section 51.49 Environmental report-limited work authorization

Section 51.49 is a new section that the NRC is adding to part 51. This new section requires the applicant for an LWA to submit an environmental report containing certain specified information. Both paragraph (a), which applies to an applicant requesting a LWA as part of a complete application, and paragraph (b), which applies to an applicant submitting its application in two parts under § 2.101(a)(9), requires the applicant to submit an environmental report which describes: (i) the activities proposed to be conducted under the LWA; (ii) the need to conduct those LWA activities in advance of the main action; (iii) a description of the environmental impacts that may reasonably be expected to result from the conduct of the requested LWA activities; (iv) the mitigation measures to be implemented in order to achieve the level of environmental impacts described; and (v) a discussion of the reasons for rejecting other mitigation measures that could be utilized to further reduce environmental impacts. Regardless of whether an LWA applicant submits an application in two parts, or seeks early consideration and decision on site suitability and environmental siting matters, the environmental report for the LWA should address any impacts attributable to activities for which NRC approval is not required, *i.e*., the activities excluded from the definition of construction in 50.12(a).

Paragraph (c)describes the contents of the environmental report when the request for the LWA is submitted as part of an ESP application. There is no opportunity for an early site permit holder to submit its application in two parts, with the LWA information submitted in

advance of the main early site permit application.

Paragraph (d) describes the contents of the environmental report when the LWA request is submitted by an ESP holder. In this situation, the environmental report need only contain information on the LWA activities and their environmental impact, and would not include the general information required by § 51.50(b).

Paragraph (e) establishes a limited exception from the information required by paragraphs (a) and (b) to be submitted in an environmental report. For those situations where the LWA is to be conducted at a site: (i) for which the Commission previously prepared an EIS for the construction and operation of a nuclear power plant, (ii) the construction permit was issued, but (iii) the construction of the plant was never completed, then the applicant's environmental report may incorporate by reference the earlier EIS. However, in the event of such referencing, the environmental report must identify whether there is new and significant information relative to the matters required to be addressed in the environmental report with respect to the environmental impacts of the requested LWA activities, as specified in paragraphs (a) or (b). In addition, analogous to the requirement in § 51.50(c)(1)(iv) of the 2007 final part 52 rule, the environmental report must include a description of the process for identifying new and significant. The applicant should have a reasonable process for identifying new and significant information that may have a bearing on the earlier NRC conclusion, and should document the results of this process in an auditable form. Documentation related to the applicant's search for new information and its determination about the significance of that new information should be maintained in an auditable form by the applicant. The NRC staff will verify that the applicant's process for identifying new and significant information is effective.

Paragraph (f) requires, for any application containing a LWA request, that the environmental report must separately evaluate the environmental impacts and proposed

alternatives to the activities proposed to be conducted under the LWA. However, at the option of the applicant, the environmental report may also include the information required by § 51.50 to be submitted in the environmental report for the construction permit or combined license application. In those situations, the "integrated" environmental report would separately address the total impacts of constructing (including the LWA activities) and operating the proposed facility. This will allow the NRC to prepare in parallel the EIS for the LWA activities and a supplemental EIS for the underlying construction permit or operating license, or a complete EIS at the LWA stage.

Section 51.71 Draft environmental impact statement-contents

Section 51.71 of the 2007 final part 52 rule is further revised by redesignating the current paragraph (e) as paragraph (f), and a new paragraph (e) is added to re-emphasize that the draft EIS for the underlying construction permit or combined license will not address or consider the sunk costs associated with the LWA. Paragraph (e) is consistent with §§ 50.10(f), 51.71(e), and 51.103(a)(6).

Section 51.76 Draft environmental impact statement-limited work authorization

Section 51.76 is a new section governing the NRC's preparation of a draft EIS to support a decision on a LWA. The internal organization of § 51.76 parallels that of § 51.49. Paragraph (a) addresses the EIS to be prepared in connection with a complete application for a construction permit or combined license. This section allows the NRC to prepare at the time of the LWA application either an EIS limited to LWA activities (to be followed by a supplemental EIS on the underlying construction permit or combined license), or a single, complete EIS for the construction permit or combined license. The NRC notes that this paragraph addresses the situation where the application for the construction permit or combined license is complete and includes the request and necessary information for a LWA. Paragraph (b), by contrast,

addresses the situation where the LWA request is submitted in advance of the complete application for the construction permit or combined license.

Paragraph (b) applies to an EIS prepared in support of a phased LWA under § 2.101(a)(9). In this situation, if the environmental report submitted in part one is limited to the LWA activities, then the NRC will prepare an EIS limited to the LWA activities. Once part two of the application is received, which includes the environmental report required by § 51.50, the NRC will prepare a supplemental EIS for the construction permit or combined license in accordance with § 51.71, and § 51.75(a) or (c), as applicable. By contrast, if the environmental report submitted in part one is a complete environmental report required by § 51.50, then the NRC will prepare at the LWA phase a single, complete EIS for the construction permit or combined license in accordance with § 51.71, and § 51.75(a) or (c), as applicable.

Paragraph (c)applies to an EIS prepared for issuance of an early site permit which will also include a LWA. The EIS will address the scope of matters required to be addressed under § 51.75(d), which depends upon the matters which the applicant chooses to address in its environmental report, as well as the environmental impacts of conducting the LWA activities requested.

Paragraph (d) addresses the situation where an ESP holder (as opposed to an applicant) requests a LWA. In this situation, siting and many of the environmental issues have been addressed and resolved in the EIS supporting issuance of the ESP. This paragraph provides for the NRC to prepare a supplemental EIS, addressing the impacts of conducting LWA activities (including any new and significant information that would change the NRC's prior conclusion with respect to those construction activities which would actually be conducted earlier under the LWA instead of a referencing construction permit or combined license), and the adequacy of the proposed redress plan. Other than this updating, the supplemental EIS will

not present any updated information on the matters resolved in the ESP EIS.

Paragraph (e) addresses the nature of the EIS prepared for a LWA requested for a site that was approved by the NRC and a construction permit issued, but construction of the nuclear power plant was not completed. In such cases, the EIS will incorporate by reference the earlier EIS, address whether there is any significant new information with respect to the environmental impacts of construction relevant to the scope of activities to be performed under the LWA, and evaluate any such information in accordance with § 51.71 in determining if the LWA should be issued, or issued with appropriate conditions.

Paragraph (f) indicates that in all cases, the EIS must separately address the impacts of and proposed alternatives to the activities to be conducted under the LWA, in order to ensure that there are specific environmental findings addressing LWA activities for purposes of transparency of the final NRC NEPA findings and decision on the LWA request. However, this paragraph also makes clear that if the applicant's environmental report contains the comprehensive information necessary to address construction and operation impacts for the proposed facility, as is allowed under 10 CFR 2.101, then the EIS must similarly address those impacts, including the costs and benefits of the underlying proposed action.

Section 51.103 Record of decision-general

Section 51.103 is revised by adding a new paragraph (a)(6), which specifies that in a construction permit or combined license proceeding where a LWA was previously issued, the Commission's decision on the construction permit or combined license application will not address or consider the sunk costs associated with the LWA. This provision, which is consistent with §§ 50.10(f) and 51.71(e), is intended to ensure that the Commission's decision whether to issue the construction permit or combined license is not biased in favor of issuance in evaluating the environmental impacts and benefits of the construction permit or combined

license, and thereby avoid NEPA segmentation claims.

Section 51.104 NRC proceedings using public hearings, consideration of environmental impact statement

Section 51.104 is revised by adding a new paragraph (c)specifying that in a LWA proceeding, a party may only take a position and offer evidence on the aspects of the proposed action within the scope of NEPA and this subpart which are within the scope of that party's admitted contention. This paragraph also specifies that, in the LWA phase of the proceeding, the presiding officer will decide the matters in controversy among the parties, *viz*., the contentions related to the adequacy of the EIS prepared for the LWA. The scope of the EIS will, in turn, depend upon whether the LWA applicant chooses to submit an environmental report limited to LWA impacts, or whether the LWA applicant chooses to submit a more comprehensive environmental report as permitted under 10 CFR 2.101 *and* seeks an early decision on siting matters under Subpart F of 10 CFR part 2.

Section 51.105 Public hearings in proceedings for issuance of construction permits or early site permits; limited work authorizations

Section 51.105 of the 2007 final part 52 rule is revised in two respects. The title of this section is revised to add a reference to LWAs, reflecting the expanded scope of matters addressed in this section. Second, a new paragraph (c)is added to specify the determinations which must be made by the presiding officer in a LWA hearing associated with either a construction permit or early site permit. Under this new paragraph, the presiding officer would:

- Determine whether the requirements of section 102(2)(A), (c)and (E) of NEPA have been met with respect to the activities to be conducted under the LWA.
- Independently consider the balance among conflicting factors with respect to the LWA.

- determine whether the applicant's proposed redress plan is reasonably expected, from a technical standpoint, to redress activities conducted under the LWA, should LWA activities be terminated by the holder or the LWA be revoked by the NRC, or upon effectiveness of the Commission's final decision denying the associated construction permit or combined license application, as applicable.

- In an uncontested proceeding, determine whether the NRC's NEPA review has been adequate.

- In a contested proceeding, determine whether in accordance with the regulations in part 51, the LWA should be issued.

Section 51.107 Public hearings in proceedings for issuance of combined licenses; limited work authorizations

Section 51.107 of the 2007 final part 52 rule is further revised in two respects. The title of this section is revised to add a reference to LWAs, reflecting the expanded scope of matters addressed in this section. Finally, a new paragraph (f) is also added to specify the determinations which must be made by the presiding officer in a LWA hearing associated with a combined license. This paragraph is essentially the same as § 51.105(c).

Part 52

§ 52.1 Definitions

A new definition of LWA is added to § 52.1 of the 2007 final part 52 rule, which would be defined as the authorization provided under § 50.10(d). The NRC notes that an applicant of an ESP who requests authority to perform the activities permitted by § 50.10(d), would not, if the request were granted, receive a LWA separate from its early site permit. Instead, the ESP itself would authorize the activities permitted by § 50.10(d). This regulatory approach is consistent

with the current language of § 52.17(c)and 52.25(b). However once an ESP is issued, the holder could apply for permission to conduct LWA activities under § 52.27 in the form of an amendment to the ESP.

§ 52.17 Contents of applications; technical information

Paragraph (c)of § 52.17 of the 2007 final part 52 rule is further revised by removing the proposed language with respect to LWAs, and instead specifying that if the applicant wishes to obtain a LWA, then the information required by § 50.10(d)(3) must be included in the site safety analysis report. This paragraph also makes clear that for early site applications which were submitted prior to the effective date of the final LWA rule, the new requirements in § 52.17(c)do not apply and their applications need only meet the requirements in former § 52.17(c).

§ 52.24 Issuance of early site permit

Paragraph (c)of this section is revised to state that an ESP must specify the activities under § 50.10 that the permit holder is authorized to perform.

§ 52.27 Limited work authorization after issuance of early site permit.

Section 52.27 of the 2007 final part 52 rule is redesignated as § 52.26, and a new § 52.27 is added. The new § 52.27 allows an early site permit holder to request a LWA in accordance with § 50.10 - a matter which was not clear under the former provisions of part 52.

§ 52.80 Content of applications; additional technical information

Paragraph (c)of § 52.80 of the 2007 final part 52 rule is further revised to require that a combined license application containing a request for a LWA must contain the information otherwise required by 10 CFR 50.10.

§ 52.91 Authorization to conduct site activities

Section 52.91 of the 2007 final part 52 rule is further revised to reflect the elimination of “LWA-1" and “LWA-2” in former § 50.10(e). Under paragraph (a) of § 52.91, an applicant for a

combined license may undertake LWA activities only if it: (i) references an ESP which includes LWA authority; or (ii) the combined license applicant applies for and is granted LWA authority under § 50.10. Paragraph (b) requires the combined license applicant who begins construction under an LWA, to implement the LWA redress plan if the underlying combined license application is withdrawn by the applicant or denied by the NRC.

V. 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 PDR is located at 11555 Rockville Pike, Rockville, Maryland.

Rulemaking Web site (Web). The NRC's interactive rulemaking Web site is located at http://ruleforum.llnl.gov. These documents may be viewed and downloaded electronically via this Web site.

http://www.nrc.gov/reading-rm/contact-pdr.html

The NRC staff contact. Geary Mizuno, Mail Stop O-15D21, Washington, DC 20555; telephone number 301-415-1639.

Document	PDR	Web	ADAMS No.	NRC Staff
2006/05/25-Comment (4) submitted by Nuclear Energy Institute, Adrian P. Heymer on Proposed Rules	X	X	ML061510471	
SECY-98-282,Part 52 Rulemaking Plan.....			ML032801416	
Staff Requirements – SECY-98-282 – Part 52 Rulemaking Plan.....			ML032801439	
Draft Regulatory Analysis.....	X	X	ML062750434	X
Final Regulatory Analysis.....	X	X	ML070160252	X

VI. Plain Language.

The Presidential memorandum dated June 1, 1998, entitled "Plain Language in Government Writing" directed that the Government's writing be in plain language. This memorandum was published on June 10, 1998 (63 FR 31883). In complying with this directive, the NRC made editorial changes to improve the organization and readability of the existing language of the paragraphs being revised. These types of changes are not discussed further in this document.

VII. 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 "NRC" regulations. The NRC program elements in this category are those that relate directly to areas of regulation reserved to the NRC by the AEA or provisions of Title 10 of the Code of Federal Regulations, and 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.

VIII. Voluntary Consensus Standards (Public Law 104-113).

The National Technology Transfer and Advancement Act of 1995, Pub. L. 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. In this rule, the NRC is: (i) redefining the scope of activities constituting "construction" for which NRC approval is required; (ii) redefining the scope of activities constituting construction which the NRC may approve in a LWA granted in advance

of the issuance of a construction permit or combined license, or which may be conducted by a holder of an ESP; and (iii) revising the NRC's procedures for granting LWAs. This rulemaking does not establish standards or substantive requirements with which all applicants and licensees must comply. For the reasons, the Commission concludes that this action does not constitute the establishment that contains generally applicable standards.

IX. Environmental Impact – Categorical Exclusion.

The NRC has determined that the changes made in this rule fall within the types of actions described in categorical exclusions described in 10 CFR 51.22(c)(1) and (c)(3). Specifically, the conforming changes made to 10 CFR Part 2 qualify for the categorical exclusion described in § 51.22(c)(1). The changes to Parts 50, 51 and 52 that describe procedures for filing and reviewing applications for LWAs qualify for the categorical exclusion described in § 51.22(c)(3)(i). All other changes qualify for the categorical exclusion described in § 51.22(c)(3)(iv).[14] Therefore, neither an EIS nor an EA has been prepared for this rule.

X. Paperwork Reduction Act Statement.

This proposed rule decreases the burden on applicants who submit applications for LWAs. This rule reduces burden by eliminating the requirement to obtain NRC permission to engage in site preparation activities that do not have a direct impact on radiological health and

---

[14]Although the industry's request came in the form of a comment on the proposed Part 52 rule (71 FR 12782; March 13, 2006), the comment letter stated; "To the extent the NRC determines that these LWA issues cannot be addressed in the current rulemaking, we ask that the Commission initiate an expedited rulemaking." The NRC has determined that the changes suggested by the industry in Comment 4 (docketed on May 30, 2006, 4:50PM) could not be incorporated into the final Part 52 rule without re-noticing. Therefore, the Commission has decided to treat the comments submitted by the industry as a petition for expedited rulemaking and published a supplemental proposed rule for public comment. The NRC determined that Comment 4 meets the sufficiency requirements described in 10 CFR 2.802(c), and that it was appropriate to seek public comment on the petition by publishing the supplemental proposed rule developed in response to the petition, as allowed under 10 CFR 2.802(e).

safety or common defense and security at sites where new nuclear power plants are to be constructed. Specifically, the burden associated with the preparation of applications for permission to engage in these activities, as well as the burden of responding to requests for additional information associated with these applications, are eliminated. The burden reduction for information collections contained in 10 CFR Part 52 (OMB approval number 3150-0151), is estimated to average 50 hours per application.

This rule also contains a new information collection requirement in § 51.49, however this new information collection is not expected to result in a net increase in the burden for LWA applicants because the information to be submitted under this new requirement was formerly submitted by such applicants as part of a complete environmental report for the underlying construction permit or combined license under § 51.50, or for the ESP application (or amendment) under Part 52. The primary effect of the new information collection requirement in § 51.49 is to delay submission of most of the environmental information to the time that the underlying construction permit or combined license application and environmental report is submitted. Thus, changes in burden for information collections contained in 10 CFR Part 51 (OMB approval number 3150-0021) are expected to be minimal.

Because the burden for this information collection is insignificant, Office of Management and Budget (OMB) clearance is not required. Existing requirements were approved by the Office of Management and Budget, approval numbers 3150-0044, 3150-0014, 3150-0146, 3150-0018, 3150-0132, 3150-0002, 3150-0055, 3150-0047, and 3150-0039.

Send comments on any aspect of this information collections, including suggestions for reducing the burden to the records and FOIA/Privacy Services Branch, T-5 F5, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by Internet electronic mail to INFOCOLLECTS@NRC.GOV; and to the Desk Officer, Office of Information and Regulatory

Affairs, NEOB-10202 (3150-0021, 3150-0151) with revised information collection requirements), Office of Management and Budget, Washington, DC 20503.

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.

XI. Regulatory Analysis.

The NRC has prepared a regulatory analysis for this rule. The analysis examines the costs and benefits of the alternatives considered by the Commission. Availability of the regulatory analysis is provided in Section V.

XII. Regulatory Flexibility Act Certification.

In accordance with the Regulatory Flexibility Act (5 U.S.C. 605(b)), the Commission certifies that this rule will not have a significant economic impact on a substantial number of small entities. This rule affects only the licensing of nuclear power plants. The companies that will apply for an approval, certification, permit, site report, or license in accordance with the regulations in this rule 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).

XIII. Backfit Analysis.

The NRC has determined that the backfit rule does not require the NRC to prepare a backfit analysis for this rulemaking, because the rulemaking does not contain any provisions that would impose backfitting as defined in the backfit rule, 10 CFR 50.109.

There are no current holders of ESPs, construction permits, or combined licenses for nuclear power plants that would be protected by the backfitting restrictions in § 50.109. To the extent that the rulemaking revises the requirements for future ESPs, construction permits, or combined licenses for nuclear power plants, these revisions do not constitute backfits because

they are prospective in nature and the backfit rule was not intended to apply to every NRC action which substantially changes the expectations of future applicants.

XIV. Congressional Review Act

Under 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 OMB.

List of Subjects

10 CFR Part 2

Administrative practice and procedure, Antitrust, Byproduct material, Classified information, Environmental protection, Nuclear materials, Nuclear power plants and reactors, Penalties, Sex discrimination, Source material, Special nuclear material, Waste treatment and disposal.

10 CFR Part 50

Antitrust, Classified information, Criminal penalties, Fire protection, Intergovernmental relations, Nuclear power plants and reactors, Radiation protection, Reactor siting criteria, Reporting and recordkeeping requirements.

10 CF Part 51

Administrative practice and procedure, Environmental Impact Statement, Nuclear materials, Nuclear power plants and reactors, Reporting and recordkeeping requirements.

10 CFR Part 52

Administrative practice and procedure, Antitrust, Backfitting, Combined license, Early Site Permit, Emergency planning, Fees, Inspection, LWA, Nuclear power plants and reactors, Probabilistic risk assessment, Prototype, Reactor siting criteria, Redress of site, Reporting and recordkeeping requirements, Standard design, Standard design certification.

For the reasons set forth 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 adopting the following amendments to 10 CFR Parts 2, 50, 51 and 52.

PART 2 - RULES OF PRACTICE FOR DOMESTIC LICENSING PROCEEDINGS AND ISSUANCE OF ORDERS

1. The authority citation for part 2 continues to read as follows:

AUTHORITY: Secs.161, 181, 68 Stat. 948, 953, as amended (42 U.S.C. 2201, 2231); sec. 191, as amended, Pub. L. 87-615, 76 Stat. 409 (42 U.S.C. 2241); sec. 201, 88 Stat. 1242, as amended (42 U.S.C. 5841); 5 U.S.C. 552; sec. 1704, 112 Stat. 2750 (44 U.S.C. 3504 note). Section 2.101 also issued under secs. 53, 62, 63, 81, 103, 104, 105, 68 Stat. 930, 932, 933, 935, 936, 937, 938, as amended (42 U.S.C. 2073, 2092, 2093, 2111, 2133, 2134, 2135); sec. 114(f), Pub. L. 97--425, 96 Stat. 2213, as amended (42 U.S.C. 10143(f)), sec. 102, Pub. L. 91--190, 83 Stat. 853, as amended (42 U.S.C. 4332); sec. 301, 88 Stat. 1248 (42 U.S.C. 5871). Sections 2.102, 2.103, 2.104, 2.105, 2.721 also issued under secs. 102, 103, 104, 105, 183i, 189, 68 Stat. 936, 937, 938, 954, 955, as amended (42 U.S.C. 2132, 2133, 2134, 2135, 2233, 2239). Sections 2.105 also issued under Pub. L. 97-415, 96 Stat. 2073 (42 U.S.C. 2239). Sections 2.200--2.206 also issued under secs. 161 b, I, o, 182, 186, 234, 68 Stat. 948-951, 955, 83 Stat. 444, as amended (42 U.S.C. 2201 (b), (i), (o), 2236, 2282); sec. 206, 88 Stat 1246 (42 U.S.C. 5846). Section 2.205(j) also issued under Pub. L. 101-410, 104 Stat. 90, as amended by section 3100(s), Pub. L. 104-134, 110 Stat. 1321-373 (28 U.S.C. 2461 note). Sections 2.600-2.606 also issued under sec. 102, Pub. L. 91-190, 83 Stat. 853, as amended (42 U.S.C. 4332). Sections 2.700a, 2.719 also issued under 5 U.S.C. 554.Sections 2.754, 2.760, 2.770, 2.780 also issued under 5 U.S.C. 557.Section 2.764 also issued under secs. 135, 141, Pub. L. 97--425, 96 Stat. 2232, 2241 (42 U.S.C. 10155, 10161). Section 2.790 also issued

under sec. 103, 68 Stat. 936, as amended (42 U.S.C. 2133), and 5 U.S.C. 552. Sections 2.800 and 2.808 also issued under 5 U.S.C. 553. Section 2.809 also issued under 5 U.S.C. 553, and sec. 29, Pub. L. 85-256, 71 Stat. 579, as amended (42 U.S.C. 2039). Subpart K also issued under sec. 189, 68 Stat. 955 (42 U.S.C. 2239); sec. 134, Pub. L. 97-425, 96 Stat. 2230 (42 U.S.C. 10154). Subpart L also issued under sec. 189, 68 Stat. 955 (42 U.S.C. 2239). Subpart M also issued under sec. 184 (42 U.S.C. 2234) and sec. 189, 68 stat. 955 (42 U.S.C. 2239). Appendix A also issued under sec. 6, Pub. L. 91-560, 84 Stat. 1473 (42 U.S.C. 2135).

2. In § 2.101, paragraphs (a)(1) and (a)(2) are revised, the introductory text of paragraph (a)(3) is revised, paragraphs (a)(3)(i) and (ii) are revised, paragraph (a)(5) is revised, paragraph (a)(4) is revised, paragraphs (a)(6) through (a)(8) are added and reserved, and paragraph (a)(9) is added to read as follows:

§ 2.101 Filing of application.

(a)(1) An application for a LWA, a permit, a license, a license transfer, a license amendment, a license renewal, or a standard design approval, shall be filed with the Director of New Reactors, the Director of Nuclear Reactor Regulation or the Director of Nuclear Material Safety and Safeguards, as prescribed by the applicable provisions of this chapter. A prospective applicant may confer informally with the NRC staff before filing an application.

(2) Each application for a license for a facility or for receipt of waste radioactive material from other persons for the purpose of commercial disposal by the waste disposal licensee will be assigned a docket number. However, to allow a determination as to whether an application for a LWA, construction permit, operating license, early site permit, standard design approval, combined license, or manufacturing license for a production or utilization facility is complete and acceptable for docketing, it will be initially treated as a tendered application. A copy of the tendered application will be available for public inspection at the NRC Web site,

http://www.nrc.gov, and/or at the NRC PDR. Generally, the determination on acceptability for docketing will be made within a period of 30 days. However, in selected applications, the Commission may decide to determine acceptability based on the technical adequacy of the application as well as its completeness. In these cases, the Commission, under § 2.104(a), will direct that the notice of hearing be issued as soon as practicable after the application has been tendered, and the determination of acceptability will be made generally within a period of 60 days. For docketing and other requirements for applications under part 61 of this chapter, see paragraph (g) of this section.

(3) If the Director of New Reactors, Director of Nuclear Reactor Regulation, or Director of Nuclear Material Safety and Safeguards, as appropriate, determines that a tendered application for a LWA, construction permit, operating license, ESP, standard design approval, combined license, or manufacturing license for a production or utilization facility, and/or any environmental report required under subpart A of part 51 of this chapter, or part thereof as provided in paragraphs (a)(5), (a)(9), or (a-1) of this section are complete and acceptable for docketing, a docket number will be assigned to the application or part thereof, and the applicant will be notified of the determination. With respect to the tendered application and/or environmental report or part thereof that is acceptable for docketing, the applicant will be requested to:

(i) Submit to the Director of New Reactors, Director of Nuclear Reactor Regulation, or Director of Nuclear Material Safety and Safeguards, as appropriate, such additional copies as the regulations in part 50 and subpart A of part 51 require;

(ii) Serve a copy on the chief executive of the municipality in which the facility, or site which is the subject of an ESP, is to be located or, if the facility, or site which is the subject of an ESP, is not to be located within a municipality, on the chief executive of the county, and

serve a notice of availability of the application or environmental report on the chief executives of the municipalities or counties which have been identified in the application or environmental report as the location of all or part of the alternative sites, containing the following information, as applicable: Docket number of the application, a brief description of the proposed site and facility; the location of the site and facility as primarily proposed and alternatively listed; the name, address, telephone number, and e-mail address (if available) of the applicant's representative who may be contacted for further information; notification that a draft EIS will be issued by the Commission and will be made available upon request to the Commission; and notification that if a request is received from the appropriate chief executive, the applicant will transmit a copy of the application and environmental report, and any changes to these documents which affect the alternative site location, to the executive who makes the request. In complying with the requirements of this paragraph, the applicant should not make public distribution of those parts of the application subject to § 2.390(d). The applicant shall submit to the Director of New Reactors or the Director of Nuclear Reactor Regulation, or the Director of the Office of Nuclear Material safety and Safeguards, as appropriate, an affidavit that service of the notice of availability of the application or environmental report has been completed along with a list of names and addresses of those executives upon whom the notice was served; and

* * * * *

(4) The tendered application for a LWA, construction permit, operating license, ESP, standard design approval, combined license, or manufacturing license for a production or utilization facility will be formally docketed upon receipt by the Director of New Reactors, Director of Nuclear Reactor Regulation or Director of Nuclear Material Safety and Safeguards, as appropriate, of the required additional copies. Distribution of the additional copies shall be deemed to be complete as of the time the copies are deposited in the mail or with a carrier

prepaid for delivery to the designated addresses. The date of docketing shall be the date when the required copies are received by the Director of New Reactors, Director of Nuclear Reactor Regulation or Director of Nuclear Material Safety and Safeguards, as appropriate. Within 10 days after docketing, the applicant shall submit to the Director of New Reactors, Director of Nuclear Reactor Regulation or Director of Nuclear Material Safety and Safeguards, as appropriate, an affidavit that distribution of the additional copies to Federal, State, and local officials has been completed in accordance with the requirements of this chapter and written instructions furnished to the applicant by the Director of New Reactors, Director of Nuclear Reactor Regulation or Director of Nuclear Material Safety and Safeguards, as appropriate. Amendments to the application and environmental report shall be filed and distributed and an affidavit shall be furnished to the Director of New Reactors, Director of Nuclear Reactor Regulation or Director of Nuclear Material Safety and Safeguards, as appropriate, in the same manner as for the initial application and environmental report. If it is determined that all or any part of the tendered application and/or environmental report is incomplete and therefore not acceptable for processing, the applicant will be informed of this determination, and the respects in which the document is deficient.

(5) *Two-part application*. An applicant for a construction permit under part 50 of this chapter or a combined license under part 52 of this chapter for a production or utilization facility which is subject to § 51.20(b) of this chapter, and is of the type specified in § 50.21(b)(2) or (3) or § 50.22 of this chapter or is a testing facility may submit the information required of applicants by part 50 or part 52 of the chapter in two parts. One part shall be accompanied by the information required by § 50.30(f) of this chapter, or § 52.80(b) of this chapter, as applicable. The other part shall include any information required by § 50.34(a) and, if applicable, § 50.34a of this chapter, or §§ 52.79 and 52.80(a), as applicable. One part may

precede or follow other parts by no longer than eighteen (18) months. If it is determined that either of the parts as described above is incomplete and not acceptable for processing, the Director of New Reactors, Director of Nuclear Reactor Regulation, or Director of Nuclear Material Safety and Safeguards, as appropriate, will inform the applicant of this determination and the respects in which the document is deficient. Such a determination of completeness will generally be made within a period of 30 days. Whichever part is filed first shall also include the fee required by §§ 50.30(e) and 170.21 of this chapter and the information required by §§ 50.33, 50.34(a)(1) or 52.79(a)(1), as applicable, and § 50.37 of this chapter. The Director of New Reactors, Director Nuclear Reactor Regulation or Director of Nuclear Material Safety and Safeguards, as appropriate, will accept for docketing an application for a construction permit under part 50 or a combined license under part 52 for a production or utilization facility which is subject to § 51.20(b) of this chapter, and is of the type specified in § 50.21(b)(2) or (3) or § 50.22 of this chapter or is a testing facility where one part of the application as described above is complete and conforms to the requirements of part 50 or part 52 of this chapter, as applicable. The additional parts will be docketed upon a determination by the Director of New Reactors, Director of Nuclear Reactor Regulation, or Director of Nuclear Material Safety and Safeguards, as appropriate, that it is complete.

(6) - (8) RESERVED.

(9) *Limited work authorization*. An applicant for a construction permit for a utilization facility which is subject to § 51.20(b) of this chapter and is of the type specified in § 50.21(b)(2) or (3) or § 50.22 of this chapter, an applicant for or holder of an early site permit under part 52 of this chapter, or an applicant for a combined license under part 52 of this chapter, who seeks to conduct the activities authorized under § 50.10(d) of this chapter may submit a complete application under paragraphs (a)(1)-(4) of this section which includes the information required

by § 50.10(d) of this chapter. Alternatively, the applicant (other than a holder of an ESP) may submit its application in two parts:

(i) Part one must include the information required by § 50.33(a) through (f) of this chapter, and the information required by § 50.10(d)(2) and (3) of this chapter.

(ii) Part two must include the remaining information required by the Commission's regulations in this chapter which was not submitted in part one, *provided, however*, that this information may be submitted in accordance with the applicable provisions of paragraph (a-1) of this section.

(iii) Part two of the application must be submitted no later than eighteen (18) months after submission of part one.

* * * * *

3. In § 2.102, paragraph (a) is revised to read as follows:

§ 2.102 Administrative Review of application.

(a) During review of an application by the NRC staff, an applicant may be required to supply additional information. The staff may request any one party to the proceeding to confer with the staff informally. In the case of docketed application for a LWA, construction permit, operating license, ESP, standard design approval, combined license, or manufacturing license under this chapter, the staff shall establish a schedule for its review of the application, specifying the key intermediate steps from the time of docketing until the completion of its review.

* * * * *

4. In § 2.104, the introductory text of paragraph (a) is revised, paragraphs (d), (e) and (f) are redesignated as paragraphs (e), (f) and (g), respectively, new paragraph (d) is added,

paragraphs (h) through (k) are added and reserved, paragraph (m)(1) is revised, and footnote 1 is revised to read as follows:

§ 2.104 Notice of hearing.

(a) In the case of an application on which a hearing is required by the Act or this chapter, or in which the Commission finds that a hearing is required in the public interest, the Secretary will issue a notice of hearing to be published in the *Federal Register* as required by law at least 15 days, and in the case of an application concerning a LWA, construction permit, ESP, or combined license for a facility of the type described in § 50.21(b) or § 50.22 of this chapter or a testing facility, at least 30 days, before the date set for hearing in the notice.[1] In addition, in the case of an application for an LWA, ESP, construction permit or combined license for a facility of the type described in § 50.22 of this chapter, or a testing facility, the notice (other than a notice under paragraph (d) of this section) must be issued as soon as practicable after the application has been docketed. However, if the Commission, under § 2.101(a)(2), decides to determine the acceptability of the application based on its technical adequacy as well as completeness, the notice must be issued as soon as practicable after the application has been tendered. The notice will state:

* * * * *

(d) In the case of an application for a LWA submitted under § 2.101(a)(9) of this part, the notice of hearing will state, in implementation of paragraph (a)(3) of this section:

(1) If the proceeding is a contested proceeding, the presiding officer will consider the

---

[1]If the notice of hearing concerning an application for a limited work authorization, construction permit, early site permit, or combined license for a facility of the type described in § 50.21(b) or § 50.22 of this chapter or a testing facility does not specify the time and place of initial hearing, a subsequent notice will be published in the *Federal Register* which will provide at least 30 days notice of the time and place of that hearing. After this notice is given the presiding officer may reschedule the commencement of the initial hearing for a later date or reconvene a recessed hearing without again providing at least 30 days notice.

following issues:

(i) Whether applicable standards and requirements of the Act and the Commission's regulations have been met;

(ii) Whether any required notifications to other agencies or bodies have been duly made;

(iii) Whether issuance of the LWA will be inimical to the common defense and security or to the health and safety of the public; and

(vi) Whether, in accordance with the requirements of subpart A of part 51 of this chapter, the LWA should be issued as proposed.

(2) If the proceeding is not a contested proceeding, the presiding officer will determine, without conducting a *de novo* evaluation of the application, whether:

(i) The application and the record of the proceeding contain sufficient information, and the review of the application by the NRC staff has been adequate to support affirmative findings on paragraphs (d)(1)(i), (ii) and (iv) of this section, and a negative finding on paragraph (d)(1)(iii) of this section; and

(ii) The review conducted under part 51 of this chapter under the NEPA has been adequate.

(3) Regardless of whether the proceeding is contested or uncontested, the presiding officer will, in accordance with subpart A of part 51 of this chapter:

(i) Determine whether the requirements of section 102(2) (A), (C), and (E) of the NEPA and subpart A of part 51 of this chapter have been complied with in the proceeding;

(ii) Independently consider the final balance among conflicting factors contained in the record of the proceeding with a view to determine the appropriate action to be taken;

(iii) Determine whether the redress plan required by 10 CFR 50.10(d)(3)(iii), if

implemented, will adequately redress the activities performed under the LWA, should LWA activities be terminated; and

(iv) Determine whether the LWA should be issued, denied or appropriately conditioned to protect environmental values.

* * * * *

(h)-(k) **RESERVED**

(m)(1) The Secretary will transmit a notice of hearing on an application for a license for a production or utilization facility, including an LWA, ESP, combined license, but not for a manufacturing license, for a license for receipt of waste radioactive material from other persons for the purpose of commercial disposal by the waste disposal licensee, for a license under part 61 of this chapter, for a construction authorization for a high-level waste repository at a geologic repository operations area under parts 60 or 63 of this chapter, for a license to receive and possess high-level radioactive waste at a geologic repository operations area under parts 60 or 63 of this chapter, and for a license under part 72 of this chapter to acquire, receive or possess spent fuel for the purpose of storage in an independent spent fuel storage installation to the governor or other appropriate official of the State and to the chief executive of the municipality in which the facility is to be located or the activity is to be conducted or, if the facility is not to be located or the activity conducted within a municipality, to the chief executive of the county (or to the Tribal organization, if it is to be located or conducted within an Indian reservation).

* * * * *

5. The heading of subpart F is revised to read as follows:

Subpart F-Additional Procedures Applicable to Early Partial Decisions on Site Suitability Issues in Connection with an Application for a Construction Permit or Combined License

to Construct Certain Utilization Facilities; and Advance Issuance of Limited Work Authorizations

6. In § 2.600, the introductory paragraph is revised, and a new paragraph (d) is added to read as follows:

§ 2.600 Scope of Subpart.

This subpart prescribes procedures applicable to licensing proceedings which involve an early submittal of site suitability information in accordance with § 2.101(a - 1), and a hearing and early partial decision on issues of site suitability, in connection with an application for a permit to construct a utilization facility which is subject to § 51.20(b) of this chapter and is of the type specified in § 50.21(b) (2) or (3) or § 50.22 of this chapter or is a testing facility. This subpart also prescribes procedures applicable to proceedings for a construction permit for a utilization facility which is subject to § 51.20(b) of this chapter and is of the type specified in § 50.21(b)(2) or (3) or § 50.22 of this chapter, or proceedings for a combined license under part 52 of this chapter, either of which includes a request to conduct the activities authorized under § 50.10(c)of part 50 of this chapter in advance of issuance of the construction permit or combined license, and submits an application in accordance with § 2.101(a)(9).

* * *

(d) The procedures in §§ 2.641 through 2.649 apply to phased applications for construction permits or combined licenses which request LWAs to be issued in advance of issuance of the construction permit or combined license (*i.e.*, a phased application).

* * * * *

7. Preceding § 2.602, an undesignated center heading is added to read as follows:

Early Partial Decisions on Site Suitability

8. In § 2.606, paragraph (a) is revised to read as follows:

§ 2.606 Partial decision on site suitability issues.

(a) The provisions of §§ 2.331, 2.339, 2.340(b), 2.343, 2.712, and 2.713 apply to any partial initial decision rendered in accordance with this subpart. Section 2.340(c)does not apply to any partial initial decision rendered in accordance with this subpart. No construction permit may be issued without completion of the full review required by section 102(2) of the NEPA, as amended, and subpart A of part 51 of this chapter. The authority of the Commission to review such a partial initial decision *sua sponte*, or to raise sua sponte an issue that has not been raised by the parties, will be exercised within the same time period as in the case of a full decision relating to the issuance of a construction permit.

* * * * *

9. Following § 2.629, an undesignated center heading and §§ 2.641 through 2.649 are added to read as follows:

Phased Applications Involving Limited Work Authorizations

Sec.

§ 2.641 Filing fees.

Each application which contains a request for LWA under the procedures of § 2.101(a)(9) and this subpart shall be accompanied by any fee required by § 50.30(e) and part 170 of this chapter.

§ 2.643 Acceptance and docketing of application for limited work authorization.

(a) Each part of an application submitted in accordance with § 2.101(a)(9) will be initially treated as a tendered application. If it is determined that any one of the parts as described in § 2.101(a)(9) is incomplete and not acceptable for processing, the Director of New Reactors or the Director of Nuclear Reactor Regulation will inform the applicant of this determination and the respects in which the document is deficient. A determination of completeness will generally be made within a period of thirty (30) days.

(b) The Director will accept for docketing part one of an application for a construction permit for a utilization facility which is subject to § 51.20(b) of this chapter and is of the type specified in § 50.21(b) (2) or (3) or § 50.22 of this chapter or an application for a combined license where part one of the application as described in § 2.101(a)(9) is complete. Part one will not be considered complete unless it contains the information required by § 50.10(d)(3) of this chapter. Upon assignment of a docket number, the procedures in § 2.101(a)(3) and (4) relating to formal docketing and the submission and distribution of additional copies of the application must be followed.

(c)If part one of the application is docketed, the Director will cause it to be published in the Federal Register and send to the Governor or other appropriate official of the State in which the site is located, a notice of docketing of the application which states the purpose of the application, states the location of the proposed site, states that a notice of hearing will be published, and requests comments on the LWA from Federal, State, and local agencies and interested persons. The notice will state that comments must be submitted to the NRC within

60 days or such other time as may be specified in the notice.

(d) Part two of the application will be docketed upon a determination by the Director that it is complete.

(e) If part two of the application is docketed, the Director will cause to be published in the Federal Register and sent to the Governor or other appropriate official of the State in which the site is located, a notice of docketing of part two of the application which states the purpose of the application, states that a notice of hearing will be published, and requests comments on the construction permit or combined license application, as applicable, from Federal, State, and local agencies and interested persons. The notice will state that comments must be submitted to the NRC within 60 days or such other time as may be specified in the notice.

§ 2.645 Notice of hearing.

(a) The notice of hearing on part one of the application must set forth the matters of fact and law to be considered, as required by § 2.104, which will be modified to state that the hearing will relate only to the matters related to § 50.33(a) through (f) of this chapter, and the LWA.

(b) After docketing of part two of the application, as provided in §§ 2.101(a)(9) and 2.643(d), a supplementary notice of hearing will be published under § 2.104 with respect to the remaining unresolved issues in the proceeding within the scope of § 2.104. The supplementary notice of hearing will provide that any person whose interest may be affected by the proceeding and who desires to participate as a party in the resolution of the remaining issues shall file a petition for leave to intervene within the time prescribed in the notice. The petition to intervene must meet the applicable requirements in subpart C of this part, including § 2.309. This supplementary notice will also provide appropriate opportunities for participation by a

representative of an interested State under § 2.315(c)and for limited appearances under § 2.315(a).

(c)Any person who was permitted to intervene under the initial notice of hearing on the LWA and who was not dismissed or did not withdraw as a party, may continue to participate as a party with respect to the remaining unresolved issues only if, within the time prescribed for filing of petitions for leave to intervene in the supplementary notice of hearing, that person files a petition for intervention which meets the applicable requirements in subpart C of this part, including § 2.309, *provided, however*, that the petition need not address § 2.309(d). However, a person who was granted discretionary intervention under § 2.309(e) must address in its petition the factors in § 2.309(e) as they apply to the supplementary hearing.

(d) A party who files a non-timely petition for intervention under subsection (c)of this section to continue as a party may be dismissed from the proceeding, absent a determination that the party has made a substantial showing of good cause for failure to file on time, and with particular reference to the factors specified in §§ 2.309(c)(1)(i) through (iv) and 2.309(d). The notice will be ruled upon by the Commission or presiding officer designated to rule on petitions for leave to intervene.

(e) To the maximum extent practicable, the membership of the atomic safety and licensing board, or the individual presiding officer, as applicable, designated to preside in the proceeding on the remaining unresolved issues pursuant to the supplemental notice of hearing will be the same as the membership or individual designated to preside in the initial notice of hearing.

§ 2.647 [Reserved].

§ 2.649 Partial decisions on limited work authorization.

The provisions of §§ 2.331, 2.339, 2.340(b), 2.343, 2.712, and 2.713 apply to any partial

initial decision rendered in accordance with this subpart. Section 2.340(c)does not apply to any partial initial decision rendered in accordance with this subpart. ALWA may not be issued under 10 CFR 50.10(c)without completion of the review for LWAs required by subpart A of part 51 of this chapter. The authority of the Commission to review such a partial initial decision *sua sponte*, or to raise sua sponte an issue that has not been raised by the parties, will be exercised within the same time period as in the case of a full decision relating to the issuance of a construction permit or combined license.

PART 50 -- DOMESTIC LICENSING OF PRODUCTION AND UTILIZATION FACILITIES

10. The authority citation for Part 50 continues to read as follows:

AUTHORITY: Secs. 102, 103, 104, 105, 161, 182, 183, 186, 189, 68 Stat. 936, 937, 938, 948, 953, 954, 955, 956, as amended, sec. 234, 83 Stat. 444, as amended (42 U.S.C. 2132, 2133, 2134, 2135, 2201, 2232, 2233, 2236, 2239, 2282); secs. 201, as amended, 202, 206, 88 Stat. 1242, as amended, 1244, 1246 (42 U.S.C. 5841, 5842, 5846); sec. 1704, 112 Stat. 2750 (44 U.S.C. 3504 note).

Section 50.7 also issued under Pub. L. 95-601, sec. 10, 92 Stat. 2951 (42 U.S.C. 5841). Section 50.10 also issued under secs. 101, 185, 68 Stat. 955, as amended (42 U.S.C. 2131, 2235); sec. 102, Pub. L. 91-190, 83 Stat. 853 (42 U.S.C. 4332). Sections 50.13, 50.54(dd), and 50.103 also issued under sec. 108, 68 Stat. 939, as amended (42 U.S.C. 2138). Sections 50.23, 50.35, 50.55, and 50.56 also issued under sec. 185, 68 Stat. 955 (42 U.S.C. 2235). Sections 50.33a, 50.55a and Appendix Q also issued under sec. 102, Pub. L. 91-190, 83 Stat. 853 (42 U.S.C. 4332). Sections 50.34 and 50.54 also issued under sec. 204, 88 Stat. 1245 (42 U.S.C. 5844). Sections 50.58, 50.91, and 50.92 also issued under Pub. L. 97-415, 96 Stat. 2073 (42 U.S.C. 2239). Section 50.78 also issued under sec. 122, 68 Stat. 939 (42 U.S.C. 2152). Sections 50.80 - 50.81 also issued under sec. 184, 68 Stat. 954, as amended (42 U.S.C.

2234). Appendix F also issued under sec. 187, 68 Stat. 955 (42 U.S.C. 2237).

11. Section 50.10 is revised to read as follows:

§ 50.10 License required; limited work authorization.

(a) *Definitions.* As used in this section, *construction* means the activities in paragraph (a)(1) of this section, and does not mean the activities in paragraph (a)(2).

(1) Activities constituting construction are the driving of piles, subsurface preparation, placement of backfill, concrete, or permanent retaining walls within an excavation, installation of foundations, or in-place assembly, erection, fabrication, or testing, any of which are for:

(i) SSCs of a facility, as defined in 10 CFR 50.2;

(ii) SSCs relied upon to mitigate accidents or transients or are used in plant emergency operating procedures;

(iii) SSCs whose failure could prevent safety-related SSCs from fulfilling their safety-related function;

(iv) SSCs whose failure could cause a reactor scram or actuation of a safety-related system;

(v) SSCs necessary to comply with 10 CFR Part 73;

(vi) SSCs necessary to comply with 10 CFR 50.48 and criterion 3 of 10 CFR part 50, appendix A; and

(vii) On-site emergency facilities, *i.e.*, technical support and operations support centers, necessary to comply with 10 CFR 50.47 and 10 CFR part 50, appendix E.

(2) Construction does not include:

(i) Changes for temporary use of the land for public recreational purposes;

(ii) Site exploration, including necessary borings to determine foundation conditions or other preconstruction monitoring to establish background information related to the suitability of

the site, the environmental impacts of construction or operation, or the protection of environmental values;

(iii) Preparation of a site for construction of a facility, including clearing of the site, grading, installation of drainage, erosion and other environmental mitigation measures, and construction of temporary roads and borrow areas;

(iv) Erection of fences and other access control measures;

(v) Excavation;

(vi) Erection of support buildings (such as construction equipment storage sheds, warehouse and shop facilities, utilities, concrete mixing plants, docking and unloading facilities, and office buildings) for use in connection with the construction of the facility;

(vii) Building of service facilities, such as paved roads, parking lots, railroad spurs, exterior utility and lighting systems, potable water systems, sanitary sewerage treatment facilities, transmission lines;

(viii) Procurement or fabrication of components or portions of the proposed facility occurring at other than the final, in-place location at the facility;

(ix) Manufacture of a nuclear power reactor under a manufacturing license (subpart F of part 52) to be installed at the proposed site and be part of the proposed facility; or

(x) With respect to production or utilization facilities, other than testing facilities and nuclear power plants, required to be licensed pursuant to section 104.a or section 104.c of the Act, the erection of buildings which will be used for activities other than operation of a facility and which may also be used to house a facility (for example, the construction of a college laboratory building with space for installation of a training reactor).

(b) *Requirement for license.* Except as provided in § 50.11, no person within the United States shall transfer or receive in interstate commerce, manufacture, produce, transfer, acquire,

possess, or use any production or utilization facility except as authorized by a license issued by the Commission.

(c)*Requirement for construction permit, early site permit authorizing limited work authorization activities, combined license, or limited work authorization.* No person may begin the construction of a production or utilization facility on a site on which the facility is to be operated until that person has been issued either a construction permit under this part, a combined license under part 52 of this chapter, an ESP authorizing the activities under paragraph (d) of this section, or a LWA under paragraph (d) of this section.

(d) *Request for limited work authorization*. (1) Any person to whom the Commission may otherwise issue either a license or permit under Sections 103, 104.b, or 185 of the Act for a facility of the type specified in § 50.21(b)(2) or (3), § 50.22, or a testing facility, may request a LWA allowing that person to perform the driving of piles, subsurface preparation, placement of backfill, concrete, or permanent retaining walls within an excavation, installation of the foundation, including placement of concrete, any of which are for a SSC of the facility for which either a construction permit or combined license is otherwise required under paragraph (c)of this section,

(2) An application for a LWA may be submitted as part of a complete application for a construction permit or combined license in accordance with 10 CFR 2.101(a)(1) through (4), or as a partial application in accordance with 10 CFR 2.101(a)(9). An application for a LWA must be submitted by an applicant for or holder of an ESP as a complete application in accordance with 10 CFR 2.101(a)(1) through (4).

(3) The application must include:

(i) A safety analysis report required by 10 CFR 50.34, 10 CFR 52.17 or 10 CFR 52.79, as applicable, a description of the activities requested to be performed, and the design and

construction information otherwise required by the Commission's rules and regulations to be submitted for a construction permit or combined license, but limited to those portions of the facility that are within the scope of the LWA. The safety analysis report must demonstrate that activities conducted under the LWA will be conducted in compliance with the technically-relevant Commission requirements in 10 CFR Chapter I applicable to the design of those portions of the facility within the scope of the LWA;

(ii) An environmental report in accordance with § 51.49 of this chapter; and

(iii) A plan for redress of activities performed under the LWA, should limited work activities be terminated by the holder or the LWA be revoked by the NRC, or upon effectiveness of the Commission's final decision denying the associated construction permit or combined license application, as applicable.

(e) *Issuance of limited work authorization*. (1) The Director of New Reactors or the Director of Nuclear Reactor Regulation may issue a LWA only after:

(i) The NRC staff issues the final EIS for the LWA in accordance with subpart A of part 51 of this chapter;

(ii) The presiding officer makes the finding in § 51.105(c)or § 51.107(d) of this chapter, as applicable;

(iii) The Director determines that the applicable standards and requirements of the Act and the Commission's regulations applicable to the activities to be conducted under the LWA have been met; the applicant is technically qualified to engage in the activities authorized; and issuance of the LWA will provide reasonable assurance of adequate protection to public health and safety and will not be inimical to the common defense and security; and

(iv) The presiding officer finds that there are no unresolved safety issues relating to the activities to be conducted under the LWA that would constitute good cause for withholding the authorization.

(2) Each LWA will specify the activities that the holder is authorized to perform.

(f) *Effect of limited work authorization*. Any activities undertaken under a LWA are entirely at the risk of the applicant and, except as to the matters determined under paragraph (e)(1) of this section, the issuance of the LWA has no bearing on the issuance of a construction permit or combined license with respect to the requirements of the Act, and rules, regulations, or orders promulgated pursuant thereto. The EIS for a construction permit or combined license application for which a LWA was previously issued will not address, and the presiding officer will not consider, the sunk costs of the holder of LWA in determining the proposed action (*i.e*., issuance of the construction permit or combined license).

(g) *Implementation of redress plan*. If construction is terminated by the holder, the underlying application is withdrawn by the applicant or denied by the NRC, or the LWA is revoked by the NRC, then the holder must begin implementation of the redress plan in a reasonable time, and complete the redress of the site no later than eighteen (18) months after termination of construction, revocation of the LWA, or upon effectiveness of the Commission's final decision denying the associated operating license application or the underlying combined license application, as applicable.

PART 51 - ENVIRONMENTAL PROTECTION REGULATIONS FOR DOMESTIC LICENSING AND RELATED REGULATORY FUNCTIONS

12. 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)).

13. In § 51.4, a new definition of construction is added to read as follows:

§ 51.4 Definitions.

* * * * *

Construction means the activities in paragraph (a) of this definition, and does not mean the activities in paragraph (b) of this definition.

(a) Activities constituting construction are the driving of piles, subsurface preparation, installation of foundations, placement of backfill, concrete, or permanent retaining walls within an excavation, or in-place assembly, erection, fabrication, or testing, any of which are for:

(1) Safety-related structures, systems, or components (SSCs) of a facility, as defined in 10 CFR 50.2;

(2) SSCs relied upon to mitigate accidents or transients or are used in plant emergency operating procedures;

(3) SSCs whose failure could prevent safety-related SSCs from fulfilling their safety-related function;

(4) SSCs whose failure could cause a reactor scram or actuation of a safety-related system;

(5) SSCs necessary to comply with 10 CFR Part 73;

(6) SSCs necessary to comply with 10 CFR 50.48 and criterion 3 of 10 CFR part 50, appendix A; and

(7) On-site emergency facilities, *i.e.*, technical support and operations support centers, necessary to comply with 10 CFR 50.47 and 10 CFR part 50, appendix E.

(b) Construction does not include:

(1) Changes for temporary use of the land for public recreational purposes;

(2) Site exploration, including necessary borings to determine foundation conditions or other preconstruction monitoring to establish background information related to the suitability of the site, the environmental impacts of construction or operation, or the protection of environmental values;

(3) Preparation of a site for construction of a facility, including clearing of the site, grading, installation of drainage, erosion and other environmental mitigation measures, and construction of temporary roads and borrow areas;

(4) Erection of fences and other access control measures;

(5) Excavation;

(6) Erection of support buildings (such as construction equipment storage sheds, warehouse and shop facilities, utilities, concrete mixing plants, docking and unloading facilities, and office buildings) for use in connection with the construction of the facility;

(7) Building of service facilities, such as paved roads, parking lots, railroad spurs, exterior utility and lighting systems, potable water systems, sanitary sewerage treatment facilities, transmission lines;

(8) Procurement or fabrication of components or portions of the proposed facility occurring at other than the final, in-place location at the facility;

(9) Manufacture of a nuclear power reactor under a manufacturing license (subpart F of part 52) to be installed at the proposed site and be part of the proposed facility; or

(10) With respect to production or utilization facilities, other than testing facilities and nuclear power plants, required to be licensed pursuant to section 104.a or section 104.c of the Act, the erection of buildings which will be used for activities other than operation of a facility and which may also be used to house a facility (for example, the construction of a college laboratory building with space for installation of a training reactor).

14. In § 51.17, paragraph (b) is revised to read as follows:

§ 51.17 Information collection requirements; OMB approval.

* * * * *

(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.

15. In § 51.20, paragraph (b)(6) is added to read as follows:

§ 51.20 Criteria for and identification of licensing and regulatory actions requiring environmental impact statements.

(a) * * *

(b) * * *

(6) Issuance of a LWA under 10 CFR 50.10 of the chapter.

* * * * *

16. In § 51.45, paragraph (c)is revised to read as follows:

§ 51.45 Environmental Report.

(a) * * * * *

(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. An environmental report prepared at the early site permit stage, construction permit stage, or combined license stage must include a description of impacts of the preconstruction activities performed by the applicant (*i.e*., those activities listed in paragraph (b)(1) through (8) 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 LWA, 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 LWA, 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 under § 51.50(b), 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 of 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 insofar as 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.

* * * * *

17. A new § 51.49 is added under the heading Environmental Reports-Production and Utilization Facilities to read as follows:

§ 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 an LWA under § 50.10(d) of this chapter in a complete application under 10 CFR 2.101(a)(1) through (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 contain the following information:

(1) A description of the activities proposed to be conducted under the LWA;

(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 in order 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 LWA. 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 early site permit application*. Each applicant for an ESP under subpart A of part 51 requesting a LWA shall submit with its application the environmental report required by § 51.50(b), provided, however, that the report must also contain the following information:

(1) A description of the activities proposed to be conducted under the LWA;

(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 in order 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.

(d) *Limited work authorization request submitted by early site permit holder*. Each holder of an early site permit requesting a LWA shall submit with its application a document entitled, “Applicant’s Environmental Report - Limited Work Authorization under Early Site Permit,” containing the following information:

(1) A description of the activities proposed to be conducted under the LWA;

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

(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 in order 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; and

(4) Any new and significant information for issues related to the impacts of construction of the facility that were resolved in the ESP proceeding with respect to the environmental impacts of the activities to be conducted under the LWA.

(e) *Limited work authorization for site where an Environmental Impact Statement was prepared, but the facility construction was not completed*. If the LWA is for activities to be conducted at a site for which the Commission has previously prepared an EIS for the construction and operation of a nuclear power plant, and a construction permit was issued but construction of the plant was never completed, then the applicant's environmental report may incorporate by reference the earlier EIS. In the event of such referencing, the environmental report must identify:

(1) Any new and significant information material for issues related to the impacts of construction of the facility that were resolved in the construction permit proceeding for the matters required to be addressed in paragraph (a) of this section; and

(2) A description of the process used to identify new and significant information regarding the NRC's conclusions in the ESP EIS. The process must use a reasonable methodology for identifying such new and significant information.

(f) *Environmental Report*. An environmental report submitted in accordance with this section must separately evaluate the environmental impacts and proposed alternatives attributable to the activities proposed to be conducted under the LWA. At the option of the applicant, the Applicant's Environmental Report - LWA Stage may contain the information required to be submitted in the environmental report required under § 51.50, which addresses the impacts of construction and operation for the proposed facility (including the environmental

impacts attributable to the LWA), and discusses the overall costs and benefits balancing for the proposed action.

18. In § 51.71, paragraph (e) is redesignated as paragraph (f), and a new paragraph (e) is added to read as follows:

§ 51.71 Draft environmental impact statement-contents.

(a) * * * * *

(e) *Effect of limited work authorization*. If a LWA 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 EIS for the construction permit or combined license application will not address or consider the sunk costs associated with the LWA.

* * * * *

19. Section 51.76 is added to read as follows:

§ 51.76 Draft environmental impact statement-limited work authorization.

The NRC will prepare a draft EIS relating to issuance of a LWA in accordance with the procedures and measures described in §§ 51.70, 51.71, and 51.73, as further supplemented or modified in the following paragraphs.

(a) *Limited work authorization submitted as part of complete construction permit or combined license application*. If the application for a LWA is submitted as part of a complete construction permit or combined license application, then the NRC may prepare a partial draft EIS, *provided*, *however*, that the analysis called for by § 51.71(d) will be limited to the activities proposed to be conducted under the LWA. Alternatively, the NRC may prepare a complete draft EIS prepared in accordance with § 51.75(a), (c), (d), (f) or (g), as applicable, or a draft environmental assessment in accordance with paragraph (e).

(b) *Phased application for limited work authorization under § 2.101(a)(9) of this chapter*. If the application for a LWA is submitted in accordance with § 2.101(a)(9) of this chapter, then the draft EIS for part one of the application may be limited to consideration of the activities proposed to be conducted under the LWA, and the proposed redress plan. However, if the environmental report contains the full set of information required to be submitted under § 51.50(a) or (c), then either a draft EIS will be prepared in accordance with § 51.75(a), (c), (d), (f) and/or (g), as applicable; or a draft environmental assessment will be prepared in accordance with paragraph (e). Siting issues, including whether there is an obviously superior alternative site, or issues related to operation of the proposed nuclear power plant at the site, including need for power may not be considered. After part two of the application is docketed, the NRC will prepare a draft supplement to the FEIS for part two of the application under § 51.72. No updating of the information contained in the final environmental statement prepared for part one is necessary in preparation of the supplemental EIS. The draft supplement must consider all environmental impacts associated with the prior issuance of the LWA, but may not address or consider the sunk costs associated with the LWA.

(c)Limited work authorization submitted as part of an early site permit application. If the application for a LWA is submitted as part of an application for an ESP, then the NRC will prepare an EIS in accordance with § 51.75(b). However, the analysis called for by § 51.71(d) must also address the activities proposed to be conducted under the LWA.

(d) *Limited work authorization request submitted by ESP holder*. If the application for a LWA is submitted by a holder of an early site permit, then the NRC will prepare a prepare a draft supplement to the EIS for the ESP. The supplement is limited to consideration of the activities proposed to be conducted under the LWA, the adequacy of the proposed redress plan, and whether there is new and significant information identified with respect to issues

related to the impacts of construction of the facility that were resolved in the ESP proceeding with respect to the environmental impacts of the activities to be conducted under the LWA. No other updating of the information contained in the FEIs prepared for the ESP is required.

(e) *Limited work authorization for site where environmental impact statement was prepared, but the facility construction was not completed*. If the LWA is for activities to be conducted at a site for which the Commission has previously prepared an EIS for the construction and operation of a nuclear power plant, a construction permit was issued but construction of the plant was not completed, the draft EIS shall incorporate by reference the earlier EIS. The draft EIS will be limited to a consideration of whether there is significant new information with respect to the environmental impacts of construction, relevant to the activities to be conducted under the limited work authority, such that the conclusion of the referenced EIS on the impacts of construction would, when analyzed in accordance with § 51.71, lead to the conclusion that the LWA should not be issued or should be issued with appropriate conditions.

(f) A draft EIS prepared under this section must separately evaluate the environmental impacts and proposed alternatives attributable to the activities proposed to be conducted under the LWA. However, if the *Applicant's Environmental Report - Limited Work Authorization Stage* also contains the information required to be submitted in the environmental report required under § 51.50, then the EIS must address the impacts of construction and operation for the proposed facility (including the environmental impacts attributable to the LWA), and discuss the overall costs and benefits balancing for the underlying proposed action, in accordance with § 51.71, and § 51.75(a) or (c), as applicable.

20. In § 51.103, a new paragraph (a)(6) is added to read as follows:

§ 51.103 Record of decision--general.

(a) * * *

(6) In a construction permit or a combined license proceeding, where a LWA under 10 CFR 50.10 was issued, the Commission's decision on the construction permit or combined license application will not address or consider the sunk costs associated with the LWA in determining the proposed action.

* * * * *

21. In § 51.104, a new paragraph (c)is added to read as follows:

§ 51.104 NRC proceedings using public hearings; consideration of environmental impact statement.

(a) * * * * *

(c)*Limited work authorization*. In any proceeding in which a LWA is requested, unless the Commission orders otherwise, a party to the proceeding may take a position and offer evidence only on the aspects of the proposed action within the scope of NEPA and this subpart which are within the scope of that party's admitted contention, in accordance with the provisions of part 2 of this chapter applicable to the LWA or in accordance with the terms of any notice of hearing applicable to the LWA. In the proceeding, the presiding officer will decide any such matters in controversy among the parties.

22. The title of § 51.105 is revised, and a new paragraph (c)is added to read as follows:

§ 51.105 Public hearings in proceedings for issuance of construction permits or early site permits; limited work authorizations.

(a) * * * * *

(c)(1) In addition to complying with the applicable provisions of § 51.104, in any proceeding for the issuance of a construction permit for a nuclear power plant or an ESP under part 52 of this chapter, where the applicant requests a LWA under § 50.10(d) of this chapter, the presiding officer shall - -

(i) Determine whether the requirements of section 102(2)(A), (c)and (E) of NEPA and the regulations in the subpart have been met, with respect to the activities to be conducted under the LWA;

(ii) Independently consider the balance among conflicting factors with respect to the LWA which is contained in the record of the proceeding, with a view to determining the appropriate action to be taken;

(iii) Determine whether the redress plan will adequately redress the activities performed under the LWA, should limited work activities be terminated by the holder or the LWA be revoked by the NRC, or upon effectiveness of the Commission's final decision denying the associated construction permit or ESP, as applicable;

(iv) In an uncontested proceeding, determine whether the NEPA review conducted by the NRC staff for the LWA has been adequate; and

(v) In a contested proceeding, determine whether, in accordance with the regulations in this subpart, the LWA should be issued as proposed.

(2) If the LWA is for activities to be conducted at a site for which the Commission has previously prepared an EIS for the construction and operation of a nuclear power plant, and a construction permit was issued but construction of the plant was never completed, then in making the determinations in paragraph (c)(1) of this section, the presiding officer shall be limited to a consideration whether there is, with respect to construction activities encompassed by the EIS which are analogous to the activities to be conducted under the LWA, new and significant information on the environmental impacts of those activities, such that the LWA should not be issued as proposed.

(3) The presiding officer's determination in this paragraph shall be made in a partial initial decision to be issued separately from, and in advance of, the presiding officer's decision

in paragraph (a) of this section.

23. In § 51.107, the title is revised, and a new paragraph (f) is added to read as follows:

§ 51.107 Public hearings in proceedings for issuance of combined licenses; limited work authorizations.

(a) * * * * *

(f)(1) In any proceeding for the issuance of a combined license where the applicant requests a LWA under § 50.10(d) of this chapter, the presiding officer, in addition to complying with any applicable provision of § 51.104, shall:

(i) Determine whether the requirements of section 102(2)(A), (c)and (E) of NEPA and the regulations in this subpart have been met, with respect to the activities to be conducted under the LWA;

(ii) Independently consider the balance among conflicting factors with respect to the LWA which is contained in the record of the proceeding, with a view to determining the appropriate action to be taken;

(iii) Determine whether the redress plan will adequately redress the activities performed under the LWA, should limited work activities be terminated by the holder or the LWA be revoked by the NRC, or upon effectiveness of the Commission's final decision denying the combined license application;

(iv) In an uncontested proceeding, determine whether the NEPA review conducted by the NRC staff for the LWA has been adequate; and

(v) In a contested proceeding, determine whether, in accordance with the regulations in this subpart, the LWA should be issued as proposed by the Director of New Reactors or the Director of Nuclear Reactor Regulation, as applicable.

(2) If the LWA is for activities to be conducted at a site for which the Commission has previously prepared an EIS for the construction and operation of a nuclear power plant, and a construction permit was issued but construction of the plant was never completed, then in making the determinations in paragraph (c)(1) of this section, the presiding officer shall be limited to a consideration whether there is, with respect to construction activities encompassed by the EIS which are analogous to the activities to be conducted under the LWA, new and significant information on the environmental impacts of those activities, such that the LWA should not be issued as proposed by the Director of New Reactors or the Director of Nuclear Reactor Regulation, as applicable.

(3) In making the determination required by this section, the presiding officer may not address or consider the sunk costs associated with the LWA.

(4) The presiding officer's determination in this paragraph shall be made in a partial initial decision to be issued separately from, and in advance of, the presiding officer's decision in paragraph (a) of this section on the combined license.

PART 52 - EARLY SITE PERMITS; STANDARD DESIGN CERTIFICATIONS; AND COMBINED LICENSES FOR NUCLEAR POWER PLANTS

24. The authority citation for part 52 continues to read as follows:

AUTHORITY: Secs. 103, 104, 161, 182, 183, 186, 189, 68 Stat. 936, 948, 953, 954, 955, 956, as amended, sec. 234, 83 Stat. 444, as amended (42 U.S.C. 2133, 2201, 2232, 2233, 2236, 2239, 2282); secs. 201, 202, 206, 88 Stat. 1242, 1244, 1246, as amended (42U.S.C. 5841, 5842, 5846); sec. 1704, 112 Stat. 2750 (44 U.S.C. 3504 note).

25. In § 52.1, a new definition of *limited work authorization* is added to read as follows:

§ 52.1 Definitions.

(a) As used in this part - -

* * *

Limited work authorization means the authorization provided by the Director of New Reactors or the Director of Nuclear Reactor Regulation under § 50.10 of this chapter.

* * * * *

26. In § 52.17, paragraph (c)is revised to read as follows:

§ 52.17 Contents of applications; technical information.

(a) * * *

(c)An applicant may request that a LWA under 10 CFR 50.10 be issued in conjunction with the early site permit. The application must include the information otherwise required by 10 CFR 50.10(d)(3), *provided however*, that for applications submitted prior to [INSERT EFFECTIVE DATE OF FINAL RULE], the application must include the information required by § 52.17(c)effective on the date of docketing.

* * * * *

27. In § 52.24, paragraph (c)is revised to read as follows:

§ 52.24 Issuance of early site permit.

(a) * * *

(c)The early site permit shall specify the activities under 10 CFR 50.10 which are requested under § 52.17(c)that the permit holder is authorized to perform.

28. Section 52.27 is redesignated as § 52.26, and a new §52.27 is added to read as follows:

§ 52.27 Limited work authorization after issuance of early site permit.

A holder of an early site permit may request a LWA in accordance with 10 CFR 50.10 of this chapter.

29. In § 52.80, paragraphs (b) and (c)are revised to read as follows:

§ 52.80 Contents of applications; additional technical information.

* * *

(b) An environmental report, either in accordance with 10 CFR 51.50(c)if a LWA under 10 CFR 50.10 is not requested in conjunction with the combined license application, or in accordance with §§ 51.49 and 51.50(c)of this chapter if a LWA is requested in conjunction with the combined license application.

(c)If the applicant wishes to request that a LWA under 10 CFR 50.10 be issued before issuance of the combined license, the application must include the information otherwise required by 10 CFR 50.10, in accordance with either 10 CFR 2.101(a)(1) through (4), or 10 CFR 2.101(a)(9).

* * * * *_____

30. Section 52.91 is revised to read as follows:

§ 52.91 Authorization to conduct limited work authorization activities.

(a) If the application does not reference an early site permit which authorizes the holder to perform the activities under 10 CFR 50.10(d), the applicant may not perform those activities without obtaining the separate authorization required by 10 CFR 50.10(d). Authorization may be granted only after the presiding officer in the proceeding on the application has made the findings and determination required by 10 CFR 50.10(e).

(b) If, after an applicant has performed the activities permitted by paragraph (a) of this section, the application for the combined license is withdrawn or denied, then the applicant shall implement the approved site redress plan.

Dated at Rockville, Maryland, this __ day of____ 2007.

For the Nuclear Regulatory Commission.

_____
Annette L. Vietti-Cook,
Secretary of the Commission.

Regulatory Analysis for Final Rule: Limited Work Authorizations for Nuclear Power Plants RIN 3150-AI05

1. Statement of the Problem and Objective

Background

The regulations in 10 CFR 50.10 broadly define the concept of "construction" and set out a procedure that allows applicants for construction permits or combined licenses[1] to request permission to undertake certain limited construction activities prior to issuance of the underlying construction permit or combined license. Permission to undertake these construction activities is known as a limited work authorization (LWA). The provisions of § 50.10(e) allow the NRC to authorize the commencement of both safety-related (known as "LWA-2" activities) and non safety-related (known as "LWA-1" activities) on-site construction activities provided that the agency has completed a final environmental impact statement (FEIS) on the issuance of the construction permit or combined license and the presiding officer in the construction permit or combined license proceeding has made the requisite environmental and, in the case of an LWA-II, safety-related findings.

On March 13, 2006, the NRC published a proposed rule amending its regulations applicable to the licensing and approval process for new nuclear power plants in order to enhance the agency's regulatory effectiveness and efficiency (71 FR 12782). The March 2006 proposed rule did not suggest major changes to the provisions of § 50.10 dealing with LWA.[2] However, in commenting on the March 2006 proposed rule industry stakeholders raised significant issues regarding both the scope of activities that are currently considered construction under § 50.10 and the process for obtaining.[3] Specifically, industry suggested that the broad concept of "commencement of construction" in § 50.10© is based on an outdated interpretation of the National Environmental Policy Act of 1969, as amended (NEPA), and not on the NRC's authority to regulate in the interest of radiological health and safety and the common defense and security under the Atomic Energy Act of 1954, as amended (AEA). Therefore, the industry

---

[1]Reference to combined licenses was added to § 50.10(e) in the proposed rule amending 10 CFR Part 52 (71 FR 12782; March 13, 2006).

[2]Stakeholders did not raise issues relating to perceived problems either with the LWA process or, more generally, with the definition of construction during the period leading to the March 2006 proposed rule.

[3]*See* Letter from Adrian P. Heymer, Nuclear Energy Institute to Annette L. Vietti-Cook, Secretary, U.S. Nuclear Regulatory Commission, *Pre-Licensing Construction Activity and Limited Work Authorization Issues relating to NRC Proposed Rule, "Licenses, Certifications and Approvals for Nuclear Power Plants," 71 Fed. Reg. 12, 782 (March 13, 2006)(RIN 3150-AG24)*(May 25, 2006). This letter was ultimately docketed and treated as a petition for rulemaking (PRM-50-82).

stakeholders suggested that the NRC abandon the concept of "commencement of construction" currently found in § 50.10© and limit construction to the activities described in § 50.10(b). In addition, the industry stakeholders suggested a phased approach to the application and approval procedures for obtaining LWAs. This approach would allow a LWA to be issued before the completion of the FEIS and adjudicatory hearing on the underlying construction permit or combined license.

Problem

Industry stakeholders supported their suggested changes to the LWA process, stating that the current business environment requires that new plant applicants seek to minimize the time between a decision to proceed with a combined license application and the start of commercial operation. In order to achieve this goal, the industry stakeholders stated that non safety-related "LWA-I" activities would need to be initiated up to two years before the activities currently defined as "construction" in § 50.10(b) would begin. In the view of these stakeholders, the current LWA approval process could unnecessarily constrain the industry's ability to use modern construction practices and needlessly add eighteen (18) months to estimated construction schedules for new plants where an early site permit (ESP) is not referenced in the combined license application.

In addition to the practical concerns posed by the existing regulatory structure, the broad definition of "commencement of construction" currently provided in § 50.10© and the approval required in § 50.10(e)(1) present a legal authority issue. Specifically, if the AEA does not provide the agency authority to require that an applicant obtain permission to engage in site preparation activities that are not reasonably related to radiological health and safety or common defense and security, and the NEPA does not provide such authority, the NRC would be acting outside of its statutory authority by regulating such activities.

Objective

The final rule addresses the concerns raised by industry stakeholders focuses NRC resources on the agency's statutory responsibility to protect radiological health and safety and the common defense and security by limiting the definition of construction to activities reasonably within the agency's statutory authority under the AEA. In addition, the final rule provides for a phased application and approval procedure, which allows the LWA to issue after completion of a limited environmental impact statement (EIS) that addresses the impacts of only the proposed LWA activities.

2. Identification of Regulatory Alternatives

This regulatory analysis evaluates the values and impacts of three regulatory alternatives. The following subsections describe these three alternatives.

2.1 No Action Alternative

The no action alternative retains the current regulations described above. As explained above,

the current regulations require NRC authorization and completion of the FEIS on the underlying combined license or construction permit request before applicants can undertake most site preparation activities. The no action alternative serves as the baseline against which the other alternatives (described below) are measured.

2.2 Proposed Action Alternative

Under the alternative proposed in this final rule, the NRC would revise its regulations defining construction in 10 CFR 50.10(b) and © by narrowing the scope of activities that are considered construction. Therefore, fewer site preparation activities would require NRC approval before being undertaken by an applicant. This change would partially address the scheduling concerns raised by industry stakeholders and focus NRC resources by limiting the definition of construction to include only those site preparation activities falling within the agency's AEA authority to regulate in the interest of radiological health and safety and the common defense and security. Under the final rule, these activities would include:

- the driving of piles;
- subsurface preparation;
- installation of foundations;
- placement of backfill, concrete, or retaining walls within an excavation; or
- in-place assembly, erection, fabrication or testing

for any of the following structures, systems, components (SSCs), and facilities:

- safety-related SSCs, as defined in 10 CFR 50.2;
- SSCs relied upon to mitigate accidents or transients or used in plant emergency operating procedures;
- SSCs whose failure could prevent safety-related SSCs from fulfilling their safety-related function;
- SSCs whose failure could cause a reactor scram or actuation of a safety-related system;
- SSCs necessary to comply with 10 CFR Part 73;
- SSCs necessary to comply with 10 CFR 50.48 and criterion 3 or 10 CFR Part 50, Appendix A; and
- on-site emergency facilities, i.e., technical support and operations support centers, necessary to comply with 10 CFR 50.47 and 10 CFR Part 50, Appendix E.

In addition, the final rule would allow issuance of a LWA authorizing site preparation activities meeting the revised definition of construction after submittal of an abbreviated environmental report and preparation of a limited EIS by the NRC staff. This EIS would be limited in scope and only address the environmental impacts associated with the proposed LWA activities. A more comprehensive EIS, considering the environmental impacts associated with the LWA activities and the underlying licensing action would be completed prior to issuing the combined license or construction permit.

2.3 Full Environmental Review Prior to Issuance of LWA

This alternative is identical to the proposed action alternative, except that it would require issuance of a comprehensive FEIS prior to the NRC granting any LWA. Like the proposed action alternative, this alternative would ensure that the NRC is acting within its statutory authority, but would only partially address the scheduling concern raised by industry.

3. Analysis of Values and Impacts

The three subsections below identify and analyze the values and impacts associated with the proposed and the alternative actions identified. Since the proposed action alternative and the full environmental review alternative represent a reduction in the current requirements, much of the analysis will be focused on determining whether: (1) the public health and safety and the common defense and security would continue to be adequately protected if the proposed reduction in the requirements were implemented and (2) the cost savings attributed to the action would be substantial enough to justify taking the action. (NUREG/BR-0058, Rev. 4 at 5-6).

3.1 Adequate Protection of Public Health and Safety and Common Defense and Security.

3.1.1 Redefining the Concept of Construction (Proposed Action and Full Environmental Review Alternatives)

The proposed action and full environmental review alternatives both result in a reduction in the current regulatory requirements due to a reduction in the number of activities that require NRC approval, in the form of an LWA, prior to being undertaken.

Prior to 1972 the definition of construction was limited to the activities currently defined as construction in § 50.10(b). These activities include pouring the foundation for, or the installation of, any portion of the permanent facility on the site. However, that definition was expanded considerably to include a wide variety of site preparation activities in 1972 with the promulgation of § 50.10©. As promulgated, § 50.10© prohibited the “commencement of construction” of a production or utilization facility until a construction permit had been issued. The term “commencement of construction” includes “any clearing of land, excavation or other substantial action that would adversely affect the natural environment of a site and [the] construction of nonnuclear facilities (such as turbogenerators and turbine buildings) for use in connection with the facility. . . .” Two years after the promulgation of § 50.10©, the NRC promulgated § 50.10(e) (39 FR 14506; April 24, 1974). This provision created the current LWA process, which was added to allow site preparation, excavation and certain other on-site activities to proceed prior to issuance of a construction permit.

The expansion of the definition of construction in 1972 was driven by the Commission's interpretation of its responsibilities under NEPA, not the AEA (37 FR 5746). [4] However, since the promulgation of § 50.10©, the legal effect of NEPA has been more thoroughly delineated by the courts. Specifically, subsequent judicial decisions have made it clear that NEPA is a procedural statute and does not expand the authority provided to an agency by its organic statute.[5] Therefore, while NEPA may require the NRC to consider the environmental effects caused by the exercise of its permitting/licensing authority, the statute cannot be the source of the expansion of the NRC's authority to require construction permits or other forms of permission, including a LWA, for activities that are not related to radiological health and safety or preservation of the common defense and security.

Since the blanket inclusion of site preparation activities in the definition of "commencement of construction" in § 50.10© was not driven by the radiological health and safety or common defense and security jurisdiction provided to the NRC in the AEA, the redefinition of construction will not have a negative impact on radiological health and safety or the common defense and security. To the contrary, the final rule reflects an effort to align the definition of construction with the NRC's responsibilities under the AEA by including only those activities with a reasonable nexus to radiological health and safety or common defense and security.

Therefore, there is reasonable assurance that public health and safety and common defense and security would continue to be adequately protected if the proposed reduction in current regulatory requirements was implemented by adopting either the proposed action or the full environmental review alternatives.

3.1.2 Issuance of LWA After Partial Environmental Review (Proposed Action Alternative)

The proposed action alternative also relaxes the current regulatory requirements by allowing an LWA to issue after issuance of a partial EIS, limited to addressing the impacts of the LWA activities. The current regulations require that a FEIS, addressing the underlying licensing action (i.e. issuance of a construction permit or combined license) be issued prior to the grant of

---

[4] *See also, The Carolina Power and Light Company* (Shearon Harris Nuclear Power Plant, Units 1, 2, 3 and 4), 7 AEC 939, 943 (June 11, 1974)(hereinafter *Shearon Harris*)("The regulations were revised in 1972, not because of any requirements of the Atomic Energy Act, but rather to implement the precepts of NEPA which had then recently been enacted."); *Kansas Gas and Electric Company* (Wolf Creek Nuclear Generating Station, Unit No. 1), 5 NRC 1, 5 (Jan. 12, 1977)(explaining that NEPA led AEC to amend its regulations in several respects, including the changes to 50.10(c)).

[5] *See, e.g., Kitchen v. Federal Communications Commission*, 464 F.2d 801, 802 (D.C. Cir. 1972); *Natural Resources Defense Counsel v. U.S. Environmental Protection Agency*, 822 F.2d 104, 129 (D.C. Cir 1987); *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350-52 (1989).

a LWA. This relaxation in the current regulations is not expected to result in a reduction in the protection of public health and safety or common defense and security. First, an EIS is drafted by the NRC in order to comply with its responsibilities under NEPA, not the AEA. The impacts evaluated in an EIS are primarily impacts on the natural environment, whereas impacts on radiological health and safety and the common defense and security are primarily addressed in other documents that must be completed by the NRC in order to meet its obligations under the AEA (e.g. Safety Evaluation Report). In addition, the regulations implementing the proposed action alternative specifically prohibit the issuance of a LWA from influencing the Commission's ultimate licensing decision and require redress of the effects of the LWA activity if a construction permit or combined license is not ultimately issued. Since the effects of the LWA activities will be assessed prior to issuance of the LWA, and the effects of the entire action– including issuance of a LWA – will be evaluated prior to issuance of a combined license or construction permit, any additive or synergistic environmental impacts of the LWA activities and the remaining construction and operation activities will be considered prior to issuance of any approvals. Therefore, no reduction in the protection of public health and safety or common defense and security is reasonably expected to result from adoption of the phased approach put forward in the proposed action alternative.

3.2 Cost Savings.

3.2.1 Cost Savings Resulting from the Reduction in the Number of LWA Applications (Proposed Action and Full Environmental Review Alternatives).

The proposed action and full environmental review alternatives both result in a reduction in the current regulatory requirements due to a reduction in the number of activities that require NRC approval in the form of a LWA prior to being undertaken. Therefore, some costs savings are expected in situations where an applicant does not request a LWA to engage in activities that were previously defined as construction.[6] Specifically, these savings would result from eliminating the applicant's and agency's costs associated with filing and processing applications to engage in LWA activities that are no longer considered construction.[7]

3.2.2 Cost Savings Resulting from Avoiding Construction Delays Associated with Definition of Construction (Proposed Action and Full Environmental Review Alternatives)

---

[6]Although the scope of the LWA request will likely be narrowed, any cost savings realized in a situation where an applicant requests a LWA before applying for a construction permit or combined license are expected to be insignificant.

[7]Industry has estimated the cost of preparing a LWA to be $150,000 and the cost associated with supporting NRC review of an LWA request to be $25,000.

Applicants' ability to perform pre-construction site preparation activities without obtaining prior permission from the NRC will lower the cost of construction by reducing the time interval between the outlay of capital for new plant construction and cost recovery realized through plant operation. The definition of construction in the final rule will minimize this time interval by allowing pre-construction, site preparation activities to proceed in parallel with the NRC's licensing process.

3.2.3 Cost Savings Resulting from Avoiding Delays Associated with Requiring Preparation of a Comprehensive Final EIS Before Issuing a LWA (Proposed Action Alternative)

The time interval between the outlay of capital for new plant construction and cost recovery will be further reduced by allowing issuance of a LWA after preparation of a limited EIS, which addresses only the environmental impacts of, and alternatives to, the proposed LWA activities. The time saved will be equal to the difference between the time required to prepare a comprehensive FEIS on the underlying licensing action (i.e. issuance of a construction permit or combined license) and the time required to prepare the limited EIS described above.

3.3 Public Perception (Proposed Action and Full Environmental Review Alternatives)

As explained above, the NRC does not believe that redefining construction will jeopardize radiological health and safety or common defense and security. Certain public stakeholders (e.g. electric utilities, independent power producers, and nuclear power plant vendors) will likely view the proposed changes in a positive light due to the anticipated positive effect on construction schedules for new nuclear power plants and a reduction of unnecessary regulatory burden. However, reducing the agency's involvement in pre-construction site preparation activities may reduce assurance in other segments of the public that these activities are being conducted in an environmentally responsible manner. These segments of the public may view the Commission's definition of construction, which is necessarily constrained by the jurisdiction delegated to the agency under the AEA, as overly technical or overly narrow. Finally, there is a risk that some segments of the public will perceive commencement of site preparation activities as an indication that the NRC has made a decision to approve a license or permit application before formal review of the application is complete.

4. Results and Decision Rationale

4.1 Results

	No Action Alternative	Proposed Action Alternative	Full Environmental Review Prior to Issuance of LWA Alternative
Effect on Adequate Protection of Public Health and Safety	None	None	None
Cost Savings	None	Savings associated with definition of construction. Savings associated with phased EIS.	Savings associated with definition of construction.
Public Perception	None	Reduced public assurance that site preparation activities will be conducted in an environmentally responsible manner. Overly narrow/technical NRC definition of construction. Perception that NRC has decided to approve an application before formal evaluation of the application is complete.	Reduced public assurance that site preparation activities will be conducted in an environmentally responsible manner. Overly narrow/technical NRC definition of construction. Perception that NRC has decided to approve an application before formal evaluation of the application is complete.

4.2 Decision Rationale

The NRC believes that its statutory authority under the AEA is limited to regulating activities that have a reasonable nexus to radiological health and safety and common defense and security. As reflected in the proposed definition of construction, the NRC does not believe that certain site-preparation activities fall within its statutory authority. In addition, the NRC does not believe

that NEPA expands its licensing authority to allow regulation of these site-preparation activities. Therefore, the NRC has no authority to require that private entities obtain permission from the agency prior to undertaking these activities. While narrowing the scope of activities that are considered construction may result in decreased public assurance that environmental values are being protected by the NRC, the agency is obliged to act within the scope of its statutory authority. Therefore, the no action alternative is not a viable option.

As to the remaining alternatives, neither alternative will impair the NRC's ability to fulfill its statutory obligation to ensure that radiological health and safety and the common defense and security are protected. However, the proposed action alternative provides additional cost reduction and efficiency by eliminating delays associated with requiring completion of the FEIS on the underlying licensing action before an applicant is granted permission to engage in LWA activities. Therefore, the proposed action alternative has been selected.

5. Implementation

The final rule is being implemented after publication of a proposed rule (71 FR 61229; Oct. 17, 2006). As reflected in the statements of consideration, public comments on the proposed rule were solicited, considered, and resolved in drafting the final rule. This final rule is being published as a stand-alone document.

The resources estimated to implement this rulemaking are as follows;

Office	Fiscal Year	FTE Estimate
OGC	FY-2007	0.1
NRR	FY-2007	<0.1
NSIR	FY-2007	<0.1

These resources are included in the FY 2007 budgets as part of existing rulemaking activities. Plant specific implementation will be achieved through individual licensing actions. Inspection of licensee implementation will be performed through the normal inspection process. This estimate is based on completion of the rulemaking in the first quarter of FY 2007.