

United States Nuclear Regulatory Commission Official Hearing Exhibit

In the Matter of: NUCLEAR INNOVATION NORTH AMERICA LLC
(South Texas Project Units 3 and 4)



ASLBP #: 09-885-08-COL-BD01
Docket #: 05200012 | 05200013
Exhibit #: BRD000004-00-BD01
Admitted:
Rejected:
Other:

Identified: 1/7/2014
Withdrawn:
Stricken:

NUCLEAR REGULATORY COMMISSION

10 CFR Parts 2, 50, 51, 52, and 100

RIN 3150-A105

Limited Work Authorizations for Nuclear Power Plants

AGENCY: Nuclear Regulatory Commission.

ACTION: Final rule.

SUMMARY: The Nuclear Regulatory Commission (NRC) is amending its 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 an 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.

DATES: The effective date is November 8, 2007.

FOR FURTHER INFORMATION CONTACT:

Nanette V. Gilles, Office of New Reactors, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; telephone 301-415-1180; e-mail: NVG@nrc.gov or 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

A. Development of the Supplemental Proposed LWA Rule

1. 10 CFR Part 52 Rulemaking
2. Industry Stakeholder Comments Seeking Changes to LWA Process

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

C. Description of Supplemental Proposed LWA Rule

II. Public Comments

A. Overview of Public Comments

B. NRC Response to Public Comments

1. Commission Questions
2. LWA Process
3. SSCs Within Scope of "Construction"
4. Excavation
5. Compliance With NEPA
6. LWA Application Process
7. Other Topics

III. Discussion

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

B. NRC's Concept of Construction and the AEA

C. NRC's LWA Rule Complies With NEPA

1. NRC's Concept of Construction Is Consistent With the Legal Effect of NEPA
2. NRC's Concept of the "Major Federal Action" Is Consistent With NEPA Law
3. NRC's Phased Approval Approach Is Not Illegal Segmentation Under NEPA

D. Consideration of Activities as "Construction."

1. Driving of Piles
2. Excavation
3. Temporary Structures and Activities in the Excavation
4. Construction SSCs

E. Phased Application and Approval Process

F. EIS Prepared, but Facility Construction Was Not Completed

G. Commission Action on PRM-50-82

IV. Section-by-Section Analysis

V. Availability of Documents

VI. Agreement State Compatibility

VII. Voluntary Consensus Standards

VIII. Environmental Impact—Categorical Exclusion

IX. Paperwork Reduction Act Statement

X. Regulatory Analysis

XI. Regulatory Flexibility Act Certification

XII. Backfit Analysis

XIII. Congressional Review Act

I. Background

A. Development of the Supplemental Proposed LWA Rule

1. 10 CFR Part 52 Rulemaking

This LWA rulemaking originated as a supplement to an 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 (SRM) 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 comments 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 (March 13, 2006; 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. To achieve this goal, NEI stated that non-safety-related "LWA-1" activities would need to be initiated up to 2 years before the activities currently defined as "construction" in § 50.10(b). NEI believes that the current LWA

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 12782 (March 13, 2006) (RIN 3150-AG24) (May 25, 2006) (ADAMS ML061510471).

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.

The 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 eight numbered comments on the supplemental proposed LWA rule. The commenter 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 in Sections III. Discussion, and IV. Section-by-Section Analysis of this document.

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 (October 17, 2006; 71 FR 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 an 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 an 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, and GE Nuclear)

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

Comment: The Commission should not adopt regulations that allow approval of LWA activities in advance of the 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 these commenters. The commenters' position fails to recognize that the LWA process has been used 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 agency's rules include several longstanding requirements directed at avoiding 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. Because of resource limitations, 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 seek resolution in an NRC hearing for the full range of issues that they are interested in. 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 on the relevant issues in an 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 non-compliance 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

need not, however, address the interest and standing requirements in § 2.309(d). The petition must be filed within the time provided by the supplementary notice of hearing published in the **Federal Register** for part two of the application.

Paragraph (d) makes clear that a non-timely petition for intervention filed under paragraph (b) (incorrectly referred to as paragraph (c) in the supplemental proposed rule) must meet the factors in both 2.309(c)(1)(i) through (iv), as well as 2.309(d). This is no different than non-timely petitions for intervention filed in ordinary, non-phased proceedings.

As noted in the *Section-by-Section Analysis* in this document for § 2.643, nothing in § 2.101(a)(9) or subpart F of part 2 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 to part 2 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 an 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 for the Commission to exercise its review and *sua sponte* authority is the same time provided for in part 2 with respect to a final decision on issuance of a construction permit or combined license.

Part 50—Domestic Licensing of Production and Utilization Facilities

50.10, License Required; Limited Work Authorization

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 of 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 LWA final rule does not permit driving of piles for SSCs described in the definition of construction, unless NRC permission is obtained in the form of an 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 an LWA, construction permit, or combined license.

The SSCs which are within the scope of the definition of construction, and which have a reasonable nexus to radiological health and safety or common defense and security are set forth in paragraph (a)(1). 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 onsite 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 before 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 an 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 before fuel load.

Construction also includes the "onsite, in-place," fabrication, erection, integration, or testing activities for any in-scope SSC. The term, "onsite, in place, fabrication, erection, integration or testing" is intended to describe the historical process of constructing a nuclear power plant in its final, onsite plant location, where components or modules are integrated into the final, in-plant location. The definition is intended to exclude persons from