PR 1,2,10,19,20,21,25,26,50,51,52,54,55, et. al.
(71FR12781)

NUCLEAR ENERGY INSTITUTE

(7)

Adrian P. Heymer
SENIOR DIRECTOR, NEW PLANT DEPLOYMENT
NUCLEAR GENERATION DIVISION

DOCKETED
USNRC

May 31, 2006 (9:22am)

OFFICE OF SECRETARY
RULEMAKINGS AND
ADJUDICATIONS STAFF

May 30, 2006
Annette L. Vietti-Cook
Secretary
U.S. Nuclear Regulatory Commission
Mail Stop 0-16C1
Washington, DC 20555-0001

ATTN: Rulemaking and Adjudications Staff

SUBJECT: Industry Response to NRC Proposed Rule, "Licenses, Certifications and Approvals for Nuclear Power Plants," 71 Fed. Reg. 12,782 (Mar. 13, 2006)

Dear Ms. Vietti-Cook:

The Nuclear Energy Institute (NEI)[1] is submitting the enclosed comments on behalf of the nuclear energy industry in response to the subject Federal Register notice. In letters dated May 16, 2006, and May 25, 2006, we previously provided comments on significant legal and policy issues related to this NRC rulemaking. This letter and the enclosures provide the balance of our comments.

The industry appreciates the steps that have been taken by the NRC to explain the proposed rule in public workshops. Yet, our concerns, first raised in the Commission meeting of November 21, 2005, relating to the complexity and extent of the proposed changes remain. The very informative public interactions with the NRC staff over the past six months have identified areas where additional improvements and revisions are needed in the proposed rule to ensure that the 10 CFR Part 52 licensing processes will be implemented in the most effective and efficient manner.

This rulemaking comes at a time when several prospective COL applicants are working towards the submittal of first-ever COL applications -- by the end of 2007. This rulemaking is on the critical path for these applications. The deployment of

[1] The Nuclear Energy Institute ("NEI") is the organization responsible for establishing unified industry policy on matters affecting the nuclear energy industry, including the regulatory aspects of generic operational and technical issues. NEI's members include all entities licensed to operate commercial nuclear power plants in the United States, nuclear plant designers, major architect/engineering firms, fuel fabrication facilities, nuclear materials licensees, and other organizations and individuals involved in the nuclear energy industry.

Template = SECY-067

SECY-02

1776 I STREET, NW SUITE 400 WASHINGTON, DC 20006-3708 PHONE 202.739.8094 FAX 202.785.1898 aph@nei.org

the next generation of new nuclear plants is directly linked to this rulemaking. It is essential that final NRC regulations are in place by the end of 2006.

The proposed rule, if approved, would impose numerous and extensive changes to a large number of Part 52 provisions and other NRC regulations. The industry comments identify significant issues that require resolution and our recommendations are substantial. They are intended to: (1) preserve longstanding principles concerning Part 52, especially the finality of safety and environmental issues resolved during design certification and early site permit proceedings; (2) clarify and ensure the effectiveness, transparency and predictability of NRC requirements related to new plants; and (3) assist the NRC staff in establishing more effective and efficient licensing processes for new plants that will enable baseload power needs to be met in the next decade.

Detailed comments with specific recommendations for each comment, including recommended rule language where appropriate, are provided in:

- Enclosure 1 – Industry Comments and Recommendations
- Enclosure 2 – Support for Conforming and Other Beneficial Changes
- Enclosure 3 – Responses to the NOPR Stakeholder Questions
- Enclosure 4 – Separate NEI comment letters previously submitted on key policy issues. These are attached for purposes of completeness and convenient reference.

<u>Summary of Selected Industry Comments</u>

- ***The final rule should provide a process for making necessary or beneficial changes to a design certification*** – Following design certification, it may be years before the first combined license applicant references the certified design and completes the detailed design. In that time, advances in technology and insights from operating experience and the detailed first-of-a-kind engineering design may identify beneficial or necessary changes to the certified design. We agree with recent NRC staff statements that Part 52 should include a provision that would allow the original design certification applicant to propose changes to the approved standard design. Such a rule change would enhance standardization and maintain adequate protection of public health and safety, while reducing NRC and industry resource burden.

- ***NRC should not require submittal of the PRA*** – New plant applicants will develop the plant specific PRA based on the design certification PRA, updated to reflect the actual plant configuration and changes in the design from that certified. Applicants should not be required to submit the complete

design-specific or plant-specific PRA. Instead, consistent with the existing practice for design certification applicants, combined license applicants should be required to provide a summary description of the results, insights and methodologies of the PRA in the final safety analysis report. The plant-specific PRA will be updated in accordance with national consensus standard criteria. The complete PRA would be available for NRC inspection at the applicant's office.

- ***The final rule should clarify the process for handling COL applications that reference a design certification application or ESP application*** – The existing rules allow a COL application to reference an application for an ESP or design certification, but contain no provisions to govern such proceedings. NEI is proposing a modification of the Part 52 rules that would preclude duplicative technical reviews and litigation in parallel proceedings, and thus promote more efficient and better focused technical reviews and hearings, benefiting licensees and other stakeholders.

- ***NRC should not adopt new requirements for severe accident design information*** – The proposed new requirement could be misinterpreted as requiring that severe accident features meet the same requirements as features needed to mitigate design bases accidents. This would represent a major and unwarranted change in Commission policy. The ramifications of such a change are extreme and do not appear to have been considered or explained in the proposed rule. Existing Commission policy and guidance have proven sufficient to ensure that future plant designs include measures for mitigating severe accidents, as evidenced by the four designs certified to date. Thus, there is no reason to establish new requirements for severe accident design information.

- ***Existing criteria in the design certification rules for evaluating Tier 2 changes affecting severe accident issues should be clarified*** – Such clarifications would make the actual language in the design certification rules consistent with the original intent, as stated by the NRC staff: to focus on features for mitigating a specific set of severe accidents, i.e., when the core has exited the reactor vessel and containment integrity is being challenged (ex-vessel severe accidents).

- ***Part 21 and other reporting requirements should not be expanded to design certification applicants and ESP holders*** – As a basis for this proposed new requirement, the NRC staff has expressed the concern that deficiencies identified during the application stage might not be reported to the COL applicant or the NRC, absent a new rule. The NRC proposal would not result in the submittal of Part 21 reports by design certification

applicants or ESP holders to the NRC prior to submission of a COL application that references the ESP or design certification because there can be no reportable safety issue until and unless the design certification or ESP is referenced in a license application. Under the existing Part 21 practices, design certification applicants and ESP holders will provide any information concerning defects related to safety related systems, structures or components to the COL applicant for evaluation and, as appropriate, reporting to the NRC. Therefore, an expansion of the scope of Part 21 is unnecessary and unwarranted.

- ***Early Site Permits, Design Certifications and applications for Early Site Permit and Design Certifications under NRC review should not be required to meet new or modified requirements in the proposed rule*** – The proposed rule contains more than 30 new substantive requirements applicable to applications for an ESP, design certification or COL. While existing applications under review would not be consistent with the new requirements, if approved, none of these new substantive requirements is necessary to ensure adequate protection of public health and safety. The NRC proposals would impose an unnecessary and inappropriate resource burden on ESP and design certification applications under review at the time the rule becomes effective. Since the new requirements are not necessary for adequate protection, the rule should include a clause to exempt existing applications under NRC review from the new requirements.

- ***NRC should clarify the applicability of Part 50 and other NRC requirements to Part 52*** – Existing Part 52 language should be retained that makes clear that Part 50 and other NRC requirements apply to Part 52 processes as those requirements are technically relevant. Doing so is necessary to account for the possibility that the NRC-proposed cross-referencing may be incomplete.

- ***Proposed new requirements for Part 52 applicants to address generic letters and bulletins and "comparable international operating experience" are unnecessary, ill-defined and unduly burdensome, and should be deleted*** – Existing requirements and guidance are sufficient to assure appropriate consideration of operating experience, including requirements to assess conformance with the Standard Review Plan and NUREG-0933, *A Prioritization of Generic Safety Issues*.

- ***NRC should not require ESP applicants to perform radiation consequences analyses*** – ESP applicants need not select and identify a particular design. These applicants should not be required to provide detailed radiation consequence analyses. Such analyses depend on specific

design information. Without specific design information, Part 100 compliance cannot be determined, and these analyses must be repeated by the COL applicant. It is unnecessary and contrary to the goal of increased licensing efficiency and effectiveness to require analyses for ESP that must be repeated for COL.

- ***NRC should not expand the scope of ITAAC required for design certification*** – The scope of design certification is different than the scope of a COL application. The proposal to expand the scope of ITAAC for design certification to be the same as that for COL is inappropriate and unnecessary.

The following major comments on the proposed rule have been submitted previously (See Enclosure 4):

- ***Enhancements are needed to the Limited Work Authorization (LWA) Process*** – The proposed NRC amendments relating to the LWA process do not address the critical need to improve the process to permit the industry to make use of modern construction practices and optimize construction schedules. Our comments submitted on May 25, 2006, support recent statements by Commissioners on considering ways to improve the LWA process. Our proposals will enable pre-construction activities to start earlier than is possible under the existing regulations or under NOPR proposals. The industry's proposals would expedite and focus required NRC approval of pre-construction activities solely on activities that have a nexus to safety.

- ***Need to affirm the finality for COL of early site permit (ESP) information*** – The proposed rule would delete key finality provisions and establish new requirements contrary to the key Part 52 principle of finality for issues – including environmental issues – resolved in a prior ESP proceeding. Without finality, an ESP has no value. NEI's letter dated May 16, 2006, describes our concerns and makes recommendations for resolving the issue.

- ***Proposals to enhance key licensing/hearing processes*** – From the initial industry-NRC interactions on the combined licensing process, it is clear that there is a need to clarify, refine and improve the license review and adjudication process for new plant licensing. We believe that this rulemaking provides a valuable opportunity for the Commission to implement specific measures to make the process even more effective and efficient than the revisions proposed in this rulemaking. As a result, additional enhancements to the agencies review and hearing processes are proposed in our letter dated May 25, 2006.

We recognize that some of these comments may raise policy issues. Also, we understand that consideration of certain issues may lead the NRC to determine that it is not possible to resolve all of NEI's comments in 2006. If this is the case, we would support a narrowing of the scope of this extensive rulemaking (i.e., deletion of proposed changes involving unresolved issues).

We believe that there would be benefit in having public meetings on the comments filed to facilitate and expedite NRC staff consideration of these and other public comments. Such interactions could assist the staff in meeting its October 2006 deadline for submittal of the final rulemaking package to the Commission. We look forward to further constructive discussions on developing the most effective and efficient process for licensing new nuclear plants.

If there are any questions on these comments, please contact me at (202) 739-8094; aph@nei.org or Russ Bell (202) 739-8087; rjb@nei.org.

Sincerely,

Adrian P. Heymer

Enclosures

c: The Honorable Nils J. Diaz, Chairman, NRC
The Honorable Edward McGaffigan, Jr., Commissioner, NRC
The Honorable Jeffrey S. Merrifield, Commissioner, NRC
The Honorable Peter B. Lyons, Commissioner, NRC
The Honorable Gregory B. Jaczko, Commissioner, NRC
Mr. Luis A. Reyes, Executive Director of Operations, NRC
Ms. Karen D. Cyr, General Counsel, NRC
Mr. William F. Kane, Deputy Executive Director of Operations, NRC
Mr. James E. Dyer, Director, Office of Nuclear Reactor Regulation, NRC
Mr. Gary M. Holahan, NRC

Enclosure 1
Industry Comments on NRC Proposals in 10 CFR Part 52 Rulemaking
May 30, 2006

Table of Contents

1. New Requirements to Submit a Probabilistic Risk Assessment (PRA) 1

2. New Requirements for Severe Accident Information 4

3. Expansion of Part 21 and Other Reporting Requirements 6

4. ESP and Design Certification Applications Under NRC Review Should Not be Required to Comply with the Proposed Rule 13

5. NRC Should Clarify the Process Applicable to a Situation in which a COL Application References an ESP or Design Certification Application 16

6. Part 52 Should Allow Original Design Certification Applicant to Obtain Amendments to Design Certification Rule 20

7. Clarification of Severe Accident Change Process for Departures from Tier 2 of Design Control Document 23

8. Proposals to Address Applicability of Part 50 and Other NRC Requirements 26

9. New Requirements for Evaluation of Operating Experience 29

10. NRC should not require ESP applicants to perform radiation consequences analyses 31

11. Expansion of the scope of ITAAC Required by a Design Certification Applicant 34

12. NRC Should Not Impose License Conditions As Part of the 52.103 Process 35

13. New Requirements for ESP Applicants to Provide ITAAC.....37

14. Expansion of the Applicability of Requirements.....39
for Employee Protection

15. New Requirements for a COL Applicant to Have
a "Reasonable Process" to Identify New and
Significant Information Relative to the ESP.....41

16. Establishment of Open-Ended Information
Requirements.....43

17. New Requirements for ESP Applicants to Address
Construction Impacts on Existing Plants.....45

18. New Testing Requirements for COL Applicants.....46

19. New Requirements Related to Transfer of an ESP.....49

20. New Security Requirements for a Design Certification
and Design Approval Applicants.....50

21. New Requirements for a Design Certification to
Specify "Design Characteristics".....52

22. New 50.46 Reporting Requirements for Design
Certification Applicants.....53

23. New Requirements Applicable to COL Amendments.....56

24. New Requirements for an ESP Applicant and
Standard Design Applicants to Demonstrate
Technical Qualifications.....57

25. New Requirements to Identify Specific Limited
Work Activities.....59

26. New Requirements for an ESP Holder to Respond
to NRC Information Requests.....62

27. New Requirements for Control of Radioactive
Effluents.....64

28. New Requirement for Construction Completion Dates.....67

29 New Requirement for Design Approvals to Address Emergency Facilities.....68

30. New Requirements on the Timing of Implementation of the Maintenance Rule.....69

31. New Requirements for Decommissioning Reports.....70

32. New Requirements for an Applicant for an ESP or Design Certification to Describe its Quality Assurance (QA) Program.....72

33. New Requirements for an ESP Applicant to Evaluate its Application against the Standard Review Plan (SRP).....75

34. New Requirements for a Design Certification Applicant to Evaluate Severe Accident Design Mitigation Alternatives (SAMDAs).....76

35. New Posting Requirements.....78

36. New Requirement to Notify NRC Within 10 Days of Successful ITAAC Completion.....78

37. Deletion of the Option of Using Appendix Q and Subpart F by COL Applicants.....80

38. Deletions of Provision that an ESP is a "Partial Construction Permit".....82

39. The Proposed Rule Would Allow the NRC Arbitrarily To Withhold the Issuance of an ESP.....83

40. The Proposed Rule Would Allow Litigation of Changes to ESP Emergency Planning Information that are not Significant to Safety.....84

41. Elimination of the Option of Renewing a Standard Design Approval.....87

42. New Limitation on Manufacturing Licenses and Restrictions on the Usefulness of a Manufacturing License....88

43. Prohibition of Changes to a Manufacturing License....90

44. The Required Findings in Mandatory Hearings are not Consistent with the Commission's Recent Decisions in the ESP Proceedings....92

45. Proposed Section 50.55a Would Inappropriately Impose a Backfit on Some Existing Design Certifications....98

46. Contrary to the Proposed Rule, Not All ESP Conditions and Certification Requirement Can Be Completed Prior to Issuance of the COL....101

47. The Proposed Rule Provides for Inconsistent Treatment of Section 50.34(f)....102

48. The Proposed Rule Provides for Inconsistent Treatment of Sections 50.36a and 50.36b....102

49. The Proposed Changes to Section 50.45 Are Inconsistent with the Remainder of the Proposed Rule....104

50. The Proposed Changes to the Environmental Qualification Requirements Are Inconsistent with the Intent of the Existing Rule....104

51. The Proposed Changes to the Section 50.54 Are Inconsistent with the Intent of the Existing Rule....106

52. Section 50.61 Should Not Be Applicable to a COL Until the NRC Has Made its 52.103(g) Findings....107

53. Section 50.72 Should Not Be Applicable to a COL Until the NRC Has Made its 52.103(g) Findings....108

54. The Section 51.71(d) Requirement for COL Applications to Assess Site Characteristics is Inconsistent with the Rest of the Proposed Rule....108

55. A Design Certification Applicant Should Be Allowed to Submit a Design Control Document rather than a Final Safety Analysis Report.....109

56. NRC Should Eliminate All Provisions Related to Antitrust Reviews.....110

57. Clarification that the Requirement to Evaluate the Applications against the SRP only Applies to Light Water Reactors.....111

58. Clarification of the 50.59 Process for COLs.....112

59. Inconsistent Treatment of ESPs.....113

60. Inconsistent Use of the Term "Site Parameters".....114

61. Provisions Recognizing that ITAAC May Be Performed Either in the Plant Or Elsewhere Should be Expanded.....115

62. Use of 10 CFR 50.69 by Design Certification Applicants.....115

This page intentionally left blank

1. New Requirements to Submit a Probabilistic Risk Assessment (PRA)

Proposed Rule

Proposed Sections 52.47(b)(1), 52.80(a), 52.137(b)(1), and 52.158(a) would require applicants to submit a PRA as part of their applications.

Comments

The proposed rule does not justify this requirement. Applicants should not be required to submit their complete design-specific or plant-specific PRA. Instead, consistent with the existing practice for design certification applicants, applicants should only be required to provide a summary description of results, insights and methodologies of their PRA in their final safety analysis report. The complete PRA (*e.g.*, codes) would be available for NRC inspection at the applicant's offices.

Further, as discussed with the NRC Staff during a March 14, 2006, workshop (Tr. 115-116), we understand that it is not the NRC's intent to require submission of the complete PRA.

As discussed during the workshop and in Section 4.4 of draft NEI 04-01, *Industry Guideline for COL Applicants Under Part 52,* Revision E (October 2005), the design PRA for the referenced standard design is expected to serve as the plant-specific PRA to support a combined license (COL) application. Chapter 19 of combined license (COL) final safety analysis reports (FSARs) will provide information that demonstrates that a referenced design certification PRA bounds site- and plant-specific information, including an evaluation of unbounded site- and plant-specific information to determine that any differences have no significant impact on design PRA insights/results/methodologies. Re-submittal of extensive design PRA information (e.g., logic models, etc.) or the complete PRA as part of the COLA is not necessary as this information was reviewed and approved in connection with the design certification.

Updated, plant-specific PRA analyses would be developed to support a COLA (1) if necessary to reflect and assess significant differences between plant-specific information and that assumed in the design PRA, (2) if needed to support a risk-informed departure or exemption from the design certification or other NRC requirement, or (3) if needed to support risk-informed design or operational requirements

(e.g., 10 CFR 50.69 or NFPA-805). Consistent with current practice for design certification and for operating plants, such updated plant-specific PRA analyses, if prepared, would be maintained available for NRC inspection (i.e., not submitted to the NRC as part of COL applications).

While unrelated to requirements on the content of COL applications, it should be noted, as we have discussed with the staff and in NEI 04-01, that the plant-specific PRA that supports the COL application would be updated as plant-specific design and as-built information is developed during construction. This update will be consistent with PRA scope and quality standards in effect six months before the COL is issued. In this way, an updated plant-specific PRA that is representative of the as-built plant will be completed and available prior to fuel load to support plant operations.

Additionally, proposed Section 52.80(a) would require a COL applicant that references a design certification, standard design, or manufacturing license to update the referenced PRA to account for "any design changes, departures, or variances." This provision could be misconstrued as requiring the updated PRA to address all design changes, including changes that are not relevant to the PRA. As discussed with the NRC Staff during the March 14, 2006, workshop (Tr.117-118), we understand that the NRC agrees that the intent of this provision is only to require the updated PRA to account for design changes that are relevant to the PRA.

Recommended Rule Language

We recommend that the identified paragraphs be modified as follows:

Sections 52.47(b) and 52.137(b). The application must also contain:

(1) A <u>summary description of</u> design-specific probabilistic risk assessment (PRA) <u>results, insights and methodologies</u>;

Section 52.80: The [COL} application must contain:

(a) A <u>summary description of</u> plant-specific probabilistic risk assessment (PRA) <u>results, insights and methodologies</u>. If the application references a standard design certification or standard design approval, or if the application proposes to use a nuclear power reactor manufactured under a manufacturing

license under subpart F of this part, the plant-specific PRA summary description must use the PRA for the design certification, design approval, or manufactured reactor, as applicable, and include an evaluation of ~~must be updated to account for~~ site-specific design information and any design changes, departures, or variances.

Section 52.158. The application must contain:

(a) *Probabilistic risk assessment (PRA).* A summary description of design-specific PRA results, insights and methodologies for the reactor. If the application references a certified design, the PRA for the certified design must be updated to reflect any additional portions of the reactor to be manufactured which are not within the scope of the certified design.

Also, we request that the Statement of Considerations for the final rule incorporate the understanding discussed above concerning the extent of design changes to be evaluated in the plant-specific PRA summary description.

The FSAR Chapter 19 summary description of the PRA would satisfy the above Section 52.80(a) requirement for COLA. We expect that guidance regarding the Chapter 19 PRA summary description will be developed as part of the guidance in DG-1145, *COL Applications for Nuclear Power Plants (LWR Edition),* currently under development by the NRC staff.

2. New Requirements for Severe Accident Information

Proposed Rule

Proposed Sections 52.47(a)(20), 52.79(a)(38), 52.137(a)(20) and 52.137(j) would require applications for design certification, COLs, design approvals and manufacturing licenses to include a description and analysis of design features for the prevention and mitigation of severe accidents (core-melt accidents), including challenges to containment integrity caused by core-concrete interaction, steam explosion, high-pressure core melt ejection, hydrogen detonation, and containment bypass.

Comments

The Supplementary Information for the proposed rule does not explain the basis for this proposed change, nor does it justify the change. For several reasons, NEI believes that the proposed new requirement is inappropriate and unwarranted.

First, the proposal introduces severe accident design information requirements in a manner that implies – incorrectly – that severe accidents are part of the design bases, as defined in 10 CFR § 50.2. There is no explanation or basis provided for treating severe accident design requirements as part of the plant's § 50.2 design basis. In particular, it would be inappropriate to apply all of the typical design basis accident requirements (e.g., single failure requirements, quality assurance requirements, environmental qualification requirements) to severe accidents. Based upon statements by the NRC at the workshop on March 14, 2006 (Tr. 105), we understand that it is not the NRC's intent to require plants to apply design basis requirements to severe accident features. At the very least, the proposed rule should be clarified to indicate that an applicant need not apply design basis requirements to severe accident features or analyses.

Second, even if these proposed requirements were not construed to be design bases requirements, severe accident requirements should not be imposed as broad generic requirements without extensive interactions with stakeholders to determine the ramifications and propriety of doing so. For example, the proposed severe accident requirements are not appropriate for all reactor types. In particular, such requirements should not be imposed upon gas cooled reactors, which are not

susceptible to events such as steam explosions, high-pressure core melt ejection, and hydrogen detonation. Therefore, at the very least, the proposed provision should be modified to limit its applicability to light water reactors.

Third, the proposed rule states that the application must provide a description and analysis of design features to "prevent" severe accidents. However, the focus of the proposed provision and all of the examples listed pertain to mitigation of severe accidents. Moreover, the set of design features to "prevent" severe accidents is unbounded in the sense that the bulk of SSCs in a nuclear plant are designed to assure safe operation and prevent severe accidents. Therefore, the proposed rule should be modified to delete any reference to prevention of severe accidents.

In summary, we believe that NRC's existing guidance adequately addresses the need to discuss severe accident features in applications for new nuclear plants. The existing design certifications, which include description and analysis of severe accident mitigation features as appropriate, provide ample evidence of this. There is no reason to elevate existing guidance to the status of a regulation. Therefore, the provision in the proposed rule is unnecessary and inappropriate, and should be deleted.

Recommended Rule Language

We recommend that the proposed provision be deleted in its entirety.

If the NRC does not agree, the proposed revision should at least be modified to mitigate some of the detrimental features. In this case, we recommend the proposed provisions be modified as follows (Section 52.79(a)(38) shown – typical):

> (38) <u>For light water reactors, a</u> description and analysis of <u>reasonable</u> design features for the ~~prevention and~~ mitigation of <u>beyond-design basis accidents involving substantial core melt.</u>;

3. Expansion of Part 21 and Other Reporting Requirements

Proposed Rule

Proposed changes to 10 CFR Part 21 and 10 CFR § 50.55(e) would require applicants in general, design certification applicants in particular, and holders of early site permits to report defects to the NRC. Additionally, proposed 10 CFR § 52.6(b) would impose certain reporting requirements on applicants for design certification and design approval.

Comments

Part 21 Should Not Apply to Applicants

The industry does not agree with the proposed changes to Part 21. Part 21 has been in existence for almost 30 years. During that period, Part 21 has never applied to applicants. Furthermore, we are not aware of any problems that would warrant the expansion of Part 21 to applicants, and the NRC has not identified any such problems. Thus, such an expansion is unjustified. Applicants have taken measures to ensure that they are made aware of any errors and deficiencies that are identified by contractors and suppliers for work performed on commercial nuclear generating projects. The reason: applicants will eventually become holders and licensees and want equipment to operate correctly. Also, the proposal is contrary to the Energy Reorganization Act (ERA), the statute that is the basis for Part 21. The following paragraphs provide additional bases for the industry position that the proposed changes to Part 21 are unnecessary and unwarranted.

It would be inappropriate and contrary to the ERA to apply Part 21 to applicants. Part 21 was established to implement Section 206 of the ERA, which applies to "licensees" and vendors/suppliers/contractors of licensees, not to "applicants." Specifically, Section 206 applies to:

> Any individual director, or responsible officer of a firm constructing, owning, operating, or supplying the components of any facility or activity which is licensed or otherwise regulated pursuant to the Atomic Energy Act of 1954 as amended, or pursuant to [the Energy Reorganization Act]...

Similarly, as indicated in 10 CFR § 21.2, the existing regulations of Part 21 apply only to entities licensed to possess, use, or transfer within the United States radioactive material, or to construct, manufacture, possess, own, operate, or transfer within the United States, any production or utilization facility or fuel storage facility. Applicants do not fall within the scope of Section 206 of the ERA, and it would be inconsistent with the Act to expand the scope of § 21.2 to include applicants.

It has been the standard practice for a construction permit (CP) applicant to specify Part 21 requirements in its procurement contracts for a plant prior to issuance of the construction permit. This is a good practice, since Part 21 is applicable to such contracts once the CP is issued by the NRC (e.g., from a commercial perspective, it is preferable to specify Part 21 in the initial contract rather than to attempt to backfit the contract to specify Part 21 requirements once the CP is issued). We would expect that this good practice will be implemented by COL applicants as well. Thus, as a practical matter, there is no reason to expand Part 21 to include applicants.

Additionally, separate and apart from Part 21, applicants will have an obligation under proposed Section 52.6(a) to provide information to the NRC that is complete and accurate in all material respects. This obligation is broader than the obligation in Part 21, and will require applicants to update and correct their applications to account for the type of defects and noncompliances covered by Part 21. The industry has no objection to proposed Section 52.6(a). Given the provisions in proposed Section 52.6(a), there is no need to apply Part 21 to applicants.

Part 21 Should Not Apply to ESPs

An ESP is an approval for a site, not for a design. In fact, under both the existing and proposed revision to Part 52, an ESP applicant is not required to designate a specific design to be located on the site in question. Given the absence of design information, Part 21 should not be applicable to an ESP applicant or an ESP holder.

Under Part 21, only noncompliances and defects in basic components involving "substantial safety hazards" are reportable. It may be impossible for an ESP applicant or holder to determine whether a particular deficiency or noncompliance in siting information creates a "substantial safety hazard" because it may not have a design against

which to make the determination.[1] As a result, absent final design information, an error in siting information will not meet the definition of a reportable condition. Since there is no practicable method for ESP applicants or holders to determine whether an error in siting information creates a substantial safety hazard, Part 21 should not be applicable to ESP applicants or holders.

Part 21, Section 50.55(e), and Section 52.6(b) Should Not Apply During the Period Prior to Submission of a COL Application

Proposed provisions in Part 21, Section 50.55(e), and Section 52.6(b) would impose reporting obligations on ESP holders, holders of standard design approvals, and design certification applicant during the period from issuance of the NRC approval to the time of reference of the approval in a COL application. For several reasons, we believe that such an extension of the reporting is inappropriate and inconsistent with prior NRC positions.

In the Supplementary Information accompanying the proposed rule (71 Fed. Reg. at 12,818) the NRC notes that it has changed its position from the 2003 Notice of Proposed Rulemaking (NOPR). It provides the following reasons for making these entities subject to the implementing requirements for Section 206 of the ERA:

> The NRC believes that the extension of NRC's reporting requirements implementing Section 206 of the ERA to part 52 licensing and approval processes should be consistent with three key principles: First, NRC regulatory requirements implementing Section 206 of the ERA should be a legal obligation throughout the entire "regulatory life" of a NRC license, a standard design approval, or standard design certification. Second, reporting of defects or failures to comply with associated substantial safety hazards should occur whenever the information on potential defects would be most effective in ensuring the integrity and adequacy of the NRC's regulatory activities under part 52 and the activities of entities subject to the Part 52 regulatory regime. Third, each entity conducting activities within the scope of part 52 should develop and implement procedures and practices to

[1] In this regard, a mere nonconservatism or error in siting issues does not create a substantial safety hazard, since plant designs typically include significant margins to account for such errors.

> ensure that it fulfills its Section 206 of the ERA reporting obligations in an accurate and timely manner. [fn. omitted]

The "regulatory life" of an early site permit, standard design approval, and standard design certification has no regulatory significance until and unless one of the Part 52 actions is referenced in a COL application. No "substantial safety hazard" could exist unless and until these actions are referenced in a COL application. It would be unduly burdensome for these entities to maintain a reporting program when no activities could create a "substantial safety hazard" under Section 206 of the ERA.

For these and other reasons explained further below, NEI continues to believe that these reporting requirements should not apply to a holder of an early site permit or a vendor of a standard design until the ESP or standard design is referenced in a COL application.

First, it is not necessary for an ESP applicant to identify any particular design, and, even if a design is specified, it is possible that the design will not have been fully developed at the time the ESP is issued. Under such circumstances, it likely will be impossible for an ESP holder to determine whether a particular deficiency or noncompliance creates a "substantial safety hazard." As a result, it will be impossible for an ESP holder to determine whether to report the deficiency or noncompliance under Part 21, Section 50.55(e) or Section 52.6(b).

Second, the NRC appears to recognize this point, but has not crafted the proposed rule to accommodate it. In particular, the Supplemental Information states as follows (71 Fed. Reg. at 12,820):

> Once an application has been granted, the NRC believes that immediate reporting of subsequently-discovered defects is not necessary in certain circumstances. For those part 52 processes which do not authorize continuing activities required to be licensed under the AEA, but are intended solely to provide early identification and resolution of issues in subsequent licensing or regulatory approvals, the NRC believes that reporting of defects or failures to comply associated with substantial safety hazards may be delayed until the time that the part 52 process is first referenced. The NRC's view is based upon its determination that a defect with respect to part 52 processes should not be regarded as a "substantial safety hazard," because the possibility of a

> substantial safety hazard becomes a tangible possibility necessitating NRC regulatory interest only when those part 52 processes are referenced in an application for a license, early site permit, design approval or design certification. Upon initial referencing, the holder (or in the case of a design certification), the applicant who submitted the application leading to the final design certification regulation must make the necessary notifications to the NRC as well as provide final engineering. The notification must address the period from the Commission adoption of the final design certification regulation up to the filing of the application referencing the final design certification regulations. Thereafter, notice must be made in the ordinary manner.

NEI agrees with the principles espoused in the quote above. However, these principles only appear in the Supplementary Information, and are inconsistent with the provisions in the proposed rule itself. In particular, there is nothing in the proposed provisions in Part 21, Section 50.55(e), or Section 52.6(b) that would allow an applicant for design certification or design approval or an ESP holder to defer reporting until such time that the standard design or ESP is referenced in a COL application. Therefore, the proposed rule needs to be modified to make it consistent with the accompanying guidance and principles quoted above.

Finally, we believe that it would be inappropriate for the NRC to apply Part 21 to the applicant for a design certification. A design certification is a rule, not a license, and the design certification applicant has no proprietary interest in the design certification rule. Therefore, the design certification applicant *per se* should have no responsibilities under Part 21, since the design certification applicant may not be the vendor used by the COL applicant. Furthermore, both Part 21 and Section 206 apply to companies that supply basic components for a nuclear plant. If the design certification applicant contracts with the COL applicant to supply basic components, the design certification applicant will be covered by the "flow down" provisions in Part 21. Thus, the actual vendor would be subject to Part 21, and there is no reason to apply Part 21 to design certification applicants.

Part 21 Should Not Be Retroactively Applied to Existing ESP Applicants and Design Certification Applicants

As mentioned above, the existing provisions in Part 21 do not apply to applicants. However, as currently written, the proposed revision to Part 21 would be applicable to existing applicants for an ESP or design certification.[2] Thus, the proposed changes to Part 21 would impose retroactive obligations on the existing ESP and design certification applicants. For several reasons, such retroactivity is inappropriate:

- Application of this proposed provision to existing applicants would be unworkable, since they have already issued contracts and cannot reasonably amend them to impose Part 21 responsibilities on contractors and subcontractors.
- Imposition of this proposed provision on the existing contracts of applicants would constitute an unconstitutional *ex post facto* regulation under Article I, Section 9 of the U.S. Constitution.

Thus, at the very least, NRC needs a grandfather clause that would except existing applicants from the need to meet the new requirements as applied to contracts and activities entered into prior to the effective date of the new regulation.

Recommended Rule Language

We recommend that the proposed provisions in Section 21.2(a) be rewritten as follows:

(1) Each individual, partnership, corporation, or other entity ~~applying for or~~ holding a license or construction permit under the regulations in this chapter to possess, use, or transfer within the United States source material, byproduct material, special nuclear material, and/or spent fuel and high-level radioactive waste, or to construct, manufacture, possess, own, operate, or transfer within the United States, any production or utilization facility or independent spent fuel storage installation (ISFSI) or monitored retrievable storage installation (MRS); and each director and responsible officer of such a licensee;

...

[2] In fact, it would be applicable to companies such as Combustion Engineering, the design certification applicant identified in Appendix B to Part 52, which no longer exists.

(3) Each individual, corporation, partnership, or other entity doing business within the United States, and each director and responsible officer of such an organization, ~~applying for a design certification rule under part 52 of this chapter; or supplying basis components with respect to that design certification, and each individual, corporation, partnership, or other entity doing business within the United States, and each director and responsible officer of such an organization,~~ whose application for design certification has been granted under part 52 of this chapter, or who has supplied or is supplying basic components with respect to that design certification, provided that such design certification is referenced in a combined license application submitted under part 52 of this chapter;

(4) Each individual, corporation, partnership, or other entity doing business within the United States, and each director and responsible officer of such an organization, ~~applying for or~~ holding a standard design approval under part 52 of this chapter; or supplies basic components with respect to a standard design approval under part 52 of this chapter, provided that such design approval is referenced in a combined license application submitted under part 52 of this chapter; and

(5) Each individual, corporation, partnership, or other entity doing business within the United States, and each director and responsible officer of such an organization, holding an early site permit under part 52 of this chapter; or supplies basic components with respect to an early site permit under part 52 of this chapter, provided that such early site permit is referenced in a combined license application submitted under part 52 of this chapter.

We recommend that the proposed provisions in Section 52.6(b) be rewritten as follows:

(b) Each applicant for a license or licensee~~, each holder of a standard design approval under this part, and each applicant for a standard design certification under this part following Commission adoption of a final design certification regulation,~~ shall notify the Commission of information identified by the applicant or the licensee as having for the regulated activity a significant implication for public health and safety or common defense and security. An applicant~~,~~ or licensee~~, or holder~~ violates this paragraph only if the applicant~~,~~ or licensee~~, or holder~~ fails to notify the Commission of information that the applicant~~,~~ or licensee~~, or~~

~~holder~~ has been identified as having a significant implication for public health and safety or common defense and security. Notification shall be provided to the Administrator of the appropriate Regional Office within 2 working days of identifying the information. This requirement is not applicable to information which is already required to be provided to the Commission by other reporting or updating requirements.

4. ESP and Design Certification Applications Under NRC Review Should Not be Required to Comply with the Proposed Rule

Proposed Rule

The proposed rule contains more than thirty new requirements on applicants for early site permits and design certifications. For example, with respect to ESP applicants, new requirements are proposed to address construction impacts on existing plants; to evaluate fission product releases; and to provide emergency preparedness (EP) ITAAC for major features of an EP plan.

With respect to design certification applicants, NRC proposes new requirements for severe accident information; for evaluation of operating experience; for control of radioactive effluents; for evaluation of severe accident design mitigation alternatives (SAMDA); and for specifying "design characteristics." There also are new proposed requirements applicable to both the ESP holders and design certification applicants, including expanded Part 21 reporting requirements; demonstration of technical qualifications; and new requirements relating to quality assurance programs.

Comments

The proposed rule is silent on whether the proposed new requirements would be imposed on applications for ESPs, on ESPs issued at the time of issuance of a final rule under the pending rulemaking, or both. The proposed rule also is silent on whether the proposed new requirements would be imposed on designs which already have been certified, on applicants for those certified designs, or on applicants for designs which have not yet been certified at the time of issuance of a final rule.

Further, the proposed rule is silent on whether the new requirements could be imposed on an applicant for a COL that references an ESP or a certified design. The possibility of retroactivity of new Part 21 requirements on existing design certification applicants was discussed at the NRC workshop on March 14, 2006. The staff stated that the proposed new requirement was intended to be a "forward-looking obligation" [Tr. p. 224-225] and that the staff is "not proposing to backfit" the design certification applicants.

To the extent the NRC does not delete the burdensome and objectionable new requirements, we recommend that the final rule include a "grandfather" clause to exempt ESPs and certified designs that are in existence, and applications for ESPs and certified designs that are pending on the effective date of any new requirements. In other words, any new requirements should only apply to ESP applications or certified design applications filed after the effective date of the new regulations. If any new requirement is intended to be applicable to an existing ESP or certified design, or to an application for an ESP, a design certification or a COL, the rule should specifically so state, and the Statements of Consideration should provide the basis for doing so. Any new requirement that does not specify such applicability would not be applicable retroactively.

It would be fundamentally unfair and an abuse of discretion for the NRC to apply new requirements to existing ESPs or certified designs, or to applications for ESPs, design certifications, or COLs that are pending at the time of adoption of any such new requirements. In the NOPR, the Commission stated: "The Commission believes that this rulemaking action will improve the effectiveness and efficiency of the licensing and approval processes <u>for future applicants</u>." (71 Fed. Reg. 12782) (emphasis added). Thus, it would appear that the NRC intended that new requirements contained in the proposed rule would not be retroactively applied, but rather applied only to new applications. A "grandfather" provision is needed in the new rule to make this clear.

Further, in order to make sure that new regulations would not apply in a retroactive manner to prior applications for ESPs or design certifications, or to ESPs and certified designs existing on the date new regulations become effective, it is necessary to prevent the new regulations from being applied through the COL process to any such existing ESPs or design certifications, or applications therefore, that are reference in a COL application even if the COL application is filed after the effective date of the new regulations.

Recommended Rule Language

The industry recommends the following language be adopted as a new General Provision:

> An early site permit issued under §52.24 and a standard design which has been certified under §52.54 shall not be subject to modification or amendment as a result of adoption by the Commission of any amendments to Commission regulations relating to early site permits, design certifications or combined licenses which are effective after the date of issuance of the early site permit or the adoption of the design certification rule unless the change resulting from such amendment to Commission regulations is required for adequate protection of the public health and safety or the common defense and security. No amendments to Commission regulations relating to early site permits, design certifications or combined licenses shall be applicable to any application for an early site permit or a design certification which was filed with the Commission prior to the effective date of any such amendments unless compliance with the regulation is required for adequate protection of the public health and safety or the common defense and security.

5. NRC Should Clarify the Process Applicable to a Situation in which a COL Application References an ESP or Design Certification Application

Proposed Rule

10 CFR § 52.27(c) allows a construction permit or COL applicant, at its own risk, to "reference in its application a site for which an early site permit application has been docketed but not granted." Similarly, Section 52.55(c) allows a construction permit or COL applicant, at its own risk, to "reference in its application a design for which a design certification application has been docketed but not granted." Beyond this permissive language, the regulations provide no further detail. The current proposed amendments to 10 CFR Part 52 do not propose changes to Sections 52.27(c) and 52.55(c). *See* 71 Fed. Reg. 12,892, 12,897.

Comments

Consistent with existing Sections 52.27(c) and 52.55(c), several NRC licensees and/or consortia are considering filing COL applications that reference an ESP *application* or a DC *application*. Because 10 CFR Part 52 currently does not specify the procedures to be followed in such a situation, further direction from the NRC is now needed as to how Sections 52.27(c) and 52.55(c) should be implemented.[3] One advantage of addressing this issue in the ongoing Part 52 rulemaking is that the NRC could thereby provide a clear, definitive, and generic regulatory solution to this question.[4]

Specifically, industry recommends that the NRC revise 10 CFR §§ 52.27(c) and 52.55(c) to provide clarification and direction on handling COL applications that reference ESP or DC applications. Such

---

[3] This topic (under the heading of the need for "licensing flexibility" in the new 10 CFR Part 52), was specifically mentioned in NEI's December 14, 2005, letter to NRC Chairman Diaz responding to questions and comments raised in the November 21, 2005, NRC-industry meeting.

[4] Further, we believe that the promulgation of a more detailed process in 10 CFR §§ 52.27(c) and 52.55(c) would be consistent with the Commission's recent directive to the NRC Staff to include in the Part 52 rulemaking "proposed strategies for staff review of expected applications and support for COL hearings before the Atomic Safety and Licensing Board Panel." *See* Jan. 30, 2006 Staff Requirements Memorandum re SECY-05-0203 from the Commission, p. 3.

guidance is needed to enhance the efficiency of both the NRC Staff's review and the conduct of NRC hearings on COL applications that reference an ESP or DC application. Industry's goal in this regard is to preclude the NRC Staff and the NRC Atomic Safety and Licensing Board (Licensing Board) from conducting duplicative review of DC and ESP application issues in the COL proceeding pending issuance of the final DC and ESP. Such redundant licensing reviews and/or redundant litigation of ESP siting issues and DC standard design issues in connection with a COL application will almost certainly delay and further encumber the Part 52 licensing process, with no attendant increase in the protection of public health and safety or the environment. Redundant licensing reviews for new plants are also inconsistent with the Commission's stated goal, in the current rulemaking, to "more effectively and efficiently implement the licensing and approval processes for future nuclear power plants under part 52." *See* 71 Fed. Reg. 12,783. Furthermore, such redundant reviews would pose the potential for inconsistent results in the multiple proceedings, and possibly the loss of standardization.

In particular, we propose that the text of Sections 52.27(c) and 52.55(c), and/or the discussion on the Statements of Consideration accompanying the NRC final rule, make the following points:

- The hearing for a COL application may proceed pending issuance of the ESP or DC referenced in the COL application, provided that a docketed ESP or DC application precedes the docketed acceptance date of the COL application.

- The issues that will be addressed in the referenced ESP proceeding or the DC proceeding/rulemaking may not be addressed in the COL application hearing, and may not form the basis for admissible contentions in the COL proceeding, except as may be combined in a single license proceeding under Section 52.8. The Licensing Board presiding in the COL hearing would defer consideration of matters to be resolved in the ESP or DC proceeding, including any contentions adjudicated in those proceedings; however, litigation on other COL issues would proceed.

- The COL application hearing should be based upon the information contained in the DC application and/or ESP application, as amended at the time of COL application hearing commences. If the DC application or ESP application were to change after the conclusion of the COL application hearing, additional hearings may be necessary if those changes impact the issues considered in the COL proceeding.

- Upon issuance of the ESP or DC, the COL applicant would amend the COL application to reference and conform to the final ESP or DC.

- The commencement of a COL hearing for a COL referencing a pending ESP or DC application would be at the risk of the COL applicant, consistent with existing Sections 52.27(c) and 52.55(c).

Underlying this proposed regulatory approach is the assumption that a COL application referencing a ESP or DC *application* should be treated similarly to a COL application that references a final ESP or DC. (*See* 10 CFR § 52.73.) In terms of the licensing review, we propose that the NRC Staff and the Advisory Committee on Reactor Safeguards (ACRS) would review siting issues in the context of the ESP proceeding and standard design issues in the context of the DC proceeding. In the COL proceeding, the Staff and the ACRS would subsequently rely upon these previous reviews and treat siting matters and standard design matters as final, thereby avoiding duplicative reviews of siting and/or design issues in the COL proceeding.

Regarding the interface between the COL proceeding and the ESP or DC application, the NRC Staff and ACRS would assume that the information in the ESP or DC application is final. If the referenced ESP or DC application is later amended, the Staff and ACRS would account for that amendment in their review of the COL application, and the applicant would amend the COL application as needed.

Recommended Rule Language

We propose the following additional changes to the existing language in 10 CFR §§ 52.27(c) and 52.55(c).[5]

<u>Proposed Revision to 10 CFR § 52.27(c)</u>

> An applicant for a construction permit or-combined license may, at its own risk, reference in its application a site for which an early site permit application has been docketed but not granted. <u>To avoid duplication of effort, the NRC (including the presiding officer) in the construction permit or combined license proceeding shall not consider or admit any proposed contentions based on or relating to the acceptability of the matters addressed in the early site</u>

[5] Alternatively, this text might be added as an administrative change to NRC regulations in 10 CFR Part 2.

> permit application, as amended. The NRC may perform, but will not complete, its review of and hearings on the application for the construction permit or combined license pending issuance of the early site permit. Alternatively, the applicant may request that the ESP and the construction permit or combined license be combined in accordance with 10 CFR 50.31 or 10 CFR 52.8.

Proposed Revision to 10 CFR § 52.55(c)

> An applicant for a construction permit or combined license may, at its own risk, reference in its application a design for which a design certification application has been docketed but not granted. To avoid duplication of effort, the NRC (including the presiding officer) in the construction permit or combined license proceeding shall not consider or admit any proposed contentions based on or relating to the acceptability of the matters addressed in the design certification application, as amended. The NRC may perform, but will not complete, its review of and hearings on the application for the construction permit or combined license pending issuance of the design certification rule.

We believe that NRC rulemaking is not the only method that could be used to delineate an acceptable process by which the NRC will address licensing reviews and hearings for COL applications that reference ESP or DC applications. Because the ongoing Part 52 rulemaking does provide one viable method for the NRC Staff to address this question, we have chosen to include comments on this issue. In addition to revising the text of the affected regulations in either Part 2 or Part 52, we ask that the NRC Staff include explanatory language addressing these concepts in the Statements of Consideration accompanying issuance of the final rule amending 10 CFR Part 52, to provide maximum clarity on these points.

6. Part 52 Should Allow the Original Design Certification Applicant to Obtain Amendments to Design Certification Rule

Proposed Rule

The final rule revision should include a revision to the current 10 CFR §52.63 to allow the original design certification applicant or its successor to petition the Commission for rulemaking to amend the design certification rule to incorporate "beneficial" changes resulting from first-of-a-kind engineering. Such changes include (1) design changes that would result in significant improvements in safety efficiency, and/or reliability; and (2) design changes that result from continuing engineering or design work or are required because of lack of availability of components specified in the original design certification.

Comments

Absent special circumstances, current NRC regulation 10 CFR §52.63 prevents any amendment to a design certification rule:

> ... unless the Commission determines in a rulemaking that a modification is necessary either to bring the certification or the referencing plants into compliance with the Commission's regulations ...
> or to assure adequate protection of the public health and safety or the
> common defense and security.

Thus, no amendment to a design certification rule appears to be allowed to incorporate the type of beneficial changes identified above.

In the March 13 NOPR, the proposed change to 10 CFR §52.63 is the same change proposed in the July 3, 2003, Notice of Proposed Rule. The Commission proposes a third reason for allowing generic post-design certification changes in addition to the two reasons that are set forth in the current rule. Specifically, the NRC proposes that a design certification rule could not be modified unless the Commission determines in a rulemaking that the change:

> "(i) ...;

"(ii) ...: or

"(iii) Reduces unnecessary regulatory burden and maintains protection to public health and safety and the common defense and security."

We have no objection to the NRC proposal. However, there remains a further need to amend the current rule to allow changes to be proposed by a design certification applicant where the changes provide benefits in connection with the design, construction, or operation of the plant. Such an amendment is needed to recognize and encourage continuing work to improve the design certification such that the most beneficial and complete design certification is available at the time the first CP or COL referencing that design certification is issued.

The Commission should allow the applicant for the original design certification or its successor to propose amendments to the design certification rule by way of notice and comment rulemaking, even in those situations where no modification is necessary, to bring the certified design into compliance with Commission regulations or orders or to assure adequate protection of the public health and safety or the common defense and security. The change to §52.63 proposed in the current rulemaking, which would allow an amendment to a design certification rule where such amendment "[r]educes unnecessary regulatory burden," is not sufficient.

Proposed changes should be permitted where they maintain both protection of the public health and safety and common defense and security. Such a process would result in worthwhile benefits in terms of improvement in safety, efficiency, and/or reliability relating to the design, construction and operation of the plant.

There also may be occasions where components specified in the standardized design will not be available. For example, the standard design may specify a component which is no longer being manufactured when the certified design is selected for use in connection with a COL application. There also may be situations where a component which is specified is later determined not to be acceptable. Finally, there may be instances where there were minor errors made in some portion of the certified design. In each of these situations, there needs to be a method whereby the original applicant for the certified design can propose and obtain a generic amendment to the design certification.

Our proposal would be consistent with both standardization and finality, since design certification amendments would be applicable to all plants that reference the design certification and would allow design certification amendments only prior to issuance of the first CP or COL that references the design certification. Following the issuance of the first CP or COL that references the amended design certification, further generic changes to and plant-specific departures from the certification would be made in accordance with the applicable change process in the design certification rule.

While the Commission declined to provide for updating a design certification to incorporate beneficial changes in the original 1989 Part 52 rule, the need for and appropriateness of such flexibility has become apparent in the intervening years – a "lesson learned." There are many reasons why the designer may want to make changes (e.g., improvements in technology, efficiency or reliability, minor corrections, further development work). The Commission should consider these factors in the current rulemaking to make the design certification process more workable and useful.

We believe the industry proposal is consistent with the concept identified by Chairman Diaz in his February 13 speech at the Platts Conference, and by the NRC staff in public meetings since that time, to amend the design certification rules to include additional standard design information.

Recommended Rule Language

Insert the following as §52.63(a)(2) and renumber the subsequent paragraphs:

> (2) <u>The original design certification applicant or its successor for a standardized design issued under this Subpart may file a request for an amendment to the design certification by way of notice and comment rulemaking to incorporate beneficial changes to the design, including changes that:</u>
>
> <u>(i) would result in significant improvements in plant safety, efficiency, and/or reliability during design, construction and operation;</u>

(ii) result from continuing engineering and design work on the details of the certified design, including changes that are required because of lack of availability of components specified in the certified design

The Commission shall grant the request if it determines that the amendment will maintain protection of the public health and safety and common defense and security and comply with the Atomic Energy Act and the Commission's regulations.

The Commission will issue an amendment only if a construction permit or combined license referencing the design certification has not yet been issued. The amendment will be applied to all plants referencing the design certification.

7. Clarification of Severe Accident Change Process for Departures from Tier 2 of Design Control Document

Proposed Rule

The proposed rule includes modifications to Section VIII.B.5.c of each of the appendices for design certification. This section of the design certification rule specifies the process for determining whether or not a license amendment is required for a departure from Tier 2 affecting resolution of a severe accident issue. The proposed changes to Section VIII.B.5.c are currently limited to modifying the introductory language to conform to 10 C.F.R. § 50.59 terminology (*i.e.*, it would delete references to "unreviewed safety question" and "safety evaluation").

Comments

Clarification in the rule language is needed both for consistency with the terminology in 10 C.F.R. § 50.59 and to conform to the Commission's intent for this section of the rule, as explained in the Statement of Considerations for each of the design certification rulemakings. Quoting from the Westinghouse AP-1000 final rulemaking, the Commission's purpose for Section VIII.B.5.c is as follows:

> The Commission believes that the resolution of severe accident issues should be preserved and maintained in the same fashion as all other safety issues that were resolved during the design certification review (refer to SRM on SECY-90-377). However, because of the increased uncertainty in severe accident issue resolutions, the Commission has adopted separate criteria in paragraph VIII.B.5.c for determining if a departure from information that resolves severe accident issues would require a license amendment. For purposes of applying the special criteria in paragraph VIII.B.5.c, severe accident resolutions are limited to *design features* where the intended function of the *design feature* is relied upon to resolve postulated accidents *when the reactor core has melted and exited the reactor vessel, and the containment is being challenged.* These design features are identified in section 1.9.5 and Appendix 19B of the DCD, with other issues, and are described in other sections of the DCD. Therefore, the location of design information in the DCD is not important to the application of this special procedure for severe accident issues. However, the special procedure in paragraph VIII.B.5.c does not apply to design features that resolve so-called "beyond design-basis accidents" or other low-probability events. The important aspect of this special procedure is that it is limited to severe accident *design features*, as defined above. Some design features may have intended functions to meet "design basis" requirements and to resolve "severe accidents." If these design features are reviewed under paragraph VIII.B.5, then the appropriate criteria from either paragraphs VIII.B.5.b or VIII.B.5.c are selected depending upon the function being changed.
>
> 71 Fed. Reg. 4462, 4474 (Jan. 27, 2006). (Emphasis added.)

In addition, during a public meeting between NEI and the NRC on April 18, 2006, the NRC clarified that the change process in Section VIII.B.5 of the design certification rules was not intended to apply to discussions of the probabilistic risk assessment in Tier 2. We believe that this is an important clarification that should be reflected in the design certification rules so that the rule language is not misconstrued.

Recommended Rule Language

We recommend that the proposed amendments for Section VIII.B.5.c be rewritten as follows:

c. A proposed departure from Tier 2 affecting resolution of an ex-vessel severe accident issue identified in the plant-specific DCD requires a license amendment if:

(1) There is a substantial increase in the ~~probability~~ likelihood of an ex-vessel severe accident design feature malfunction such that a particular ex-vessel severe accident previously reviewed and determined to be not credible could become credible; or

(2) There is a substantial increase in the consequences to the public of a particular ex-vessel severe accident previously reviewed.

NEI also recommends that the proposed amendments for Section VIII.B.5.a be modified as follows:

a. An applicant or licensee who references this appendix may depart from Tier 2 information, without prior NRC approval, unless the proposed departure involves a change to or departure from Tier 1 information, Tier 2* information, or the technical specifications, or requires a license amendment under paragraphs B.5.b or B.5.c of this section. When evaluating the proposed departure, an applicant or licensee shall consider all matters described in Tier 2 of the plant-specific DCD, except for discussions of the probabilistic risk assessment.

8. Proposals to Address Applicability of Part 50 and Other NRC Requirements

Proposed Rule

The proposed rule includes four types of interrelated changes:

1. Proposed changes to Part 52 to copy some requirements and contain references to other requirements from Part 50 and other regulations.
2. Proposed changes to Part 50 and other regulations to contain references to Part 52.
3. Proposed changes to Part 52 that would delete the existing provisions in 10 CFR § 52.83, and modify other regulations such as 10 CFR § 52.81 to delete the statement that Part 50 and other regulations apply to the extent "technically relevant."
4. Proposed 10 CFR § 52.0, which contains general provisions regarding the applicability of other parts.

Comments

As we understand it, these proposed changes are not intended to impose new requirements on Part 52 applicants, but instead to clarify which requirements are applicable to Part 52 applicants. Therefore, it appears that the proposed changes are not intended to be substantive. Nevertheless, we have several concerns with respect to these proposed changes.

The first sentence in proposed § 52.0(b) states that unless otherwise specifically provided for in this part, the regulations in 10 CFR Chapter I apply to a holder of, or applicant for an approval, certification, permit, or license. This sentence is unnecessary and conflicts with other provisions in 52.0(b), which state that only the "applicable" provisions apply. We believe that this section should be modified to delete the first sentence, thereby eliminating the inconsistency and the potential for confusion.

Also, the third type of changes identified above under *Proposed Rule* creates the potential for unintended consequences. As the NRC Staff acknowledged during the workshop on March 14, 2006 (Tr. 29), it is possible that the Staff may have inadvertently missed some applicable requirements or provisions. Similarly, due to the shear magnitude of the task, the industry has not been able to perform a comprehensive

review of every section in 10 CFR to determine whether the NRC has properly designated the applicability of each section. (We were able to determine that the Staff's draft proposed rule did inadvertently miss some applicable regulations, e.g., Part 171, which were corrected in the NOPR). In order to account for such inadvertent oversights by both the NRC and the industry, it is critical that Part 52 contain language similar to that currently in Sections 52.81 and 52.83. Restoring the "applicable as technically relevant" language is necessary to encompass regulations that are intended to apply to Part 52 applicants, but that are not specifically addressed in the proposed rule.

Additionally, the third type of proposed changes identified above could, for example, render impossible the issuance of a standard design certification. By its nature, a design certification is not intended to and cannot satisfy all of the "standards set out in 10 CFR parts 20, 50 and its appendices, 51, 73, and 100." However, a literal reading of the proposed rule would require just such a result. NEI does not believe that the NRC intended such a result in proposing to eliminate references to "technically relevant" and "applicable" regulations. There is no downside to retaining this language for the final rule.

Recommended Rule Language

We recommend the following changes to the proposed regulations:

§ 52.0 Scope; applicability of 10 CFR Chapter I provisions.

(b) Unless otherwise specifically provided for in this part, ~~the regulations in 10 CFR chapter I apply to a holder of or applicant for an approval, certification, permit, or license.~~ a holder of or applicant for an approval, certification, permit, or license issued under this part shall comply with all requirements in 10 CFR chapter I that are applicable. A license, approval, certification, or permit issued under this part is subject to all requirements in 10 CFR chapter I which, by their terms, are applicable and technically relevant to early site permits, design certifications, combined licenses, design approvals, or manufacturing licenses.

(c) Except as otherwise specifically provided for in this chapter or in the license, holders of combined licenses issued under this subpart are subject to (1) all technically relevant provisions of 10 CFR part 50 and its appendices applicable to holders of construction permits for nuclear power reactors, and (2) all

technically relevant provisions of 10 CFR part 50 and its appendices applicable to holders of operating licenses once the Commission has made the findings required under § 52.103(g).

(d) For purposes of determining applicable requirements, an early site permit is a partial construction permit, except as otherwise specified in this chapter.

§ 52.48 Standards for review of applications.

Applications filed under this subpart will be reviewed for compliance with the technically relevant standards set out in 10 CFR parts 20, 50 and its appendices, 51, 73, and 100.

§ 52.81 Standards for review of applications.

Applications filed under this subpart will be reviewed according to the technically relevant standards set out in 10 CFR parts 20, 50, 51, 54, 55, 73, 100, and 140.

§ 52.139 Standards for review of applications.

Applications filed under this subpart will be reviewed for compliance with the technically relevant standards set out in 10 CFR parts 20, 50 and its appendices, and 10 CFR parts 73 and 100.

§ 52.159 Standards for review of application.

Applications filed under this subpart will be reviewed according to the technically relevant standards set out in 10 CFR parts 20, 50 and its appendices, 51, 73, and 100 and its appendices.

9. New Requirements for Evaluation of Operating Experience

Proposed Rule

Proposed 10 CFR §§ 52.47(a)(19), 52.79(a)(37), 52.137(a)(19), and 52.157(p) would impose new requirements for applicants for a design certification, COL, manufacturing license, or standard design approval to address generic letters and bulletins issued up to six months before the docket date of the application, and comparable international operating experience.

Comments

The Supplementary Information for the proposed rule provides no justification for including a requirement to provide information on operating experience in Part 52 applications. Additionally, no guidance is provided regarding the threshold or mechanism for consideration of operating experience.

The NOPR does reference the Staff Requirements Memorandum dated February 15, 1991, as a basis for this proposed requirement. However the SRM simply states that applications should "incorporate the experience from operating events in current designs which we want to prevent in the future." It does not require an evaluation of every NRC generic letter and bulletin, let alone international experience. As discussed below, this is unnecessary because operating experience is reflected in other regulatory guidance that applicants are required to consider.

The proposed requirement to address "comparable international experience" is vague, undefined, and unbounded. Such a requirement could prove especially problematic in licensing hearings, since it could result in an applicant being forced to consider relatively trivial events identified by intervenors. Additionally, to the extent that international experience is significant, presumably the NRC would take actions to communicate that experience in a generic letter or bulletin. *See, e.g.,* NRC Generic Letter 97-01, "Degradation of Control Rod Drive Mechanism Nozzle and Other Vessel Closure Head Penetrations," which discusses international experience with cracking in Alloy 600 vessel head penetrations.

Even without the requirement to address "comparable international experience," the proposed requirements are unnecessary and unduly burdensome. NRC's regulations already require an applicant to address the Standard Review Plan (SRP) in effect six months prior to submission of the application. The NRC is currently engaged in an extensive effort to revise and update the SRP, and we understand and expect that update will include lessons learned from operating experience to the extent appropriate. Furthermore, Section 52.47 already requires design certification applicants to address unresolved safety issues and high and medium priority generic safety issues in NUREG-0933, and proposed Section 52.79(a)(20) would require COL applicants to do the same. In sum, the intent of the proposed new requirements to ensure consideration of operating experience, as appropriate, is already achieved by other proposed and existing NRC requirements.

The requirement to address all generic letters and bulletins is unduly burdensome. For example, the NRC has been issuing generic letters and bulletins since the 1970s. In some cases, those generic letters and bulletins have been superseded by later generic letters and bulletins, other NRC guidance, or NRC regulations. Requiring applicants to address issues that are thirty years old and in some cases have been superseded by intervening developments is not a wise use of NRC or industry resources. Therefore, to the extent that NRC decides to retain a requirement to consider generic letters and bulletins, the requirement should be limited in time (e.g., to those generic letters and bulletins issued since the most recent revision of the applicable SRP sections).

Recommended Rule Language

We recommend that the NRC delete the proposed provisions.

If NRC does not accept this recommendation, we recommend that the proposed provision be rewritten, as follows:

> The information necessary to demonstrate how operating experience insights from generic letters and bulletins issued ~~up to~~ <u>after the most recent revision of the applicable Standard Review Plan and</u> six months before the docket date of the application~~, or comparable international operating experience,~~ have been incorporated into the plant design;

10. NRC should not require ESP applicants to perform radiation consequences analyses

Proposed Rule

Proposed 10 CFR § 52.17(a)(1)(ix) would require an ESP applicant to evaluate postulated fission product releases consistent with 10 CFR § 50.34 using containment leak rates and fission product cleanup systems.

Comments

Modification of proposed Section 52.17(a)(1) is needed to reflect the ability to seek and obtain an ESP without specifying the design to be built and without providing specific design information.

While the industry and the NRC Staff generally agree on the acceptability of the plant parameter envelope (PPE) approach for ESP applicants who have not selected a specific design for their site, proposed Section 52.17(a)(1) does not adequately reflect this approach. Under the PPE approach, an ESP applicant does not seek approval of the site for specific facilities; rather, bounding design information is used as a surrogate for actual facility information to support the ESP review and approval is sought for a reactor or reactors that fall within the PPE.

Depending on the approach selected by an ESP applicant, the radiological consequence analyses that can meaningfully be performed and provided for NRC review are different. ESP applications based on a specific design may[6] be able to present complete radiological consequence analyses that demonstrate that Part 100 radiological dose criteria are met for the proposed site/design combination. However, if the ESP applicant has not selected a specific design, complete radiological consequence analyses, which require knowledge of design-specific accident sequences, release histories, etc., cannot be meaningfully accomplished. Instead, the focus for these ESP

[6] Section 52.17(a)(1) should not require complete radiological consequence analyses even for applicants that seek approval of the site for a specific facility because the specified facility may not be a certified design. If the ESP application is based on a specific, non-certified design, the design-specific information necessary for complete radiological consequence analyses may not yet be available, or may be subject to change. NRC review and approval of accident sequences, release histories and related design-specific information would be expected in a design certification or combined license proceeding, not in an ESP proceeding.

applicants should be on the site-related aspects of radiological consequence analyses, i.e., determination of site atmospheric dispersion characteristics.

The determination that radiological dose consequence criteria are met can only be made when both the site and design are known. The existing ESP applicants are using the PPE approach and have not specified a particular design as the basis for their applications. Their radiological consequence analyses are based on bounding analyses; design-specific analyses will be required to be submitted in any combined license application referencing the ESPs.

For an ESP application, the acceptability of the site with respect to radiological dose consequence criteria should be dependent on the site characteristic atmospheric dispersion factors (X/Q), including any assumptions related to the structures, systems and components (SSCs) that bear significantly on the calculation of X/Q such as elevated release point and building locations associated with assumed wake effects. At the COL stage, the site X/Q will need to be combined with the release history information provided in a design certification, or approved during the COL review of an uncertified design, to determine whether dose requirements are met for the specific plant.

The NRC provides no explanation in the Supplementary Information as to why it would require an ESP applicant to evaluate postulated fission product releases using containment leak rates and fission product cleanup systems. This provision is inappropriate and, as discussed above, is potentially impossible to satisfy for an ESP applicant using the PPE approach.

The ESP approach for addressing compliance with Part 100 requirements should be similar to that used in the current rule to address emergency planning. Section 52.17(a)(1) requires ESP applicants to "identify physical characteristics of the proposed site ... that could pose a significant impediment to the development of emergency plans." In this way, the rule recognizes that while emergency planning is an important consideration in determining site suitability, the ESP applicant may not be able to demonstrate compliance with Part 50, Appendix E, requirements at the ESP stage. Rather, the only requirement for ESP is to identify significant impediments to development of emergency plans, and if there are any, measures to mitigate or eliminate them. The proposed rule uses a similar approach to address adequate security plans. Proposed Section 52.17(a)(1)(xi) requires ESP applicants to demonstrate that "site

characteristics are such that adequate security plans and measures *can be developed.*" [Emphasis added]

Like EP and security, radiation dose consequence criteria cannot be shown to be met at the ESP stage if the applicant has not selected a design and/or does not have the necessary design information available, such as information on systems, structures, components and source terms. Such an ESP applicant could, however, demonstrate that radiation dose consequence criteria *can be met* by providing a sample analyses based on a typical plant design and site characteristic X/Q. This is similar to the approach used by the NRC staff and the first three applicants for ESP. A COL applicant referencing such an ESP would be required to perform specific radiation dose consequence analyses for the specific design selected, and these analyses would be subject to NRC review.

If an ESP applicant has selected a design and has the necessary design information, the applicant may provide design-specific radiation dose consequence analyses, using the site characteristic X/Q. Once these analyses are approved in the ESP, compliance with Part 100 dose consequence criteria would be considered resolved for future applicants referencing the ESP, consistent with Section 52.39(a)(2), and these analyses would not be subject to further NRC review.

In summary, a lesson learned from the existing ESP proceedings is that final radiation consequence analyses should not be a requirement for ESP. Instead, Part 52 should allow such an analysis to be performed and provided for NRC review by ESP applicants if the requisite design-specific information is known. If not, and similar to the approach for addressing EP and security plans, the ESP applicant should be required to demonstrate that Part 100 requirements *can be met* by providing sample radiation consequence analyses based site characteristic X/Q.

Recommended Rule Language

We recommend that proposed Section 52.17(a)(1)(ix) be replaced with the following:

> A description and safety assessment of the site on which a facility is to be located. The assessment must contain information demonstrating that site characteristics are such that Part 100 requirements can be met, including the criteria in Section 50.34(a)(1) of this chapter for radiological dose

consequences of postulated accidents. If specific design information is available, the assessment may contain an analysis and evaluation that demonstrates that Part 100 requirements are met.

11. Expansion of the Scope of ITAAC Required by a Design Certification Applicant

Proposed Rule

Proposed Section 52.47(b)(2) changes the scope of the ITAAC required for design certification from those needed to ensure conformance to the "design certification" to those needed to ensure that the plant conforms to the "design certification, the provisions of the Act, and the Commission's rules and regulations."

Comments

NRC explains this proposal as follows (71 Fed. Reg. at 12,793):

> The proposed rule would conform the requirement for acceptable inspections, tests, analyses, and acceptance criteria (ITAAC) (proposed § 52.47(b)(2)) with the AEA and the requirements in the current § 52.97(b). This clarification of the current language, which was a condensed version of the language in §§ 52.79(c) and 52.97(b), is intended to avoid any future misunderstandings.

We disagree that this justifies the proposed change, or that the change is necessary to prevent "misunderstandings." The language in Section 185.b of the Atomic Energy Act applies to COLs, not to design certifications. Given the smaller scope of a design certification, it is natural to apply different requirements to design certification ITAAC versus COL ITAAC.

This proposed change could be misconstrued as expanding the scope of the ITAAC needed for design certification. Furthermore, it would be impossible for a design certification applicant to satisfy the *literal* language of this new provision, since the scope of the standard design does not encompass all of the design within the scope of the NRC's rules and regulations.

Based upon the NRC's comments in the workshop on March 14, 2006 (Tr. 149-150), we understand that it is not the intent of the NRC to expand the scope of the ITAAC required for design certification. Given that the NRC does not intend to change the substance of the requirements for design certification ITAAC, there is no reason to change the language in existing Section 52.47(b)(2) (especially since a change in language could be misconstrued). There is no problem here that the proposed change is needed to resolve.

Recommended Rule Language

We recommend that proposed Section 52.47(b)(2) be modified to maintain the current language in Section 52.47(a)(1(vi), as follows:.

> (2) The proposed inspections, tests, analyses, and acceptance criteria (ITAAC) that are necessary and sufficient to provide reasonable assurance that, if the inspections, tests, and analyses are performed and the acceptance criteria met, a plant that incorporates the design certification is built and will operate in accordance with the design certification~~, the provisions of the Act, and the Commission's regulations~~;

12. NRC Should Not Impose License Conditions As Part of the 52.103 Process

Proposed Rule

Proposed Section 2.105(b)(3)(iv) states that the notice of intended operation under § 52.103(a) may identify "conditions, limitations or restrictions to be placed on the license in connection with the finding under § 52.103(g)."

Comments

The Supplementary Information for the proposed rule provides no justification for this proposed change. Furthermore, at the workshop on March 14, 2006 (Tr. 124), the NRC stated that it had nothing in mind when it made this change.

There is no basis for the NRC to impose license conditions as part of the § 52.103(g) finding. The COL should be unaffected by the § 52.103(g) finding, since that finding will conclude that all of the ITAAC acceptance criteria have been satisfied.

The policy underlying the licensing reforms of the Energy Policy Act of 1992 (EPAct) (which essentially codified Part 52) was that all licensing requirements would be known at the time the COL was issued. This proposed change to Section 2.105(b)(3)(iv)) would undermine the certainty that the EPAct requires the COL to provide, such that licensees would not know what their licensing conditions would be until the Section 52.103(g) findings were made. Thus, the proposed revision would conflict with the letter and policy of the EPAct of 1992.

Section 52.103(f) does allow § 2.206 petitions to modify the terms and conditions of a COL and issuance of an order if the Commission determines that action is necessary; however, that is a separate process that does not involve the Section 52.103(a) notice (which is issued six months before scheduled fuel load). Thus, there is no reason or basis for a § 52.103(a) notice to identify conditions, limitations or restrictions to be placed on a COL.

Also, the Commission may impose conditions in connection with issuing a finding under Section 52.103(c) to allow a period of interim operation pending the completion of a hearing granted to resolve question of alleged ITAAC noncomplicance. However, these conditions are also distinct from any that would or could be imposed earlier in the Section 52.103(a) notice.

Recommended Rule Language

Proposed Section 2.105(b)((3)(iv) should be deleted from the final rule.

13. New Requirements for ESP Applicants to Provide ITAAC

Proposed Rule

Proposed 10 CFR § 52.17(b)(3) would require ESP applicants to provide ITAAC on emergency planning (EP) for both major features or complete programs. Proposed Section 52.24(a)(5) would require a Commission finding that the ESP proposed ITAAC, "including any on emergency planning," are necessary and sufficient to make a reasonable assurance finding.

Comments

The Supplementary Information for the proposed rule (71 Fed. Reg. at 12,789) explains the purpose of these proposed provisions as follows:

> In addition, the Commission proposes to add new § 52.17(b)(3) to require that complete and integrated emergency plans submitted for review in an early site permit application must include the proposed inspections, tests, and analyses that the holder of a combined license referencing the early site permit shall perform, and the acceptance criteria that are necessary and sufficient to provide reasonable assurance that, if the inspections, tests, and analyses are performed and the acceptance criteria met, the facility has been constructed and would operate in conformity with the license, the provisions of the AEA, and the NRC's regulations. ... The NRC will not be able to make the required finding without the inclusion of proposed inspections, tests, analyses, and acceptance criteria (ITAAC) in an ESP application that includes complete and integrated emergency plans.

We note that this discussion is inconsistent with proposed Section 52.17(b)(3) in that it focuses solely on the need for EP ITAAC when the ESP application includes complete and integrated emergency plans. The Supplementary Information does not identify the need for EP ITAAC when the ESP application includes only EP "major features." We believe the Supplementary Information is correct and that EP ITAAC should <u>not</u> be required for the "major features" option. The NRC does not need to make a reasonable assurance finding with

respect to the description of "major features" of an EP plan submitted at the ESP stage. Instead, under 10 CFR § 52.18, the NRC is only required to determine that the major features are "acceptable." Thus, using the staff's rationale, EP ITAAC are not necessary. Indeed, the first three ESPs each reflect use of the "major features" option and are progressing toward NRC approval without ITAAC on EP major features.

Additionally, it may not be possible to develop ITAAC for EP major features at the ESP stage. By definition, information on EP major features will not include details of the EP plan. In some cases, it might be necessary to have such details in order to develop appropriate EP ITAAC. Therefore, development of EP ITAAC should be deferred to the COL stage when detailed EP information will be available.

In the preliminary discussions between NRC and NEI on this topic, it has been acknowledged that the existing language in Part 52 does not preclude any ESP applicant from proposing EP ITAAC. Given the possibility that EP ITAAC may in the future be determined to be practical and useful for ESP applicants using the "major features" option, we would not object to adding a permissive provision to the end of Section 52.17(b)(3).

In summary, an ESP applicant should not be required to propose EP ITAAC for major features of an EP plan.

Recommended Rule Language

We recommend that Section 52.17(b)(3) be modified as shown below to be consistent with the Supplemental Information in the proposed rule and because EP ITAAC are not necessary under the "major features" option. We also recommend that Section 52.24(a)(5) be modified to reflect that EP ITAAC are the only type of ITAAC envisioned for ESPs.

Section 52.17(b)(3)

(3) Emergency plans~~, and each major feature of an emergency plan,~~ submitted under paragraph (b)(2)(ii) of this section after [insert date of final rule] must include the proposed inspections, tests, and analyses that the holder of a combined license referencing the early site permit shall perform, and the acceptance criteria that are necessary and sufficient to provide reasonable assurance that, if the inspections, tests, and analyses are performed and the acceptance criteria met,

the facility has been constructed and will operate in conformity with the license, the provisions of the Atomic Energy Act, and the NRC's regulations.

Also, we would not object to adding a permissive provision such as the following to the end of Section 52.17(b)(3):

Major features of an emergency plan submitted under paragraph (b)(2)(i) of this section may include proposed inspections, tests, analyses, and acceptance criteria.

Section 52.24(a)(5):

(5) The proposed inspections, tests, analyses and acceptance criteria~~including any~~ on emergency planning, if any, are necessary and sufficient, within the scope of the early site permit, to provide reasonable assurance that the facility has been constructed and will be operated in conformity with the license, the provisions of the Act, and the Commission's regulations;

14. Expansion of the Applicability of Requirements for Employee Protection

Proposed Rule

Proposed Section 52.5(a) would prohibit discrimination by a Commission licensee, holder of a standard design approval, an applicant for a license, standard design certification, or standard design approval, a contractor or subcontractor of a Commission licensee, holder of a standard design approval, applicant for a license, standard design certification, or standard design approval, against an employee for engaging in certain protected activities. Additionally, proposed changes to Part 19 (especially proposed Section 19.20) include parallel provisions.

Comments

Application of employee protection requirements to design certification applicants and applicants for design approval is inappropriate and unauthorized under Section 211 of the Energy Reorganization Act.

Section 211 applies to "employers." Section 211 defines "employer" as including an NRC licensee or applicant for license, and contractors or subcontractors of such a licensee or applicant, and certain Department of Energy contractors or subcontractors. An applicant for a design certification or design approval is not encompassed within any of the provisions in Section 211.

Furthermore, an applicant for design certification is fundamentally different from an applicant for a license. Design certification occurs through rulemaking. As a result, a design certification applicant has no proprietary interest in a design certification. As indicated by provisions such as 10 CFR § 52.73, a design certification can be utilized by any qualified vendor, and the design certification applicant will not necessarily be the ultimate designer or supplier of a plant that references the design certification. Therefore, it would be inappropriate to apply the provisions in proposed Section 52.5 to design certification applicants.

In summary, the proposed rule would have the effect of applying licensing provisions to design certification rulemaking. This fundamental shift in the nature of design certification is inappropriate, is unfair to design certification applicants, and should be rejected.

Recommended Rule Language

The proposed provision should be revised to delete the references to standard design certification and standard design approval. Thus, the first sentence in § 52.5(a) should be rewritten as follows:

> § 52.5(a) Discrimination by a Commission licensee ~~holder of a standard design approval,~~ or an applicant for a license, ~~standard design certification, or standard design approval,~~ or a contractor or subcontractor of a Commission licensee ~~holder of a standard design approval,~~ or applicant for a license, ~~standard design certification, or standard design approval,~~ against an employee for engaging in certain protected activities is prohibited.
>
> ...

If the NRC does not agree, the proposed revision should at least be modified to mitigate some of the detrimental features. In particular, at most, § 52.5(a) should apply only during those periods in which the applicant for design certification or design approval is actively engaged in regulated activities. Therefore, if the NRC does not agree to delete

the reference to standard design certification and standard design approval, the first sentence in § 52.5(a) should at least be rewritten as follows:

> § 52.5(a) Discrimination by a Commission licensee ~~holder of a standard design approval,~~ or an applicant for a license, ~~standard design certification, or standard design approval,~~ or a contractor or subcontractor of a Commission licensee ~~holder of a standard design approval,~~ or applicant for a license, ~~standard design certification, or standard design approval,~~ against an employee for engaging in certain protected activities is prohibited. Additionally, discrimination by an applicant for a standard design certification or standard design approval, or its contractors or subcontractors, against an employee for engaging in certain protected activities is prohibited, during the period in which the application is pending before the Commission or the applicant is a contractor or subcontractor of a Commission licensee or applicant for a license.

We also recommend that parallel changes be made in proposed 10 CFR Part 19.

15. New Requirements for a COL Applicant to Have a "Reasonable Process" to Identify New and Significant Information Relative to the ESP

Proposed Rule

Proposed 10 CFR § 51.50(c)(1) would require a COL applicant to "have a reasonable process for identifying any new and significant environmental information regarding the NRC's conclusions in the early site permit environmental impact statement," when an ESP is referenced in a COL application. See 71 Fed. Reg. 12,880-81.

Comments

This proposed new requirement is unnecessary. Significantly, the Supplementary Information accompanying the proposed rule provides

no clear justification for including this new requirement. See 71 Fed. Reg. 12,826-27. It should therefore be deleted.

The NRC's proposal to require COL applications to include new and significant information that relates to the NRC's conclusions in a previous ESP EIS is analogous to the existing regulations in 10 CFR § 51.53(c)(iv), which require that a license renewal applicant's ER "contain any new and significant information regarding the environmental impacts of license renewal of which the applicant is aware." The NRC acknowledges this comparison in the discussion accompanying this proposed amendment.

However, an important distinction exists between the NRC's approach to this issue in the license renewal context and the approach it proposes in the new plant licensing context. Section 51.53(c) does not require a license renewal applicant to implement or "have" a reasonable process for identifying new and significant information, or for analyzing or revalidating previously resolved issues. But proposed Section 51.50(c)(1) would require precisely that for COL applicants referencing an ESP. This distinction is key.

There is no reason to require more for COL applicants. As we have previously stated in correspondence with the NRC, it is the responsibility of a COL applicant to identify whether new and significant information exists with respect to an earlier NRC conclusion in the ESP EIS.[7] Further, we indicated our agreement with the concept that a COL applicant will have processes for identifying "new and significant" information that causes an adverse change to an ESP EIS conclusion, and that such processes will be available for NRC audit at the COL applicant's facility. *Id.*

However, industry does not agree (nor has it ever previously agreed) that NRC regulations should *require* COL applicants to establish, implement and/or "have" such processes to identify such new and significant information, or require such information to be submitted on the docket. These proposed requirements reflect a substantial step beyond NRC's position in the license renewal context, with no attendant justification as to why such a requirement is now needed for COL applicants when no such requirement has been needed for license renewal. In sum, NRC has failed to justify this new requirement, or to explain why it now finds industry's position on this issue (as set forth in the September 2005 NEI letter and NEI-04-01) inadequate.

[7] See Sept. 27, 2005, letter from A. Heymer, NEI, to Dr. William Beckner, NRR, NRC, at p. 2.

The guidance provided in NRC Regulatory Guide 4.2, Supplement 1, Section B.5, has been sufficient for numerous license renewal applications, and would also be sufficient for COL applications if repeated in the DG-1145 guidance being prepared for COL applications. Thus, we recommend that similar approach be used in proposed Section 51.50(c)(1). Further, Section 4.6.4 in draft NEI-04-01, *Industry Guideline for Combined License Applicants Under 10 CFR Part 52*, states that a COL applicant should establish a process for identifying new and significant environmental information. Additional detailed guidance is provided in Section 6.4.1 of NEI-04-01.

The industry has been consistent in recognizing the value and need to implement such a process. However, we believe strongly that such a process should not be codified. In particular, the industry is concerned that the proposed regulation could lead to litigation on the "reasonableness" of the COL applicant's process, thereby wasting resources and undermining the finality provided by an ESP. As a result, we recommend that, instead of including such a provision in the rule, the NRC simply endorse NEI-04-01 or provide appropriate guidance in DG-1145.

Recommended Rule Language

We recommend deletion of the proposed provision discussed above (which is the first sentence of proposed Section 51.50(c)(1)).

16. Provisions Authorizing Open-Ended Information Requirements

Proposed Rule

Proposed 10 CFR §§ 52.17(d), 52.79(a)(42), 52.137(a)(27) and 52.157(p) would allow the NRC to require applicants for an ESP COL, standard design approval and manufacturing license to include "any information beyond" that specified in application requirements.

Comments

The proposed rule would establish an open-ended provision that essentially would confer upon the NRC Staff the authority to set *ad*

hoc requirements outside the rulemaking process. Such open-ended discretion on the part of the Staff to require information beyond that specified in the regulation is inconsistent with the requirements of the Administrative Procedures Act. The NOPR fails to justify these proposed new requirements.

To the extent that additional information may be necessary during the NRC Staff review of an application, the Staff already has a "request for additional information" (RAI) process that may be applied to Part 52 applications. This process is codified in 10 CFR § 2.102(a). Furthermore, as the Staff noted in its comments in its December 27, 2005, response to the Commission's SRM, the NRC "has inherent authority to require submission of addition information, upon a determination that it is necessary" (Enclosure at 2). Thus, no additional regulatory authority is needed for the NRC Staff to request additional information necessary to complete its review of an application.

These proposed requirements should be deleted. For the same reason, and because the NRC and the industry now have substantial experience with the design certification process, the similar requirement in existing Section 52.47(a)(3) should be deleted.

Recommended Rule Language

We recommend that the NRC delete the proposed provisions. Alternatively, the provisions could be rewritten to reflect the RAI process:

> <u>During its review of the application, the NRC Staff may request additional information that it determines is necessary for public health and safety or the common defense and security, or to determine compliance with applicable requirements.</u>

17. New Requirements for ESP Applicants to Address Construction Impacts on Existing Plants

Proposed Rule

Proposed 10 CFR § 52.17(a)(1)(x) would require ESP applicants to address impacts on operating units of constructing new units on existing sites.

Comments

This provision in the proposed rule is contrary to the industry-NRC understanding on this matter, as documented in correspondence in 2003 regarding ESP Topic ESP-19 (*see* NEI Letter dated May 14, 2003, and NRC Letter dated August 11, 2003). As discussed by the NRC at the workshop on March 14, 2006 (Tr. 78-79), NRC apparently did not consider ESP-19 when it prepared the proposed rule, and it does not know why it changed its position.

Consistent with the resolution of ESP-19, the COL applicant (and not the ESP applicant) should have the obligation to identify the impacts of construction on existing operating plants. The COL applicant is in the best position to provide such information, since it will have final information regarding the design and construction plans. In contrast, the ESP applicant will not have final design information or construction plans. Therefore, it will be difficult, if not impossible, for an ESP applicant to provide the information specified in the proposed rule. In any event, the issue does not relate to site suitability.

In this regard, proposed 10 CFR § 52.79(a)(31) includes a requirement for a COL applicant to include such information in the COL application on construction impacts, and this provision reflects the current requirements in 10 CFR § 50.34(a)(11). This approach also is consistent with the Staff's comments in its December 27, 2005, response to the Commission's SRM (Enclosure at 3). Therefore, there is no need to impose this requirement on ESP applicants.

In summary, the requirement proposed in Section 52.17(a)(1)(x) is both unnecessary and potentially impossible for an ESP applicant to implement. Therefore, this provision should be deleted.

Recommended Rule Language

We recommend that Section 52.17(a)(1)(x) be deleted.

18. New Testing Requirements for COL Applicants

Proposed Rule

Proposed 10 CFR §§ 52.79(a)(24) and 50.43(e) would impose new testing requirements for COL applicants planning to build advanced designs that have not been certified.

Comments

The proposal conflicts with the Commission's intent expressed in the original 1989 Statement of Considerations for Part 52 and may also present an undue burden and obstacle to commercialization of advanced designs.

In essence, proposed Sections 52.79(a)(24) and 50.43(e) would require that the same testing required of a design certification applicant be performed by a COL applicant that seeks a license for a non-evolutionary custom plant. The proposed rule would require either (A) analysis, testing or experience, or (B) full-scale prototype testing. Additionally, the Commission has stated that, for design certification of advanced reactors, it favors the use of a full-scale prototype in lieu of the other alternatives (51 Fed. Reg. 24,643). We believe it is unnecessary to apply these requirements to COL applicants, and that the potential requirement for a full-scale prototype testing is particularly inappropriate.

Exercising the proposed COL requirement for prototype testing would create a logical disconnect. Absent a license, a prototype commercial nuclear plant cannot be built in the United States. However, under the proposed rule, absent construction of a prototype, the design could not be licensed. This "Catch-22" situation would effectively close an important path for bringing to market nuclear plant designs with innovative safety features. For these reasons, it would be inappropriate to establish or impose proposed § 50.43(e) (prototype testing) on COL applicants.

The fact that the current § 52.79 does not reference the prototype testing requirements in Section 52.47(b)(2)(i) was no mere oversight—it was intentional. The SOC for both the original proposed Part 52 (53 Fed. Reg. 32,060, Aug. 23, 1988) and the final Part 52 (54 Fed. Reg. 15,372, Apr. 18, 1989) indicate that design certification and licenses

are to be treated differently with respect to prototype testing. For example, in issuing the proposed (1988) and final (1989) versions of Part 52, the Commission stated the following:

- "Certification of a reactor design which differs significantly from a reactor design which has been built and operated may be granted only after the design has been shown to be sufficiently mature." (53 Fed. Reg. at 32,063-64).

- In order to demonstrate maturity, "prototype testing is likely to be required for certification of advanced non-light water designs." (54 Fed. Reg. at 15,375).

- In contrast, the NRC recognized that it may "license the prototype for commercial operation." (54 Fed. Reg. at 15,374).

- Furthermore, the NRC expressly rejected a proposal that would allow a COL to be issued only for a standard design, stating: "The final rule does not contain this restriction because there may be circumstances in which a combined license would properly utilize a non-standard design and because such a restriction would mean, among other things, that every prototype would have to be licensed in a fully two-step process." (54 Fed. Reg. at 15,383).

- Thus, "[i]t is well to remember also that, under the rule, prototype testing is only required for certification or an unconditional final design approval, if at all." (54 Fed. Reg. at 15374).

Additionally, the original 1986 Commission Policy Statement on Regulation of Advanced Nuclear Power Plants (51 FR 24,643, July 8, 1986) indicated that the intent of the revised licensing process was to minimize complexity and uncertainty in the licensing process. The addition of a prototype plant testing requirement minimizes neither the complexity nor the uncertainty, but rather adds to the uncertainty by inserting a significant additional step (currently representing an unknown quantity) prior to the licensing of a plant of a new design.

The Commission has stated that prototype testing will likely be required for design certification of advanced reactors. However, there are significant differences between certified and custom designs. A certified design is effective for 15 years, may be incorporated by reference by any license applicant without further review and approval by the NRC, and is subject to broad protection against backfits under the change control process in 10 CFR § 52.63.

In contrast, the arguments for prototype testing for *certification* of advanced reactors do not apply to *licensing* of advanced reactors. Unlike a design certification, licensing represents approval of only a single facility. Licensing of subsequent facilities, even if identical in design, is still subject to NRC review and approval including possible design changes to account for any unfavorable results of startup and power ascension testing and operating experience from previously licensed facilities. Furthermore, unlike a design certification, the NRC has fairly broad authority under 10 CFR § 50.109, "Backfitting," to impose backfits on a licensed facility to account for any unfavorable results of startup and power ascension testing and operating experience. Finally, in lieu of prototype testing, the NRC has authority to impose special license conditions that might not be necessary or appropriate if applied to all plants with a standard design (e.g., a license condition can require special design, procedural, or testing provisions to provide adequate protection of safety until the design is demonstrated to be safe through testing or operation). Therefore, there is no compelling reason for a full-scale prototype test facility prior to prior to licensing of an advanced reactor.

In addition, it is simply unnecessary to impose on COL applicants the requirements of § 50.43(e) to demonstrate safety features via analysis, testing and/or experience. This is because the COL applicant is already subject to 10 CFR § 50.34(b)(4) requirements to provide sufficient information of this type to support the required NRC safety determination on the design. Additionally, at COL issuance, the NRC has authority to establish license conditions, including conditions on successful demonstration of unique design features.

NRC guidance and past precedent indicate that a full-scale prototype testing facility need not precede licensing of a new type of reactor. For example, NRC Regulatory Guide 1.70, "Standard Format and Content of Safety Analysis Reports for Nuclear Power Plants - LWR Edition," which provides the standard format and content for safety analysis reports, explicitly states that special, unique, or first of a kind design features may be verified through startup test:

> "14.1.2 Plant Design Features That Are Special, Unique, or First of a Kind
>
> A summary description of preoperational and/or startup testing planned for each unique or first-of-a-kind principal design feature should be included in the PSAR [Preliminary

Safety Analysis Report]. The summary test descriptions should include the test method and test objectives."

Similarly, NUREG-0800, "Standard Review Plan" Section 14.2, Paragraph III.8, recognizes that the initial test program in Final Safety Analysis Reports may include provisions for "testing for special, unique, or first-of-a-kind design features." Thus, NRC guidance clearly allows for testing of unique and first-of-a-kind design features through the startup and power ascension test program, and does not require prototype testing prior to issuance of a license for a plant involving such features.

In summary, Part 52 and § 50.43 should not be modified to impose prototype testing requirements for licensing of an advanced reactor. Through its existing requirements and regulatory authority, the NRC may assure that applicants provide adequate information to support required COL reviews and safety determinations, as well as satisfactory demonstration of innovative design features during startup and power ascension testing.

Recommended Rule Language

The proposed new COL application requirements are unnecessary and should not be included in 10 CFR Part 52 and § 50.43.

In the alternative, the Statement of Considerations for the final rule should clearly state that the NRC does not prefer the use of prototypes over analysis, testing, or experience for licensing of reactors advanced reactors, and that the NRC may issue a COL for a prototype plant.

19. New Requirements Related to Transfer of an ESP

Proposed Rule

Proposed 10 CFR § 52.28 would specify that an "application to transfer an early site permit will be processed under 10 CFR 50.80." Section 50.80(a) would be revised to include permits issued under Part 52 within the scope of the regulations for transfer of licenses.

Comments

We agree that an ESP should be subject to transfer, and that NRC regulations should include criteria governing the transfer of ESPs. However, not all of the requirements in Section 50.80 are relevant to such transfers (*e.g.*, requirements on financial qualifications, requirements for technical qualifications). The final rule should reflect that such a transfer would be subject to the "applicable" requirements in 10 CFR § 50.80.

Based upon the December 27, 2005, NRC Staff response to the Commission's SRM on the draft proposed rule (Enclosure, Number 14), we understand that the NRC agrees with the above comment.

Recommended Rule Language

We recommend that proposed Section 52.28 be revised, as follows:

> An application to transfer an early site permit will be processed under the applicable requirements in 10 CFR 50.80. The application need not address the technical or financial qualifications of the proposed transferee.

20. New Security Requirements for a Design Certification and Design Approval Applicants

Proposed Rule

Proposed 10 CFR §§ 52.47(a)(24) and 52.137(a)(24) would specify that applications for a design certification or standard design approval must describe the design features needed to satisfy Part 73 regarding security.

Comments

The Supplementary Information for the proposed rule does not explain the need for or purpose of this proposed requirement as part of the current rulemaking.

The proposed requirement is too broad and cannot be implemented as written. Many of the security design features required by Part 73 are outside the scope of the standard design and cannot be satisfied by a design certification applicant or an applicant for design approval. In fact, a number of security design features will be site-specific and will be the responsibility of the COL applicant. Therefore, at the very least, the language in the proposed rule on this point should be modified to indicate that applicants for design certification and design approval need only address those security design features that are within the scope of the standard design.

We understand that there are five security rulemakings being developed. Any additional security requirements should be deferred to the security rulemakings not a rulemaking on Part 52. The security design expectations for new reactor licensing activities are the topic of a separate rulemaking activity which has been approved by the Commission in the Staff Requirements Memorandum on SECY 05-120 (Sept. 9, 2005). Part 52 should reference Part 73 and the other NRC requirements relating to security.

Recommended Rule Language

NEI recommends that the Commission remove these proposed paragraphs from the current rulemaking and include appropriate provisions in a separate rulemaking specific to security design expectations.

In the alternative, these sections should be revised as follows:

> A description of the design features that will provide physical protection of the standard plant design in accordance with the requirements of 10 CFR part 73 <u>applicable to the standard design</u>;

21. New Requirements for a Design Certification to Specify "Design Characteristics"

Proposed Rule

Proposed 10 CFR § 52.54(b) would require the design certification rule to specify "design characteristics."

Comments

Section 52.47 already requires that characteristics of the standard design be identified in the design certification application. In particular, the design characteristics are identified in the design control document (DCD), which is incorporated by reference in the design certification rule. It is unclear what more, if anything, is contemplated by the proposed rule. Anything more would be superfluous and confusing.

The NOPR (71 Fed. Reg. 12,793) indicates that this provision would be added, consistent with 10 CFR § 50.50, which specifies that the Commission may include conditions and limitations, as it deems necessary, in a license or construction permit. We do not dispute the authority of the NRC to impose appropriate conditions in the design certification. However, the proposed rule does not contain language similar to that in § 50.50. Instead, the proposed rule states that a design certification rule must identify "design characteristics." There is no justification for requiring the identification of "design characteristics" in a design certification rule because these will be identified in the generic DCD.

At the workshop on March 14, 2006 (Tr.146-148), the NRC staff explained that the intent of the proposed provision is to ensure that design certifications contain design characteristics to facilitate comparison with design parameters specified in an ESP. The staff agreed that design control documents contain this information already, and that there was no intent to require additional or reformatted information in design control documents, or for design control documents to include a "list" of design characteristics.

As a practical matter, such a list may not be particularly useful, anyway. The NRC has not established a uniform list of issues to be addressed in the ESP design parameters, and instead a list is

developed on a case-by-case basis depending upon the conditions of each site. Therefore, in the absence of a uniform list of design parameters for ESPs, it is not possible to identify a corresponding list of design characteristics for a design certification. In any event, since the requisite information is in the DCD, there is no reason to impose the burden of developing a list of design characteristics upon the design certification applicant and the NRC. This would represent an unnecessary drain on NRC and industry resources. If a uniform list of ESP design parameters is someday established, design certification applicants may well decide as a matter of good practice to establish a corresponding list of design characteristics in the DCD. However, for the reasons discussed above, doing so should not be made a requirement.

In summary, the proposed change is unnecessary, confusing, and could be inappropriately interpreted as adding a new requirement for design certification. Accordingly, the Commission should not adopt this proposed provision.

Recommended Rule Language

We recommend that this proposed provision be removed. When the NRC approves a design certification rule, it will reference the DCD, which will contain the information that would be considered "design characteristics."

22. New 50.46 Reporting Requirements for Design Certification Applicants

Proposed Rule

Proposed changes to 10 CFR § 50.46(a)(3) would impose the reporting requirements of 10 CFR § 50.46 on design certification and standard design approval applicants, during both the application process and following issuance of the design certification rule or standard design approval.

Comments

The NOPR suggests that this provision is necessary to ensure that the NRC is "notified of changes to or errors acceptable evaluation models"

used in Part 52 licenses, design certifications or standard design approvals. 71 Fed. Reg. at 12,805. However, there is no reason for the NRC to be made aware of changes or errors unless and until a design certification or a standard design approval is referenced in a combined license, operating license, or manufacturing license (COL/OL/ML) application. If the design certification or design approval is never referenced in a license application, no regulatory action is warranted to change or modify the standard design.

Also, the proposed provision would create an unnecessary burden on both the NRC and the industry. A COL/OL/ML applicant referencing a design certification will be required to identify any change to or error in an accepted evaluation model upon submittal of an application that references a design certification or design approval. Therefore, the necessary notification (and remedial action if warranted) will be taken at that time. Requiring the applicant for design certification or design approval to make a similar notification would be redundant and unnecessary.

Finally, for design certifications, the proposed change is inconsistent with the concept that design certification is a rulemaking proceeding rather than a licensing proceeding. The design certification applicant may not be the ultimate vendor of the plant referenced in the license application. If the design certification applicant is not the vendor, the actual vendor (or other entity designated by the license applicant) will need to develop and maintain its own calculations and evaluations to satisfy the requirements in Section 50.46. In such a case, any changes or errors by the design certification applicant would not be relevant to the COL, since the design certification applicant's evaluation would not be the evaluation of record used by the COL applicant.

In this regard, the proposed change would represent a fundamental shift in the regulatory philosophy behind the reporting requirement in Section 50.46 Section 50.46 has always been applicable to licensees and license applicants. Imposing similar requirements on vendors would represent a substantial departure from the existing regulatory provisions, with no real benefit or value. Furthermore, since the licensee and license applicant will still be required to make such reports, the proposed rule would require reports by two different entities regarding the same error or change, creating the potential for inconsistencies and confusion.

Finally, there is no reason to impose a reporting requirement on applicants for design certification or design approval while their

applications are pending, because proposed Section 52.6(a) will require the applicants to provide information to the NRC that is complete and accurate in all material respects. This obligation is broader than the obligation in Section 50.46, and will require applicants to update and correct their applications to account for the type of information covered by Section 50.46.

Recommended Rule Language

We recommend that the section be rewritten, as follows:

§ 50.46 Acceptance criteria for emergency core cooling systems for light-water nuclear power reactors.

(a)* * *

(3) The requirements below apply to each applicant for or holder of an operating license or construction permit issued under this part, or a combined license or a manufacturing license issued under part 52 of this chapter. Each of these responsible entities shall:

(i) ~~Each applicant for or holder of an operating license or construction permit issued under this part, applicant for a standard design certification under part 52 of this chapter (including an applicant after the Commission has adopted a final design certification regulation), or an applicant for or holder of a standard design approval, a combined license or a manufacturing license issued under part 52 of this chapter, shall~~ estimate the effect of any change to or error in an acceptable evaluation model or in the application of such a model to determine if the change or error is significant. For this purpose, a significant change or error is one which results in a calculated peak fuel cladding temperature different by ...

23. New Requirements Applicable to COL Amendments

Proposed Rule

Proposed 10 CFR § 52.98(a) states:

> (a) After issuance of a combined license, the Commission may not modify, add, or delete any term or condition of the combined license, the design of the facility, the inspections, tests, analyses, and acceptance criteria contained in the license which are not derived from a referenced standard design certification or manufacturing license, except in accordance with the provisions of § 52.103 or § 50.109 of this chapter, as applicable.

Comments

Overall, NEI supports the provisions in proposed Section 52.98. In particular, the intent of proposed Section 52.98(a) appears to be appropriate, since it would restrict the Commission's unilateral ability to impose changes without the appropriate justification under the backfit rule in § 50.109. It appears, however, that Section 52.98(a) as written would not allow the Commission to make a change *at the request of the COL holder* unless the change meets the backfit rule.

The December 27, 2005, NRC Staff response (Enclosure, p. 5) to the Commission's Staff Requirements Memorandum on the proposed revisions to Part 52 states that it is not the intent of the NRC to impose the backfit criteria on license amendment requests by a COL holder. However, the actual language used in the proposed rule does not reflect that intent. The proposed provision should be modified to clarify that the NRC may issue license amendments at the request of the licensee without the need for the licensee to demonstrate that the backfit criteria are satisfied.

Recommended Rule Language

We suggest proposed Section 52.98(a) be clarified as follows:

> § 52.98 Finality of combined licenses; information requests.
>
> (a) After issuance of a combined license, <u>except upon request by the licensee</u>, the Commission may not modify, add, or

delete any term or condition of the combined license, the design of the facility, the inspections, tests, analyses, and acceptance criteria contained in the license which are not derived from a referenced standard design certification or manufacturing license, except in accordance with the provisions of § 52.103 or § 50.109 of this chapter, as applicable.

24. New Requirements for an ESP Applicant and Standard Design Applicant to Demonstrate Technical Qualifications

Proposed Rule

Sections 52.24(a)(4), 52.47(a)(23), 52.54(a)(4), 52.137(a)(23) and 2.104(d)(v) of the proposed rule would impose requirements for an ESP applicant, design approval applicant, and design certification applicant to demonstrate technical qualifications.

Comments

The Supplementary Information for the proposed rule neither explains nor justifies the purpose of these proposed provisions. We believe these proposed changes are inconsistent with the provisions in proposed 10 CFR § 50.40 regarding technical qualifications for applicants. Proposed Section 50.40(b) – correctly – does not specify that an applicant for an early site permit, a design certification, or a design approval need demonstrate technical qualifications. These proposed amendments also appear inconsistent with Section 182.a of the Atomic Energy Act, which does not require that applicants for an ESP, design certification, or design approval demonstrate their technical qualifications. Rather, the statute imposes that requirement only upon applicants for an NRC *license*.

If promulgated, these proposed changes would impose a new requirement on the applicants in question. The existing ESP applicants and design certification applicants were not required to demonstrate their technical qualifications. Nor does there appear to be a reason to impose such an additional requirement on future ESP and design certification applicants. Industry is unaware of any problem here that the proposed new requirements are needed to resolve.

We object to these additional requirements for ESP holders because they are not authorized to conduct any safety-related construction activities. See 10 CFR § 52.25. We object to these additional requirements for design certification and design approval applicants for slightly different reasons. A design certification is a rulemaking activity, not a license, and the design certification applicant will not necessarily be supplying a reactor to a future COL applicant. Instead, under 10 CFR § 52.73, another entity may be the reactor vendor, and the COL applicant will need to demonstrate the technical qualifications of that entity (as well as its other primary contractors). Similarly, if the COL applicant references a standard design approval, it will need to demonstrate the technical qualifications of the vendor.

Thus, there is no reason for an applicant for an ESP, design certification, or design approval to demonstrate its technical qualifications at the time it submits its application. Instead, the COL applicant will need to demonstrate its technical qualifications and those of its reactor vendor. Deferral of such a demonstration until the COL stage is especially appropriate, since the technical qualifications of the vendor and ESP holder may change substantially during the 15 to 20 year interval between the issuance of the ESP and/or design approval and the submission of the COL application.

Recommended Rule Language

> We recommend that the NRC delete the proposed requirement in Sections 52.24(a)(4), 52.47(a)(23), 52.54(a)(4), 52.137(a)(23) and 2.104(d)(v) discussed above. At a minimum, proposed Section 52.24(a)(4) and 2.104(d)(v) requirements pertaining to ESP applicants should be deleted.

25. New Requirements relating to Limited Work Authorizations

This section of the industry's comments focuses on the provisions in the Part 52 proposed rule relating to Limited Work Authorizations (LWAs). As identified in the cover letter, NEI's separate submittal to the NRC on May 25, 2006, proposed substantial enhancements to the NRC's existing LWA-1 and (to a lesser extent) LWA-2 processes. (See Enclosure 4 to the NEI comments.) Given that separate submittal and industry's recommendations relating to LWAs and pre-construction activities, we request that the NRC consider our limited comments below against the background of NEI's more comprehensive May 25, 2006, paper. Commission endorsement and implementation of the recommendations in that NEI paper would obviate the need to address many of the more limited and restrictive changes that the NRC has proposed.

NEI's May 25, 2006, comments on the LWA process propose that the NRC modify its regulations to allow applicants to conduct the activities contemplated by existing 10 CFR §§ 50.10(b) and 50.10(e)(1) without requiring a prior permit, LWA or other NRC authorization. The legal and policy-related bases for this proposal are discussed more fully in that document. In brief, we believe the definition of "construction" reflected in current 10 CFR § 50.10(b) reflects the correct interpretation of the Commission's licensing responsibility under the Atomic Energy Act (AEA) and is consistent with the agency's obligations under the National Environmental Policy Act (NEPA). Conversely, we conclude that the restrictions on the "commencement of construction" in existing Section 50.10(c) and the prohibitions on pre-licensing activities in existing Section 50.10(e)(1) are unnecessary under the relevant statutes and can be deleted.

The industry's proposal would align NRC regulations with an evolved understanding of an agency's role under NEPA case law that post-dates existing Section 50.10(c). It would also allow COL applicants to take advantage of modern construction and project management techniques, optimize construction schedules, and focus NRC pre-construction activities on matters that have safety significance. In the May 25, 2006, LWA paper, industry further recommends that LWA-2 findings be accelerated based on a partial environmental submittal by the applicant, a partial environmental review by the Staff, and related findings by the NRC Atomic Safety and Licensing Board focused only on the impacts of specific proposed LWA-2 activities.

To minimize any confusion that may result from our submitting separate rulemaking comments on this topic, we have not commented here on all of the NRC's proposed revisions relating to LWAs. Nor have we provided suggested rule language relating to those proposed revisions at this time. If the Staff has any questions after reviewing NEI's May 25, 2006, submittal on the LWA process and these more limited comments, please contact NEI. We believe that additional public discussions relating to the LWA process would be useful and would help the NRC achieve its aim of further improving the licensing process for new plants.

Proposed Rule

The proposed rule contains new requirements that place unnecessary new limits and burdens on COL applicants and ESP holders that wish to obtain Limited Work Authorizations (LWAs) and perform pre-construction site preparation activities.

Proposals that would limit allowable pre-construction activities should not be adopted

As noted in NEI's May 25, 2006, submittal, this rulemaking provides an opportunity for the NRC to make LWAs available and useful to applicants on a schedule that provides meaningful benefit to COL applicants. The NRC's process for licensing new plants should make it easier, not more cumbersome, for ESP holders or COL applicants to perform pre-construction activities. However, many of the proposed revisions impose more restrictive new and/or changed requirements that may impact the ability of ESP holders and COL applicants to continue to conduct the full extent of site preparation activities described under Section 50.10(e) without unnecessary burden.[8] The industry does not support these proposed changes, and our preferred resolution, as discussed more fully in the May 25 submittal, is to allow applicants to conduct activities now categorized as LWA-1 activities without prior NRC review or approval of any kind.

[8] For example, the current rule contemplates that an ESP holder may conduct site preparation activities authorized by Section 50.10(e)(1) without specifically listing or restricting the activities that could be performed. Also, a COL applicant may under the current rule request separate authorization to conduct the activities listed in Section 50.10(e)(1) or Section 50.10(e)(3)(i). Inexplicably, the proposed amendments are even more restrictive, and the NRC has failed to provide any justification for imposing these new obstacles.

Proposed Section 50.10(e), like the current regulation, also appears unnecessarily restrictive in that it would continue to require issuance of an FEIS and issuance of Licensing Board findings as a prerequisite to performing LWA-1 site preparation activities. These requirements should be eliminated. We believe that there is no need for NRC to approve LWA-1 activities because those activities are not safety-related. Moreover, NEPA does not require hearings on environmental issues. The LWA-1 activities would be at the risk of the applicant and, if necessary, would be subject to site redress based upon the environmental findings of the Licensing Board on the application as a whole. (See Enclosure 4 for more details.)[9]

To the extent that ESP holders or COL applicants seek to conduct LWA-2 activities, we recommend that NRC regulations be modified to allow the applicant to propose and justify specific site preparation activities in advance of the submittal of its complete licensing documents. This focused request would be subject to an appropriately focused and expedited Staff review and a limited hearing, resulting in the issuance of an expedited licensing board decision on the specific LWA-2 activities requested. The applicant would submit a full environmental report, and the Staff would issue a full EIS and hold related hearings, on a less accelerated schedule.

Clarify that Pre-Construction Activities Include Manufacturing of Modules

Section 50.10(b) would continue to exclude from the definition of "construction" the "procurement or manufacture of components of the facility." Thus, this provision will continue to *allow* the procurement or manufacture of components of the facility prior to issuance of a CP or COL. The Part 52 final rule should clarify (possibly in the Supplementary Information provided by the Commission) that this exclusion applies to the procurement and manufacturing of Part 52 facility construction modules, and that a CP or COL applicant may procure or manufacture construction modules.

[9] Additionally, proposed Section 50.10(e)(3) would continue to restrict safety-related construction activities that could be conducted prior to issuance of a COL to the installation of structural foundations, including any necessary subsurface preparation." In this regard, we propose that the NRC amend its regulations to specifically allow a COL applicant that references a design certification to conduct any construction activity approved as part of the design certification.

Add Provision for ESP Holders to Request Authorization to Conduct Pre-Construction Activities

There may be situations in which the ESP holder did not include a site redress plan in its ESP application. If, as we propose in our May 25, 2006, partial comments, NRC determines that future applicants need not obtain NRC authorization to perform LWA-1 activities, this omission will become moot or cease to be significant. Alternatively, if the Commission determines that a site redress plan continues to be a prerequisite for LWA-1 and LWA-2 activities, the NRC should revise its regulations to authorize ESP holders (including those whose ESP applications were under review at the time the final rule becomes effective) the flexibility to submit a site redress plan if they did not do so originally, to conduct LWA activities.

26. New Requirements for an ESP Holder to Respond to NRC Information Requests

Proposed Rule

Proposed Section 52.39(e) would allow the NRC to request information from an ESP holder if the staff first evaluates the burden to be imposed "in view of the potential safety significance of the issue to be addressed in the requested information," and if the evaluation conforms to 10 CFR § 50.54(f). The proposed new provision also states that such an evaluation is not necessary if the request seeks to verify compliance with the current licensing basis of the ESP.

Comments

The proposed rule should be modified to allow the ESP holder to defer a response to NRC questions until the COL proceeding or until the ESP holder submits a request for renewal of the ESP. Such an allowance is appropriate for several reasons:

- An ESP holder will not necessarily maintain (and should not be required to maintain) a technical staff to respond to information requests from the NRC. Therefore, an ESP holder may not be able to submit an appropriate response until the COL proceeding application or until the ESP holder submits a request for renewal of the ESP.

- An ESP holder is not allowed to perform any safety-related construction activities. Therefore, there will be no adverse impact upon safety if the ESP holder is allowed to defer a response to an NRC request for information.
- An ESP holder may never submit a COL application. In such an event, the NRC's request for information will be moot.

Recommended Rule Language

We recommend that proposed § 52.39(e) be rewritten, as follows:

> *Information requests.* Except for information requests seeking to verify compliance with the current licensing basis of the early site permit, information requests to the holder of an early site permit must be evaluated before issuance to ensure that the burden to be imposed on respondents is justified in view of the potential safety significance of the issue to be addressed in the requested information. Each evaluation performed by the NRC staff must be in accordance with 10 CFR 50.54(f), and must be approved by the Executive Director for Operations or his or her designee before issuance of the request. <u>An ESP holder may, upon notification to the NRC, elect to defer responding to an information request until a COL application is filed, or until the holder requests renewal of the ESP. If the ESP expires without being renewed and is not referenced in a COL application, then the ESP holder need not respond to any information requests which it has deferred.</u>

27. New Requirements for Control of Radioactive Effluents

Proposed Rule

Proposed Sections 52.47(a)(9) and (a)(10) and Sections 52.137(a)(9) and (a)(10) would require a design certification or standard design applicant to (1) describe the kinds and quantities of radioactive materials expected to be produced and used in the construction and operation and the design features for controlling and limiting radioactive effluents and radiation exposures within the limits set forth in 10 CFR Part 20, and (2) provide information on the design of equipment to maintain control over radioactive materials in gaseous and liquid effluents produced during normal reactor operations described in 10 CFR § 50.34a(e).

Comments

Currently, 10 CFR § 50.34(b)(3) requires that an application for an operating license include information in the Final Safety Analysis Report that addresses the "kinds and quantities of radioactive materials expected to be produced in the operation and the means for controlling and limiting radioactive effluents and radiation exposures within the limits set forth in part 20 of this chapter." The Section 50.34(a) requirements for a construction permit application do not contain a corresponding requirement for radioactive materials produced during construction. The NRC proposes no changes to the provisions in Sections 50.34(a) or (b).

The proposed changes would also tailor the current Part 50 requirements for design certifications and design approvals by requiring that applications describe *design features* (rather than "means") for controlling and limiting radioactive effluents and radiation exposures. Based upon comments made by the NRC at the workshop on March 14, 2006 (Tr. 152-153), we understand that by this change, the NRC staff does not intend to impose different effluent requirements on applicants for design certification and design approvals than on other applicants. Rather, the intent is to make clear that design certification and design approval applicants are not expected to describe "means" for controlling and limiting effluents that are outside the scope of the standard design (e.g., procedural controls, training, etc.) Nevertheless, the language in the proposed rule might

be construed otherwise. To avoid any implication that a new requirement is being imposed upon applicants for a design certification or standard design, the proposed amendments should be modified as suggested below.

The changes would impose new requirements for controlling effluents during both construction and operation (only operation is included in the current Part 50 requirements). No basis is provided for adding requirements on the construction phase, and doing so is inconsistent with existing requirements in Section 50.34(a) and proposed Section 52.79(a)(3). Proposed Sections 52.47(a)(9) and 52.137(a)(9) should be modified consistent with existing requirements.

Furthermore, the proposed rule is not internally consistent. Proposed changes to 10 CFR Part 50, Appendix I, state that Sections 52.47 and 52.137 provide that applications for design certification and design approval "shall include a description of the equipment and procedures for the control of gaseous and liquid effluents and for the maintenance and use of equipment installed in radioactive waste systems." The proposed change to Appendix I should be modified to be consistent with Section 52.47(a)(10) and 52.137(a)(10).

Recommended Rule Language

We recommend that the affected sections be revised, as follows:

<u>10 CFR § 52.47(a), 10 CFR § 52.137(a) (applicable to design certification and standard design approval)</u>

(9) A description of the kinds and quantities of radioactive materials expected to be produced ~~and used~~ in the ~~construction and~~ operation and the design features for controlling and limiting radioactive effluents and radiation exposures within the limits set forth in 10 CFR part 20 <u>of this chapter</u>;

(10) The information with respect to the ~~design of~~ equipment to maintain control over radioactive materials in gaseous and liquid effluents produced during normal reactor operations described in 10 CFR 50.34a(e) <u>of this chapter</u>.

10 CFR § 52.79(a) (applicable to combined license applications)

(16) The information with respect to the ~~design of~~ equipment and procedures to maintain control over radioactive materials in gaseous and liquid effluents produced during normal reactor operations, as described in 10 CFR 50.34a(d) of this chapter.

10 CFR § 157 (e) (applicable to manufacturing license applications)

(11) The information with respect to the ~~design of~~ equipment and procedures to maintain control over radioactive materials in gaseous and liquid effluents produced during normal reactor operations described in 10 CFR 50.34a(e) of this chapter.

Appendix I

SECTION I. *Introduction.* Section 50.34a provides that an application for a construction permit shall include a description of the preliminary design of equipment to be installed to maintain control over radioactive materials in gaseous and liquid effluents produced during normal conditions, including expected occurrences. In the case of an application filed on or after January 2, 1971, the application must also identify the design objectives, and the means to be employed, for keeping levels of radioactive material in effluents to unrestricted areas as low as practicable. Sections 52.47, 52.79, 52.137, and 52.157 of this chapter provide that applications for design certification, combined license, design approval, or manufacturing license, respectively, shall include a description of the equipment and procedures, as applicable, for the control of gaseous and liquid effluents and for the maintenance and use of equipment installed in radioactive waste systems.

28. New Requirements for Construction Completion Dates

Proposed Rule

Proposed Sections 50.23, 52.77 and 52.79(a)(39) would require a COL application to state the earliest and latest dates for completion of construction.

Comments

The requirement to specify a construction completion date should only be applicable to construction permits, and not to combined licenses.

There currently is no requirement for a COL to specify the completion dates for construction. When the NRC amended its regulations in 1992 to reflect provisions of the Energy Policy Act of 1992, it specifically removed the provision that would have required a COL applicant to state the earliest and latest dates for completion of construction. 57 Fed. Reg. 60,975 (Dec. 23, 1992). The basis for removing this requirement was that it was "no longer required under the legislation." *Id.*, at 60,976.

In particular, Section 185.a of the Atomic Energy Act requires that a construction permit state the earliest and latest dates for completion of construction. In contrast, Section 185.b, which addresses a combined license, does not require a COL to specify a construction completion date, nor does it specifically impose the requirements of Section 185.a.

The Supplementary Information for the proposed rule does not explain why the NRC has changed its view of the requirements in Section 185, other than simply to suggest that the NRC now believes the construction permit provisions in Section 185.a are applicable to a combined license. Absent any valid basis for changing its view of the Energy Policy Act of 1992, the NRC should not impose this unnecessary and inappropriate requirement.

The requirement to specify a construction completion date represents an undue administrative burden with no useful purpose, and the requirement should not be extended beyond the explicit language in Section 185.a - - i.e., it should not be extended beyond construction permits. The experience for Part 50 plants demonstrates that the costs

of such a requirement can be substantial. These costs may include the costs of preparation of requests to extend the completion dates when construction was delayed, the costs of NRC review of such request, and in some cases the cost of expensive hearings on the extension requests. Furthermore, the NRC routinely granted timely extension requests, without addressing any safety issues. Thus, there was no useful purpose served by extension requests or the requirement to specify a construction completion date.

Finally, we note that the industry does not object to informing the NRC of its expected construction schedules. We understand that the NRC needs such information to plan its construction-related inspections. The expectation that COL applicants will provide construction schedule information to NRC is documented in NUREG-1789, *Part 52 Construction Inspection Program Framework Document,* and most recently in an April 4, 2006, NEI letter to NRC identifying "lessons learned" from the joint industry-NRC ITAAC Demonstration Project." However, as discussed above, construction completion dates should not be specified as a COL license condition because such conditions impose unnecessary administrative burdens on all concerned if construction is not completed within the specified time.

Recommended Rule Language

We recommend that NRC delete the requirement to specify the earliest and latest dates for completion of construction for a combined license.

29. New Requirement for Design Approvals To Address Emergency Facilities

Proposed Rule

Proposed 10 CFR § 52.137(a)(22) would require that an applicant for a standard design approval to include design information on coping with emergencies.

Comments

The NOPR makes no reference to this change, and the purpose and intent of this provision is unclear.

This requirement, taken literally, cannot be satisfied. The standard design approval applicant will not be responsible for certain emergency planning design features, including the Emergency Operations Facility (EOF) and other offsite emergency design features (such as sirens). Such design features will be the responsibility of the COL applicant.

In addition, we note that the same provision is not included in the scope of proposed requirements for a design certification. It is unclear why an application for design approval should be subject to greater requirements than an applicant for design certification.

Recommended Rule Language

We recommend that the NRC delete proposed § 52.137(a)(22).

30. New Requirements on the Timing of Implementation of the Maintenance Rule

Proposed Rule

The NRC proposes to modify the requirements for a maintenance program at nuclear plants. The scope of Section 50.65(a) would be modified to include combined licenses issued under Part 52, "after the Commission makes the finding under § 52.103(g)." COL holders would be required to implement the requirements of 10 CFR 50.65 30 days before the scheduled date for initial fuel loading of the reactor.

Comments

The Supplementary Information for the proposed rule does not explain or justify requiring a COL holder to implement the Maintenance Rule prior to fuel load. Further, the requirement in proposed Section 50.65(c) to implement the Maintenance Rule 30 days before fuel load appears is inconsistent with the requirement in paragraph 50.65(a) that the Maintenance Rule applies after the NRC has made its 52.103(g) finding.

As we have discussed with the NRC staff in connection with SECY-05-0197, operational programs will be implemented (sometimes in phases) in connection with key project or licensing milestones, such as fuel load. In no case has program implementation been required 30 days or

other arbitrary period prior to a project/licensing milestone. Doing so for the Maintenance Rule would provide no discernable regulatory or operational value. Indeed, the NRC provides no justification for it.

Finally, the NRC should not require implementation of the Maintenance Rule prior to fuel load when not all systems will have been placed in service. Moreover, most of the requirements in the Maintenance Rule, such as the monitoring and assessment activities in Section 50.65(a), are predicated upon an operating plant. That said, it should be emphasized that, regardless of any NRC requirement, the licensee will have implemented its maintenance programs, as well as its quality assurance and configuration control programs, long before fuel load to maintain and control the configuration of SSCs as they are turned over to operations and placed into service.

Recommended Rule Language

We recommend deletion of paragraph (c) from the proposed revision to Section 50.65, in its entirety:

~~(c) The requirements of this section shall be implemented by each licensee no later than July 10, 1996. For combined licenses under part 52, the requirements of this section shall be implemented by the licensee no later than 30 days before the scheduled date for initial loading of fuel.~~

Current operating plants, which were required to implement the maintenance program by July 10, 1996, have now complied with the regulation and the provision is no longer applicable. For Part 52 combined licenses, the implementation schedule stated in § 50.65(a) is appropriate.

31. New Requirements for Decommissioning Reports

Proposed Rule

Proposed Section 50.75(e)(3) would require a combined license holder, following issuance of the combined license and until the date that the Commission makes the finding under 10 CFR § 52.103(g), to provide an annual report updating its decommissioning certification.

Comments

The combined license holder is required to submit a decommissioning funding report in its application, explaining how it will fund decommissioning. The annual update during the construction period would serve no purpose and is unnecessary and unduly burdensome. In addition, such a reporting requirement is not imposed on construction permit holders. The licensee should be allowed to adjust the funding certification at the time construction is complete and the plant is ready to begin operation.

The annual update under § 50.75(e)(3) should not be required prior to the date that the Commission makes the Section 52.103(g) finding. Once the NRC has issued its § 52.103(g) finding, the licensee will be subject to decommissioning funding requirements, and must submit periodic reports as provided in Section 50.75(f)(1). This approach appears to be consistent with the other requirements in 10 CFR § 50.75 for establishing decommissioning funding, and also would accomplish the intent of the regulatory scheme established to ensure adequate decommissioning funding upon the end of the operational life of the plant, as discussed in the NOPR.

Recommended Rule Language

We recommend that the proposed requirement be rewritten, as follows:

> §50.75(e)(3) Each holder of a combined license under subpart C of 10 CFR part 52 shall, ~~following issuance of the combined license until the date that the Commission makes the finding under 10 CFR 52.103(g), submit a report to the NRC, by March 31 of each year, containing an update to the certification described under paragraph (b)(1) of this section.~~ no later than 30 days after the Commission publishes notice in the **Federal Register** under 10 CFR 52.103(a), ~~the licensee shall~~ submit a report containing a certification that financial assurance for decommissioning is being provided in an amount specified in the licensee's ~~most recent updated~~ certification, <u>as adjusted</u>; and a copy of the financial instrument obtained to satisfy the requirements of paragraph (e) of this section.

32. New Requirements for an Applicant for an ESP or Design Certification to Describe its Quality Assurance (QA) Program

Proposed Rule

Proposed Section 50.55(f) would impose requirements on the quality assurance program, as described or referenced in the safety analysis report, on holders of an ESP, a manufacturing license, or a combined license (up to issuance of the § 52.103(g) finding, when the requirements of 10 CFR § 50.54(a) would apply). Section 52.17(a)(1)(xii), 52.47(a)(21), 52.137(a)(21), 52.157(e)(17) and Appendix B to Part 50 in the proposed rule would impose a new requirement on an ESP applicant, a design certification applicant, an applicant for design approval, and an applicant for a manufacturing license to describe the quality assurance program under Appendix B to Part 50 for ESP site activities, design activities, and manufacturing activities respectively.

Comments

As written, the proposed rule would require all ESP site activities, design activities, and construction activities to be subject to an Appendix B QA program. We do not believe that it is the intent of the NRC to apply the Appendix B requirements so broadly. Therefore, we recommend that the NRC revise these provisions to clarify that the Appendix B quality assurance program applies only to activities affecting the safety-related functions of the structures, systems, and components, and not to all ESP site activities, design activities, and construction activities. The recommended changes would make these new Part 52 requirements consistent with existing Appendix B, which states, "The pertinent [QA] requirements of this appendix apply to all activities affecting the safety-related functions [of SSCs]."

Additionally, these proposals could be interpreted as requiring applicants for an ESP, design certification, design approval, or a manufacturing license to establish and implement a QA program that addresses each of the 18 criteria in 10 CFR 50, Appendix B. Not all of those criteria are applicable to each of the applicants. For example, Criteria III on design control, Criterion IX on special processes, and some of the other criteria are clearly inapplicable to ESP applicants. Similarly, Criteria IX, Criterion X on inspections, and some of the

other criteria would not be applicable to applicants for design certification and design approval. We do not believe that it is the intent of the NRC to apply the Appendix B requirements so broadly. Therefore, we recommend that the language in the proposed rule be modified to clarify that the applicant need only establish and implement the criteria in Appendix B to the extent that those criteria are applicable to the activities being conducted by the applicant.

Finally, proposed Section 52.17(a)(1)(xii) would require an ESP applicant to provide "a description of the quality assurance program applied to site-related activities for the future design, fabrication, construction, and testing of the structures, systems, and components of a facility or facilities that may be constructed on the site." This provision is ambiguous and could be incorrectly interpreted as applying to all site-related activities. Furthermore, on its face, this language would require a QA program for an ESP to have a broader scope than a QA program for a CP or COL. No justification has been provided for this expansion of the scope of the ESP QA program. Such an expansion is unwarranted. The scope of an ESP QA program should be no greater than the scope of a QA program for a CP or COL.

Recommended Rule Language

We recommend that the affected sections be rewritten, as follows:

> 10 CFR § 50.55(f)(4) Each holder of an early site permit or a manufacturing license under part 52 of this chapter shall implement the quality assurance program described or referenced in the safety analysis report, including changes to that report, for those activities affecting safety-related structures, systems, and components. Each holder of a combined license shall implement the quality assurance program for design and construction described or referenced in the safety analysis report, including changes to that report, for those activities affecting safety-related structures, systems, and components, provided, however, that the holder of a combined license is not subject to the terms and conditions in this paragraph after the Commission makes the finding under § 52.103(g) of this chapter.
>
> 10 CFR § 52.17(a)(1)(xii) For applications submitted after [insert date of final rule], a description of the quality assurance program applied to site-related activities performed by the applicant or its contractors that provide an

input for the future design, fabrication, construction, and testing of the safety-related structures, systems, and components of a facility or facilities that may be constructed on the site. Appendix B to 10 CFR Part 50, sets forth the requirements for quality assurance programs for nuclear power plants. The applicant may utilize, without verification, data generated by third parties such as government agencies and researchers. The description of the quality assurance program for a nuclear power plant site shall include a discussion of how the applicable requirements of appendix B of this part will be satisfied for the scope of activities to be conducted by the applicant;

10 CFR § 52.47(a)(21) A description of the quality assurance program to be applied to the design of the safety-related structures, systems, and components of the facility. Appendix B to 10 CFR part 50, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants," sets forth the requirements for quality assurance programs for nuclear power plants. The description of the quality assurance program for a nuclear power plant shall include a discussion of how the applicable requirements of appendix B to 10 CFR part 50 will be satisfied for the scope of activities to be conducted by the applicant;

10 CFR § 52.137(a)(21) A description of the quality assurance program to be applied to the design of the ~~SSCs~~ safety-related structures, systems, and components of the facility. Appendix B to 10 CFR part 50, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants," sets forth the requirements for quality assurance programs for nuclear power plants. The description of the quality assurance program for a nuclear power plant shall include a discussion of how the applicable requirements of appendix B to 10 CFR part 50 will be satisfied for the scope of activities to be conducted by the applicant;

10 CFR § 52.157(e)(17) A description of the quality assurance program to be applied to the design and manufacture of the safety-related structures, systems, and components of the reactor. Appendix B to 10 CFR part 50, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants," sets forth the requirements for quality assurance programs for nuclear power plants. The description of the

quality assurance program must include a discussion of how the applicable requirements of appendix B to 10 CFR part 50 will be satisfied for the scope of activities to be conducted by the applicant;

33. New Requirements for an ESP Applicant to Evaluate its Application against the Standard Review Plan (SRP)

Proposed Rule

Proposed Section 52.17(a)(1)(xiii) would require an ESP application to include an evaluation of the site against applicable sections of the Standard Review Plan (SRP) revision in effect 6 months prior to the docket date of the application.

Comments

The NRC has issued RS-002, *Processing Applications for Early Site Permits*, as guidance for ESP application review. The final Part 52 rule should have flexibility to allow an ESP application to provide an evaluation against RS-002 or other NRC applicable guidance documents, in lieu of an evaluation against the SRP.

Recommended Rule Language

We recommend that proposed § 52.17(a)(1)(xiii) be rewritten, as follows:

(xiii) For applications submitted after [insert date of final rule], an evaluation of the site against applicable sections of the Standard Review Plan (SRP) revision in effect 6 months before the docket date of the application, or other NRC guidance documents specific to early site permit application reviews. The evaluation required by this section shall include an identification and description of all differences in analytical techniques and procedural measures proposed for a site and those corresponding techniques and measures given in the SRP or other guidance acceptance criteria. Where such a difference exists, the evaluation shall discuss how the proposed alternative provides an acceptable method of complying with the Commission's regulations, or portions

thereof, that underlie the corresponding SRP or other guidance acceptance criteria. The SRP was issued to establish criteria that the NRC staff intends to use in evaluating whether an applicant/licensee meets the Commission's regulations. The SRP or other guidance is not a substitute for the regulations, and compliance is not a requirement.

34. New Requirements for a Design Certification Applicant to Evaluate Severe Accident Design Mitigation Alternatives (SAMDAs)

Proposed Rule

Proposed Sections 52.47(b)(5), 52.137(a)(20), 51.30, 51.31, 51.54, 51.55, and 51.56 would require a design certification applicant, applicant for design approval, and manufacturing license applicant to perform an evaluation of SAMDAs.

Comments

Although it has been the practice of design certification applicants to provide SAMDA evaluations, it has not been a requirement.

Historically, the evaluation of SAMDAs has been based on *Limerick Ecology Action v. NRC*, 869 F.2d 719 (3rd Cir. 1989), which held that NRC treatment of SAMDAs through a policy statement did not meet the requirements of the National Environmental Policy Act (NEPA). In particular, the court held that the NRC needed to consider SAMDAs for the Limerick plant because the NRC had not issued a rule concluding that severe accidents are "remote and speculative" under NEPA.

Based upon that decision, the NRC has reviewed SAMDAs as part of design certification reviews. In addition, the Commission directed the Staff to continue to assess alternatives, such as rulemaking (*see* SECY-91-229 and its SRM) to resolve generically the concern posed by the court in *Limerick Ecology Action*. The Staff indicated it would continue to pursue rulemaking and, as part of that effort, attempt to define what is a "credible" accident, and what constitutes "remote and

speculative." *See* Memorandum, "Response to SRM for SECY-91-229, 'Severe Accident Mitigation Design Alternatives for Certified Standard Designs'" (Jan. 28, 1992). Current NRC guidance in SECY-93-087, Issue II.O indicates that each design certification applicant should evaluate SAMDAs.

The industry has long maintained that severe accidents in nuclear power plants are remote and speculative under NEPA. The industry believes that the NRC should continue its efforts to resolve the court's ruling through rulemaking rather than a plant-by-plant analysis.

In particular, NRC's policy statements on *Severe Reactor Accidents Regarding Future Designs and Existing Plants*, 50 Fed. Reg. 32138 (Aug. 8, 1985) and *Regulation of Advanced Nuclear Power Plants*, 59 Fed. Reg. 35461 (July 12, 1994), state the Commission's expectations that new nuclear plants "will achieve a higher standard of severe accident safety performance" than existing plants, and that "advanced reactors will provide enhanced margins of safety." The SAMDA evaluations for the existing design certifications completely fulfill the Commission's expectations. In fact, the SAMDA evaluations for the existing design certifications show that the probability of a severe accident is so low that no SAMDAs are even remotely cost-beneficial. Thus, for new plants, the SAMDA evaluation is a costly academic exercise with no practical value. Based upon this experience, the NRC should initiate rulemaking finding that severe accidents in new nuclear plants are remote and speculative, and that SAMDA evaluations are not required for new plants.

Based upon this recommendation, the industry believes that all of the requirements for a SAMDA evaluation in the proposed rule should be deleted. Pending completion of the rulemaking to resolve this issue generically, the NRC should continue to adhere to its existing *guidance* in SECY-93-087 that calls for applicants to perform a SAMDA analysis.

Recommended Rule Language

We recommend that the NRC delete all references to SAMDA analyses in the final Part 52 rule.

The NRC should initiate a rulemaking or policy statement to disposition SAMDA generically for future design certifications and design approvals. In the meantime, the NRC and industry should continue to resolve SAMDA requirements by the process approved by

the Commission in SECY-91-229 that has been used for the design certifications completed to date.

35. New Posting Requirements

Proposed Rule

Proposed 10 CFR § 19.11(b)(2) would require various applicants to post "the operating procedures applicable to the activities regulated by the NRC which are being conducted by the applicant or holder."

Comments

The intent and purpose of this new requirement are unclear. Furthermore, if interpreted literally, this new requirement is unduly burdensome. The applicants for, and holders of, standard design approvals, ESPs, COLs, design certifications, and manufacturing licenses may have volumes of operating procedures. There is no reason to post all of these procedures, and it would be impractical to do so.

Recommended Rule Language

We recommend that proposed Section 19.11(b)(2) be deleted.

36. New Requirement to Notify NRC Within 10 Days of Successful ITAAC Completion

Proposed Rule

For ITAAC completed within the last 180 days before fuel load, proposed Section 52.99(c) would require the COL holder to notify the NRC within 10 days of successful ITAAC completion.

Comments

This requirement is unnecessary and should be deleted. The licensee will be highly motivated to notify the NRC of successful ITAAC

completion as quickly as possible so as to trigger the NRC's ITAC verification process.

Processes for expediting ITAAC verification during the critical last six months before fuel load should be considered in an integrated and comprehensive way outside the rulemaking context. Rule changes are not necessary. Rather, we recommend such processes be discussed as part of our ongoing joint industry-NRC ITAAC Demonstration Project. We intend to document common understandings about ITAAC implementation and verification, including special processes for managing the ITAAC verification in the last six months before fuel load, in NEI 06-01, *COL Implementation Guideline.*

Recommended Rule Language

We recommend the NRC delete the proposed requirement from the final rule.

In the alternative, we recommend the provision be modified as follows to reflect the difference between (1) the successful completion of a specific ITAAC test or analysis, and (2) the consideration of all factors (e.g., status of corrective actions and availability of necessary documentation) and determination by the licensee that an ITAAC has been successfully completed.

> § 52.99(c) The licensee shall notify the NRC that the inspections, tests, or analyses in the ITAAC have been successfully completed and that the corresponding acceptance criteria have been met. For those inspections, tests, or analyses that are completed within 180 days prior to the scheduled date for initial loading of fuel, the licensee shall notify the NRC within 10 days of determining that ITAAC have been successfully completed~~the successful completion of ITAAC~~.

37. Deletion of the Option of Using Appendix Q and Subpart F by COL Applicants

Proposed Rule

The propose rule would delete 10 CFR Part 52, Appendix Q, which allows a Part 52 applicant to request early site suitability review. In addition, the proposed rule would not clarify that Subpart F of 10 CFR Part 2 may be used by COL applicants.

Comments

While no applicant has yet expressed an intent to use the early site review process in Appendix Q or the process in Subpart F to Part 2 for partial decisions on site suitability issues, these processes may provide important flexibility for early and efficient consideration of site suitability issues for COL applicants. There is no reason to eliminate this flexibility, and no harm is caused by allowing Part 52 applicants to utilize these provisions.

Both of these regulations allow critical path site issues to be reviewed by NRC in advance of the submission of a COL application (COLA), in cases where the applicant's schedule or other considerations does not allow it to complete the ESP process in advance of the COLA. Further, utilization of Appendix Q or Subpart F in the context of a COLA could allow the NRC Staff to more efficiently utilize its resources to focus early review of site issues only on those issues sought by the applicant, rather than the full scope of issues required by an application for an ESP.

In the August 2005 draft of the proposed rule, changes were indicated in 10 CFR 2 Subpart F that would have allowed the Subpart to be used in the Part 52 combined license (COL) process. This change is not part of the proposed rule noticed in the Federal Register. Thus, one could (erroneously) conclude that Part 2, Subpart F, is only applicable to the Part 50 construction permit process. We suggest that the August 2005 draft revisions to Subpart F be incorporated into the final Part 52 rule to clarify its continuing availability to Part 52 applicants.

The recommended changes below would specifically allow an application for an ESP or COL to reference a review conducted in accordance with Appendix Q to Part 50. The recommended changes

would also modify the provisions in Subpart F of Part 2 explicitly to allow its use in Part 52 actions. Based upon the statements provided by the NRC at the workshop on March 14, 2006 (Tr. 23-24), we understand that it is the NRC's intent to allow Part 52 applicants to use Subpart F.

Recommended Rule Language

We recommend that the NRC retain Appendix Q in Part 52, as well as in Part 50, and also make the following changes in Subpart F of Part 2:

> §2.101(a-1) *Early consideration of site suitability issues.* An applicant for a construction permit <u>or a combined license</u> 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 is a testing facility, may request that the Commission conduct an early review and hearing and render an early partial decision in accordance with subpart F on issues of site suitability within the purview of the applicable provisions of parts 50, 51, 52, and 100 of this chapter. In such cases, the applicant ~~for the construction permit~~ may submit the information required of applicants by the provisions of this chapter in three parts: * * *
>
> § 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 ~~to construct~~ <u>for a part 50 construction permit or a part 52 combined license</u> 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 is a testing facility.
>
> § 2.603 Acceptance and docketing of application for early review of site suitability issues.
>
> . . .
> (b)(1) The Director of Nuclear Reactor Regulation will accept for docketing an application for a construction permit <u>or a combined license</u> 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 or is a testing facility where part one of the application as described in § 2.101(a - 1) <u>or part 52</u> is complete. . . .

38. Deletion of Provision that an ESP is a "Partial Construction Permit"

Proposed Rule

The proposed rule would delete the statement in 10 CFR § 52.21 that an early site permit is a "partial construction permit."

Comments

The Supplementary Information for the proposed rule does not explain the purpose, intent, or effect of deleting this provision in the current rule. Despite the deletion in the rule language, the NRC continues to refer to an early site permit as a partial construction permit at various places throughout the NOPR (*see* 71 Fed. Reg. at 12,790, 12,791, 12,809, 12,812, and 12,815). Therefore, the notice of proposed rule is not internally consistent, and it is unclear whether the Commission intends for the deletion to have any substantive effect.

We believe that the proposed change would remove some clarity afforded by the current rule. This proposed deletion could result in certain benefits being removed from the ESP, since it would no longer have the status of a partial construction permit. Furthermore, the existing provision is useful, and there is no reason why an ESP should not continue to be referred to as a partial construction permit.

Recommended Rule Language

We recommend that the NRC revise proposed Section 52.21 as follows:

> An early site permit <u>is a partial construction permit and</u> is subject to all procedural requirements in 10 CFR part 2 . . .

39. The Proposed Rule Would Allow the NRC Arbitrarily To Withhold the Issuance of an ESP

Proposed Rule

Proposed Section 52.24(a) states that the Commission may issue an ESP if it makes the requisite findings. In contrast, the current rule states that the Commission shall issue the ESP if it makes the requisite findings.

Comments

The Supplementary Information for the proposed rule provides no explanation or justification for this proposed amendment. The proposed provision would enable the NRC arbitrarily to withhold issuance of an ESP, even though the ESP application has satisfied all applicable requirements. The NRC should be required to issue the ESP in such cases.

Recommended Rule Language

We recommend that proposed section 52.24(a) be rewritten, as follows:

> After conducting a hearing under § 52.21 and receiving the report to be submitted by the ACRS under § 52.23, the Commission ~~may~~ shall issue an early site permit ...

40. The Proposed Rule Would Allow Litigation of Changes to ESP Emergency Planning Information that Are Not Significant to Safety

Proposed Rule

Proposed 10 CFR § 52.39(c)(iv) would allow litigation in a COL proceeding referencing an ESP contentions on "new or additional information" provided in the COL application "which materially affects the Commission's earlier determination on emergency preparedness" in the ESP proceeding, or "is needed to correct inaccuracies in the emergency preparedness information approved in the early site permit."

Comments

This proposed provision identifies a different standard for emergency planning contentions than that in 10 CFR § 50.54(q). Section 50.54(q) allows a licensee to make changes in an NRC-approved emergency plan, without prior NRC approval, if the change does not decrease the effectiveness of the plan and the plan as changed continues to meet the requirements in Appendix E to Part 50. This standard ensures adequate protection of safety, and has been accepted and used by the industry and NRC for years. This same standard should be applied to changes in emergency plans approved by the NRC in the ESP proceeding. The NRC has not explained the basis for or justified the higher standard in the proposed rule.

Additionally, proposed § 52.39(c)(iv) is objectionable because it is inconsistent with proposed § 52.39(a)(2). Section 52.39(a)(2) states that, "if the early site permit approved an emergency plan (or major features thereof) that are in use by a licensee of a nuclear power plant, the Commission shall treat as resolved changes to the early site permit emergency plan (or major features thereof) that are identical to changes made to the licensee's emergency plans in compliance with § 50.54(q) of this chapter occurring after issuance of the early site permit." Thus, proposed § 52.39(c)(iv) would appear to allow intervenors to raise contentions on material changes that have "finality" under proposed § 52.39(a)(2), which is inconsistent with the concept of finality.

More fundamentally, there is no reason for the NRC to distinguish between approved emergency plans for ESPs for existing reactor sites

and approved emergency plans for ESPs on greenfield sites. As long as the emergency planning information has been approved by the NRC in the ESP proceeding, it should be afforded the same protection whether or not the emergency plan is the same as that being used by an existing plant. Thus, all changes to approved emergency planning information should be judged under the standards in Section 50.54(q), not just those changes related to sites with an existing nuclear plant.

Finally, the "materiality" standard in proposed Section 52.39(c)(iv) could allow litigation of changes that are not significant to safety. In this regard, NRC has typically defined "material" as information that has the ability to influence the agency in the conduct of its regulatory responsibilities.[10] Under this definition, a change in emergency planning information may be material, but may not represent a decrease in safety. If a change does not adversely affect safety, it should not be subject to NRC approval or hearings.

In this regard, it is possible that the proposed rule is defining the term "material" in a manner that is different from the NRC's traditional definition. Specifically, regarding material changes in emergency planning, the Supplemental Information for the proposed rule (71 Fed. Reg. 12,795) states the following:

> New information that materially changes the bases for compliance includes: (1) Information that substantially alters the bases for a previous NRC conclusion with respect to the acceptability of a material aspect of emergency preparedness or an emergency preparedness plan; and (2) Information that would constitute a basis for the Commission to modify or impose new terms and conditions on the early site permit related to emergency preparedness in accordance with § 52.39(a)(1).

This definition of "materially" is substantially more stringent that the definition the NRC traditionally has used. If the NRC intends to use this standard in evaluating changes in ESP emergency planning

[10] *See Virginia Elec. and Power Co.* (North Anna Power Station, Units 1 and 2), CLI-76-22, 4 NRC 480 (1976) (In defining "materiality" in the context of material false statements under Section 186 of the Atomic Energy Act, the Commission determined that "materiality should be judged by whether a reasonable staff member should consider the information in question in doing his job." *North Anna*, CLI-76-22, 4 NRC at 486. Further, "determinations of material require careful, common-sense judgments of the context in which information appears and the stage of the licensing process involved. Materiality depends upon whether information has a natural tendency or capability to influence a reasonable agency expert." *Id.* at 491.

information, the NRC should use this quoted language in the rule, rather than using the term "materially affects."

Recommended Rule Language

We recommend that the proposed rule be rewritten, as follows:

10 CFR 52.39(a)(2) In making the findings required for issuance of a construction permit, operating license, or combined license, or the findings required by § 52.103, if the application for the construction permit, operating license, or combined license references an early site permit, the Commission shall treat as resolved those matters resolved in the proceeding on the application for issuance or renewal of the early site permit, except as provided for in paragraphs (b), (c) and (d) of this section. (i) If the early site permit approved an emergency plan (or major features thereof) that are in use by a licensee of a nuclear power plant, the Commission shall treat as resolved changes to the ESP emergency plan (or major features thereof) that are identical to changes made to the licensee's emergency plans in compliance with § 50.54(q) of this chapter occurring after issuance of the ESP. (ii) If the early site permit approved an emergency plan (or major features thereof) that are not in use by a licensee of a nuclear power plant, the Commission shall treat as resolved changes that could be made under § 50.54(q) of this chapter without prior NRC approval.

10 CFR 52.39(c)(iv) New or additional information is provided in the application ~~which materially affects the Commission's earlier determination on~~ that substantially alters the bases for a previous NRC conclusion and constitutes a sufficient basis for the Commission to modify or impose new terms and conditions related to emergency preparedness~~, or is needed to correct inaccuracies in the emergency perparedness information approved in the early site permit~~. Changes that have finality under § 52.39(a)(2) are not subject to contentions or litigation.

41. Elimination of the Option of Renewing a Standard Design Approval

Proposed Rule

Proposed Section 52.147 would prohibit renewal of standard design approvals.

Comments

The Supplementary Information for the proposed rule provides no explanation or basis for the prohibition on renewal of a standard design approval.

A design approval should be subject to renewal, just as a design certification, ESP, and COL are subject to renewal. There is no reason to prohibit renewals of design approvals.

Recommended Rule Language

We recommend that the section be rewritten, as follows:

> § 52.147 Duration and renewal of design approval.
> (a) A standard design approval issued under this subpart is valid for 15 years from the date of issuance and may ~~not~~ be renewed for an additional 15 years upon request within 2 years of the expiration of the approval or renewed approval. A design approval continues to be valid beyond the date of expiration in any proceeding on an application for a construction permit, combined license, or an operating license which references the standard design approval and is docketed before the date of expiration of the design approval; it also continues to be valid upon a timely renewal request until such time that the Commission approves or denies renewal of the standard design approval.
>
> (b) Not less than twelve nor more than thirty-six months prior to expiration of the initial fifteen-year period, or any later renewal period, any person may apply for renewal of the standard design approval. An application for renewal must contain all information necessary to bring up to date

the information and data contained in the previous application.

(c) The NRC staff shall issue a renewal if the design, either as originally approved or as modified during the renewal, complies with the Atomic Energy Act and the Commission's regulations applicable and in effect at the time the initial approval was issued, and any other requirements the NRC staff may wish to impose after a determination that there is a substantial increase in overall protection of the public health and safety or the common defense and security to be derived from the new requirements and that the direct and indirect costs of implementation of those requirements are justified in view of this increased protection. In addition, the applicant for renewal may request an amendment to the standard design approval. The NRC staff shall grant the amendment request if it determines that the amendment will comply with the Atomic Energy Act and the Commission's regulations in effect at the time or renewal. If the amendment request entails such an extensive change to the standard design approval that an essentially new standard design is being proposed, an application for a standard design approval shall be filed in accordance with § 52.135, 52.136, and 52.137 of this part.

42. New Limitation on Manufacturing Licenses and Restrictions on the Usefulness of a Manufacturing License

Proposed Rule

Proposed Section 52.167(b)(3) would limit the number of reactors that may be manufactured under a manufacturing license to that number of reactors whose start of manufacture could practically begin within a 10-year period. Proposed Section 52.173 would allow the manufacturing license to be valid for not less than 5, nor more than 15 years from the date of issuance, and would permit renewal. However, proposed Sections 52.173 and 52.177(c) would impose the restriction that a manufacturer may not initiate manufacture of a reactor less than 3 years before the expiration of the license, even though a timely application for renewal has been filed with the NRC.

Comments

The Supplementary Information for the proposed rule provides no justification for establishing these requirements and limitations, other than stating that the 3-year period provides "a reasonable period for completing the manufacture of a nuclear power reactor, based in large part upon public statements by various reactor vendors that they have set goals for constructing complete nuclear power plants onsite within 3 years." In our view, there is no practical reason to impose such restrictions. If a plant design that is the subject of a manufacturing license remains technically viable to purchasers, the NRC should not unduly restrict the market by removing the vendor's capability to meet the needs of its customers. Further, there appears to be no basis related to safety for restricting the use of the manufacturing license as long as the manufacturing is conducted in accordance with the terms of the license.

Recommended Rule Language

We recommend that the affected proposed sections be rewritten, as follows:

> § 52.167(b)(3) The number of nuclear power reactors authorized to be manufactured, and the latest date for completion of the manufacturing of all the reactors. The number of reactors to be specified in the manufacturing license may be no more than the number of reactors whose start of manufacture can practically begin within ~~a 10-year period~~ the specified duration of the license period commencing on the date of issuance of the manufacturing license;

§ 52.173 Duration of manufacturing license.
A manufacturing license issued under this subpart may be valid for not less than 5, nor more than 15 years from the date of issuance. ~~A holder of a manufacturing license may not initiate the manufacture of a reactor less than 3 years before the expiration of the license even through a timely application for renewal have been filed with the NRC.~~ Upon expiration of the manufacturing license, the manufacture of any uncompleted reactors may continue subject to the terms of the license but manufacture of additional reactors may not commence ~~must cease~~ unless a timely application for renewal has been filed with the NRC.

§ 52.177(c) A manufacturing license, either original or renewed, for which a timely application for renewal has been filed, remains in effect until the Commission has made a final determination on the renewal application ~~*provided, however,* that in accordance with § 52.173, the holder of a manufacturing license may not begin manufacturing license may not be manufacture of a reactor less than 3 years before the expiration of the license~~.

43. Prohibition of Changes to a Manufacturing License

Proposed Rule

Proposed Section 52.171(b)(1) would not allow the holder of a manufacturing license to make changes, except by means of a license amendment.

Comments

The Supplementary Information for the proposed rule states that the "NRC proposes to provide a greater degree of finality to a manufacturing license," and that "one of the key reasons for licensing manufactured reactors is to enhance standardization." The NRC also suggests that allowing changes could result in losing the advantages of a manufactured reactor if each one is treated as a "one-off" custom product.

The need for NRC approval of every change to a manufacturing license that may be identified is not justified. On the contrary, a manufacturer can maintain the concept of a standard design when making relatively minor changes in procurement, manufacturing, and quality assurance processes, as allowed by or consistent with the 10 CFR § 50.59 change process. The manufacturer would periodically report these changes to the NRC and the change processes would be subject to NRC oversight.

In this regard, there is no greater need for standardization of reactors fabricated under a manufacturing license versus reactors constructed under a design certification. As provided in 10 CFR § 52.63(b)(2) and Section VIII.B.5 of the design certification rules, a COL holder or applicant may depart from a design certification using a 50.59-like process. This same flexibility should be afforded to the holder of a manufacturing license.

It simply is not realistic to expect zero changes in a reactor design over a 15-year period. Due to factors should as obsolesce of components and changes by component suppliers, minor changes should be expected. It would pose an undue burden on the holder of the manufacturing licensee and the NRC to require such minor changes to be subject to prior NRC review and approval.

Recommended Rule Language

We recommend that proposed section 52.171(b)(1) be rewritten, as follows:

> The holder of a manufacturing license may ~~not~~make changes to the design of the nuclear power reactor authorized to be manufactured, without prior Commission approval, <u>in accordance with the process in § 50.59 of this chapter. Any</u> ~~The~~ request for a change to the design <u>that requires prior Commission approval under § 50.59</u> must be in the form of an application for a license amendment, and must meet the requirements of 10 CFR 50.90 through 50.92.

44. The Required Findings in Mandatory Hearings Are not Consistent with the Commission's Recent Decision in the ESP Proceedings

Proposed Rule

Proposed changes to Sections 2.104, 51.105, 51.105a, and 51.107 would identify the contents of notices of hearing for construction permit, ESP, and COL proceedings, including findings to be made by the presiding officer in those proceedings.

Comments

The proposed changes to Sections 2.104, 51.105, 51.105a, and 51.107 do not fully incorporate the Commission's conclusions in its Memorandum and Order CLI-05-17 (July 28, 2005) as to the findings that must be made by the Atomic Safety and Licensing Board for a mandatory hearing.

The proposed rule appears to incorporate the Commission Memorandum and Order CLI-05-17 regarding the conduct of mandatory hearings in proceedings for three early site permit and two fuel cycle facility applications. However, the treatment of "contested issues" versus "uncontested issues" discussed in CLI-05-17 is not reflected in the proposed change. Instead, the proposed rule repeats much of the ambiguous language that led the Commission to issue CLI-05-17. The rule language should be revised to conform to the Commission's decision regarding:

- the distinction between "contested issues" and "uncontested issues;"
- the Commission's admonition against *de novo* reviews by the Licensing Board for uncontested issues; and
- the prohibition against an intervenor's participation on uncontested matters.

Additionally, the proposed rule would require the licensing board to make a number a number of findings that it is not currently required to make, such as:

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

- Whether any required notifications to other agencies or bodies have been duly made;
- Whether there is reasonable assurance that the site is in conformity with the provisions of the Act, and the Commission's regulations;
- Whether the proposed inspections, tests, analyses and acceptance criteria, including any on emergency planning, are necessary and sufficient within the scope of the early site permit to provide reasonable assurance that the facility has been constructed and will be operated in conformity with the license, the provisions of the Act, and the Commission's regulations;

The NOPR does not explain why these additional findings should be added to the notice of hearing, nor the basis for these proposed additional findings. NEI does not believe that it is appropriate to expand the scope of the findings required to be made the licensing boards in hearings.

Recommended Rule Language

We recommend that the affected sections be rewritten, as follows:[11]

§ 2.104

(d) In the case of an application for an early site permit under subpart A of part 52 of this chapter, the notice will, except as the Commission determines otherwise, state, in implementation of paragraph (a)(3) of this section:

(1) If the ~~proceeding~~ issue is ~~a~~ contested ~~proceeding~~, the presiding officer will consider the 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~~) If the applicant requests authorization to perform the activities under § 52.17(c) of this chapter, whether there is reasonable assurance that the proposed site is a suitable location for a reactor of the general size and type described in the application from the standpoint of

[11] The following recommendations do not address the provisions in the proposed rule related to manufacturing licenses, since the industry is recommending that the NRC not hold mandatory hearings for manufacturing licenses. If NRC does not accept that recommendation, it should make changes in the provisions applicable to manufacturing licenses that correspond to the changes shown above.

radiological health and safety considerations under the Act and regulations issued by the Commission.

~~(iv) Whether there is reasonable assurance that the site is in conformity with the provisions of the Act, and the Commission's regulations;~~

~~(v) Whether the applicant is technically qualified to engage in any activities authorized;~~

~~(vi) Whether the proposed inspections, tests, analyses and acceptance criteria, including any on emergency planning, are necessary and sufficient within the scope of the early site permit to provide reasonable assurance that the facility has been constructed and will be operated in conformity with the license, the provisions of the Act, and the Commission's regulations;~~

(~~v~~ii) Whether issuance of the early site permit will be inimical to the common defense and security or to the health and safety of the public; and

(~~v~~iii) Whether, in accordance with the requirements of subpart A of part 52 of this chapter and subpart A of part 51 of this chapter, the early site permit should be issued as proposed.

(2) If the ~~proceeding~~ issue 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) through (v), and (vii) of this section, and a negative finding on paragraph (d)(1)(vi) of this section; and

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

(3) ~~Regardless of whether the proceeding is contested or uncontested,~~ ~~t~~The presiding officer, without conducting a de novo evaluation of the application, 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; and

(iii) If the applicant requests authorization to perform the activities under § 52.17(c) of this chapter, whether there is reasonable assurance that the proposed site is a suitable location for a reactor of the general size and type described in the application from the standpoint of radiological health and safety considerations under the Act and regulations issued by the Commission.

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

(e) In the case of an application for a combined license under subpart C of part 52 of this chapter, the notice will, except as the Commission determines otherwise, state, in implementation of paragraph (a)(3) of this section:

(1) If the proceeding issue is ~~a~~ contested ~~proceeding~~, the presiding officer will consider the 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 there is reasonable assurance that the facility will be constructed and will operate in conformity with the license, the provisions of the Act, and the Commission's regulations.~~

(~~iv~~) Whether the applicant is technically and financially qualified to engage in the activities authorized;

~~(v) Whether issuance of the license will not be inimical to the common defense and security or to the health and safety of the public.~~

(~~vi~~i) Whether the proposed inspections, tests, analyses, and acceptance criteria, including those applicable to emergency planning, are necessary and sufficient to provide reasonable assurance that the facility has been constructed and will be operated in conformity with the license, the provisions of the Act, and the Commission's regulations;

(~~vii~~i) Whether any inspections, tests, or analyses have been successfully completed and the acceptance criteria in a referenced early site permit, standard design certification or for a manufactured reactor have been met, but only to

the extent that the combined license application represents that those inspections, tests and analyses have been successfully completed and the acceptance criteria have been met;

(~~viii~~iv) Whether the issuance of the combined license will be inimical to the common defense and security or to the health and safety of the public; and

(~~ix~~v) Whether, in accordance with the requirements of subpart C of part 52 of this chapter and subpart A of part 51 of this chapter, the combined license should be issued as proposed.

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

(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 (e)(1)(i) through (vii), and (ix) of this section, and a negative finding on paragraph (e)(1)(viii) of this section; and

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

(3) ~~Regardless of whether the proceeding is contested or uncontested, t~~The presiding officer, without conducting a de novo evaluation of the application, 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; and

(iii) Determine whether the combined license should be issued, denied or appropriately conditioned to protect environmental values.

§ 51.105

(a) In addition to complying with applicable requirements of § 51.104, in a proceeding for the issuance of a construction permit or early site permit for a nuclear power reactor, testing facility, fuel

reprocessing plant or isotopic enrichment plant, the presiding officer will, without conducting a de novo evaluation of the application of uncontested issues:

(1) Determine whether the requirements of section 102(2)(A), (C), and (E) of NEPA and the regulations in this subpart have been met;
(2) Independently consider the final balance among conflicting factors contained in the record of the proceeding with a view to determining the appropriate action to be taken;
(3) Determine, after weighing the environmental, economic, technical, and other benefits against environmental and other costs, and considering reasonable alternatives, whether the construction permit or early site permit should be issued, denied, or appropriately conditioned to protect environmental values;
(4) Determine, ~~in an uncontested proceeding~~ for uncontested issues, whether the NEPA review conducted by the NRC staff has been adequate; and
(5) Determine, ~~in a contested proceeding~~ for contested issues, whether in accordance with the regulations in this subpart, the construction permit or early site permit should be issued as proposed by the NRC's Director of Nuclear Reactor Regulation.

§ 51.107

(a) In addition to complying with applicable requirements of § 51.104, in a proceeding for the issuance of a combined license for a nuclear power reactor, the presiding officer, without conducting a de novo evaluation of the application of uncontested issues, will:

(1) Determine whether the requirements of section 102(2)(A), (C), and (E) of NEPA and the regulations in this subpart have been met;
(2) Independently consider the final balance among conflicting factors contained in the record of the proceeding with a view to determining the appropriate action to be taken;
(3) Determine, after weighing the environmental, economic, technical, and other benefits against environmental and other costs, and considering reasonable alternatives, whether the combined license should be issued, denied, or appropriately conditioned to protect environmental values;

(4) Determine, ~~in an uncontested proceeding~~ for uncontested issues, whether the NEPA review conducted by the NRC staff has been adequate; and
(5) Determine, ~~in a contested proceeding~~ for contested issues, whether in accordance with the regulations in Nuclear Reactor Regulation. the combined license should be issued as proposed by the NRC's Director of Nuclear Reactor Regulation.

45. Proposed Section 50.55a Would Inappropriately Impose a Backfit on Some Existing Design Certifications

Proposed Rule

A proposed change to 10 CFR § 50.55a(f)(3)(iii)(A) would add a requirement for a design certification or a design approval under Part 52 issued before November 22, 1999, to include design provisions and provide access for inservice testing of pumps and valves classified as Code Class 1 for purposes of the American Society of Mechanical Engineers (ASME) *Boiler and Pressure Vessel Code*. This proposed revision further states that the latest NRC-approved edition of the ASME Code must be used in the design.

Comments

The proposed change constitutes an inappropriate backfit. The design certifications issued prior to November 22, 1999, were required to utilize the applicable editions of the ASME Code that were in effect and approved by the NRC at the time. Under the provisions in 10 CFR § 52.63(a)(1) and Section VIII.B.1 of the design certification rules, the NRC is not allowed to change those design certifications, except to assure adequate protection or to bring the designs into compliance with the Commission's regulations "at the time the certification was issued." The Commission has not made such a finding, and therefore the backfit contained in the proposed rule is inappropriate and in noncompliance with the Commission's own regulations.

Additionally, 10 CFR § 50.55a(g)(3) currently requires that the pre-service inspection (PSI) on components be performed to the construction code to which the component was fabricated. When plants are under construction, the various components are fabricated

to a number of editions and addenda to the construction code. It would be a tremendous burden to the industry to perform PSI on multiple components to a number of different editions and addenda. It would be practical to choose one construction code edition and addenda as a code of record for the PSI. The industry had previously provided this comment to the NRC. Section 50.55a(g)(3) should be revised to effectuate this comment.

Recommended Rule Language

We recommend that the NRC delete the reference to design certifications in proposed 10 CFR § 50.55a(f)(3)(iii)(A). No change is needed to address the three previously issued design certification rules.

With respect to § 50.55a(g)(3), we recommend the following changes:

> "For a boiling or pressurized water-cooled nuclear power facility whose construction permit under this part, or a combined license under part 52 of this chapter was issued on or after July 1, 1974:
>
> (i) Components (including supports) which are classified as ASME Code Class 1 (1) must be designed and be provided with access to enable the performance of inservice examination of these components in accordance with the editions and addenda of Section XI of the ASME Boiler and Pressure Vessel Code incorporated by reference in paragraph (b) of this section applied to the construction of the particular component, and (2) must meet the preservice examination requirements set forth in the edition and addenda of Section XI of the ASME Boiler and Pressure Vessel Code incorporated by reference in paragraph (b) of this section in effect on the date 6 months prior to the date of issuance of the construction permit or COL, or the editions and addenda applied to the construction of the particular component. In both cases (1) and (2), the optional ASME Code cases listed in NRC Regulatory Guide 1.147, through Revision 13, that are incorporated by reference in paragraph (b) of this section also may be applied. ~~must be designed and be provided with access to enable the performance of inservice examination of these components and must meet the preservice examination requirements set forth in the editions and addenda of Section XI of the ASME Boiler and Pressure Vessel Code incorporated by reference in paragraph (b) of this section (or the optional ASME Code cases listed in NRC Regulatory Guide 1.147, through Revision 13, that are incorporated by reference in~~

~~paragraph (b) of this section) applied to the construction of the particular component.~~

(ii) Components which are classified as ASME Code Class 2 and Class 3 and supports for components which are classified as ASME Code Class 1, Class 2, and Class 3 (1) must be designed and be provided with access to enable the performance of inservice examination of these components in accordance with the editions and addenda of Section XI of the ASME Boiler and Pressure Vessel Code incorporated by reference in paragraph (b) of this section applied to the construction of the particular component, and (2) must meet the preservice examination requirements set forth in the edition and addenda of Section XI of the ASME Boiler and Pressure Vessel Code incorporated by reference in paragraph (b) of this section in effect on the date 6 months prior to the date of issuance of the construction permit or COL, or the editions and addenda applied to the construction of the particular component. In both cases (1) and (2), the optional ASME Code cases listed in NRC Regulatory Guide 1.147, through Revision 13, that are incorporated by reference in paragraph (b) of this section also may be applied. ~~must be designed and be provided with access to enable the performance of inservice examination of these components and must meet the preservice examination requirements set forth in the editions and addenda of Section XI of the ASME Boiler and Pressure Vessel Code incorporated by reference in paragraph (b) of this section (or the optional ASME Code cases listed in NRC Regulatory Guide 1.147, through Revision 13, that are incorporated by reference in paragraph (b) of this section) applied to the construction of the particular component."~~

46. Contrary to the Proposed Rule, Not All ESP Conditions and Certification Requirements Can Be Completed Prior to Issuance of the COL

Proposed Rule

Proposed 10 CFR § 52.79(b)(3) and § 52.79(d)(3) would require that the FSAR demonstrate that all ESP conditions and certification requirements will be satisfied by the date of issuance of the COL.

Comments

It may not be possible to complete all ESP conditions prior to issuance of the COL. For example, there may be ESP conditions applicable to improvement of subsurface conditions that must be implemented under an approved quality assurance program (i.e., after the COL is issued). Similarly, it may not be possible to complete all design certification requirements prior to issuance of the COL. For example, some of the COL action items specified in the DCD cannot be implemented until construction or initial testing. The proposed rule should therefore be modified to account for these possibilities.

Recommended Rule Language

We recommend that the following revisions be made in the proposed rule:

> § 52.79(b)(3) The final safety analysis report must demonstrate that all terms and conditions that have been included in the early site permit will be satisfied by the date of issuance of the combined license, or the final safety analysis report must include provisions to implement those conditions that cannot be implemented until after the license is issued.
>
> § 52.79(d)(3) The final safety analysis report must demonstrate that all requirements and restrictions set forth in the referenced design certification rule must be satisfied by the date of issuance of the combined license, or the final safety analysis report must include provisions to implement those requirements and restrictions that cannot be implemented until after the license is issued.

47. The Proposed Rule Is Inconsistent Regarding Treatment of Section 50.34(f) Provisions

Proposed Rule

Proposed Section 50.34(f) states that "each applicant for a design certification, design approval, combined license, or manufacturing license under part 52 of this chapter shall demonstrate compliance with the technically relevant portions of the requirements in paragraphs (f)(1) through (3) of this section."

Comments

This provision is inconsistent with the provisions in existing Section 52.47(a)(1)(ii) and proposed Sections 52.47(a)(17), 52.79(a)17), 52.137(a)(17), and 52.157(e)(12), which state that paragraphs (f)(1)(xii), (f)(2)(ix), and (f)(3)(v) are not applicable to such applicants.

Recommended Rule Language

We recommend that the sentence cited above in proposed Section 50.34 be deleted.

48. The Proposed Rule Provides for Inconsistent Treatment of Sections 50.36a and 50.36b

Proposed Rule

The proposed rule would make Section 50.36a applicable to each licensee, including COL holders. However, the proposed rule would not change current paragraph 50.36a(a)(2), which, which requires each licensee to submit annual reports of radioactive effluents. Similarly, the proposed rule would not change Section 50.36b, which allows the NRC to impose environmental conditions on licenses authorizing operation.

Comments

When read in its entirety, proposed Section 50.36a would require a COL holder to submit an annual report of effluent releases during the

construction period. The regulation should be amended to require the annual reporting only after the 10 CFR § 52.103(g) finding and commencement of operation of the plant. This change in the proposed rule would make Section 50.36a consistent with the current Part 50 regulatory scheme, in which the annual reporting requirement is effective only after an operating license is issued.

Similarly, Section 50.36b could be interpreted as authorizing the inclusion of environmental conditions in a COL that are immediately effective, rather than effective after the NRC has issued its 52.103(g) finding. To be consistent with the intent of Section 50.36b, that section should be revised to provide that the environmental conditions may only be applied to the period after the NRC has issued its 52.103(g) finding.

Recommended Rule Language

We recommend that proposed Section 50.36a(a)(2) be revised as follows:

> 50.36a(a)(2) - - Each licensee <u>with an operating license, or each licensee with a combined license following the Commission's finding under 10 CFR 52.103(g) of this chapter,</u> shall submit a report to the Commission annually that specifies the ...

We recommend that the following sentence be added to the end of Section 50.36b:

> <u>Any such conditions included in a combined license issued under Part 52 may become effective only upon issuance of the Commission finding under 10 CFR 52.103(g) of this chapter.</u>

49. The Proposed Changes to Section 50.45 Are Inconsistent With the Remainder of the Proposed Rule

Proposed Rule

Proposed Section 50.45 states that an application for a COL or COL amendment must meet the requirements in 10 CFR §§ 50.21 through 50.38 and 50.40 through 50.43, as applicable.

Comments

The proposed rule would relocate to Part 52 most of the requirements in 10 CFR §§ 50.21 through 50.38 and 50.40 through 50.43 for a COL. However, under the proposed rule, Section 50.34 is not applicable to COL applicants (except as provided in proposed section 50.45). Therefore, the proposed rule is not consistent in its treatment of COLs.

Recommended Rule Language

We recommend that proposed Section 50.45 be revised to reference the applicable requirements in Part 52 (52.75, 52.77, 52.79, 52.80, and 52.81), rather than the requirements in 10 CFR §§ 50.21 through 50.38 and 50.40 through 50.43.

50. The Proposed Changes to the Environmental Qualifications Requirements Are Inconsistent With the Intent of the Existing Rule

Proposed Rule

Proposed changes to 10 CFR § 50.49 would make the regulation applicable to COL applicants and holders. Section 50.49(d) would require a license applicant or holder to have an environmental qualification file for electrical equipment important to safety. Currently, such requirements are only applicable to an applicant or holder of an operating license. Similarly, proposed Sections 52.47(a)(11), 52.137(a)(11), and 52.157(e)(6) would require applicants

for design certification, design approval, and manufacturing licenses to include the information required by Section 50.49(d).

Comments

At the time of submission of the applications, and during construction or manufacturing under a COL or manufacturing license, the applicant/licensee may not have identified the specific electrical components to be installed in the plant, and therefore will not be able to establish qualification files for all applicable components. To be consistent with the intent of the existing rule (which is not applicable during construction), the proposed rule should be modified to indicate that the requirement for qualification files applies only at the time of the NRC's 52.103(g) finding.

For the same reason, applicants for design certification, design approval, and manufacturing licenses should not be required to establish qualification files, since those applicants may not yet have identified the specific electrical equipment (i.e., make and model) to be installed in the plant.

Recommended Rule Language

We recommend that Section 50.49(d) be modified as follows:

> The applicant or licensee shall prepare a list of electric equipment important to safety covered by this section. In addition, the applicant or licensee shall include the information in paragraphs (d)(1), (2), and (3) of this section for this electric equipment important to safety in a qualification file. The applicant or licensee shall keep the list and information in the file current and retain the file in auditable form for the entire period during which the covered item is installed in the nuclear power plant or is stored for future use to permit verification that each item of electric equipment is important to safely meet the requirements of paragraph (j) of this section. <u>COL holders must comply with the requirements of this paragraph prior to first fuel load.</u>

We also recommend that proposed Sections 52.47(a)(11), 52.137(a)(11), and 52.157(e)(6) be deleted.

51. The Proposed Changes to the Section 50.54 Are Inconsistent With the Intent of the Existing Rule

Proposed Rule

The proposed rule would make 10 CFR § 50.54 applicable to COLs.

Comments

Currently, Section 50.54 applies only to plants in operation, and is not applicable to plants under construction. To be consistent with this regulatory intent, not all of the provisions in Section 50.54 should be applicable to COLs during construction. In particular, the following provisions in Section 50.54 should not be applicable to a COL prior to the time of the 52.103(g):

- 50.54(i), (j), (k), (l), (m), which apply to control room operations
- 50.54(i-1), which applies to operator requalification programs
- 50.54(o), which pertains to containment leak rate testing
- 50.54(p), (q), and (t), which pertain to preparing, maintaining, and/or implementing certain plans
- 50.54(w), which establishes insurance requirements
- 50.54(z), which establishes reporting requirements

Additionally, for COLs that reference a design certification, Section 50.54(h) as literally worded would be inconsistent the backfit protections of Section 52.63.

Finally, current paragraph 50.54(u) imposes requirements on each nuclear power reactor licensee to submit to the NRC plans for coping with emergencies. The NRC should consider deleting this paragraph, as it is out of date and no longer applicable to either operating reactors or new reactor applicants.

Recommended Rule Language

We recommend that Section 50.54 be revised to indicate that the paragraphs identified above are applicable only after the NRC has made the finding in Section 52.103(g).

Additionally, we recommend that Section 50.54(h) be revised as follows:

> Except as provided in section 52.63 of this chapter, the license shall be subject to the provisions of the Act now or hereafter in effect and to all rules, regulations, and orders of the Commission. The terms and conditions of the license shall be subject to amendment, revision, or modification, by reason of amendments of the Act or by reason of rules, regulations, and orders issued in accordance with the terms of the act, except as provided in section 52.63 of this chapter.

Finally, we recommend that Section 50.54(u) be deleted.

52. Section 50.61 Should Not Be Applicable to a COL Until the NRC Has Made its 52.103(g) Finding

Proposed Rule

The proposed changes to 10 CFR § 50.61 would make this section applicable to a COL holder. Among other requirements, this section requires a calculation of RT_{PTS}.

Comments

The calculation of RT_{PTS} depends upon material properties of the reactor vessel. At the time of issuance of a COL, it is possible that the reactor vessel may not have yet been manufactured, and therefore its material properties may not be sufficiently known for the purposes of calculating RT_{PTS}. Therefore, the proposed rule should be modified to indicate that Section 50.61 applies to a COL at the time the NRC makes its 52.103(g) finding.

Recommended Rule Language

We recommend that proposed Section 50.61(b)(1) be revised as follows:

> For each pressurized water nuclear power reactor for which an operating license has been issued under this part or a combined license has been issued under part 52 of this chapter after the NRC has made the finding under section 52.103(g) of this chapter, . . .

53. Section 50.72 Should Not Be Applicable to a COL Until the NRC Has Made its 52.103(g) Finding

Proposed Rule

The proposed rule does not identify any changes to 10 CFR 50.72, which imposes certain reporting requirements on licensed plants.

Comments

Given the other changes in the proposed rule, Section 50.72 could now be construed as applying to a COL upon its issuance. Therefore, the proposed rule should be modified to indicate that Section 50.72 applies to a COL only after the NRC makes its 52.103(g) finding.

Recommended Rule Language

We recommend that Section 50.72(a) be modified as follows:

> General requirements. (1) Each nuclear power reactor licensee licensed under Sec. 50.21(b) or Sec. 50.22 of this part, and each holder of an operating license under this part or a combined license under part 52 of this chapter (after the Commission has made the finding under § 52.103(g) of this chapter), shall notify the NRC Operations Center via the Emergency Notification System of:

54. The Section 51.71(d) Requirement for COL Applications to Assess Site Characteristics Is Inconsistent with the Rest of the Proposed Rule

Proposed Rule

Proposed Section 51.71(d) states: "The draft supplemental environmental impact statement prepared at the combined license stage when an early site permit is referenced need not include detailed information or analyses that were resolved in the final environmental impact statement prepared by the Commission in connection with the early site permit, provided that the design of the facility falls within the design parameters specified in the early site permit, the site falls

within the site characteristics specified within the early site permit, and ...."

Comments

Proposed Section 51.71(d) should revised to be consistent with Section 51.50(c)(1)(i). COL applicants that reference an ESP are not required to demonstrate that "the site falls within the site characteristics specified within the early site permit." The site characteristics are resolved with finality in the ESP proceeding.

Recommended Rule Language

Proposed Section 51.71(d) should be revised as follows:

> Section 51.71(d) "The draft supplemental environmental impact statement prepared at the combined license stage when an early site permit is referenced need not include detailed information or analyses that were resolved in the final environmental impact statement prepared by the Commission in connection with the early site permit, provided that the design of the facility falls within the site characteristics and design parameters specified in the early site permit~~, the site falls within the site characteristics specified within the early site permit,~~ and there is no ...."

55. A Design Certification Applicant Should Be Allowed to Submit a Design Control Document rather than a Final Safety Analysis Report

Comments

Proposed Section 52.47(a) would require that the DC application contain an FSAR. However, the NRC has required all design certification applicants to date to submit a Design Control Document (DCD), which largely duplicated the information submitted as part of the safety analysis report. Furthermore, it is the current practice of design certification applicants to submit a DCD and not a FSAR. To avoid burdensome and redundant submittals, incorporate an important design certification "lesson learned" and conform to current

NRC practice, proposed Section 52.47(a) should refer to a DCD rather than an FSAR, or reflect that a DCD is effectively the FSAR for the purpose of the regulations.

Recommended Rule Language

We recommend 10 CFR § 52.47(a) be amended, as follows:

> The application must contain a final safety analysis report, referred to as the generic Design Control Document (generic DCD), that describes the facility, presents the design bases and the limits on its operation, and presents a safety analysis of the structures, systems, and components and of the facility as a whole, and must include the following information: ...

56. NRC Should Eliminate All Provisions Related to Antitrust Reviews

Comments

Certain provisions in the proposed rule and in existing NRC regulations are inconsistent with Section 625 of the Energy Policy Act of 2005 (Public Law 109-58), which eliminated the antitrust review for an application for a license to construct or operate a utilization facility or production facility under Section 103 or 104.b of the Atomic Energy Act of 1954, as amended, filed on or after the date of enactment of the Act (Aug. 8, 2005). Specifically, the proposed rule includes provisions in 10 CFR §2.104(l) that discuss antitrust reviews. This section should be deleted. Also, Sections 50.41(c), 50.42(b), and 50.54(g) of the existing rules still contain provisions related to antitrust reviews that should be deleted.

Recommended Rule Language

We recommend that the NRC delete Sections 2.104(l), 50.41(c), and 50.42(b), 50.54(g), consistent with the Energy Policy Act of 2005.

57. The Requirement to Evaluate Applications Against the SRP Should Only Apply to Light Water Reactors

Proposed Rule

Proposed Sections 52.47(a)(26), 52.137(a)(26), and 52.157(p) state that a design certification, design approval, and manufacturing license application shall include an evaluation of the standard plant design against the Standard Review Plan in effect 6 months prior to the docket date of the application.

Comments

These proposed provision are similar to 10 CFR § 50.34(h). However, unlike Section 50.34(h), the provisions in the proposed sections are not limited to applicants for light water reactors (LWRs). This may have been an inadvertent oversight by NRC. The analogous provision for COL applicants, Section 52.79(a)(1)(41), correctly limits this requirement to LWRs.

Similar to the requirement in Section 50.34(h), the requirement in proposed Sections 52.47(a)(26), 52.137(a)(26), and 52.157(p) should be explicitly limited to LWRs. Since the SRP was developed solely for light water reactors, it would be inappropriate and serve no useful purpose to require design certification applicants for other types of reactors (e.g., high temperature gas cooled reactors) to evaluate their design against the SRP.

Recommended Rule Language

We recommend that proposed Sections 52.47(a)(26), 52.137(a)(26), and 52.157(p) be revised to state as follows:

> For light water cooled nuclear power plants, an ~~An~~ evaluation of the standard plant design against the Standard Review Plan (SRP) revision in effect 6 months before the docket date of the application. . . .

58. Clarification of the Section 50.59 Change Process for COLs

Proposed Rule

Proposed 10 CFR §§ 50.59(b) and 52.98 would make the change process in § 50.59 applicable to holders of COLs. Under the existing provisions in Section 50.59(c), certain types of changes require a license amendment.

Comments

We agree that Section 50.59 should be applicable to COL holders as soon as the COL is issued. However, during the period of construction, we believe that a clarification of the 50.59 process is warranted.

Existing Section 50.59 guidance in NEI 96-07, *Guidelines for 10 CFR 50.59 Implementation*, which has been accepted by the NRC in Regulatory Guide 1.187, states in Section 4.5:

> An activity is considered "implemented" when it provides its intended function, that is, when it is placed in service and declared operable. Thus, a licensee may design, plan, install and test a modification prior to receiving the license amendment to the extent that these preliminary activities do not themselves require prior NRC approval under 10 CFR 50.59.

Many times during construction, minor changes are needed or minor nonconformances arise that are acceptable as-is from a safety perspective. For those changes needing NRC approval under Section 50.59, it should be acceptable to make the change at the risk of the licensee, document and control the change as an issue needing further approval, and then confirm the acceptability of the change after the fact to allow construction activities to proceed pending NRC approval of a license amendment. This should be permitted for any changes to structures, systems, or components that have not yet been placed in service. Such a process would be consistent with the existing guidance in NEI 96-07 that is quoted above.

Recommended Rule Language

We recommend that the Statements of Consideration for the final rule endorse this concept.

59. Inconsistent Treatment of ESPs

Proposed Rule

Proposed Section 52.39(d) states that a "variance will not be issued once the construction permit, operating license, or combined license is issued." In contrast, proposed Section 52.27(b)(2) indicates the ESP continues to be valid "in any hearing held under 10 CFR 52.103 before operation begins under a combined license which references the early site permit."

Comments

Proposed Section 52.39 appears to be based on the presumption that the ESP will be subsumed into the CP or COL. However, such a presumption is inconsistent with the proposed Section 52.27. If the ESP remains valid, then NRC regulations should contain a provision that allows for a request for a variance. If the ESP is subsumed into the CP or COL, then no variance is necessary, but the ESP should not be valid during 52.103 hearings.

We recommend that Part 52 be revised so that an ESP is subsumed within a CP or COL once the latter is issued. Therefore, any terms or conditions (including ITAAC) in the ESP that cannot be resolved during the CP or COL proceeding would need to be included as terms and conditions in the CP or COL.

Additionally, Part 52 should allow for cases in which an ESP has a broader scope than the CP or COL. For example, if the ESP applies to two units but the CP or COL only applies to one unit, the ESP should remain in effect for the balance of the units not encompassed within the CP or COL.

Recommended Rule Language

We recommend that the language quoted above in proposed Sections 52.39(d) and 52.27(b)(2) be deleted. In addition, we recommend that the follow provision be added as a new Section 52.27(d):

> Upon approval of an application for a construction permit or combined license that references an early site permit, the

early site permit is no longer effective with respect to that construction permit or combined license. Any terms or conditions in the early site permit that could not be satisfied by the time of issuance of the construction permit or combined license shall become terms or conditions of the construction permit or combined license.

60. Inconsistent Use of the Term "Site Parameters"

Proposed Rule

Proposed Section 51.50(b) states: "Environmental reports must focus on the environmental effects of construction and operation of a reactor, or reactors, which have characteristics that fall within the postulated site parameters." Similarly, proposed Section 51.71(d) states: "The draft environmental impact statement prepared at the early site permit stage must focus on the environmental effects of construction and operation of a reactor, or reactors, which have characteristics that fall within the postulated site parameters...."

Comments

This language does not appear to be consistent with the definitions of "site parameters" and "site characteristics" added to Part 52. In Part 52, site characteristics are actual identified characteristics, and site parameters are postulated parameters in a design certification.

Recommended Rule Language

We recommend that proposed Sections 51.50(b) and 51.71(d) be revised to refer to characteristics that fall within the "site characteristics and design parameters," rather than "site parameters."

61. Provisions Recognizing that ITAAC May Be Performed Either in the Plant Or Elsewhere Should be Expanded

Proposed Rule

Proposed Section 52.47(b)(4) provides that ITAAC related to verifying compliance with interface requirements may be performed "either in the plant or elsewhere."

Comments

We agree that ITAAC may be performed "either in the plant or elsewhere." This has been a "lesson learned" from the ongoing joint industry-NRC ITAAC Demonstration Project, which has identified that certain ITAAC may need to be performed at off-site locations where SSCs, or modules, are fabricated.

Recommended Rule Language

We recommend also adding the language "either in the plant or elsewhere" to Sections 52.47(b)(2) and 52.80(b) of the final rule.

62. Use of 10 CFR 50.69 by Design Certification Applicants

Proposed Rule

10 CFR 50.69, *Risk-informed categorization and treatment of structures, systems and components for nuclear power reactors* allows a licensee or an applicant for a license the option of using probabilistic risk insights to improve the decision-making process for categorizing structures, systems and equipment. However, §50.69 language is vague in regard to whether a design certification applicant is permitted to use §50.69. In discussions, the NRC staff has interpreted the language as precluding a design certification applicant from using the §50.69 process. No change to §50.69 is included in the proposed rule.

Comments

In 1999, the Commission, in its Staff Requirements Memorandum on SECY-98-300, *Options for Risk-Informed Revisions to 10 CFR Part 50 – Domestic Licensing of Production and Utilization Facilities,* approved the NRC staff proposal to risk-inform the scope of systems, structures, and components covered by those sections of Part 50 requiring special treatment (e.g., Quality Assurance, Environmental Qualification, Technical Specifications, 50.59, ASME code, 50.72, and 50.73).

In 2004, the NRC issued 10 CFR 50.69. The rule allows combined license applicants the option of adopting the regulation. Yet, the language on allowing design certification applicants the option of using the categorization methodologies prescribed in rule is vague and confusing. It has been interpreted as precluding design certification applicants from using the alternative categorization methodologies. Thus, for new plants licensed under Part 52, each combined license applicant that chooses to adopt §50.69 must perform an extensive analyses and make a submittal to the NRC for an exemption from the structure, system and component categorization process used in certifying the design.

The industry believes that there would be benefit if the NRC amended the language in §50.69 to clarify that design certifications have the option of using §50.69. Providing design certification applicants such an option could improve regulatory efficiency and reduce the regulatory burden on combined license applicants and on the NRC staff. If a design certification applicant chooses to use a §50.69 approach for categorizing structures, systems and components, the categorization evaluations would only be performed once and reviewed by the NRC once, instead of numerous times. Such a rule change would enhance standardization, while maintaining adequate protection of public health and safety.

Recommended Rule Language

We recommend existing Section 50.69 be modified as follows:

> (b) Applicability and scope of risk-informed treatment of SSCs and submittal/approval process. (1) A holder of a license to operate a light water reactor (LWR) nuclear power plant under this part; a holder of a renewed LWR license under part 54 of this chapter; an applicant for a

construction permit or operating license under this part; or an applicant for a design certification, design approval, a combined license, or manufacturing license under part 52 of this chapter; may voluntarily comply with the requirements in this section as an alternative to compliance with the following requirements for RISC-3 and RISC-4 SSCs:

This page intentionally left blank

Enclosure 2
Support for Conforming Changes and Other Beneficial Proposals

Part A

This is a list of changes that the industry considers necessary to ensure that the regulations are consistent and conform to the Energy Policy Act of 2005 and previous rulemakings.

1. Amend existing § 52.83 to change the reference from § 52.99 to § 52.103(g) as to when the requirements applicable to operating licenses apply. This is a correction, and is not intended to be a substantive change. Additionally, this same change should be made to clarify that a Part 52 combined license 40-year license term begins at the time the § 52.103(g) finding is made (rather than the § 52.99 finding). This would also be consistent with the duration of a combined license in the Energy Policy Act of 2005, Section 621. (NEI believes that the proposed rule adequately addresses this issue.)

2. Amend existing § 52.85 to correct the reference to Part 2, Subpart G, hearing requirements. This paragraph should have been changed in the 2004 rulemaking that amended 10 CFR Part 2. The paragraph could simply reference Part 2 as the governing regulation for hearing procedures. (NEI believes that the proposed rule adequately addresses this issue.)

3. Include changes to the design certification rules and the change processes in Part 52 to be consistent with the concepts of the revised 10 C.F.R. § 50.59. Note that the NRC deferred these changes from the § 50.59 rule change. *See* 64 Fed. Reg. 53,582, 53,601 (Oct. 4, 1999). (NEI believes that the proposed rule adequately addresses this issue.)

4. Add Part 52 applicants and license holders to the scope of Part 140 for financial protection and indemnity requirements. This is a not a substantive change because the provisions in Part 140 have always been intended to apply. (NEI believes that the proposed rule adequately addresses this issue.)

5. Modify § 171.15 to reflect that a COL holder shall start to pay annual fees once the Commission has made the finding under § 52.103(g). This reflects interpretations that the NRC has already taken on the existing

rule. (NEI believes that the proposed rule adequately addresses this issue.)

6. Remove requirements for anti-trust reviews required by § 50.33a and other sections. (The proposed rule only partially addresses this issue. See also Enclosure 1, Comment 56.)

Part B

This is a list of NOPR changes that the industry considers beneficial. The final rule amending Part 52 should include these changes.

Beneficial Changes Proposed for Part 52

1. Section 52.1, regarding definitions
2. Section 52.7, regarding applicability of Section 50.12 exemption process
3. Section 52.17(a)(1)(i), regarding addition of phrase, "or range of possible facilities"
4. Section 52.39(a)(1), regarding finality of early site permit determinations
5. Sections 52.39(c)(1)(i)-(iii) and (v), regarding finality of early site permit determinations
6. Section 52.43, regarding the relationship of Subpart B to other subparts
7. Section 52.45, regarding elimination of the requirement for final design approval
8. Section 52.47(b)(4), regarding performance of ITAAC "(in the plant or elsewhere)"
9. Section 52.79(b), (c), (d) and (e), regarding contents of FSARs
10. Sections 52.80(b) and 52.97(a)(2), regarding provisions for completion of ITAAC at the COL stage
11. Section 52.85, regarding administrative review of applications; hearings
12. Section 52.98, regarding finality of combined license; information requests
13. Section 52.103, regarding ITAAC hearing and finding process
14. Section 52.104, regarding 40-year duration of combined license.
15. Section 52.147, regarding 15-year duration of standard design approval.

16. Appendix A, B, and C to Part 52, regarding identified corrections to design certification rules, such as to Section X, Records and Reporting

Beneficial Changes Proposed for Parts 2, 50, 51, 73, and 171

1. Section 2.1, regarding Scope
2. Section 2.100, regarding Scope of subpart
3. Section 2.105, regarding Notice of proposed action (a)(12) and (13)
4. Section 2.106, regarding Notice of issuance
5. Section 2.109, regarding Effect of timely renewal application
6. Section 2.390, regarding Public inspections, exemptions, requests for withholding
7. Section 2.800, regarding Scope of rulemaking
8. Section 50.54(i-1), clarifying that operator requalification programs must be in effect within three months after the Section 52.103(g) finding
9. Section 50.54(gg), regarding operation at up to 5% power notwithstanding FEMA identified deficiencies, provided the Commission makes a reasonable assurance finding
10. Section 50.55a, regarding clarification of when the requirements would be applicable to operation under a combined license and that applicable ASME Code editions will be those in effect 12 months prior to fuel loading
11. Section 50.109, regarding applicability of the Backfit Rule
12. Appendix E to Part 50 Emergency Planning and Preparedness for Production and Utilization Facilities, Section IV.f.2.a.ii, regarding conduct of the full participation exercise within two years of fuel load
13. Appendix E to Part 50 Emergency Planning and Preparedness for Production and Utilization Facilities, Section IV.f.2.a.iii, regarding coordination of the EP exercise for the new plant with that for the operating unit(s)
14. Section 51.50 Environmental report construction permit, early site permit, or combined license stage
15. Section 51.71(d), regarding draft environmental impact statement contents (except the text requiring the site to be shown to meet the site characteristics)
16. Section 51.75(c)(1), regarding draft environmental impact statement construction permit, early site permit, or combined license

17. Section 73.56, regarding personnel access authorization requirements for nuclear power plants
18. Section 73.57, regarding requirements for criminal history checks
19. Part 171, related to annual fees

Enclosure 3
Response to Stakeholder Questions in the NOPR

Table of Contents

1. Moving Part 52 to an Appendix of Part 50.....1

2. Elimination of the Option for an ESP Applicant to Identify Major Features of an Emergency Plan.....2

3. Elimination of the Option of Using Appendix Q in a Part 52 Application.....4

4. New Requirements for a License for the Manufacturing Process.....5

5. Elimination of the Option of Referencing an ESP or Design Certification in a Construction Permit Application.....7

6. Notification of the Scheduled Date for Fuel Load.....10

7. Requiring that Additional Operational Programs Be Discussed in COL Applications.....11

8. Transferring Backfitting Requirements from Part 50 to Part 52.....12

9. New Requirements for an ESP Holder to Update ESP Information.....13

10. New Requirements for Periodic Updates to the PRA.....21

11. NEI Comments on the AP1000 Rulemaking.....22

12. Submission of Detailed Schedule for ITAAC Completion and Delay in Fuel Load for NRC Inspection.....32

13. Mandatory Hearings for Manufacturing Licenses.....34

14. Amendments to the Design Certification Rule to Provide Resolutions for DAC.....35

15. Expansion of Part 21 Reporting Requirements.....37

NRC Question 1. - - Moving Part 52 to an Appendix of Part 50

In response to several commenters' concerns about the clarity of the applicability of part 50 provisions to part 52, the Commission has added provisions to part 52 (§§ 52.0 through 52.11) that are analogues to comparable provisions in part 50. Another possible way of addressing the commenters' concerns would be to transfer all the provisions in part 52 to a new subpart (e.g., subpart M) of part 50, and retain the existing numbering sequence for the current part 52 with the addition of a prefix (e.g., proposed 50.1001 = current 52.1). The Commission is considering adopting this alternative proposal in the final rule and is interested in whether stakeholders regard this as a more desirable approach for minimizing the ambiguity of the relationship between part 50 and part 52.

Response

NEI does not believe that moving the provisions to a new subpart of Part 50 would resolve the commenters' concerns regarding clarity. Relocation of the provisions from Part 52 to Part 50 only moves the problem from one part of the Commission's regulations to another part. The lack of clarity and confusion would remain. In addition, relocating the Part 52 requirements to Part 50 would create further confusion because many existing documents reference Part 52 and would become obsolete.

NRC Question 2. - - Elimination of the Option for an ESP Applicant to Identify Major Features of an Emergency Plan

Currently, § 52.17(b) of subpart A of 10 CFR part 52 requires that an early site permit application identify physical characteristics that could pose a significant impediment to the development of emergency plans. An early site permit application may also propose major features of the emergency plans or propose complete and integrated emergency plans in accordance with the applicable standards of § 50.47 and the requirements of appendix E of 10 CFR part 50. The requirements in § 52.17 do not further define major features of emergency plans. Section 52.18 of subpart A requires the Commission to determine, after consultation with the Federal Emergency Management Agency, whether any major features of emergency plans submitted by the applicant under § 52.17(b) are acceptable. Section 52.18 does not provide any further explanation of the Commission's criteria for judging the acceptability of major features of emergency plans.

The Commission has concluded, after undergoing the review of the first three early site permit applications, that the concept of Commission review and acceptance of major features of emergency plans may not achieve the same level of finality for emergency preparedness issues at the early site permit stage as that associated with a reasonable assurance finding of complete and integrated plans. Therefore, the Commission is considering modifying in the final rule the early site permit process in proposed subpart A to remove the option for applicants to propose major features of emergency plans in early site permit applications and requests public comment on this alternative. The NRC believes that, if the option for early site permit applicants to include major features of emergency plans is to be retained, it would be useful to further define in the final rule what a major feature is and establish a clearer level of finality associated with the NRC's review and acceptance of major features of emergency plans. If the option to include major features of emergency plans is retained, the NRC would propose to define major features of emergency plans as follows:

> *Major features of the emergency plans* means the aspects of those plans necessary to: (i) Address one or more of the sixteen standards in § 50.47(b), and (ii) describe the

> emergency planning zones as required in §§ 50.33(g), 50.47(c)(2), and Appendix E to 10 CFR part 50.

In addition, the NRC is considering adopting in the final rule the requirement that major features of emergency plans must include the proposed inspections, tests, and analyses that the holder of a combined license referencing the early site permit shall perform, and the acceptance criteria that are necessary and sufficient to provide reasonable assurance that, if the inspections, tests, and analyses are performed and the acceptance criteria met, the facility has been constructed and will operate in conformity with the license, the provisions of the Atomic Energy Act, and the NRC's regulations, insofar as they relate to the major features under review.

The NRC believes that, under this alternative, the level of finality associated with each major feature that the Commission found acceptable would be equivalent, for that individual major feature, to the level of finality associated with a reasonable assurance finding by the NRC for a complete and integrated plan, including ITAAC, at the early site permit stage.

Response

NEI believes that the NRC should retain the option to address major features of emergency plans in an early site permit application without modification (other than providing some definition). There is no reason to eliminate this option from the regulations. Elimination of this option would unnecessarily reduce the flexibility of applicants (especially applicants for greenfield sites) to pursue an approach that provides some finality without the burden of producing a complete and integrated emergency plan.

We agree that it would be useful to provide a definition of "major features of the emergency plans." However, we believe that the NRC's definition is too restrictive. It may not be feasible for an ESP applicant to provide all of the information needed to resolve a particular emergency planning standard in § 50.47(b). Therefore we recommend that NRC's proposed definition be rewritten as follows:

> *Major features of the emergency plans* means the aspects of those plans necessary to: (i) Address <u>in whole or part</u> one or more of the sixteen standards in § 50.47(b), and (ii) describe the emergency planning zones as required in §§ 50.33(g), 50.47(c)(2), and Appendix E to 10 CFR part 50.

We believe the goal of the "major features" option should be an NRC finding that the proposed major features are acceptable as elements of a complete and integrated emergency plan that would be considered later. We understand that this is not the same level of finality as the "reasonable assurance" finding that would be made in connection with the completed and integrated plan option. We expect that NRC would not re-review for COL information that provided the basis for the NRC approval of major features in an ESP but would address (1) integration of approved major features with the balance of EP information provided at COL necessary to support the NRC's reasonable assurance finding; and (2) updated EP information required by Section 52.39(b).

For the reasons discussed in Enclosure 1, Comment 13, NEI believes that the NRC should not require ITAAC for major features.

NRC Question 3. - - Elimination of the Option of Using Appendix Q in a Part 52 Application

As indicated in Section III, Discussion of Substantive Changes, the NRC is proposing to remove Appendix Q to part 52 entirely from part 52 and retain it in part 50. Currently, Appendix Q to part 52 provides for NRC Staff issuance of a site report on site suitability issues with respect to a specific site, for which a person (most likely a potential applicant for a construction permit or combined license) seeks the NRC Staff's views. The NRC is also considering removing, in the final rule, the early site review process in Appendix Q to part 52 in its entirety from the NRC's regulations and is interested in stakeholder feedback on this alternative. One possible reason for removing the early site review process in its entirety is that potential nuclear power plant applicants would use the early site permit process in subpart A of part 52, rather than the early site review process as it currently exists in appendix Q to parts 50 and 52. Also, in cases where a combined license applicant was interested in seeking NRC Staff review of selected site suitability issues (as appendix Q to part 52 was designed for), the applicant could request a pre-application review of these issues. The use of pre-application reviews for selected issues has been successfully used by applicants for design certification. The NRC is especially interested in the views of potential applicants for nuclear power plant construction permits and combined licenses as to whether there is any value in retaining the early site review process.

Response

For the reasons discussed in Enclosure 1, Comment 37, NRC should not delete the option for a Part 52 applicant to reference a review performed under Appendix Q.

NRC Question 4. - - New Requirements for a License for the Manufacturing Process

Under subpart F of part 52 of the proposed rule, the NRC proposes to require approval of, and extend finality to, the final design for a reactor to be manufactured under a manufacturing license. While the NRC will also review the acceptability of the manufacturing license applicant's organization responsible for design and manufacturing, as well as the QA program for design and manufacturing, the proposed rule does not provide a regulatory structure for further extending the scope of NRC review and issue finality to the manufacturing process itself. The NRC could extend regulatory review approval, and consequently expand issue finality, to the manufacturing itself in the final rule. There are two models that the Commission is considering adopting if it were to move in this direction. The first would be an analogue to the subpart C of part 52 combined license process, whereby the NRC would review and approve manufacturing ITAAC to be included in the manufacturing license. During the manufacturing of each reactor, the NRC would verify at the manufacturing location whether the ITAAC have been conducted and the acceptance criteria met. A NRC finding of successful completion of all the ITAAC would preclude any further inspection of the acceptability of the manufacture of the reactor at the site where the manufactured reactor is to be permanently sited and operated. The NRC's inspections and findings for the combined license or operating license would be limited to whether the reactor had been emplaced in undamaged condition (or damage had been appropriately repaired) and all interface requirements specified in the manufacturing license had been met. The NRC believes that it has authority to issue a manufacturing license under Section 161.h of the AEA.

The other model that the NRC could adopt would be a combination of the approval processes used by the Federal Communications Commission (FCC) and Federal Aviation Administration (FAA) in approving the manufacture of electronic devices and airplanes. The

NRC's manufacturing license would approve: (1) The design of the nuclear power reactor to be manufactured; (2) the specific manufacturing and quality assurance/quality control processes and procedures to be used during manufacture; and (3) tests and acceptance criteria for demonstrating that the reactor has been properly manufactured. To be completely consistent with the FCC and FAA models, the NRC would issue a manufacturing license only after a prototype of the reactor had been constructed and tested to demonstrate that all performance requirements (i.e., compliance with NRC requirements and manufacturer's specifications) can be met by the design to be approved for manufacture.

The NRC requests public comment on whether the manufacturing license process in proposed subpart F of part 52 should be further extended in the final rule to provide an option for NRC approval of the manufacturing, and if so, which model of regulatory oversight, i.e., the combined license ITAAC model or the FCC/FAA approval model, should be used by the NRC. The NRC also seeks public comment on whether an opportunity for hearing is required by the AEA in connection with a NRC determination that the manufacturing ITAAC have been successfully completed.

Response

NEI believes that it would be useful to allow an applicant for a manufacturing license to have the *option* of providing ITAAC to ensure that the as-manufactured plant conforms to the important design characteristics specified in the application for the manufacturing license (similar to the ITAAC for a design certification). This should not be required - - a manufacturer may prefer to use the existing approach for confirming the adequacy of manufacturing.

The NRC should not require a prototype for a manufacturing license for evolutionary designs. Instead, a manufacturing license should be subject to the provisions in proposed Section 50.43(e). These provisions are adequate for a design certification, and there is no reason to impose more stringent requirements on a manufacturing license.

NRC Question 5. - - Elimination of the Option of Referencing an ESP or Design Certification in a Construction Permit Application

Currently, part 52 allows an applicant for a construction permit to reference either an early site permit under subpart A of part 52 or a design certification under subpart B of part 52. Specifically, § 52.11 states that subpart A of part 52 sets out the requirements and procedures applicable to NRC issuance of early site permits for approval of a site or sites for one or more nuclear power facilities separate from the filing of an application for a construction permit or combined license for such a facility. Similarly, § 52.41 states that subpart B of part 52 sets out the requirements and procedures applicable to NRC issuance of regulations granting standard design certification for nuclear power facilities separate from the filing of an application for a construction permit or combined license for the facility. However, the current regulations in 10 CFR part 50 that address the application for and granting of construction permits do not make any reference to a construction permit applicant's ability to reference either an early site permit or a design certification. Also, the NRC has not developed any guidance on how the construction permit process would incorporate an early site permit or design certification, nor has the nuclear power industry made any proposals for the development of industry guidance on this subject. The NRC has not received any information from potential applicants stating an intention to seek a construction permit for the construction of a future nuclear power plant. In addition, the NRC recommends that future applicants who want to construct and operate a commercial nuclear power facility use the combined license process in subpart C of part 52. Therefore, the NRC is considering removing from part 52, in the final rule, the provisions allowing a construction permit applicant to reference an early site permit or a design certification and is interested in stakeholder feedback on this alternative.

Response

There is no reason to delete the option of a construction permit referencing an ESP or a design certification. Deletion of this option would eliminate regulatory flexibility.

We agree with the NRC that the COL process will likely be the preferred approach for future nuclear plants, and we currently do not anticipate any significant or insurmountable problems with the COL

process. However, the COL process has never been utilized, and therefore it is not possible to foreclose the possibility that unexpected problems may materialize. In the event that the COL process develops unexpected problems, it may be valuable to have a construction permit and operating license as an option.

Therefore, we recommend a provision be added to Part 50 to specify how an applicant for a construction permit can reference a design certification or ESP. A paragraph similar to 10 CFR § 52.73, which states the relationship of subpart C to other subparts of Part 52, could be added to Part 50.

In particular, the regulations should describe the process for the treatment of ITAAC in a construction permit application that references a standard design certification. The industry currently envisions that the ITAAC process will add certainty and stability to the Part 52 process pertaining to COLs. However, such an outcome is not guaranteed. Therefore, as a contingency, the regulations should allow a construction permit application to reference a design certification, without the ITAAC. In such cases, the operating license proceeding would need to find under 10 CFR § 50.57(a)(1) that construction of the facility has been substantially completed, in conformity with the construction permit and the application as amended, the provisions of the Act, and the rules and regulations of the Commission. However, issues related to the standard design would have finality and would not be subject to further review in the construction permit or operating license proceeding.

In contrast, it should be straightforward for a construction permit and operating license to reference an ESP. In short, a construction permit applicant should be able to reference an ESP in precisely the same manner and subject to the same conditions as a COL applicant (subject to the same qualification discussed above with respect to any ITAAC on emergency planning that may be contained in the ESP).

Recommended Rule Language

We recommend that the following paragraphs be added to 10 CFR § 50.23:

10 CFR § 50.23 Construction Permits

...

(a) An application for a construction permit under this part may, but need not, reference an early site permit, standard design certification, standard design approval, or manufacturing license issued under part 52.

(b) If an application for construction permit references an early site permit, standard design certification, standard design approval, or manufacturing license under part 52, the referenced information shall be given the same effect as if it were referenced in a combined license application submitted under subpart C of part 52 of this chapter, except as provided in paragraph (e) of this section..

(c) In the absence of a demonstration that an entity other than the one originally sponsoring and obtaining a design certification is qualified to supply a design, the Commission will entertain an application for a construction permit that references a standard design certification issued under part 52 only if the entity that sponsored and obtained the certification supplies the design for the applicant's use.

(d) The Commission will require, before granting a construction permit that references a standard design certification, that information normally contained in certain procurement specifications and construction and installation specifications be completed and available for audit if the information is necessary for the Commission to make its safety determinations, including the determination that the application is consistent with the certification information.

(e) If an application for a construction permit references a standard design certification or an early site permit, the inspections, tests, analyses, and acceptance criteria specified in the standard design certification or early site permit shall not be applicable to the applicant or holder of the construction permit.

NRC Question 6. - - Notification of the Scheduled Date for Fuel Load

The NRC is considering revising § 52.103(a) in the final rule to require the combined license holder to notify the NRC of the licensee's scheduled date for loading of fuel into a plant no later than 270 days before the scheduled date, and to advise the NRC every 30 days thereafter if the date has changed and if so, the revised scheduled date for loading of fuel. The initial notification would facilitate timely NRC publication of the notice required under § 52.103(a) and NRC Staff scheduling of inspection and audit activities to support NRC Staff determinations of the successful completion of ITAAC under § 52.99. The proposed updating would also facilitate NRC Staff scheduling of those inspection and audit activities, Commission completion of hearings within the time frame allotted under § 52.103(e), and any Commission determinations on petitions as provided under § 52.103(f). The NRC requests public comment on the benefits and impacts (including information collection and reporting burdens) that would occur if the proposed requirement were adopted.

Response

NEI agrees with this concept. However, we do not support a rule change because a rule change is not necessary. Rather, we believe that the concept should be implemented via guidance rather than a rule change.. Additionally, following the initial notification, a licensee should be required to submit a follow-up 30-day notification only if the schedule in the prior notification has changed. It would be unnecessarily burdensome to require a license to submit notifications every 30 days stating that the schedule has not changed.

NRC Question 7. - - Requiring that Additional Operational Programs Be Discussed in COL Applications

As discussed in Section IV.C.6.f of this proposed rule, the NRC is proposing to modify § 52.79(a) to add requirements for descriptions of operational programs that need to be included in the FSAR to allow a reasonable assurance finding of acceptability. This proposed amendment is in support of the Commission's direction to the Staff in SRM-SECY-02-0067 dated September 11, 2002, "Inspections, Tests, Analyses, and Acceptance Criteria for Operational Programs (Programmatic ITAAC)," that a combined license applicant was not required to have ITAAC for operational programs if the applicant fully described the operational program and its implementation in the combined license application. In this SRM, the Commission stated:

> [a]n ITAAC for a program should not be necessary if the program and its implementation are fully described in the application and found to be acceptable by the NRC at the COL stage. The burden is on the applicant to provide the necessary and sufficient programmatic information for approval of the COL without ITAAC.

Accordingly, the NRC is proposing in the final part 52 rulemaking to add requirements to § 52.79 that combined license applications contain descriptions of operational programs. In doing so, the Commission has taken into account NEI's proposal to address SRM-SECY-04-0032 in its letter dated August 31, 2005 (ML052510037). However, the NRC is concerned that there may be operational program requirements that it has not captured in its proposed § 52.79. Therefore, the NRC is requesting public comment on whether there are additional required operational programs that should be described in a combined license application that are not identified in proposed § 52.79. If additional required operational programs are identified, the Commission is considering adding them to § 52.79 in the final rule.

Response

NEI believes that the requirements for operational programs are sufficient, as proposed, and that no additional operational programs need to be described in the COL application.

NRC Question 8. - - Transferring Backfitting Requirements from Part 50 to Part 52

The NRC notes that the backfitting provisions applicable to various part 52 processes are contained in both part 50 and part 52 and, therefore, the proposed language for § 50.109 cross-references to applicable provisions of part 52, which may be confusing. The NRC is considering adopting in the final rule an alternative which would remove from § 50.109 the backfitting provisions applicable to the licensing and approval processes in part 52, and place them in part 52. There are two possible approaches for doing so: the first would be for the NRC to establish a general backfitting provision in part 52 applicable exclusively to the licensing and approval processes in part 52. Under this approach, each licensing and approval process in part 52 would be the subject of a backfitting section in a new subpart of part 52 (*e.g.*, § 52.201 for standard design approvals, etc.). The existing backfitting provisions applicable to early site permits and design certification would be transferred to the relevant sections in the new subpart. The second approach would be to ensure that each subpart of part 52 contains the backfitting provisions applicable to the licensing or approval process in that subpart. The NRC is considering adopting these alternative approaches in the final rule and requests public comment on whether either of these administrative approaches is preferable to the approach in the proposed rule.

Response

NEI does not believe that NRC's alternative approach is necessary to clarify the application of the backfitting rule to Part 52 actions. The proposed rule includes adequate references to Section 50.109 in the various subparts of Part 52, and we believe that no purpose would be served by replicating the language in Section 50.109 in Part 52.

If, however, the NRC decides to modify the rule using the approach described above, then each subpart in Part 52 should include its own standards for backfitting. Such an approach could minimize confusion, since an ESP and design certification are subject to special change processes instead of Section 50.109.

NRC Question 9. - - New Requirements for an ESP Holder to Update ESP Information

The Commission is considering adopting in the final part 52 rulemaking an alternative to the re-proposed rule's approach for addressing new and significant environmental information with respect to matters addressed in the ESP EIS which require supplementation.[10] As a separate matter, the Commission is also considering adopting in the final part 52 rulemaking an analogous requirement for addressing new information necessary to update and correct the emergency plan approved by the ESP, the ITAAC associated with emergency preparedness (EP), or the terms and conditions of the ESP with respect to emergency preparedness, or new information materially changing the Commission's determinations on emergency preparedness matters previously resolved in the ESP. To implement either or both of these alternatives, the Commission is also evaluating whether several additional concepts should be adopted in the final rulemaking. The two alternatives, as well as the additional implementing concepts, are described below. The Commission emphasizes that it may, with respect to the alternative addressing updating environmental information and emergency preparedness information, adopt either or both alternatives in the final part 52 rulemaking, in place of or in addition to the proposed rule's alternative of conducting the updating in each combined license proceeding. Under the option where multiple alternatives for updating environmental and emergency preparedness information would be allowed, the Commission proposes that the decision be left to the combined license applicant as to which alternative to pursue. Commenters are requested to address: (1) The advantages and disadvantages of adopting each alternative for updating environmental and emergency preparedness information in an ESP proceeding as opposed to the proposed rule's alternative of conducting the updating in each combined license proceeding; (2) whether the Commission should only allow updating of environmental and emergency preparedness information in an ESP proceeding or in a COL proceeding, but not both; and (3) if the Commission allows updating in either an ESP proceeding or in a COL proceeding, whether it should be an option for the COL applicant to

[10] The scope of environmental information that must be supplemented is limited to the matters which were addressed in the original EIS for the ESP. Thus, for example, if the ESP applicant chose not to address need for power (as is allowed under § 52.18), the combined license applicant need not address need for power in its environmental report (ER) to update the ESP EIS, and the NRC need not determine whether there is new and significant information with respect to need for power as part of the updating of the ESP EIS.

decide which update process to pursue. The Commission believes it may allow COL applicants the option of deciding whether to update environmental and emergency preparedness information in either an ESP proceeding or in a COL proceeding in order to afford the COL applicant the determination which approach best satisfies their business and economic interests.

Environmental matters resolved in ESP. The Commission is considering requiring a combined license applicant planning to reference an ESP to submit a supplemental environmental report for the ESP. The supplemental environmental report must address whether there is any new and significant environmental information with respect to the environmental matters addressed in the ESP EIS. Based upon this information, the NRC will prepare a draft supplemental environmental assessment (EA) or EIS setting forth the agency's proposed determinations with respect to any new and significant information. In accordance with existing practice and procedure, the draft supplemental EA or EIS will be issued for public comment. After considering comments received from the public and relevant Federal and State agencies, the NRC will issue a final supplemental EA or EIS. Once the final supplemental EA or EIS is issued, the ESP finality provisions in proposed § 52.39 would apply to the matters addressed in the supplemental EA or EIS, and those matters need not be addressed in any combined license proceeding referencing the ESP. Thus, for example, if a new and significant environmental issue, for example, a newly-designated endangered species, is addressed in the supplemental ESP EIS, the matter would be resolved for all combined licenses referencing the ESP (unless, of course, there is new and significant information identified at the time of a subsequent referencing combined license with respect to that endangered species). There would be no updating of environmental information necessary in the combined license proceeding. The Commission considers this approach for updating the ESP as meeting the Agency's obligations under NEPA, without imposing undue burden on the ESP holder and the NRC through continuous or periodic updating, and preserving the distinction between the ESP and any referencing combined license proceeding. Since an ESP may be referenced more than once, this approach would provide for issue finality of the updated information and preclude the need for reconsideration of the same environmental issue in successive combined license proceedings referencing the ESP. The Commission requests public comment on this proposal, which would likely involve changes to §§ 52.39, 51.50(c), 51.75, and 51.107 (and possibly conforming changes in parts 2, 51, and 52).

Emergency preparedness information resolved in ESP. The Commission is separately considering requiring a combined license applicant referencing an ESP to provide to the NRC new EP information necessary to correct inaccurate information in the ESP emergency plan, EP ITAAC, or the terms and conditions of the ESP with respect to EP. Based upon the EP information submitted by the combined license applicant, the NRC will, as necessary, approve changes to the ESP emergency plan, the EP ITAAC, or the terms and conditions of the ESP with respect to EP. Once the Commission has resolved the EP updating matters, these matters would be accorded finality under § 52.39. There would be no separate updating necessary in the combined license proceeding. Thus, for example, if an EP ITAAC in an ESP were changed by virtue of this updating process, the changed ITAAC for EP would be applicable to any combined license referencing the ESP whose ITAAC have not yet been satisfied (*i.e.*, the amended EP ITAAC would not be applicable to a combined license where the Commission has made the § 52.103(g) finding with respect to that EP ITAAC). The NRC's consideration of such EP information would be considered to be part of the ESP proceeding, and any necessary changes with respect to EP would therefore be deemed to be changes within the scope of the ESP. The Commission considers this proposal as a means for updating the ESP with respect to EP information in a timely fashion, without imposing undue burden on the ESP holder and the NRC through continuous or periodic updating, while preserving the distinction between the ESP and any referencing combined license proceeding. Since an ESP may be referenced more than once, this approach would provide for issue finality of the updated information and preclude the need for reconsideration of the same issue in successive combined license proceedings referencing the ESP. The Commission requests comment whether this approach should be adopted by the Commission in the final rulemaking, which will likely involve changes to § 52.39 (and possible conforming changes in § 50.47, 50.54, and 10 CFR part 50, appendix E).

ESP updating in advance of combined license application submission. To minimize the possibility that the ESP updating process may adversely affect a combined license proceeding referencing that ESP, the Commission proposes to require the combined license applicant intending to reference an ESP to submit its application to update the ESP with respect to EP and/ or environmental information no later than 18 months before the submission of its combined license application. The Commission believes that the 18-month lead time is sufficient to complete the NRC's regulatory consideration of the

updating, such that the combined license applicant will be able to prepare its application to reflect the updated ESP. The Commission also recognizes that there may be increased regulatory complexity under this approach, as well as the possibility that resources may be unnecessarily expended if the potential combined license applicant ultimately decides not to proceed with its application. The Commission requests public comment on whether the 18-month lead time is appropriate, whether the time should be decreased or increased, or whether the Commission should simply require that the ESP update application be filed no later than simultaneously with the filing of the combined license application. Based upon the public comments, the Commission will adopt one of these alternatives, if it decides that updating of environmental and/or EP matters should be accomplished in an ESP proceeding, as opposed to the combined license proceeding in which the ESP is referenced.

Expanding the scope of resolved issues after ESP issuance. The Commission is also considering whether the final rule should include provisions addressing how the ESP holder may request, at any time after the issuance of the ESP, that additional issues be resolved and given finality under § 52.39. For example, the holder of the ESP which does not include an approved emergency plan, may wish to submit complete emergency plans for NRC review and approval. Such a request is not explicitly addressed in either the current or re-proposed subpart A to part 52, although it would be reasonable to treat that request as an application to amend the ESP. The Commission requests public comment on whether the Commission should adopt in the final rule new provisions in subpart A to part 52 that would explicitly address requests by the ESP holder to amend the early site permit to expand the scope of issues which are resolved and given issue finality under § 52.39. The Commission is also considering whether, as part of the ESP updating process discussed above, the ESP holder/combined license applicant should be allowed to request an expansion of issues which are resolved and given issue finality. If the Commission were to allow an ESP holder/combined license applicant to expand the scope of resolved issues in the ESP update proceeding, the Commission believes that the 18-month time period for filing the updating application in the ESP proceeding may be insufficient, and is considering adopting in the final rule a 24-month (2-year) period for filing the ESP updating application, where the ESP holder/combined license applicant seeks to expand the scope of resolved issues. The Commission seeks public comment on whether, in such cases, the Commission should require in the final rule an 18- or 24-month period, or some other period, for submitting its ESP updating application.

Approval in ESP of process and criteria for updating ESP after issuance. The Commission requests public comment whether the Commission should adopt in the final rulemaking provisions affording the ESP applicant the option of requesting NRC approval of procedures and criteria for identifying and assessing new and significant environmental information, and/or new information necessary to update and correct the emergency plan approved by the ESP, the ITAAC associated with emergency preparedness (EP), or the terms and conditions of the ESP with respect to emergency preparedness, or otherwise materially changing the Commission's determinations on emergency preparedness matters previously resolved in the ESP. These procedures and criteria, if approved as part of the ESP issuance, could be used by any combined license applicant referencing the ESP to identify the need to update the ESP with respect to environmental and/or emergency preparedness information. There would be no need for the NRC to review the adequacy of the ESP holder/combined license applicant's process and criteria for determining whether new information is of such importance or significance so as to require updating; the NRC review could thereby be focused solely on whether the ESP holder's updated information, or determination that there is no change in either an environmental or emergency preparedness matter, was correct and adequate. Under this proposal, § 52.17 and/or § 51.50(b) would be amended to incorporate such a process for "pre-approval" of ESP updating procedures and criteria. While NRC approval of updating procedures and criteria would be reflected in the ESP, the Commission does not believe that the ESP itself must contain the procedures and criteria in order to be accorded finality under § 52.39. An ESP holder/combined license applicant need not comply with any or all of the updating process and criteria, and would be free to use (and justify) other procedures or criteria in the ESP updating proceeding. Naturally, there would be no finality associated with such departures from the ESP approved procedures and criteria. The Commission does not believe that either subpart A of part 52 or an ESP with the contemplated approved updating procedures and criteria should contain a "change process" akin to § 50.59, allowing the ESP holder to make changes to the approved updating procedures and criteria without NRC review and approval. Any change (other than typographic and administrative corrections) should require an amendment to the ESP. However, the Commission seeks public comment on whether a different course should be adopted in the final rule. The Commission recognizes that any NRC-approved procedures and criteria for updating environmental and/or emergency preparedness information in an ESP updating process as described

above, would be equally valid for updating such information under the updating provisions in the re-proposed rule. The Commission requests comments on whether, if the Commission adopts in the final rulemaking the re-proposed rule's concept of updating in the combined license proceeding, the Commission should provide the ESP applicant with the option of seeking NRC approval of the procedures and criteria for updating environmental and/or emergency preparedness information in a combined license proceeding which references the ESP.

Public participation in ESP updating process. The Commission is considering two ways for allowing public participation in the updating process, if the updating alternative is adopted in the final rule. One approach would be to allow interested persons to challenge the proposed updating by submitting a petition, analogous to that in proposed § 52.39(c)(2), which would be processed in accordance with § 2.206. This approach would be most consistent with the existing provisions in § 52.39, inasmuch as updating of an ESP is roughly equivalent to a request that the terms and conditions of an ESP be modified. A consequence of this approach is that the potential scope of matters which may be raised is not limited to those ESP matters which the ESP holder/combined license applicant and the NRC conclude must be updated. The other approach that the Commission may adopt is to treat any necessary updating as an amendment to the ESP, for which an opportunity to request a hearing is provided. This approach would limit the scope of the hearing to those matters for which an amendment is required. Where the ESP holder does not request an amendment on the basis that no updating is necessary with respect to a matter, an interested person could not intervene with respect to that matter. A consequence of this approach is that, under the Commission's regulations in 10 CFR part 2 and its current practice, a hearing granted on any amendment necessitated by the updating process would be more formalized than a hearing accorded under the § 2.206 petition process. The Commission requests public comment on the approach that the Commission should adopt, together with the reasons for the commenter's recommendation.

Response:

An ESP holder should never be required to update the information in the ESP application. To the extent that additional information is necessary, it should be the obligation of the COL applicant to provide that information as part of its COL application.

The NRC's proposal to require updating would add an unnecessary additional level of review (and possibly hearings). Furthermore, this additional level of review would provide little or no benefit, since the COL applicant would still be under the obligation to update the updated information provided by the ESP holder.

The update requirement would also be inconsistent with the purpose of an ESP, which is to provide early resolution of issues and licensing stability. To achieve that stability, NRC regulations stipulate that while the ESP is in effect, the Commission may not change or impose new requirements, including emergency planning requirements, unless it determines that a modification is necessary either to bring the permit or the site into compliance with the Commission's regulations and orders applicable and in effect at the time the permit was issued, or to assure adequate protection of the public health and safety or the common defense and security. An updating requirement would only serve to erode the finality and certainty provided by the ESP, thereby defeating one of the purposes of an ESP.

Moreover, the proposed 18-month updating requirement may not be feasible. For example, under the NRC's current schedule for the existing ESP applications for North Anna and Grand Gulf, the ESPs will not be issued until 2007, shortly before the planned COL applications for those sites. This would allow insufficient time for the updating envisioned by the NRC, and it would be unfair to those applicants to require them to delay their COL applications to accommodate the updating process. Additionally, the proposed updating process would be inconsistent with 10 CFR § 52.27(c), which permits a COL application to reference an ESP application.

Although we oppose a mandatory updating requirement, we agree with NRC's proposal that would provide the ESP holder with the option of requesting an ESP amendment in order to resolve issues that were not addressed at the ESP stage or to achieve finality on updated information. There may be some situations in which an ESP holder may find such an amendment process to be advantageous. Examples may include transfer of the ESP to another holder or approval of a site redress plan. If the NRC decides to establish such an amendment process, we do not believe that there should be any time limitations placed on amendment requests. Similar to the process that already exists in 10 CFR § 52.27(c), a COL applicant should be able to reference an application for an ESP amendment that is pending approval by the NRC.

We agree that if an ESP is referenced in a COL application, the COL application should identify any "new and significant" information that indicates an adverse change to an environmental impact conclusion in the ESP environmental impact statement (EIS). "New and significant" information should be defined as information that would cause an environmental impact previously determined to be "small" to become "moderate" or "large" or an environmental impact previously determined to be "moderate" to become "large." This information will be submitted to the NRC in the form of a supplement to the ESP environmental report (ER).

As discussed in Enclosure 1, Comment 40, we believe that a COL applicant should be able to make changes or updates to ESP emergency planning information without NRC approval in accordance with the criteria in 10 CFR § 50.54(q) just as the remaining safety information can be revised under 50.59 once it has been reviewed and approved. However, this revised information should not be considered as an "amendment" submitted under 50.90 for review and approval, but rather should be considered to be information equivalent to that provided under Section 50.71(e) for information.

With respect to ESP environmental information, we agree that a COL applicant should have processes for identifying "new and significant" information that causes an adverse change to an ESP EIS environmental impact conclusion. The processes for identifying "new and significant" information and for evaluating whether that information has an adverse impact on the conclusions in the ESP EIS should be available for NRC audit at the COL applicant's facilities in a manner comparable to the process used for license renewal. We do not believe that this information should be required or codified in NRC regulations.

NRC Question 10. - - New Requirements for Periodic Updates to the PRA

The Commission is considering adopting in the final part 52 rulemaking a new provision in § 50.71 that would require combined license holders to update the PRA submitted with the combined license application periodically throughout the life of the facility on a schedule similar to the schedule for final safety analysis report (FSAR) updates (*i.e.*, at least every 24 months) or, alternatively, on a schedule to coincide with every other refueling outage. Updates would be required to ensure that the information included in the PRA contains the latest information developed. The PRA update submittal would be required to contain all the changes necessary to reflect information and analyses submitted to the Commission by the licensee or prepared by the licensee pursuant to Commission requirement since the submittal of the original PRA, or as appropriate, the last update to the PRA under this section. The submittal would be required to include the effects of all changes made in the facility or procedures as reflected in the PRA; all safety analyses and evaluations performed by the licensee either in support of approved license amendments or in support of conclusions that changes did not require a license amendment in accordance with § 50.59(c)(2) or, in the case of a license that references a certified design, in accordance with § 52.98(c); and all analyses of new safety issues performed by or on behalf of the licensee at Commission request. The Commission requests stakeholder feedback on whether such a requirement should be added to the Commission's regulations and, if so, what is an appropriate update schedule.

Response

The proposed rule (10 CFR § 52.80(a)) does not include a frequency for updating the PRA. In its SRM on SECY-05-0203, the Commission directed that PRA scope and methods should be addressed in guidance, not in the regulations. Similarly, NEI believes that the PRA update frequency should be also be addressed in guidance rather than prescribed by regulation. A frequency of once every two operating cycles would be reasonable, consistent with other existing requirements in 10 CFR § 50.69(e).

As discussed in Enclosure 1, Comment 1, the plant-specific PRA used to support a COL application that references a design certification will essentially be the design certification PRA. As we have discussed with the staff and in Section 4.4 of NEI 04-01, Revision E, we envision that

the plant-specific PRA will be updated consistent with PRA scope and quality standards in effect six months before the COL is issued as plant-specific design and as-built information is developed during construction. In this way, an updated plant-specific PRA that is representative of the as-built plant will be completed and available prior to fuel load for NRC audit and to support plant operations. As with the update frequency during operation, we recommend that the update of the plant-specific PRA during construction is a matter suitable to address in guidance.

We do not understand the proposal to require PRA updates to reflect safety analyses and evaluations performed by the licensee and analyses of new safety issues performed by or on behalf of the licensee at Commission request. In this regard, new analyses and evaluations are often performed using design basis assumptions (i.e., conservative assumptions), that may not be appropriate for a PRA. Thus, only new analyses which impact the PRA would be warrant consideration. Again, guidance and examples could be developed regarding the information that should be considered when updating the plant-specific PRA.

NRC Question 11. - - NEI Comments on the AP1000 Rulemaking

In a letter dated July 5, 2005, the Nuclear Energy Institute (NEI) submitted comments on the proposed rule for the AP1000 design certification. Many of those comments have generic applicability to the three pre-existing design certification rules (DCRs) in appendices A–C of 10 CFR part 52. In the final AP1000 rulemaking (January 27, 2006; 71 FR 4464), the Commission adopted some of the NEI-recommended changes, while rejecting others (71 FR at 4465–4468). For those changes that were adopted in the final AP1000 design certification, the Commission indicated that it would consider making the same changes to the existing design certifications in appendices A–C. For those changes that were not adopted in the final AP1000 design certification, the Commission stated that it would reconsider the issues in the part 52 rulemaking, and if the Commission changes its position and the change is adopted, the Commission would make the change for all four design certifications, including the AP1000. The Commission is considering amending the appropriate sections in each DCR based on the comments below. The Commission considers most of NEI's proposed changes to be consistent with proposed § 52.63(a)(1); in

particular, the Commission believes that the proposed changes would satisfy the "reduces unnecessary regulatory burden" criterion in proposed § 52.63(a)(1)(iii). The few remaining changes, constituting editorial clarifications or corrections reflecting the Commission's original intent, are not subject to the existing change restrictions in § 52.63(a)(1). Accordingly, the Commission believes that it has authority to incorporate some or all of the NEI-proposed changes into appendices A–D in the final part 52 rulemaking. The Commission also requests comments on whether some of NEI's proposed changes accepted in the AP1000 design certification and proposed for inclusion in appendices A–C should not be included in those appendices in the final part 52 rulemaking because they are unnecessary, or because they would not meet one or more of the change criteria in proposed § 52.63(a)(1). The Commission is also assessing whether NEI's proposed changes which were not adopted in the AP1000 final rulemaking should be adopted in the final part 52 rulemaking for all four design certifications, including the AP1000. The Commission is particularly interested in whether there are reasons, other than those presented by NEI, for adopting those changes, as well as commenter's views on the Commission's reasons for rejecting the NEI proposals as stated in the final AP1000 design certification rulemaking.

a. NEI recommended modification of the generic technical specification definition in Section II.B to clarify that bracketed information is not part the DCRs for purposes of the change processes in Section VIII.C, and an exemption is not required for plant-specific departures from bracketed information. The Commission stated in the section-by-section analysis for the AP1000 DCR (71 FR 4464) that some generic technical specifications and investment protection short-term availability controls contain values in brackets. The values in brackets are neither part of the DCR nor are they binding. Therefore, the replacement of bracketed values with final plant-specific values does not require an exemption from the generic technical specifications or investment protection short-term availability controls. The Commission believes that including this guidance in each DCR is not necessary. The Commission requests comment on whether there are countervailing this provision in the DCRs.

b) NEI recommended modification of the Tier 2 definition in Section II.E to clarify that bracketed information in the investment protection short-term availability controls is not part of Tier 2 and thus not subject to the Section VIII.B

change controls. The Commission stated in the section-by-section analysis for the AP1000 DCR (71 FR 4464) that some generic technical specifications and investment protection short-term availability controls contain values in brackets. The values in brackets are neither part of the DCR nor are they binding. Therefore, the replacement of bracketed values with final plant-specific values does not require an exemption from the generic technical specifications or investment protection short-term availability controls. The Commission believes that including this guidance in each DCR is not necessary. The Commission requests comment on whether there are countervailing considerations that favor inclusion of this provision in the DCRs.

c) NEI recommended modification of the requirement in Section VIII.C.2 to delete the phrase "or licensee" because that phrase conflicted with the requirement in Section VIII.C.6. The Commission believes that generic technical specifications should not apply to holders of a combined license because the license will include plant-specific technical specifications. Therefore, the Commission is considering amending each of the DCRs to delete the phrase "or licensee" from Section VIII.C.2 and requests public comment on this approach.

d) NEI recommended modification of the requirement in Section VIII.C.6 to delete the last portion, which states "changes to the plant-specific technical specifications will be treated as license amendments under 10 CFR 50.90." NEI stated that this sentence is not necessary because it is redundant with § 50.90. It is not necessary to include a provision in each DCR stating that a license amendment is necessary to make changes to technical specifications in order to render this a legally-binding requirement inasmuch as Section 182.a of the AEA requires that technical specifications be part of each license. The Commission believes that clarity and understanding by the reader is enhanced by repeating the statutory requirement in each DCR. The Commission requests comment on whether there are countervailing considerations that favor non-inclusion of this provision in the DCRs, and may decide to remove this provision in the final part 52 rulemaking.

e) NEI recommended modification of the requirement in Section X.A.1 to require the design certification applicant to include

all generic changes to the generic technical specifications and other operational requirements in the generic DCD. The Commission believes that inclusion of changes to the generic technical specifications and other operational requirements will enhance the generic DCD and facilitate its use by referencing applicants. The Commission is considering amending each of the DCRs to include the generic technical specifications and other operational requirements in the generic DCD and requests public comment on this approach.

f) NEI recommended modification of the requirement in Sections IV.A.2 and IV.A.3 to be consistent with respect to inclusion of information in the plant-specific DCD, or explain the difference between "include" (IV.A.2) and "physically include" (IV.A.3). The Commission is considering amending each of the DCRs to use the same term in both provisions, and requests public comment on this approach.

g) NEI recommended modification of the definition in Section II.E.1 to exclude the design-specific probabilistic risk assessment (PRA) and the evaluation of the severe accident mitigation design alternatives (SAMDA) from Tier 2 information. The Commission believes that the PRA and SAMDA evaluations do not need to be included in Tier 2 information because they are not part of the design basis information. The Commission is considering amending each of the DCRs to modify the definition of Tier 2, and requests public comment on this approach.

h) NEI recommended modification of the requirement in Section III.E to use "site characteristics" consistently, instead of "site-specific design parameters." The Commission intends to use the term "characteristics" to refer to actual values and "parameters" to refer to postulated values. The Commission has proposed amending Section III.E of each DCR to use "site characteristics," and requests public comment on this approach.

i) NEI recommended modification of Section IV.A.2 to clarify the use of "same information" and "generic DCD" in that requirement. The Commission has proposed amending Section IV.A.2 of each DCR to use the phrase "same type of information" to avoid confusion, and requests public comment on this approach.

j) NEI recommended modification of the requirement in Section VIII.B.6.a to delete the sentence "The departure will not be considered a resolved issue, within the meaning of Section VI of this appendix and 10 CFR 52.63(a)(4)," in order to be consistent with the requirement in Section VI.B.5 of the DCRs. The Commission believes that departures from Tier 2* information should not receive finality or be treated as resolved issues within the meaning of section VI.B of the DCRs. The Commission requests comment on whether departures from Tier 2* information should be considered a resolved issue, and may decide to remove this provision from each DCR.

k) NEI recommended modification of Section VIII.C.3 to require the NRC to meet the backfit requirements of 10 CFR 50.109 in addition to the special circumstances in 10 CFR 2.758(b) in order to require plant-specific departures from operational requirements. The Commission believes that plant-specific departures should not have to meet the backfit requirement for generic changes. The Commission will have to demonstrate that special circumstances, as defined in § 2.335, are present in order to require a plant-specific departure. The Commission requests comment on whether there are countervailing considerations that would favor modification of this provision in the DCRs.

l) NEI recommended modification of the requirement in Section VIII.C.4 to include a requirement that operational requirements that were not completely reviewed and approved by the NRC should not be subject to any Tier 2 change controls, e.g. exemptions. However, NEI previously proposed that requested departures from Chapter 16 by an applicant for a COL require an exemption (62 FR 25808; May 12, 1997). The Commission believes that the requirement for an exemption applies to technical specifications and operational requirements that were completely reviewed and approved in the design certification rulemaking (see 62 FR 25825). The Commission requests comment on whether departures from technical specifications and operational requirements that were not completely reviewed and approved should also require an exemption.

m) NEI recommended modification of the requirement in Section VIII.C.4 to delete the sentence "The grant of an exemption must be subject to litigation in the same manner as other issues material to the license hearing," in order to be consistent with the requirement in Section VI.B.5 of the DCRs. The Commission believes that exemptions from operational requirements should not receive finality or be treated as resolved issues (refer to section VI.C of the DCRs). The Commission requests comment on whether exemptions from operational requirements should be considered a resolved issue, and may decide to modify this provision in each DCR.

n) NEI recommended modification of the requirement in Section IX.B.1 to better distinguish between NRC Staff ITAAC conclusions under proposed Section 52.99(e) and the Commission's ITAAC finding under proposed Section 52.103(g). The Commission believes that individual DCRs should not address the scope of the NRC Staff's activities with respect to ITAAC verification. This is a generic matter that, if it is to be addressed in a rulemaking, is more appropriate for inclusion in subpart C of part 52 dealing with combined licenses. The Commission requests comment on whether there are countervailing considerations that favor clarification of this provision in the DCRs.

o) NEI recommended modification of the language in Section IX.B.3 to make editorial changes for clarity, e.g. "ITAAC will expire" vs. "their expiration will occur." The Commission believes that the original rule language is acceptable. The Commission requests comment on whether there are countervailing considerations that favor clarification of this provision in the DCRs.

p) NEI recommended modification of the language in Sections X.B.1 and X.B.3 to clarify references to the design control documents, e.g. "plant-specific" vs. "generic." The Commission agrees that the references to plant-specific and generic DCD should be clarified in Sections X.B.1 and X.B.3 to ensure that the requirements in these sections are properly implemented by applicants referencing the design certification rules. The Commission requests public comment on this prospective modification.

Response

NEI appreciates the consideration provided by the NRC to its recommendations on the AP1000 rule. The final rule on Part 52 should incorporate NEI's recommendations as discussed above.

In the case of recommendations (a) and (b), NEI believes that it would be sufficient if the Statements of Considerations for the final rule were to provide the requested clarification, rather than the rule itself.

With respect to recommendation (f), we favor consistent use of the term "include" rather than "physically include" for requirements in Section IV of the design certification rules concerning content of COLAs.

A matter closely related to recommendation (f) is the actual method of incorporation of the generic DCD into the plant-specific DCD portion of the COL application's FSAR. As noted in the Statements of Consideration accompanying the AP1000 final rule, NEI recommended a change to the Definitions (Section III.B of that rule (71 FR 4466). In the AP1000 final rule, the NRC Staff disagreed with this recommended change, saying that "the generic DCD should also be part of the FSAR, not just incorporated by reference, in order to facilitate the NRC staff's review of any departures or exemptions." This NRC staff response accompanying the AP1000 Final Rule has led to considerable confusion among the prospective COL application preparers.

- This NRC response (in the subject Statements of Consideration) appears to conflict with the current § 52.79(b) which states the COL application's FSAR "may incorporate by reference the final safety analysis report for a certified standard design," and with Section 50.32 which provides for incorporation by reference to eliminate repetitive information. While this specific language is revised in the current proposed rule, the same meaning is maintained which indicates that the COL application's FSAR "need not contain information or analyses submitted to the Commission" in connection with the design approval or design certification (proposed § 52.79 (b) and (c) respectively).

- In discussion with the NRC Staff (DG-1145 workshops), it is further understood that the NRC Staff considered either full incorporation or incorporation by reference of the generic DCD into the COL application to be acceptable approaches. This NRC Staff position is consistent with the industry understanding; however, it is in conflict with the Statements of Consideration accompanying the AP1000 Final Rule.

Given the current and proposed rule language and discussions with NRC Staff, we recommend that the NRC clarify this issue in the Statements of Consideration for the final rule. It is the industry's understanding that the generic DCD is part of the COLA FSAR and that it may be included by full text incorporation or by incorporation by reference. The NRC should explicitly state that either approach is acceptable.

With respect to recommendation (j), Section VIII.B.6.a of the design certification rules states that an applicant who references the design certification rule must obtain NRC approval for departures from Tier 2* information in the generic DCD. This Section further states that the departure is not considered to be a resolved issue under Section VI of the design certification rules. This is inconsistent with Section VI.B.5 of the design certification rules, which states that license amendments are considered to be resolved. Section VIII.B.6.a of the design certification rules should be revised to be consistent with Section VIII.B.5 of the design certification rules. Departures from Tier 2* information that are reviewed and approved by the NRC in the combined license proceeding should have finality for the plant in question. We recommend that the affected sections be amended, as follows:

- Section VI.B.5. All departures from the DCD that are approved by license amendment, <u>or which were approved in the proceeding for the issuance of a combined license referencing the design certification rule,</u> but only for that plant.

- Section VIII.B.6.a. An applicant who references this appendix may not depart from Tier 2* information, which is designated with italicized text or brackets and an asterisk in the generic DCD, without NRC approval <u>in the proceeding for the application</u>. The departure will not be considered a resolved issue, within the meaning of Section VI of this appendix and 10 CFR 52.63(a)(5) <u>for the initial issuance of a</u>

> combined license for the plant proposing the departure, but will be considered a resolved issue in subsequent proceedings for that plant.

With respect to recommendation (k), Section VIII.C.3 of the design certification rules inappropriately allows the NRC to make changes to operational requirements in the DCD without satisfying the backfit requirements in § 50.109. To the extent that NRC completely reviewed and approved operational requirements in the design certification proceeding, those requirements should be afforded the protection of the backfit rule. Section VIII.C.3 of the design certification rules should be revised to include a reference to § 50.109 for such changes. We recommend Section VIII.C.3 of the design certification rules be amended, as follows:

> The Commission may require plant-specific departures on generic technical specifications and other operational requirements that were completely reviewed and approved, provided a change to a design feature in the generic DCD is not required and special circumstances as defined in 10 CFR 2.335 are present. The Commission may modify or supplement generic technical specifications and other operational requirements that were not completely reviewed and approved or require additional technical specifications and other operational requirements on a plant-specific basis, provided a change to a design feature in the generic DCD is not required. Changes to operational requirements that were completely reviewed and approved are governed by the requirements in 10 CFR 50.109.

With respect to recommendations (l) and (m), Section VIII.C.4 of the design certification rules states that a COL applicant must request an exemption from the NRC if the applicant wants to depart from the generic technical specifications or other operational requirements. This is unduly burdensome. The operational requirements do not have finality under Section VI.C of the design certification rules, and therefore there is no basis for applying such a stringent change control process on a COL applicant that desires to change the operational requirements. Furthermore, under Section VIII.B.5 of the design certification rules, a COL applicant may depart from final design-related provisions in the design certification rule using a "50.59-like" process, and there is no reason to impose an exemption process with

respect to operational provisions.[12] Therefore, Section VII.C.4 should be amended to state that a departure from an operational requirement does not require an exemption. We recommend that Section VIII.C.4 of the design certification rules be amended, as follows:

> An applicant who references this appendix may depart from the operational requirements using the process identified in Section VIII.B.5. If the departure requires NRC approval, the ~~An~~ applicant ~~who references this appendix~~ may request ~~an exemption from~~ a plant-specific change in the generic technical specifications or other operational requirements. ~~The Commission may grant such a request only if it determines that the exemption will comply with the requirements of 10 CFR 50.12(a).~~ The grant of ~~an exemption~~ such a request must be subject to review and litigation in the same manner as other issues material to the license hearing.

An additional generic comment concerning the design certification rules is Comment #52 from the industry's September 30, 2003, response to the 2003 Part 52 NOPR:

Consistent with adding the definition of "departure from a method of evaluation," the basic definition of "departure" should also be added to the DCRs. Like the definition of "departure from a method of evaluation," the definition of "departure" should be based on that from Regulatory Guide 1.187. The basic definition of "change or departure" should precede the definition of "departure from a method of evaluation." Thus, we recommend adding the new definition as paragraph II.G and renaming the final two paragraphs as II.H and II.I.

We also recommend that the Statements of Consideration for the final Part 52 rule refer to the source of these definitions and guidance on their use contained in NEI 96-07, *Guidelines for 10 CFR 50.59 Implementation*, Revision 1, which was endorsed by Regulatory Guide 1.187. In particular the final rule should identify that NEI 96-07, Revision 1, defines "design functions" as used in the definition of "change" (departure) below as:

---

[12] NRC states that NEI's comments on the original design certification rules recommended the use of exemptions for plant-specific departures from the generic technical specifications. However, NRC is taking NEI's comments out of context. At the time NEI submitted those comments, it was also recommending that the generic technical specifications have finality. (NEI comments dated July 25, 1996). In the absence of finality, a stringent change control process on applicants is not warranted.

> Updated FSAR-described functions design bases functions and other SSC functions described in the UFSAR that support design bases functions. Implicitly included within the meaning of design functions are the conditions under which intended functions are required to be performed, such as equipment response times, process conditions, equipment qualification and single failure."

Recommended Rule Language

New definition II.G – Change or departure means a modification or addition to, or removal from, the facility or procedures that affects: (1) a design function, (2) method of performing or controlling the function, or (3) an evaluation that demonstrates that intended functions will be accomplished.

NRC Question 12. - - Submission of Detailed Schedule for ITAAC Completion and Delay in Fuel Load for NRC Inspections

The Commission is considering adopting in the final part 52 rulemaking a new provision that would either require combined license applicants to submit a detailed schedule for the licensee's completion of ITAAC or require the combined license holder to submit the schedule for ITAAC completion. Delaying submission of the schedule would allow the combined license holder to develop the schedules based on more accurate information regarding construction schedules and would allow the schedule to be submitted at a time when it would be most useful to the NRC for planning purposes. The Commission could require that applicants submit the schedule within a specified time prior to scheduled COL issuance, for example, 3 months prior to COL issuance, or within some time period (e.g., 6 months or 1 year) after COL issuance. In addition, the Commission is considering an additional element to this provision that would require that the licensee submit an update to the ITAAC schedule within 12 months after combined license issuance and that the licensee update the schedule every 6 months until 12 months before scheduled fuel load, and monthly thereafter until all ITAAC are complete. The Commission is considering adopting these requirements to support the NRC staff's inspection and oversight with respect to ITAAC completion, and to facilitate publication of the **Federal Register** notices of successful completion of ITAAC as required by proposed § 52.99(e). The

Commission requests stakeholder comment on whether such a provision, with or without the update element, should be added to the Commission's regulations and which time frame for submission of the schedule would be most beneficial.

The Commission is also considering adopting a provision that would establish a specific time by which the licensee must complete all ITAAC to allow sufficient time for the NRC staff to verify successful completion of ITAAC, without adversely affecting the licensee's scheduled date for fuel load and operation. The Commission considers "60 days prior to the schedule date for initial loading of fuel" to be a reasonable time period by which all ITAAC must be completed. However, the Commission requests comments on whether this time period would provide too much or too little time prior to scheduled fuel load. Alternatively, the Commission is considering a 30-day or a 90-day time period prior to scheduled fuel load. The 30-day option would allow more flexibility for the licensee to complete ITAAC late in construction but would require immediate action on the part of the NRC (to determine if the final ITAAC were completed successfully and, if so, for the Commission to make its finding under § 52.103(g)) so as not to delay scheduled fuel load. The 90-day option would reduce licensee flexibility to complete ITAAC late in construction but would ensure that the NRC had ample time to make its determination on the final ITAAC for Commission review of all ITAAC under § 52.103(g). The Commission requests stakeholder comment on whether a provision requiring completion of ITAAC within a certain time period prior to scheduled fuel load should be added to the Commission's regulations.

Response

We believe that it is unnecessary to include a requirement for either the COL applicant or the COL holder to submit a detailed schedule for ITAAC completion. As a practical matter, a COL applicant could provide only an estimated completion schedule, which likely would not be sufficiently accurate as construction proceeds.

More importantly, the COL holder will have schedules at the site, and those schedules will be available for NRC review. A COL holder will interact and coordinate with the NRC to ensure that NRC has sufficient information to schedule its inspection activities for ITAAC, and no regulatory requirement for submission of a schedule is necessary. In addition, a COL applicant or COL holder would likely consider detailed schedule information proprietary information.

Requiring submission of proprietary information is not appropriate in this case.

We also believe it would be inappropriate to impose a requirement to complete ITAAC within 60 days, 30 days, or any other period prior to fuel loading and operation. A COL holder likely will complete several ITAAC within 30 days of fuel loading. It will be important for the NRC to plan to provide the appropriate level of inspections and reviews to prevent delays in fuel load. NRC should not abrogate its responsibilities by imposing a mandatory delay on licensees, nor should the NRC institute a 60-day period (or any other period) of delay. The cost of such a period would be very high, with interest and carrying costs likely to be on the order of a million dollars per day. The industry believes that, with proper planning, the NRC should be in a position to make a 52.103(g) finding promptly after the licensee completes the last ITAAC. In a separate May 25 response to the NOPR, we proposed a number of ways the NRC could improve the efficiency and effectiveness of its Part 2 and Section 52.103 processes and follow-up interactions to discuss those proposals.

NRC Question 13. - - Mandatory Hearings for Manufacturing Licenses

As discussed in Section IV.F.6 of this statement of considerations, the Commission proposes in this rulemaking, as a matter of policy and discretion, that the Commission hold a "mandatory" hearing (i.e., a hearing which, under NRC requirements in 10 CFR part 2, is held regardless of whether the NRC receives any hearing requests or petitions to intervene) in connection with the initial issuance of every manufacturing license. The Commission believes that Section 189.a.(1)(A) of the AEA does not require that a hearing be held in connection with the initial issuance of a manufacturing license. Nonetheless, there are several reasons for the Commission to require by rule, as a matter of discretion, a mandatory hearing. A manufacturing license may be viewed as analogous to a construction permit—a regulatory approval for which Section 189 of the AEA specifically requires that a hearing be held. Even though the Commission's regulations did not address the hearing requirements for manufacturing licenses, the Commission noticed a "mandatory" hearing in connection with the only manufacturing license application ever received by the Agency. Offshore Power Systems (Floating Nuclear Power Plants), 38 FR 34008 (December 10, 1973). Accordingly, proposed §§ 2.104 and 52.163 require that a mandatory hearing be

held in each proceeding for initial issuance of a manufacturing license. However, the Commission recognizes that there may be countervailing considerations weighing against Commission adoption of a rulemaking provision mandating that a hearing be held in connection with the initial issuance of every manufacturing license where there has been no stakeholder interest in a hearing. If there is no stakeholder interest in a hearing, transparency and public confidence would not appear to be relevant considerations in favor of holding a mandatory hearing. Considerations of regulatory efficiency and effectiveness would be paramount, and would weigh against holding of a mandatory hearing. The Commission requests comments on whether the Commission should exercise its discretion to provide by rule an opportunity for hearing, rather than a mandatory hearing, and the reasons in favor of providing an opportunity for hearing as opposed to holding a mandatory hearing. Based upon the public comments, the Commission may adopt a final rule which deletes § 2.104(f), revises § 2.105 (governing the content of a **Federal Register** notice of proposed action where a mandatory hearing is not held under § 2.104) to add, as appropriate, references to issuance of manufacturing licenses, and revised § 52.163 to provide an opportunity for hearing rather than a mandatory hearing in connection with the initial issuance of a manufacturing license.

Response

NEI believes that there is no need to require mandatory hearings for manufacturing licenses. Mandatory hearings are not an appropriate or beneficial method for reviewing and resolving technical issues. Rather, technical issues are most appropriately addressed by NRC Staff review. The NRC should refrain from imposing mandatory hearing requirements for manufacturing license and reserve mandatory hearings for those situations explicitly identified in the Atomic Energy Act.

NRC Question 14. - - Amendments to the Design Certification Rule to Provide Resolutions for DAC

As discussed in Section IV.C.5.g of this SOC, the proposed rule would amend the special backfit requirement in 10 CFR 52.63(a)(1) to provide the Commission with the ability to make changes to the design certification rules (DCRs) or the certification information in the generic design control documents that reduce unnecessary regulatory burdens. The underlying rationale for this provision also forms the basis for

amending the Tier 2 change process in the three DCRs (appendices A, B, and C of part 52) to incorporate the revised change criteria in 10 CFR 50.59. The Commission is considering adopting an additional provision [§ 52.63(a)(1)(iv)] in the final rule that would allow amendments of design certification rules to incorporate generic resolutions of design acceptance criteria (DAC) or other design information without meeting the special backfit requirement in the current § 52.63(a)(1). The applicants for the current DCRs requested use of DAC in lieu of providing detailed design information for certain areas of their nuclear plant designs, for example, instrumentation and control systems. Under the proposed requirements, a generic change to design certification information would have to meet the special backfit requirement of § 52.63(a)(1) or reduce an unnecessary regulatory burden while maintaining protection to public health and safety and the common defense and security. The Commission adopted this special backfit requirement to restrict changes and to require that everyone meet the same backfit standard for generic changes, thereby ensuring that all plants built under a referenced DCR would be standardized. By allowing a DCR amendment to include generic resolutions of DAC or other design information, the Commission would enhance its goals for design certification, for example, early resolution of all design issues and finality for those issue resolutions, which would avoid repetitive consideration of design issues in individual combined license proceedings. There are currently three ways of resolving generic design issues: (1) The combined license applicant that references a DCR could submit plant-specific resolutions in its application, which could result in loss of standardization; (2) a vendor could submit generic resolutions in topical reports that, if approved, could but would not be required to be referenced in a combined license application; or (3) the Commission could exempt itself from the special backfit requirement in § 52.63(a)(1) and amend the DCR to incorporate a generic resolution, which could result in multiple rulemakings to revise each DCR to incorporate each generic resolution. The Commission intends that any review of a proposed generic resolution would be performed under the regulations that are applicable and in effect at the time that the approval or amendment is completed. Therefore, the NRC is requesting public comments on: (1) Whether a provision should be added to § 52.63(a)(1) to allow generic amendments to design certification information that meet applicable regulations in effect at the time that the rulemaking is completed; and (2) whether the generic resolutions should be incorporated into a DCR without meeting a backfit requirement, which would provide for completion of the design certification information and facilitate standardization, or

whether an application for a generic amendment should be required to meet a backfit requirement (e.g., § 50.109).

Response

Enclosure 1, Comment 6, addresses this question.

NRC Question 15. - - Expansion of Part 21 Reporting Requirements

15. In Section IV.J of the Supplementary Information of this **Federal Register** Notice, the NRC outlines key principles regarding its proposal for reporting requirements that implement Section 206 of the Energy Reorganization Act, as amended, for part 52 licenses, certifications, and approvals. The NRC discusses that the beginning of the "regulatory life" of a referenced license, standard design approval, or standard design certification under part 52 occurs when an application for a license, design approval, or design certification is docketed. The NRC also cautions, however, that this does not mean that an applicant is without Section 206 responsibilities for pre-application activities because there are two aspects to the reporting requirements, namely, a "backward looking" or retrospective aspect with respect to existing information, and a "forward looking" or prospective aspect with respect to future information. For an early site permit applicant, the retrospective obligation is that the early site permit holder and its contractors, upon issuance of the early site permit, must report all known defects or failures to comply in "basic components," as defined in part 21. Under the proposed part 21 requirements presented in this rule, the early site permit holder and its contractors are required to meet these requirements upon issuance of the early site permit. Accordingly, applicants should procure and control safety-related design and analysis or consulting services in a manner sufficient to allow the early site permit holder and its contractors to comply with the above described reporting requirements of Section 206, as implemented by part 21. A similar argument applies to design certification applicants. Although the Commission has not proposed an explicit requirement imposing part 21 on applicants for an early site permit or design certification in this rule, it is considering adopting such a requirement in the final part 52 rulemaking because, as a practical matter, the NRC has to require these applicants to implement a part 21 program before approval of the early site permit or design certification. Therefore, providing explicit part 21 requirements for applicants would clarify the Commission's intent. The

Commission requests stakeholder comment on whether it should, in the final rule, impose part 21 reporting requirements on applicants for early site permits and design certifications.

Response

Enclosure 1, Comment 3, addresses this question.

From: "HEYMER, Adrian" <aph@nei.org>
To: <secy@nrc.gov>
Date: Tue, May 30, 2006 6:48 PM
Subject: Industry Response to NRC Proposed Rule, "Licenses, Certifications and Approvals for Nuclear Power Plants," 71 Fed. Reg. 12,782 (Mar. 13, 2006)

May 30, 2006

Annette L. Vietti-Cook

Secretary

U.S. Nuclear Regulatory Commission

Mail Stop 0-16C1

Washington, DC 20555-0001

ATTN: Rulemaking and Adjudications Staff

SUBJECT: Industry Response to NRC Proposed Rule, "Licenses, Certifications and Approvals for Nuclear Power Plants," 71 Fed. Reg. 12,782 (Mar. 13, 2006)

Dear Ms. Vietti-Cook:

The Nuclear Energy Institute (NEI)[1] is submitting the enclosed comments on behalf of the nuclear energy industry in response to the subject Federal Register notice. In letters dated May 16, 2006, and May 25, 2006, we previously provided comments on significant legal and policy issues related to this NRC rulemaking. This letter and the enclosures provide the balance of our comments.

Sincerely,

Adrian P. Heymer

Senior Director, New Plant Deployment

Nuclear Generation Division

Nuclear Energy Institute

(202) 739-8094

aph@nei.org

Enclosures

---

[1] The Nuclear Energy Institute ("NEI") is the organization responsible for establishing unified industry policy on matters affecting the nuclear energy industry, including the regulatory aspects of generic operational and technical issues. NEI's members include all entities licensed to operate commercial nuclear power plants in the United States, nuclear plant designers, major architect/engineering firms, fuel fabrication facilities, nuclear materials licensees, and other organizations and individuals involved in the nuclear energy industry.

This electronic message transmission contains information from the Nuclear Energy Institute, Inc. The information is intended solely for the use of the addressee and its use by any other person is not authorized. If you are not the intended recipient, you have received this communication in error, and any review, use, disclosure, copying or distribution of the contents of this communication is strictly prohibited. If you have received this electronic transmission in error, please notify the sender immediately by telephone or by electronic mail and permanently delete the original message.

Mail Envelope Properties (447CCBA9.4D8 : 9 : 62680)

Subject: Industry Response to NRC Proposed Rule, "Licenses, Certifications and Approvals for Nuclear Power Plants," 71 Fed. Reg. 12,782 (Mar. 13, 2006)
Creation Date Tue, May 30, 2006 6:48 PM
From: "HEYMER, Adrian" <aph@nei.org>

Created By: aph@nei.org

Recipients
nrc.gov
TWGWPO02.HQGWDO01
SECY (SECY)

Post Office	**Route**
TWGWPO02.HQGWDO01	nrc.gov

Files	**Size**	**Date & Time**
MESSAGE	2138	Tuesday, May 30, 2006 6:48 PM
TEXT.htm	11953	
05-30-06_NRC_Industry Response to NRC Proposed Rule 71 Fed. Reg. 12,782.pdf	128823	
05-30-06_NRC_NOPR Comments Final Enclosures.pdf	531508	
Mime.822	922313	

Options
Expiration Date: None
Priority: Standard
ReplyRequested: No
Return Notification: None

Concealed Subject: No
Security: Standard

Junk Mail Handling Evaluation Results
Message is eligible for Junk Mail handling
This message was not classified as Junk Mail

Junk Mail settings when this message was delivered
Junk Mail handling disabled by User
Junk Mail handling disabled by Administrator
Junk List is not enabled
Junk Mail using personal address books is not enabled
Block List is not enabled

From: "HEYMER, Adrian" <aph@nei.org>
To: <secy@nrc.gov>
Date: Wed, May 31, 2006 11:20 AM
Subject: Resend of Industry Response to NRC Proposed Rule, "Licenses, Certifications and Approvals for Nuclear Power Plants," 71 Fed. Reg. 12,782 (Mar. 13, 2006)

May 30, 2006

Annette L. Vietti-Cook

Secretary

U.S. Nuclear Regulatory Commission

Mail Stop 0-16C1

Washington, DC 20555-0001

ATTN: Rulemaking and Adjudications Staff

SUBJECT: Industry Response to NRC Proposed Rule, "Licenses, Certifications and Approvals for Nuclear Power Plants," 71 Fed. Reg. 12,782 (Mar. 13, 2006)

Dear Ms. Vietti-Cook:

The Nuclear Energy Institute (NEI)[1] is submitting the enclosed comments on behalf of the nuclear energy industry in response to the subject Federal Register notice. In letters dated May 16, 2006, and May 25, 2006, we previously provided comments on significant legal and policy issues related to this NRC rulemaking. This letter and the enclosures provide the balance of our comments.

Sincerely,

Adrian P. Heymer

Senior Director, New Plant Deployment

Nuclear Generation Division

Nuclear Energy Institute

(202) 739-8094

aph@nei.org

Enclosures

This electronic message transmission contains information from the Nuclear Energy Institute, Inc. The information is intended solely for the use of the addressee and its use by any other person is not authorized. If you are not the intended recipient, you have received this communication in error, and any review, use, disclosure, copying or distribution of the contents of this communication is strictly prohibited. If you have received this electronic transmission in error, please notify the sender immediately by telephone or by electronic mail and permanently delete the original message.

Mail Envelope Properties (447DB441.11B : 7 : 16667)

Subject: Resend of Industry Response to NRC Proposed Rule, "Licenses, Certifications and Approvals for Nuclear Power Plants," 71 Fed. Reg. 12,782 (Mar. 13, 2006)
Creation Date Wed, May 31, 2006 11:20 AM
From: "HEYMER, Adrian" <aph@nei.org>

Created By: aph@nei.org

Recipients
nrc.gov
TWGWPO02.HQGWDO01
SECY (SECY)

Post Office	**Route**
TWGWPO02.HQGWDO01	nrc.gov

Files	**Size**	**Date & Time**
MESSAGE	1589	Wednesday, May 31, 2006 11:20 AM
TEXT.htm	9665	
05-30-06_NRC_Industry Response to NRC Proposed Rule 71 Fed. Reg. 12,782.pdf	128823	
05-30-06_NRC_NOPR Comments Final Enclosures.pdf	531508	
05-30-06_NRC_Comment Enclosure 4.pdf	489044	
Mime.822	1588838	

Options

Expiration Date:	None
Priority:	Standard
ReplyRequested:	No
Return Notification:	None
Concealed Subject:	No
Security:	Standard

Junk Mail Handling Evaluation Results
Message is eligible for Junk Mail handling
This message was not classified as Junk Mail

Junk Mail settings when this message was delivered
Junk Mail handling disabled by User
Junk Mail handling disabled by Administrator
Junk List is not enabled
Junk Mail using personal address books is not enabled
Block List is not enabled

NUCLEAR ENERGY INSTITUTE

ENCLOSURE 4
(Ltrs. of 05/16/06 & 05/25/06)

Adrian P. Heymer
SENIOR DIRECTOR, NEW PLANT DEPLOYMENT
NUCLEAR GENERATION DIVISION

May 16, 2006

Annette L. Vietti-Cook
Secretary
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

ATTENTION: Rulemakings and Adjudications Staff

SUBJECT: *Federal Register* Notice 71 FR 12782, March 13, 2006, Notice of Proposed Rule for Licenses, Certifications and Approvals for Nuclear Power Plants

Dear Ms. Vietti-Cook:

The Nuclear Energy Institute (NEI)[1] is providing this early, partial response to the subject Notice of Proposed Rule (NOPR). These specific comments are related to the finality at the combined license (COL) stage of NRC environmental findings in a referenced early site permit. We are submitting these comments early because this is a key issue for prospective COL applicants and further senior industry-NRC management interaction may be necessary.

A fundamental principle of Part 52 is to provide for the early resolution of safety and environmental issues. NRC design certifications and early site permits (ESP) provide the regulatory vehicles for resolving issues associated with standard plant designs and site suitability. Part 52 provides that, in any COL proceeding, the Commission "shall treat as resolved" those issues resolved in an ESP proceeding provided the terms and conditions of the referenced ESP are met.

Specific language in proposed Sections 51.50(c)(1)(iii), 51.107(b)(3) and 52.39(a)(2)(v) of the March 13, 2006 NOPR is contrary to the ESP finality principle of Part 52. The

[1] NEI is the organization responsible for establishing unified nuclear industry policy on matters affecting the nuclear energy industry, including the regulatory aspects of generic operational and technical issues. NEI's members include all utilities licensed to operate commercial nuclear power plants in the United States, nuclear plant designers, major architect/engineering firms, fuel fabrication facilities, materials licensees, and other organizations and individuals involved in the nuclear energy industry.

1776 I STREET, NW SUITE 400 WASHINGTON, DC 20006-3708 PHONE 202.739.8094 FAX 202.785.1898 aph@nei.org

proposals would, if implemented, lead to unnecessary and inefficient reconsideration, re-review and possible re-litigation of issues that have been resolved in an ESP proceeding, and could deter future use of the ESP process.

The enclosure describes the bases for our concerns and includes recommended rule language designed to resolve those concerns and affirm the ESP finality principle in the regulations. Our comments and recommendations are consistent with the intent of Part 52, National Environmental Policy Act (NEPA) requirements and precedents, and implementation of NRC license renewal regulations. The key points discussed in the enclosure are:

- Issues resolved in an ESP should have finality in a COL or other future licensing proceeding, provided the terms and conditions of the ESP are met.

- Consistent with NRC regulations and practice for license renewal, persons seeking to reopen previously resolved environmental issues should be required to obtain a waiver of the ESP finality rules under Section 2.335(b) and (c).

- A COL application that references an ESP must contain information necessary to:
    - Demonstrate that the actual facility falls within the site characteristics and design parameters specified in the ESP,
    - Resolve other significant environmental issue not previously considered in the ESP application or the ESP Final Environmental Impact Statement (EIS)
    - Identify new and significant information that the COL applicant becomes aware of regarding issues discussed in either the ESP application or the ESP Final EIS

- The COL Application Environmental Report (COL ER) should not be required to identify all new information regarding previously considered issues. Consistent with the process and practices used successfully for license renewal, a COL applicant would only provide information on a previously considered environmental issue if it is both new <u>and</u> significant.

- The COL applicant is responsible for determining the significance of new information about the site or design. New and significant information would be included in the COL application ER, as appropriate. The process for identifying and evaluating the significance of new information, and the actual evaluations, would be maintained in an auditable format and would be available for NRC audit and inspection.

- Members of the public and agencies may submit comments on previously considered issues during the environmental scoping process or during the comment period on any draft supplemental EIS that the Staff may prepare. The NRC staff would consider all such comments, and if they present significant new information, would obtain a waiver from the Commission to allow reconsideration of the affected issue. This is consistent with license renewal proceedings.

- Consistent with NEPA regulations and case law, an ESP and a COL can and should be considered closely related "connected actions." There is no need or requirement to prepare a new EIS for the second of two connected actions, or revalidate previous findings if neither the applicant nor others identify significant new information. For COL applications that reference an ESP, the NRC should prepare a supplemental EIS that incorporates by reference the findings and conclusions of the ESP final EIS. This is consistent with proposed new Section 51.75(c)(1).

Resolution of these environmental finality issues is essential to affirm the Commission's fundamental objective that Part 52 provides for the early resolution of safety and environmental issues. Establishing clear requirements and guidance on the finality of ESP information and the content of COL applications is vitally important to assure focused, effective and efficient preparation and review of forthcoming COL applications.

We believe that further public interactions between industry and NRC technical and legal staffs may be needed on this issue. This would help assure that a common understanding is reached and appropriate language for the proposed rule is developed to support the October 2006 schedule.

If you have any questions about the industry's perspective on the finality for COL of ESP environmental information as discussed in this letter or the enclosure, please contact me (202) 739-8094; aph@nei.org or Russ Bell (202) 739-8087; rjb@nei.org).

Sincerely,

Adrian Heymer

Enclosure

c: The Honorable Nils J. Diaz, Chairman, NRC
The Honorable Edward McGaffigan, Jr. Commissioner, NRC
The Honorable Jeffrey S. Merrifield, Commissioner, NRC
The Honorable Peter B. Lyons, Commissioner, NRC
The Honorable Gregory B. Jaczko, Commissioner, NRC
Mr. Luis A. Reyes, Executive Director of Operations, NRC
Ms. Karen D. Cyr, General Counsel, NRC
Mr. James E. Dyer, NRC

Industry Comments on March 13, 2006, Part 52 Notice of Proposed Rulemaking: Proposed Amendments that Would Expand the Scope of the COL Environmental Review and Negate the Finality of Previously Determined ESP Environmental Issues Should Be Modified

Proposed Rule Provisions

Proposed Section 51.50 (environmental report)

Proposed Section 51.50(c)(1)(iii) would add a new provision requiring a COL application referencing an early site permit to include in the Environmental Report, in addition to the environmental information and analyses otherwise required, "any new and significant information on the site or design to the extent that it differs from, or is in addition to, that discussed in the early site permit environmental impact statement." 71 Fed. Reg. 12,782, 12,881.[1]

Proposed Section 52.39 (finality of early site permits)

Proposed Section 52.39(a)(2) specifies that if a COL application references an ESP, "the Commission shall treat as resolved those matters resolved in the proceeding on the application for issuance or renewal of the early site permit, except as provided for in paragraphs (b),(c) and (d) of this section." 71 Fed. Reg. at 12,893. Thus, the subject matter covered in proposed Section 52.39(b), (c), and (d) will not be treated as resolved, and may be the subject of litigation in the COL application hearing.

Of particular interest to this discussion is proposed Section 52.39(c)(1), paragraph (v), which provides that in any proceeding for issuance of a COL referencing an ESP, contentions may be litigated on whether:

> "(v) Any significant environmental issue not covered which is material to the site or the design to the extent that it differs from those discussed or it reflects significant new information in addition to that discussed in the final environmental impact statement."

71 Fed. Reg. at 12,893.[2] A similar provision is included in proposed Section 51.107(b)(3). See 71 Fed. Reg. at 12,885. Thus, in a COL proceeding where

---

[1] NEI will separately comment on other provisions added to proposed 10 CFR 51.50(c)(1) requiring COL applicants to "have a reasonable process for identifying new and significant information" regarding the NRC's conclusions in the ESP EIS.

[2] NEI will separately comment on Section 52.39(c)(1)(iv) regarding lack of consistency with Section 52.39(a)(2) regarding emergency planning information updated for COL in accordance with Section 50.54(q).

an ESP is referenced, these issues would not be treated as previously resolved.

Additionally, the proposed rule would delete current provisions in 10 C.F.R. §§ 52.79(a)(1), and 52.89 that afford finality to previously resolved environmental issues.[3]

Comments on Proposed Rule Provisions

Overview

The NRC should not eliminate the concept of finality embodied in Sections 52.39(a)(2), 52.79(a)(1), and 52.89 with respect to previously resolved environmental issues.[4] Additionally, NRC should not promulgate proposed Sections 52.39(c)(1)(v) and 51.107(b)(3) as written, which would allow litigation in COL proceedings of environmental issues previously resolved in an ESP proceeding. Rather, NRC should modify these proposed Sections to require that persons seeking to reopen previously resolved environmental issues must petition the Commission for a waiver of the finality rules. The Commission should grant such waivers only if information arising after the ESP proceeding shows that granting the COL would have a significantly greater impact on the environment than what was described in the ESP EIS.

The Commission should also direct the NRC Staff that it is not necessary for the Staff to examine or revalidate previously resolved environmental issues, or perform an independent search for new information. Rather, the EIS at the COL stage should incorporate by reference the ESP EIS.

In this regard, NRC should clarify that Section 51.20(b) allows preparation of either an EIS or an EIS supplement for both an ESP application and a COL application. The proposed amendments to Sections 51.20(b)(1)-(2) do not change this flexibility (see 71 Fed. Reg. at 12,878), and proposed amended Section 51.75(c)(1) clearly supports use of an EIS supplement for the COL application. Industry's position is also supported by the fact that an early site permit and a combined operating license should be considered "connected actions" under National Environmental Policy Act (NEPA) case law and Council on Environmental Quality (CEQ) regulations.

---

[3] *See* 71 Fed. Reg. at 12,898 (deleting current § 52.79(a)(1)); *id.* at 12,902 (deleting current § 52.89); *id.* at 12,893 (amending §§52.39(a)(2) and 52.39(c)).

[4] Sections 52.39(a)(2), 52.79(a)(1), and 52.89 have been restructured or eliminated in the proposed rule. At the end of this paper, recommended rule language is provided for the restructured provisions that preserves the concept of finality embodied by the existing regulations.

The NRC should revise proposed Section 51.50(c)(1)(iii) to emphasize that COL applicants must include in their Environmental Reports (ERs) only that information which is both new and significant – not merely new. NRC should revise proposed Section 52.39(c)(1)(v) in several respects, to provide that in COL proceedings, contentions may only be litigated on *significant* environmental issues material to the site or the design that were not previously considered in the ESP proceeding. Further, NRC should define the scope of information to be considered "new" at the COL stage (when an ESP is referenced) more narrowly than is suggested by the language in proposed Sections 51.50(c)(1) and 52.39(c). NRC should also clarify the meaning of "new and significant" information consistent with license renewal precedent and the Supplementary Information for this proposed rule.

Recommended rule language for addressing these concerns is provided at the end of this paper.

The Proposed Amendments Undercut the Rulemaking Goal of Achieving Finality for Previously Resolved ESP Issues

The NRC asserts that 10 CFR Part 52 "does provide finality for previously resolved issues." 71 Fed. Reg. at 12,826. However, the finality afforded by the ESP process would be significantly eroded by the proposed new requirements in Sections 51.50 and 52.39.

We are concerned that proposed Section 52.39(c)(1)(v), if adopted, could be interpreted to mean that any information that allegedly "differs from" or is "in addition to" that discussed in the final ESP EIS is new and significant information that is subject to review and hearing in the COL proceeding.[5] The effect of such an interpretation would be to unnecessarily expand the environmental review at the COL stage and negate the finality afforded to environmental issues that were previously resolved – eliminating one of the primary benefits of an ESP. Only information that is new and significant with respect to the environmental impacts considered in the ESP EIS – and not information that merely differs from or is in addition to that discussed in the ESP EIS – is appropriate to include in the COL application (COLA) ER. The effect of the staff proposals would be to eliminate the concept of finality embodied in Sections 52.39(a)(2), 52.79(a)(1), and 52.89 with respect to previously resolved environmental issues.

[5] The Supplementary Information appears to support this concern, stating that environmental issues analyzed at the ESP stage would be only "candidates" for issue preclusion at the COL stage (71 Fed. Reg. at 12,826).

In the industry's view, these proposed changes and deletions should not be reflected in the final rule. They will not achieve the Commission's stated goal in this rulemaking of enhancing the agency's effectiveness and efficiency in licensing new plants. Rather, they would undermine the fundamental objective and benefit of an ESP. They are not required by NEPA. Further, they are not consistent with the stated goals of the existing Part 52 rule, which include fostering "early resolution of safety and environmental issues in licensing proceedings." *See, e.g.,* 54 Fed. Reg. 15,372, 15,373 (1989). Consistent with this NRC objective, existing Section 52.39 provides that in making findings necessary for the issuance of a COL (which includes any findings required by NEPA), the Commission shall "treat as resolved" (with limited exceptions) those matters resolved in a proceeding on the ESP application. 10 C.F.R. § 52.39(a)(2).[6] Thus, the current rules avoid reconsideration of environmental issues in a COL application when those issues have previously been assessed and resolved in an ESP proceeding. This important regulatory objective must be preserved.

If these proposed amendments are promulgated as proposed, they may well deter submittal of any future ESP applications. Rather than proceeding with these changes, the Commission should modify the final rule to reflect that persons seeking to reopen previously resolved environmental issues in a COL proceeding must petition the Commission for a waiver of the finality rules (currently, 10 CFR §§ 52.39(a)(2), 52.79(a)(1), and 52.89). This is consistent with license renewal. As discussed below, the Commission should also clarify other proposed new provisions which, as drafted, are either confusing as written or appear to conflict with recent statements made by NRC Staff representatives at NRC public meetings and workshops related to proposed Part 52.

NRC May Prepare an EIS Supplement at the COL Stage Because ESPs and COLs May Be Viewed as "Connected Actions" under NEPA

The changes proposed by the NRC Staff are not required by NEPA. In discussing the proposed changes to Section 51.50, the NRC cites "the NRC staff's belief that, inasmuch as an early site permit and a combined license are major Federal actions significantly affecting the quality of the human

[6] Under existing 52.39(a)(2), the Commission "shall treat as resolved those matters resolved" in the ESP proceeding, unless a contention is admitted that a reactor does not fit within an ESP site parameter or a petition is filed alleging either that the site is not in compliance with the ESP terms or that the terms and conditions of the ESP should be modified.

environment, both actions require the preparation of an EIS."[7] It references NRC regulations and unspecified NEPA case law as supporting this position. 71 Fed. Reg. at 12,826. We submit that because an ESP and a COL are "connected actions," under NEPA case law[8] and Council on Environmental Quality (CEQ) regulations, they may appropriately be addressed by the NRC in a single environmental impact statement. In addition, this language in the Supplemental Information is inconsistent with the language in Sections 51.71(d) and 51.75(c)(1) of the proposed rule itself, which properly states that only a supplemental EIS is needed at the COL stage when an ESP is referenced.

CEQ regulations define "connected actions" as actions that "are closely related and therefore should be discussed in the same impact statement." 40 C.F.R. § 1508.25(a)(1). Since an ESP is a partial construction permit (CP) and resolves whether a site is suitable for construction and operation of new units, it is "closely related" to a COL.

Further, CEQ regulations provide that actions are "connected" if they are "interdependent parts of a larger action and depend on the larger action for their justification." 40 C.F.R. § 1508.25(a)(1)(iii). This is the case here. If a COL is a partial CP, it is an initial step in a larger action and is undertaken only to further decisions and actions on whether new nuclear units should be built and operated. The ESP, by itself, cannot have a significant impact on the environment unless it is used in connection with another activity, such as a COL.

Under applicable case law, there is no requirement to prepare a new EIS for the latter of two connected actions that were previously evaluated together in a single EIS. Thus, the EIS prepared at ESP stage serves as the EIS for issuance of both the ESP and COL. The ESP EIS includes an evaluation of

---

[7] The rulemaking notice can be read to suggest that NRC intends to prepare a COL EIS that will review every environmental issue to determine whether prior findings should be changed as a result of new and significant information or may be incorporated by reference. *See* 71 Fed. Reg. at 12,626 ('the combined license environmental review *is informed* by the EIS prepared at the early site permit stage, and the NRC staff intends to use tiering and incorporation-by-reference *where it is appropriate to do so.*"). *See also id.* ("the NRC is ultimately responsible for completing any required NEPA review, for example, *to ensure that the conclusions for a resolved early site permit environmental issue remain valid for a combined license action.*") (emphasis added).

[8] *E.g., Village of Grand View v. Skinner*, 947 F.2d 651, 656-57 (2d Cir. 1991).

the environmental impacts related to issuance of a COL inasmuch as it considers the environmental impact of plant construction and operation, the activities permitted by the COL. Existing Part 52 regulations properly recognize that a COL application "need not contain information or analyses submitted to the Commission in connection with the ESP." See 10 CFR 52.79(a)(1). It follows that the EIS prepared for ESP – which assesses the environmental impacts of plant construction and operation – does not have to be duplicated. The proposal in the Supplemental Information to treat a COL as a separate action requiring its own independent EIS is thus a significant and unjustified departure from NEPA requirements and case law and is inconsistent with existing NRC rules and the language in the proposed rule itself.

Use of EIS Supplements

While a COL should not be considered an independent action requiring a separate EIS, there may be a need at the COL stage to prepare a supplement to the EIS. In correspondence with NEI, the NRC stated that, "inasmuch as an ESP and a COL are major federal actions," an environmental assessment is not a sufficient environmental inquiry on which to base an action on an ESP or a COL application, and, accordingly, "pursuant to 10 CFR 51.20, both actions require the preparation of an environmental impact statement (EIS)."[9] On this point, we read existing 10 CFR 51.20 as allowing the preparation of either an EIS or an EIS supplement. We ask the NRC to confirm in the final rule this reading of Section 51.20. In particular, we request that the NRC retain the language in Sections 51.71(d) and 51.75(c)(1) of the proposed rule, which states that no more than a supplemental EIS is needed at the COL stage when an ESP is referenced.

A supplement to the EIS would be required if there are significant environmental issues not considered in the ESP proceeding (such as deferred issues like need for power and alternative energy sources), and may be required if the design of the facility exceeds the bounds analyzed in the ESP EIS. Existing NRC rules already require consideration of such issues. 10 C.F.R. § 52.89. An EIS supplement would also be required under NEPA if "new information [regarding the action] shows that the remaining action will affect the quality of the environment 'in a significant manner or to a

[9] *See* July 6, 2005, letter from W. Beckner, NRR, to A. Heymer, NEI, p.1. As previously discussed, the EIS prepared at the ESP stage serves as the EIS for issuance of both the ESP and COL, and thus satisfies Section 51.20 at both stages. Consequently, at the COL stage, an environmental assessment could be used to determine whether there is any need for supplementation.

significant extent not already considered.'"[10] In this regard, we support the proposed new Section 51.75(c)(1), to the extent it provides that for COL applications that reference ESPs, the draft supplemental COL EIS "shall incorporate by reference" the ESP final EIS. 71 Fed. Reg. at 12,884.

Waiver of Finality Provisions as Prerequisite to Reconsideration of Previously Analyzed Impacts

There may be instances when the applicant, the NRC Staff, or a member of the public identifies new information that they believe alters the evaluation of an environmental issue addressed in the ESP EIS. If this new information does not relate to a design feature exceeding the parameters specified in the ESP, then a waiver of the finality rules (currently, Sections 52.39(a)(2), 52.79(a)(1), and 52.89) should be obtained from the Commission in order to allow reconsideration of the previously analyzed impact. Consistent with federal case law on when an agency must prepare a supplement to an EIS, the Commission should grant the waiver only if the new information presents a "seriously different picture of the environmental impact" of granting a COL than what was previously envisioned.[11] By this means, the NRC's interests in preserving finality and in supplementing environmental review when appropriate would be carefully balanced.

---

[10] *Nat'l Comm. for the New River, Inc. v. FERC*, 373 F.3d 1323, 1330 (D.C. Cir. 2004) (quoting *Marsh v. Or.Natural Res. Council*, 490 U.S. 360, 374 (1989)); *see* 10 C.F.R. § 51.92(a). The Courts of Appeals have held that "a supplemental EIS is only required where new information provides a seriously different picture of the environmental landscape." *New River*, 373 F.3d at 1330. (emphasis in original, internal quotations omitted) (quoting *City of Olmsted Falls v. FAA*, 292 F.3d 261, 274 (D.C. Cir. 2002)). *See also Sierra Club v. U.S. Army Corps of Eng'rs*, 295 F.3d 1209, 1215-16 (11th Cir. 2002) (significant impact not previously covered); *S. Trenton Residents Against 29 v. FHA*, 176 F.3d 658, 663 (3d Cir. 1999) ("seriously different picture of the environmental impact"); *Hughes River Watershed Conservancy v. Glickman*, 81 F.3d 437, 443 (4th Cir. 1996) (same); *Sierra Club v. Froehlke*, 816 F.2d 205, 210 (5th Cir. 1987) (same). "To require otherwise would render agency decisionmaking intractable, always awaiting updated information only to find the new information outdated by the time a decision is made." *Marsh*, 490 U.S. at 373 (footnote omitted).

[11] *See, e.g., S. Trenton Residents*, 176 F.3d at 663; *New River*, 373 F.3d at 1330.

The Commission's consideration of the new information in the course of evaluating a waiver request would be consistent with federal case law that allows agencies to employ non-NEPA documentation (i.e., documentation aside from an EA or supplemental EIS and not subject to NEPA public participation requirements) to determine whether alleged new impacts are significant enough to require the preparation of supplemental NEPA documentation and explain why not.[12] If the Commission were to deny the waiver request, it would be appropriate for the Commission to explain why the new information did not require a supplement to the ESP EIS, but public participation would not be required.[13] "Although NEPA requires agencies to allow the public to participate in the preparation of an SEIS, there is no such requirement for the decision whether to prepare an SEIS."[14]

Significantly, requiring a waiver would also be consistent with the approach that the NRC has followed in license renewal proceedings, where the NRC Staff (or an intervenor) is required to apply to the Commission for a waiver before any Category 1 issue (i.e., any issue previously resolved generically)

---

[12] *See, e.g., Pennaco Energy, Inc. v. DOI*, 377 F.3d 1147, 1151 (10th Cir. 2004) (agency may use supplemental information report). *See also Highway J Citizens Group v. Mineta*, 349 F.3d 938, 959-60 (7th Cir. 2003), *cert. denied*, 541 U.S. 974 (2004) (agency-requested expert analysis); *Hodges v. Abraham*, 300 F.3d 442, 446, 448 (4th Cir. 2002) (agency record of decision based on review of previous NEPA documents); *Idaho Sporting Congress v. Alexander*, 222 F.3d 562, 566 (9th Cir. 2000) (agency supplemental information report); *Price Rd. Neighborhood Ass'n v. DOT*, 113 F.3d 1505, 1509-10 (9th Cir. 1997) (assessments by other agencies or agency's own "statement of explanation"); *Marsh*, 490 U.S. at 383-85 (agency supplemental report based on agency-requested expert analysis).

[13] Of course, if the NRC were to determine that an SEIS was required to re-evaluate environmental issues previously considered in the ESP EIS, NEPA's public participation requirements would apply to the preparation of the SEIS. *See Idaho Sporting Congress*, 222 F.3d at 566-68.

[14] *Friends of the Clearwater v. Dombeck*, 222 F.3d 552, 560 (9th Cir. 2000) (emphasis in original). Indeed, the federal courts have stated that were public participation required on the decision whether to prepare a supplemental EIS, that threshold decision "would become as burdensome as preparing the supplemental EIS itself, and the continuing duty to gather and evaluate new information . . . could prolong NEPA review beyond reasonable limits." *Id.*, 222 F.3d at 560 (citation omitted).

can be reconsidered, based on significant and new information. See SECY-93-032 at 3-4; 61 Fed. Reg. 28,467, 28,470 (1996). This approach would allow supplementation of the ESP EIS where appropriate, while maintaining the preclusive effect of the Part 52 regulations. In the Supplementary Information in the rulemaking notice, the NRC recognizes the applicability of the license renewal environmental review process to the review of COL applications referencing ESPs (71 Fed. Reg. at 12,826), and we agree that the NRC's license renewal approach is fully applicable here.

While the environmental issues in a license renewal proceeding are resolved generically by rule, the permissibility of such an approach is predicated on the fact that NEPA does not require an agency to adopt any particular internal decision-making structure.[15] NEPA does not require agencies to elevate environmental concerns over other appropriate considerations, but rather only requires that the agency take a "hard look" at the environmental consequences before taking a major action.[16] Thus, the NRC can determine an appropriate method of conducting the hard look required by NEPA, and can adopt an approach that takes into account administrative efficiency in avoiding needless repetition of litigation.[17]

In Part 52, the NRC has chosen an appropriate method of taking the hard look required by NEPA. It allows environmental impacts to be determined at an early stage in an ESP proceeding, based on a site-specific EIS prepared with full public participation, and then applies finality to the issues so resolved to allow a potential applicant to determine that its proposed site is suitable before expending large sums for plant design and licensing. If an agency has the discretion to treat as resolved impacts determined generically by rule, it also has discretion to treat as resolved impacts determined after a full site specific investigation and proceeding. In both cases, the waiver mechanism is an appropriate procedural safeguard allowing supplementation when demonstrated to be necessary.

Moreover, if a waiver were required, previously resolved environmental issues could not be reopened simply based on allegations and artful pleadings in a hearing request. In accordance with the NRC's Rules of Practice, the Commission would be able to grant a waiver request only if it were supported by an affidavit establishing the special circumstances with particularity and

---

[15] *Baltimore Gas & Electric Co. v. NRDC*, 462 U.S. 87, 100-101 (1983).

[16] *Baltimore Gas & Electric Co, id.* at 97.

[17] *Id.* at 101.

making a prima facie showing that the rule should be waived. 10 C.F.R. § 2.335(b),(c). These procedural safeguards are needed and appropriate to preserve the current rule's objective of allowing early resolution of environmental issues.

Need to Clarify the Scope of "New and Significant" Information at the COL Stage when an ESP Is Referenced

In its July 6, 2005, letter to NEI (p. 2), the NRC proposed to categorize as "new" in the context of "new and significant" *any information that was not contained or referenced in the ESP application or the ESP EIS.* NRC noted that: "[t]his new information may include (but is not limited to) specific design information that was not contained in the application, especially where the design interacts with the environment, or information that was in the ESP application, but has changed by the time of the COL application. Such information may or may not be significant." Similarly, the Supplementary Information for the proposed rule provides (71 Fed. Reg. at 12,826) that for COL applications referencing ESPs, "new" information is "any information that was not contained or referenced in the *early site permit application or the early site permit EIS.*" (emphasis added).

In apparent contrast, the text of proposed section 51.50(c)(1)(iii) requires COL applications to include, *inter alia*, "any new and significant information on the site or design to the extent that it differs from, or is in addition to, that discussed in the early site permit environmental impact statement." *See* 71 Fed. Reg. at 12,881. Here, the concept of what is "new" is tied only to what information was in the ESP EIS.[18] The same is true of the language of proposed Sections 51.107(b)(3) and 52.39(c)(1)(v).

The new definition will result in unnecessary and duplicative work for COL applicants and the NRC Staff, and will introduce inefficiencies into the licensing and hearing process. Also, the broader definition increases the potential for unnecessarily expanding any associated hearing. Moreover, adoption of this broader definition of "new" severely undermines the intended

[18] Proposed § 51.50(c)(1)(3) is very similar to the existing 10 C.F.R § 51.53(b), which governs the scope of environmental review in Part 50 OL proceedings. Under § 51.53, the ER for an OL is required to address environmental matters "to the extent that they differ from those discussed or reflect new information in addition to that discussed in the final environmental impact statement prepared by the Commission in connection with the construction permit." The old two-step licensing process allowed reconsideration and litigation of environmental matters that had been addressed at the CP stage. The proposed rule should not revert to this ineffective standard.

value and benefit of an ESP. Arguably, a party to a COL proceeding could litigate whether the conclusions in the EIS would be changed by any information – any study, any report, any opinion, or any alleged facts – not explicitly discussed in the EIS, as long as that party met the pleading requirements of basis and reasonable specificity, and even if the information was addressed for ESP (but not documented in the EIS). We believe this standard is unduly broad, and that NRC has not justified the change.

At a minimum, no information should be deemed "new" if it was considered in preparing the Environmental Report or EIS (as may be evidenced by references in these documents, RAI responses, comment letters, and the like), or if it was generally known or publicly available (such as information in reports, studies and treatises) during preparation of the EIS. Consistent with these concerns, the Part 52 final rule (including proposed Sections 51.50(c)(1), as well as 51.107(b)(3) and 52.39(c)(1)(v) if the reference to new and significant information is retained in those sections) and Supplementary Information should be amended to reflect a more appropriate definition of "new" information.

When considering the meaning of "new" and "new and significant" with respect to matters previously considered for ESP, it is important to remember that proposed Section 51.50(c)(1)(ii) requires that COL applications contain information to resolve any other significant environmental issue not considered in the ESP proceeding.

The NRC should also clarify that proposed section 51.50(c)(1)(iii), as well as any other sections that refer to new and significant information, is intended to capture environmental information that is both new <u>and</u> significant – not merely new. We understand that the ER submitted with a COL application that references an ESP must identify any new and significant information regarding the environmental impacts discussed in the ESP EIS. This understanding is based on the Supplementary Information discussion (including the analogy to the NRC's license renewal process (*see* 71 Fed. Reg. at 12,826-27) and the NRC's July 6, 2005, letter to NEI.

However, and as discussed earlier, we believe the current wording of proposed §§ 51.50(c)(1)(iii) (as well as 51.107(b)(3) and 52.39(c)(1)(v)) is confusing in this regard, because it could be interpreted to mean that information that "differs from" or is "in addition to" that discussed in the final ESP EIS is new and significant information subject to review and hearing in the COL proceeding. These sections should be clarified in the final rule.

The importance of this clarification has been heightened by the NRC Staff's recent suggestion[19] that COL applicants, unlike license renewal applicants, are expected to identify all new environmental information that was not provided with the ESP application, regardless of significance. This would include, for example, new environmental data and or studies (e.g., meteorological, hydrological, aquatic, etc.) on issues that were addressed in the ESP EIS. Moreover, the Staff stated that specific design information concerning systems that interface with the environment must be provided in the COL application for NRC review, even though the environmental impacts of these systems were assessed in the ESP EIS based on design information intended to bound the actual future design from an environmental perspective.

Whether in the case of new environmental information or more specific design information, a COL applicant should not be expected to include new information in its ER unless the applicant determines it to be significant with respect to the environmental impacts discussed in the ESP EIS. An auditable record of these evaluations will be maintained by the COL applicant.[20]

We expect that regulatory guidance, such as DG-1145, will indicate that new information should be considered significant and described in the COLA ER if the COL applicant determines that the new information would cause an adverse change in the previously concluded environmental impact from "small" to "moderate" or from "moderate" to "large." This is consistent with NRC's existing practice for license renewal.

In sum, the NRC should clarify that under proposed section 51.50(c)(1)(iii), information on previously considered issues would be included a COL applicant's environmental report only if it is both new and significant. This information would be used by the staff to determine whether to seek from the Commission a waiver of the finality rules. The Commission should make it

---

[19] Reference NRC staff statements at an April 21, 2006, public workshop concerning expectations for the content of a COL application

[20] For example, specific design information on environment interfacing systems would not be provided in the COLA ER unless the actual design differs from the bounding design information used for ESP in a way that would adversely affect the environmental impacts discussed in the ESP FEIS. COL application ERs will contain the required demonstration that the actual facility falls within the site characteristics and design parameters specified in the ESP. Specific design information about environment interfacing systems will be maintained available for NRC audit/inspection as it is developed by the COL applicant.

clear that proposed section 51.50(c)(1)(iii) is not intended to require a COL applicant to update the environmental report prepared as the ESP stage.

Conclusion

The Commission should protect the finality of issues resolved at the ESP stage, so that the benefits of an ESP are preserved. For this reason, the proposed sections 51.107(b)(3) and 52.39(c)(1)(v) should be modified to make clear that to avoid preclusion at the COL stage, a contention must (in addition to meeting NRC admissibility standards) involve a significant environmental issue material to the site or the design that was not previously considered in the ESP proceeding. A waiver of ESP finality provisions should be required to raise an issue previously evaluated in the ESP EIS. It is appropriate to require a COL applicant to identify information that is both new and significant, so that the NRC staff can determine whether to seek such a waiver, but a broad update to the previous environmental review is unwarranted.

Recommended Rule Language

§ 52.39 Finality of early site permit determinations.
(a)(2) In making the findings required for issuance of a construction permit, operating license, or combined license, or the findings required by § 52.103, if the application for the construction permit, operating license, or combined license references an early site permit, the Commission shall treat as resolved those matters resolved in the proceeding on the application for issuance or renewal of the early site permit, except as provided for in paragraphs (b), (c) and (d) of this section. . . .

(c) The following issues may be raised in any proceeding for the issuance of a construction permit, operating license, or combined license referencing an early site permit:

.....

(v) Any significant environmental issue material to the site or the design which was not previously considered in the early site permit application or the final environmental impact statement prepared by the Commission in connection with the early site permit. Environmental issues evaluated in the final environmental impact statement prepared by the Commission in connection with an early site permit may only be raised in a proceeding for the issuance of a construction permit, operating license, or combined license referencing the early site permit upon waiver of this rule in accordance with 10 CFR 2.335 based upon a prima facie showing that significant new information materially alters previous conclusions.

. . .

§ 52.80 Contents of applications; additional technical information.
The application must contain:

.....

(c) An environmental report to the extent required by 10 CFR 51.50(c).

Classification of Licensing and Regulatory Action
§ 51.20 Criteria for and identification of licensing and regulatory actions requiring environmental impact statements.

. . .

(b) The following types of actions require an environmental impact statement or a supplement to an environmental impact statement:

. . .

(2) Issuance or renewal of a full power or design capacity license to operate a nuclear power reactor, testing facility, or fuel reprocessing plant under part 50 of this chapter, or a combined license under part 52 of this chapter if there are significant environmental issues not previously evaluated.

Environmental Reports--Production and Utilization Facilities

§ 51.50 Environmental report—construction permit, early site permit, or combined license stage.

. . .

(c) Combined license stage. Each applicant for a combined license shall submit with its application a separate document, entitled "Applicant's Environmental Report–Combined License Stage."

(1) Application not referencing an early site permit. If the combined license application does not reference an early site permit, the environmental report shall contain the information specified in §§ 51.45, 51.51 and 51.52; for other than light-water-cooled nuclear power reactors, the environmental report shall contain the basis for evaluating the contribution of the environmental effects of fuel cycle activities for the nuclear power reactor. Each environmental report shall identify procedures for reporting and keeping records of environmental data, and any conditions and monitoring requirements for protecting the non-aquatic environment, proposed for possible inclusion in the license as environmental conditions in accordance with § 50.36b of this chapter. The combined license environmental report may reference information contained in a final environmental document previously prepared by the NRC staff.

(2) Application referencing an early site permit. If the combined license application references an early site permit, then the "Applicant's Environmental Report–Combined License Stage" need not contain information or analyses submitted to the Commission in "Applicant's Environmental Report–Early Site Permit Stage," but must contain:

.....

(i) ...
(ii) ...
(iii) Any new and significant information regarding the environmental impacts discussed in the ESP application or EIS of which the applicant is aware.

§ 51.71 Draft environmental impact statement--contents.

. . .

(d) *Analysis*. Unless excepted in this paragraph, the draft environmental impact statement will include a preliminary analysis that considers and weighs the environmental effects of the proposed action; the environmental impacts of alternatives to the proposed action; and alternatives available for reducing or avoiding adverse environmental effects and consideration of the economic, technical, and other benefits and costs of the proposed action and alternatives and indicate what other interests and considerations of Federal policy, including factors not related to environmental quality if applicable,

are relevant to the consideration of environmental effects of the proposed action identified under paragraph (a) of this section. The draft environmental impact statement prepared at the early site permit stage must focus on the environmental effects of construction and operation of a reactor, or reactors, which have characteristics that fall within the postulated site parameters, and will not include an assessment of the benefits (for example, need for power) of the proposed action or an evaluation of other alternative energy sources unless considered by the applicant, but must include an evaluation of alternative sites to determine whether there is any alternative to the site proposed. Absent a waiver granted pursuant to 10 CFR 2.335 based on significant new information, any draft supplemental environmental impact statement prepared at the combined license stage when an early site permit is referenced need not discuss issues that were resolved in the final environmental impact statement prepared by the Commission in connection with the early site permit, provided that the design of the facility falls within the design parameters specified in the early site permit and the site falls within the site characteristics specified within the early site permit. . . .

Draft Environmental Impact Statements--Production and Utilization Facilities
§ 51.75 Draft environmental impact statement–construction permit, early site permit, or combined license.

. . .

(c) (1) Combined license application referencing an early site permit. If the combined license application references an early site permit and the site and design of the facility falls within the site characteristics and design parameters specified in the early site permit, then any draft supplemental combined license environmental impact statement shall incorporate by reference the early site permit final environmental impact statement, need not discuss previously resolved issues.

. . .

§ 51.107 Public hearings in proceedings for issuance of combined licenses.

. . .

(b) If the combined license application references an early site permit, then the presiding officer in a combined license hearing shall not admit contentions proffered by any party on environmental issues which have been accorded finality under § 52.39 of this chapter, unless this contention- -

(1) Demonstrates that the design of the facility falls outside the design parameters specified in the early site permit;

(2) Demonstrates that the site no longer falls within the site characteristics specified in the early site permit;

(3) Raises a significant environmental issue material to the site or the design which was not previously considered or referenced in the early site permit application or final environmental impact statement prepared by the Commission in connection with the early site permit; or

(4) Raises any other material environmental issue the finality of which has been waived by the Commission in accordance with 10 CFR 2.335 based on significant new information.

NUCLEAR ENERGY INSTITUTE

Adrian P. Heymer
SENIOR DIRECTOR, NEW PLANT DEPLOYMENT
NUCLEAR GENERATION DIVISION

May 25, 2006

Annette L. Vietti-Cook
Secretary
U.S. Nuclear Regulatory Commission
Mail Stop 0-16C1
Washington, DC 20555-0001

ATTN: Rulemaking and Adjudications Staff

SUBJECT: Licensing and Hearing Process Issues relating to NRC Proposed Rule, "Licenses, Certifications and Approvals for Nuclear Power Plants," 71 Fed. Reg. 12,782 (Mar. 13, 2006) (RIN 3150-AG24)

Dear Ms. Vietti-Cook:

The Nuclear Energy Institute (NEI)[1] is pleased to submit the enclosed partial comments on certain aspects of the above-captioned Nuclear Regulatory Commission (NRC) rulemaking. These comments relate to the NRC licensing and hearing processes, as those processes will be applied to combined operating license (COL) applications, early site permit (ESP) applications, and design certification (DC) applications.

10 CFR Part 52 originally was promulgated to improve the effectiveness, predictability and timeliness of the licensing process for new nuclear power plants. Over the course of the last several years, both the industry and the NRC staff have more specifically focused on issues relating to the combined license. Both the industry and NRC staff have identified additional enhancements to the licensing process that will further improve its predictability and timeliness. We believe that implementing the proposals contained herein will not only streamline the licensing process but also continue to assure that sufficient time and effort are devoted to licensing reviews and that the public is afforded an adequate opportunity to participate in NRC hearings on new plant construction and operation.

---

[1] The Nuclear Energy Institute ("NEI") is the organization responsible for establishing unified industry policy on matters affecting the nuclear energy industry, including the regulatory aspects of generic operational and technical issues. NEI's members include all entities licensed to operate commercial nuclear power plants in the United States, nuclear plant designers, major architect/engineering firms, fuel fabrication facilities, nuclear materials licensees, and other organizations and individuals involved in the nuclear energy industry.

1776 I STREET, NW SUITE 400 WASHINGTON, DC 20006-3708 PHONE 202.739.8094 FAX 202.533.0147 aph@nei.org

The Part 52 rulemaking currently underway provides a valuable opportunity for the Commission proactively to promulgate measures to accelerate its licensing review and hearing processes for future ESP, DC and COL applications. It also provides an opportunity to ensure greater regulatory predictability and stability. We believe that these additional proposals are necessary and that many of them can be accomplished as part of this rulemaking.

The industry's proposals address various aspects of the NRC's licensing and hearing process. They build on, and in some cases recommend codifying, the current NRC process for standardized reference-plant interactions and submittals. We believe that adopting the changes described in the enclosed comments will advance the agency's ability to achieve the objectives of the Part 52 rulemaking.

Beginning at the application stage, we recommend that NRC regulations explicitly provide for the submittal of phased applications and standardized application sections. Phased submittals and corresponding phased NRC review of COL applications, for example, would facilitate completion of the review of potentially extensive portions of the license applications at an earlier date. This in turn would accelerate the overall license review schedule and would permit earlier commencement of hearings.

Moving to the license application review phase, we are proposing steps to facilitate the timely completion of licensing milestones for new plant applications by the NRC staff. In this regard, the Commission should direct the NRC staff to docket applications more quickly and to complete key licensing documents (SER, EIS) by a certain deadline, or explain why it cannot do so. Also, these measures, if undertaken, will facilitate the earlier initiation (and, therefore, completion) of licensing hearings, because initiation of hearings is linked to the availability of the licensing documents.

In addition, we recommend that the Commission implement measures to streamline and simplify the mandatory licensing hearings for COL applications. For example, the NRC could shorten the "milestone schedule" in 10 CFR Part 2 and thereby reduce the overall hearing schedules for ESP and COL applications. In this regard the agency could direct that hearings be initiated earlier and that Licensing Board decisions be more promptly issued after the close of the hearing. Further, the NRC should make immediately effective Licensing Board decisions authorizing issuance of an ESP or a COL.

The industry also recommends that the NRC specify the use of legislative hearings for the Section 52.103 hearing. This policy decision clearly would be consistent with the Atomic Energy Act of 1954, as amended, and the Administrative Procedure Act (APA). Further, we recommend that NRC utilize APA Section 554(a)(3) to exempt *certain* ITAAC from any Section 52.103 hearing when the question of whether a

new facility complies with an ITAAC can be decided on the basis of satisfying objective acceptance criteria that solely involve inspections or test results.

Many of the industry's recommendations can be made as part of the ongoing Part 52 rulemaking. However, to the extent the NRC determines that any of these proposals raise re-notice questions under the APA, we urge the Commission to initiate an expedited rulemaking so as to ensure that any new rulemaking associated with new plant licensing is completed prior to the submittal of the first COL applications. This would greatly advance the industry's and the agency's common objectives to put into place as soon as possible a more efficient, less time-consuming licensing and hearing process.

NEI is submitting these partial comments on the Part 52 rulemaking separately because they address significant legal, licensing and policy matters that will likely require further industry-NRC interactions. We request that NRC consider the industry's recommendations as the agency revises Part 52 and related rules. As NRC senior management and Commission involvement on these issues is likely to be warranted, the industry stands ready to support any such meetings or other interactions.

If you have any questions about the industry's perspective on the licensing and hearing issues discussed in this letter or the enclosure, please contact me at (202) 739-8094; aph@nei.org or Anne Cottingham (202) 739-8139; awc@nei.org.

Sincerely,

Adrian Heymer

Enclosure

c: The Honorable Nils J. Diaz, Chairman, NRC
The Honorable Edward McGaffigan, Jr., Commissioner, NRC
The Honorable Jeffrey S. Merrifield, Commissioner, NRC
The Honorable Peter B. Lyons, Commissioner, NRC
The Honorable Gregory B. Jaczko, Commissioner, NRC
Mr. Luis A. Reyes, Executive Director of Operations, NRC
Ms. Karen D. Cyr, General Counsel, NRC
Mr. James E. Dyer, Director, Office of Nuclear Reactor Regulation, NRC
Mr. Gary M. Holahan, NRC

Nuclear Energy Institute
Partial Comments on March 13, 2006, 10 CFR Part 52 Notice of Proposed Rulemaking: Proposed Enhancements to Streamline and Increase the Efficiency of the NRC Licensing and Hearing Process for Nuclear Plants

May 25, 2006

TABLE OF CONTENTS

I. Introduction 1

II. Submittal of Phased Applications and Standardized Application Sections 2

III. Ensure the Timely Completion of Licensing Milestones for New Plant Applications 3

IV. Tighten the Milestone Schedules in 10 CFR Part 2 to Streamline Hearing Schedules for ESP and COL Applications 5

A. Changes Designed to Initiate NRC Hearings Earlier 5

B. Changes Designed to Facilitate Earlier Issuance of Atomic Safety and Licensing Board Decisions 6

V. Atomic Safety and Licensing Board Decisions Authorizing Issuance of an ESP or a COL Should Be Immediately Effective 9

VI. Improve the Timeliness of the Section 52.103 Process 11

A. Changes to 10 CFR 52.99(d) 11

B. Use Legislative Hearings for the Section 52.103 Hearing 11

C. Exempt Certain ITAAC Issues from Hearing under Administrative Procedure Act Section 554(a)(3) 13

NEI Partial Comments on 10 CFR Part 52 Notice of Proposed Rulemaking:

Proposed Enhancements to Streamline and Increase the Efficiency of the NRC Licensing and Hearing Process for Nuclear Plants

I. Introduction

This paper describes a number of process-related changes that should be made and that are in addition to the proposed changes in the existing rulemaking to amend 10 CFR Part 52. These additional modifications will more fully promote the objectives of Part 52, which include enhancing the NRC's regulatory effectiveness and efficiency in implementing its licensing process for new nuclear plants. *See* 71 Fed. Reg. 12,782-83. These proposals will enable the NRC Staff and NRC Atomic Safety and Licensing Boards (Licensing Boards) to resolve licensing issues earlier and more efficiently. This, in turn, should increase the regulatory certainty. The NRC can also streamline the hearing process in various ways to shorten the overall licensing process without compromising the agency's statutory responsibility to protect public health and safety.

A variety of proposals intended to improve the timeliness of the NRC licensing and hearing process in 10 CFR Part 2 and Part 52 are discussed below. Most of them would not change substantive requirements for Part 52 applicants or license holders. Therefore, these proposed revisions could be made pursuant to Section 553(b) of the Administrative Procedure Act without the need to re-notice the proposed rule. If the NRC determines that re-notice questions are raised by these proposals, we ask that the Commission issue an expedited rulemaking relating to such amendments, address any comments, and to the extent possible include the resulting changes in the final rule promulgating the Part 52 amendments.

In the competitive environment in which new nuclear plants will be constructed and operated, it is untenable for the Commission to allow an essentially unlimited period of time (limited only by non-mandatory proposed "milestone dates") for Licensing Boards to hold hearings and issue licensing decisions. It is important for the Commission to give guidance to Licensing Boards on the conduct and duration of hearings and the issuance of licensing decisions.

We recognize that the Commission plans to monitor aggressively the licensing progress of new plant applications.[1] However, the ongoing Part 52 rulemaking

---

[1] *See* Feb. 20, 2006 letter from NRC Chairman Nils Diaz to the Honorable Joe Barton, U.S. House of Representatives, at pp. 3-5 (responses to questions 1 through 7). Therein, the Chairman indicated (p. 5) that with respect to COL applications, the agency is "evaluating the current review approach to determine if efficiencies in resource needs and schedule could be achieved in NRC's review of COL applications while maintaining the requisite safety review."

provides an opportunity for the Commission to consider other, more effective measures to accelerate the overall NRC licensing process and enhance regulatory stability and certainty. As discussed below, such steps should include initiating the mandatory hearing and the Section 52.103 hearing earlier; simplifying and efficiently processing issues identified during those hearings; eliminating duplicative litigation of issues; issuing NRC Licensing Board decisions as promptly as possible; and optimizing the NRC Staff's review time.

II. NRC Regulations Should Explicitly Provide for the Submittal of Phased Applications and Standardized Application Sections

10 CFR § 2.101 should be revised to clarify that the NRC may accept the phased submittal and review of applications under 10 CFR Part 52. Phased submittal and NRC review of combined operating license (COL) applications could allow completion of at least part of the licensing review at an earlier date, thereby streamlining the overall NRC licensing review schedule. For example, a COL applicant might file those portions of its application that pertain to environmental and siting issues sooner than those portions that pertain to the plant design, to permit early resolution of those issues. (Such early resolution might, for example, support issuance of a limited work authorization under 10 CFR § 50.10(e).)

Similarly, a design certification applicant might submit at an earlier date those portions of its application that describe its analytical methodologies and computer codes, to obtain early approval of those methodologies and codes before completing design work using those methodologies and codes. This approach is likely to give the Staff greater flexibility in allocating its resources, which should lead to more effective use of NRC resources overall. Additionally, it should enable the NRC to issue its formal approvals earlier than it would otherwise be able to do so, since the early submittals could be removed from the critical path. In this way, the overall licensing schedule could be streamlined.

Further, the NRC should modify its regulations to provide explicitly for the submittal, review, and approval of standardized sections of applications, i.e., sections that will be standardized for each application or for each application of a particular technology. This applies particularly to resolution of design acceptance criteria (DAC) and COL action items.

Recommended Rule Language

We recommend that the affected regulation be amended as follows:

§ 2.101 Filing of application.

(a)(1) An application for a permit, license, a license transfer, a license amendment, a license renewal, and standard design approval, shall be filed with the Director of Nuclear Reactor Regulation or 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]

(i) An application for an early site permit, design certification, combined license, standard design approval, or manufacturing license filed under Part 52 of this chapter may be submitted in a phased approach. The NRC staff will review each phased submittal and determine whether it is complete and acceptable for the staff to commence its review of that submittal.
An application filed in a phased submittal will not be docketed until the entire application has been filed and has been determined to be complete and acceptable for docketing.

(ii) An applicant or a group of applicants for a permit, license, a license transfer, a license amendment, a license renewal, or standard design approval may file one or more standard portions of an application for NRC staff review. Upon review and approval of each standard portion, the NRC staff shall rely upon its approval with respect to other applications that reference the standard portion(s), and such additional approvals shall be subject to the provisions in § 50.109 of this chapter. The applicant shall identify in the final application those portions that are standard.

III. The Commission Should Seek to Ensure the NRC Staff's Timely Completion of Licensing Milestones for New Plant Applications

We believe that the establishment of model milestones or recommended schedules would reduce the time taken for the Staff to complete licensing reviews and issue safety and environmental licensing documents. Currently, NRC regulations do not mandate that the Staff meet specific deadlines for all major licensing review activities. Such process enhancements might also be addressed via regulatory guidance documents.[3]

Some NRC licensing reviews will inherently require more time than others. We also recognize and agree that the NRC Staff and agency contractors must devote

---

[2] This paragraph reflects the language of the existing proposed Section 2.101(a)(1). *See* 71 Fed. Reg. 12,782, 12,846-47. The italicized language reflects our proposed additional rule language.

[3] We do not believe that this goal is unreasonable or unreachable. For example, during the first two years of its existence (1975-1976), the NRC routinely completed its licensing reviews and mandatory hearings for a construction permit in about 24 months.

sufficient time and effort to each review to ensure that NRC standards for completeness, accuracy and protection of public health and safety are satisfied. Streamlining the NRC Staff's license review process need not (and indeed must not) adversely affect the quality of NRC licensing documents.

At the same time, however, we believe that in many cases the NRC can complete licensing reviews and issue the associated safety and environmental documents in less time than it has taken in the past. This will be particularly true of standardized license applications or standardized portions of applications. Industry proposes to use standardized approaches to the extent feasible.

Because the commencement of NRC licensing hearings is currently linked to the issuance of NRC licensing documents, completion of the Staff's licensing review will facilitate earlier initiation and, therefore, completion, of licensing hearings for new plant applications. Thus, adoption of these scheduling deadlines should accelerate the overall NRC licensing process, and be consistent with the Commission's stated goals for this rulemaking.

We offer several suggestions below for the Commission's consideration that the industry believes will result in a more efficient and expedient review of license applications.

- Require the NRC Staff to docket an early site permit (ESP), design certification (DC) and COL application within 30 days after the application is filed with the NRC. NRC regulations in 10 CFR 2.101(a)(2) treat this 30-day review period as a goal, not a requirement.

- Require the NRC Staff to complete and issue the draft SER or SER with open items and the draft EIS within 12 months after docketing an ESP or "first of class" COL application.[4] This period could be even shorter for a COL application that references a certified design or a reference COL application.

- Require the NRC Staff to complete and issue the final SER and the final EIS within 4 months after issuance of the draft SER and EIS. This period could be even shorter for a COL application that references a DC and/or ESP.

[4] For subsequent standardized COL applications, the turnaround time for the draft licensing documents should be shorter.

IV. NRC Should Tighten the Milestone Schedules in 10 CFR Part 2 to Streamline Hearing Schedules for ESP and COL Applications

We urge the Commission to revise the "Model Milestones for NRC Adjudicatory Proceedings" schedules in Appendix B to Part 2 to further streamline the hearing process and promote more timely hearings on ESP and COL applications held under 10 CFR Part 2, Subpart L.[5] We believe that such modifications would do much to further the Commission's stated regulatory effectiveness and efficiency goals in the ongoing Part 52 rulemaking. Additionally, we propose that the Commission monitor on a continuing basis whether the Atomic Safety and Licensing Boards are meeting the existing model milestones, and take action when necessary to maintain appropriate hearing schedules for proceedings involving new plant applications.

A. Changes Designed to Initiate NRC Hearings Earlier

1. The NRC model schedule in Part 2, Appendix B (applicable to hearings on COL applications conducted under 10 CFR Part 2, Subpart L) states that the presiding officer should set an initial schedule for the proceeding within 55 days after he/she issues a decision ruling on intervention and admission of contentions (for which the presiding officer is allowed 140 days after publication of the *Federal Register* notice of opportunity for hearing). It is not clear why this additional time (approximately 2 months) is needed to issue a hearing schedule. We suggest that the presiding officer establish an initial hearing schedule *at the same time* that he/she issues a decision ruling on intervention and admission of contentions – no later than 140 days after publication of the hearing notice.

2. The NRC model schedule for hearings on COL applications conducted under 10 CFR Part 2, Subpart L, states that licensing hearings should begin 175 days after issuance of the safety evaluation report (SER) and NEPA document (e.g., environmental impact statement). We believe this time interval should be shortened appreciably, even assuming that that additional contentions may be admitted based upon the final SER and final EIS.

NRC precedent suggests that the final SER and EIS are unlikely to contain any new information not in the draft SER and draft EIS that is sufficient to support admission of a contention. Moreover, the Commission has previously directed the presiding officer to expedite a proceeding by conducting hearings on contentions

---

[5] On April 20, 2005, the NRC published a final rule amending its regulations to adopt "Model Milestones for NRC Adjudicatory Proceedings." *See* 70 Fed. Reg. 20,457 (April 20, 2005). NRC presiding officers must "refer to the model milestones as a starting point" in establishing a hearing schedule and in managing NRC hearings in accordance with that schedule. *See* 70 Fed. Reg. 20,457. The model milestones are not mandatory, however, and allow detailed hearing schedules to be established based upon all relevant information. *Id.* at 20,458-59. Some of the milestones (those discussed herein) are specifically intended for use in hearings conducted under 10 CFR Part 2, Subpart L, including hearings on COL applications. *Id.* at 20,460.

prior to issuance of the final SER and EIS unless those hearings will adversely impact the Staff's ability to complete its evaluations in a timely manner.[6] At a minimum, the hearing for Part 52 applications should address threshold legal and policy questions based on the draft SER and draft EIS. *Louisiana Energy Services*, "Notice of Hearing and Commission Order," 69 Fed. Reg. at 5876 (Feb. 6, 2004) ("Threshold environmental legal and policy issues need not await issuance of the final EIS"). This would also assist in the fair, prompt, and efficient resolution of contested issues.

The directive in the *Louisiana Energy Services* proceeding is consistent with Commission guidance in the Statement of Policy on Conduct of Adjudicatory Proceedings to improve the management and the timely completion of the proceeding and avoid unnecessary delays. 63 Fed. Reg. 41,872 (Aug. 5, 1998). Therefore, we recommend that hearings proceed based on the information contained in the draft SER and draft EIS.[7]

In the event that the final SER or EIS contains significant new information, there would be an opportunity to submit late-filed contentions. We recommend that any hearing on late-filed contentions should commence as promptly as possible, perhaps 90 days after issuance of the final SER and final EIS. That should give the parties sufficient time to finalize their testimony and prepare for hearing. The model milestone schedule should reflect these different scenarios.

B. Changes Designed to Facilitate Earlier Issuance of Licensing Board Decisions

The NRC model schedule for hearings on COL applications conducted under 10 CFR Part 2, Subpart L, states that the presiding officer should issue an initial decision on a COL application within 90 days after the end of the hearing and the close of the record. Industry believes that this schedule should be reduced to 60 days or less after the close of the record.

Further, NRC Licensing Boards should be directed to issue a decision in the 10 CFR 52.103 hearing within 30 days of the close of that proceeding. Licensing Boards would be allowed to deviate from those time limits only with the prior approval of the Commission.

---

[6] *See e.g.*, *Louisiana Energy Services* (National Enrichment Facility), "Notice of Hearing and Commission Order," 69 Fed. Reg. 5873, 5876 (Feb. 6, 2004).

[7] Alternatively, the Commission could direct that hearings should commence more promptly – 45 days after issuance of the final SER and final EIS, if no additional contentions on the final SER or EIS are admitted. Based on this rationale, NRC could require that proposed late-filed contentions be submitted within 30 days of initial issuance of the SER with open items and any draft EIS. The deadline for motions for summary disposition on previously admitted contentions could also be moved up. Within 85 days of issuance of draft SER and draft NEPA document, the presiding officer would rule on admission of proposed late-filed contentions and motions for summary disposition, and set a schedule for the remainder of proceeding.

Recommended Rule Language

NEI recommends that the NRC revise 10 CFR Part 2, Appendix B, as follows:[8]

II. Model Milestones for Hearings Conducted Under 10 CFR Part 2, Subpart L

These model milestones would apply to proceedings conducted under 10 CFR Part 2, Subpart L, including those on applications for early site permits (ESPs), combined licenses (COLs), renewed licenses, and license amendments.

[8] Because we have proposed more than one alternative for modifying various deadlines in the license review and hearing process, not all alternatives may be reflected in the marked-up model milestones above.

MODEL MILESTONES
[10 CFR Part 2, Subpart L]
Specific to Early Site Permit and Combined License Application Proceedings

• Within 140 days of publication of notice in FEDERAL REGISTER: • ~~Within 55 days of presiding officer decision granting intervention and admitting contentions~~:	Presiding officer decision on intervention petitions and admission of contentions and ~~Presiding officer to~~ setting initial schedule for proceeding, based on staff schedule for issuing draft and final SERs and any necessary NEPA document.
• Within 30 days of issuance of draft SER and any necessary draft NEPA document:	Proposed late-filed contentions on draft SER and necessary draft NEPA documents filed; last date for motions for summary disposition on previously admitted contentions.
• Within 85 days of issuance of draft SER and draft NEPA document:	Presiding officer decision on admission of proposed late-filed contentions and motions for summary disposition; presiding officer sets schedule for remainder of proceeding.
• Within 14 days after presiding officer decision on amended/late-filed contentions:	All parties complete updates of mandatory disclosures.
• Within 115 days of issuance of draft SER and draft NEPA document:	~~Motions for summary disposition due~~. Written direct testimony filed.
• Within ~~155~~ 135 days of issuance of draft SER and draft NEPA document:	Evidentiary hearing begins on initial contentions.
• Within ~~175~~ 90 days of issuance of final SER and final NEPA document:	Evidentiary hearing begins on late-filed contentions, if any.
• Within 60 ~~90~~ days of end of evidentiary hearing and closing of record:	Presiding officer issues initial decision.

V. NRC Atomic and Safety Licensing Board Decisions Authorizing Issuance of an ESP or a COL Should Be Immediately Effective

Proposed 10 CFR § 2.340(h) states that an Atomic Safety and Licensing Board decision authorizing issuance of a COL is immediately effective. See 71 Fed. Reg. at 12,852.[9] In contrast, proposed 10 CFR § 2.340(e) states that a licensing board decision authorizing issuance of an ESP is not immediately effective and does not become effective until the Commission has acted under Section 2.340(e)(2).

NRC should amend proposed 10 CFR § 2.340(e) to clarify that a licensing board decision authorizing issuance of an ESP is immediately effective. This change would not affect the procedural right of any party to appeal the licensing board's final decision to the Commission, or to request the licensing board or the Commission to issue a stay of the ESP. Additionally, this change would not affect the Commission's *sua sponte* review of a licensing board's decision.

As currently provided in § 2.340(e), the Commission generally allows itself 60 days to review a licensing board decision. Moreover, it is not unusual for the Commission to grant itself additional time to review licensing board decisions. Therefore, industry's recommended change could save two months or more on the schedule for pre-construction activities for a facility, plus substantial savings on interest and carrying costs, without affecting the substance of the Commission's review.

The NRC has identified no valid reason to delay the effectiveness of a licensing board's decision on an ESP pending Commission review. Such a decision does not authorize any safety-related construction activities and, therefore, issuance of the ESP cannot affect safety. Furthermore, a licensing board decision authorizing a COL (which does permit safety-related construction activities) is immediately effective under § 2.340(h). The rulemaking does not justify treating ESP decisions more restrictively than COL decisions, and we are not aware of any case law or rationale that supports doing so. Therefore, NEI urges the Commission to modify proposed § 2.340 to provide that licensing board decision authorizing either a COL or an ESP is immediately effective.

---

[9] NRC should amend proposed Section 2.340(h) to eliminate confusion relating to the immediate effectiveness of the licensing board decision issuing a COL. Proposed Section 2.340(h)(1) (see col. 1) specifies that: "a presiding officer's decision authorizing issuance of a combined license is immediately effective, and the Director shall issue the appropriate license. . . . " Yet in proposed Section 2.340(h)(2)(iii) (see col. 2), it appears that the presiding officer's decision is automatically stayed pending a Commission decision on a stay request (nominally 30 days). Thus, as currently drafted, Section 2.340(h)(2)(iii) seems to undermine the intent of proposed Section 2.340(h)(1) to provide for immediate effectiveness of a Commission decision authorizing issuance of a COL. To correct this inconsistency, the last sentence in Section 2.340(h)(2)(iii) should be deleted.

Recommended Rule Language

Proposed § 2.340(e)(1) should be amended to state as follows:

> *Nuclear power reactor early site permits.* (1) Presiding officers. Presiding officers shall hear and decide all issues that come before them, indicating in their decisions the type of licensing action, if any, which their decision would authorize. *A presiding officer's decision authorizing issuance of an early site permit is immediately effective, and the Director shall issue the appropriate permit in accordance with paragraph (c) of this section.* ~~The presiding officer's decisions concerning early site permits are not effective until the Commission actions outlined in paragraph (e)(2) of this section have taken place.~~

Proposed § 2.340(e)(2) should be replaced in its entirety with the following:

> *(2) The Commission. (i) Reserving the power to act at an earlier time, the Commission will, upon receipt of the presiding officer's decision authorizing issuance of an early site permit, review the matter on its own motion to determine whether to stay the effectiveness of the decision. An early site permit decision will be stayed by the Commission only if it determines that it is in the public interest to do so, based on a consideration of the gravity of the substantive issue, the likelihood that it has been resolved incorrectly below, the degree to which correct resolution of the issue would be prejudiced by any activities authorized by § 52.24(c) of this chapter pending review, and other relevant factors addressing the public interest.*
>
> *(ii) The parties may file comments with the Commission addressing matters which, in their view, pertain to the immediate effectiveness issue. To be considered, these comments must be received within ten (10) days of the presiding officer's decision. However, the Commission may dispense with comments by so advising the parties. An extensive stay will not be issued without giving the affected parties an opportunity to be heard.*

Proposed § 2.340(e)(1) should be amended to state as follows:

> *(h)(2)(iii). The Commission intends to issue a stay decision within thirty (30) days of receipt of the presiding officer's decision.* ~~The presiding officer's initial decision will be considered stayed pending the Commission's decision.~~

VI. NRC Should Improve the Timeliness of the Section 52.103 Process

A. Changes to 10 CFR 52.99(d)

The proposed rule would make several changes related to the Commission's findings under Sections 52.99 and 52.103 regarding completion of ITAAC and authorization of fuel loading and operation. Certain of the proposed amendments are inconsistent with other sections or parts and proposed Section 52.99(d) incorrectly refers to the ESP ITAAC. When the COL is issued, it will incorporate the ESP ITAAC and the ESP will no longer be effective with respect to that COL. The changes suggested below address these issues.[10]

B. Specify the Use of Legislative Hearings for the Section 52.103 Hearing

We strongly recommend that the Commission modify the procedures in Section 52.103 and Part 2 to promote more timely completion of the Section 52.103 process, including consideration of late-filed contentions. In particular, the Commission should specify that Section 52.103 hearings (the "ITAAC hearing") shall be legislative hearings under Subpart O of Part 2.[11] Use of a legislative hearing in this instance would be consistent with Section 189.a.(1)(B)(iv) of the Atomic Energy Act of 1954, as amended (AEA), and would meet the NRC's obligation under 10 CFR 52.103 to provide an opportunity for a hearing on whether the inspections, tests, analyses, and acceptance criteria for the new nuclear facility have been satisfied. In a Subpart O-type legislative hearing, there would be no parties and no discovery. Witnesses would be called to provide testimony on agency-identified matters and would be asked questions by the presiding official – which could be an NRC Atomic

---

[10] Proposed changes to 10 CFR 52.99(d) are as follows:

(d)(1) In the event that an activity is subject to an ITAAC derived from a ~~referenced early site permit or~~ standard design certification and the licensee has not demonstrated that the ITAAC has been met, the licensee may take corrective actions to successfully complete that ITAAC, request ~~a variance from the early site permit ITAAC,~~ or request an exemption from the standard design certification ITAAC, as applicable. A request for ~~a variance or~~ an exemption must also be accompanied by a request for a license amendment under § 52.98(f).

(2) In the event that an activity is subject to an ITAAC not derived from a referenced ~~early site permit or~~ standard design certification and the licensee has not demonstrated that the ITAAC has been met, the licensee may take corrective actions to successfully complete that ITAAC or request a license amendment under § 52.98(f).

[11] Although designed to be more expeditious, the potential use of 10 CFR Part 2, Subpart N procedures for 10 CFR 52.103 hearings would, in our view, be problematic because Subpart N contemplates a hearing that is not expected to require more than two days to complete — a prerequisite that might not apply to every hearing request made under Section 52.103. Additionally, Subpart N currently requires that all parties to the proceeding agree that the hearing should be conducted under that subpart. Obtaining the agreement of all parties on that point may be difficult.

Safety and Licensing Board member or the Commission.[12] The Commission has previously noted that the "non-adversarial" nature of a legislative hearing makes it well-suited to the development of "'legislative facts,' viz., general facts which help a decisionmaker decide questions of policy and discretion."[13]

We believe that a sound legal basis exists for this proposal. The NRC is required to hold formal, on-the-record hearings under the Administrative Procedure Act only if the agency's governing statute, the AEA, mandates such formal hearings. The AEA does not mandate formal, on-the-record hearings for COL applications under 10 CFR Part 52. Section 185.b of the AEA provides that, following issuance of the COL, the Commission "shall ensure that the prescribed inspections, tests, and analyses are performed and, prior to operation of the facility, shall find that the prescribed acceptance criteria are met. Any finding made under this subsection shall not require a hearing except as provided in section 189a.(1)(B)."

Thus, the NRC will conduct initial licensing hearings for COL applications under 10 CFR Part 2, Subpart L (informal hearing procedures). Similarly, the AEA does not require formal, on-the-record hearings for the 10 CFR 52.103(d) ITAAC hearing. *See* AEA Section 189.a.(1)(B)(iv), which provides that: "The Commission, in its discretion, shall determine appropriate hearing procedures, whether informal or formal adjudicatory, for any hearing under clause (i), and shall state its reasons therefor." The language of NRC regulations in Section 52.103(d) is essentially identical to this statutory provision.

This proposal also is grounded in sound public policy. The AEA narrowly focuses the Section 52.103 hearing opportunity on "whether the facility as constructed complies, or on completion will comply, with the acceptance criteria of the license." *See* AEA Section 189.a.(1)(B)(i). Legislative hearings are appropriate for resolving any disputes regarding ITAAC satisfaction, given the objective nature of most of the ITAAC (discrete inspections, tests, and analyses with objective acceptance criteria that do not require use of expert judgment). More broadly, requiring that the 10 CFR 52.103 hearing be legislative in nature should significantly accelerate the NRC hearing process for new plants, minimizing the potential for significant delay immediately prior to plant operation.

The Commission could effect this change by issuing an order in each licensing proceeding. Alternatively, to codify the change in the regulations, the NRC could amend the language of existing10 CFR Part 2, Subpart O (including Sections 2.1500

---

[12] *See* 69 Fed. Reg. 2182, 2192 (Jan. 14, 2004) (NRC final rule amending rules of practice in 10 CFR Part 2).

[13] 69 Fed. Reg. at 2192. By contrast, the Commission noted, a more adversarial hearing process would likely be better suited to resolving factual disputes relating to the occurrence of a past event, where the credibility of an eyewitness might be determinative, or where motive or intent is at issue.

and 2.1502) to specify that Subpart O legislative hearings will be used to meet the Commission's obligation under 10 CFR 52.103(d) to hold a hearing leading to the issuance of findings required under 10 CFR 52.103(g).

C. Exempt Certain ITAAC Issues from Section 52.103 Hearing under Administrative Procedure Act Section 554(a)(3)

NEI further proposes that the NRC modify its hearing process to provide that, in deciding whether to grant a request for a hearing pursuant to Section 52.103,[14] the presiding officer first determine whether a contention is exempt from adjudication under Section 554(a)(3) of the Administrative Procedure Act (APA) (5 U.S.C. § 554(a)(3)) and Section 185b. of the AEA.

APA Section 554(a)(3) exempts from APA formal adjudication requirements those matters in which decisions "rest solely on inspections, tests and elections." The scope of the Section 554(a)(3) exemption has generally been construed to include "technical facts ... as to which administrative hearings have long been thought unnecessary" and situations where an agency relies on the "judgment" of a tester or inspector. *Door v. Donaldson*, 195 F.2d 764 (D.C. Cir. 1952); *see also* Attorney General's Committee on Administrative Procedure, Final Report to President and the Congress, at 37 (1941) (noting that "resort to formal procedures [for inspections, tests, and elections] ... is not desired or utilized ... because it gives no added protection"); S.Rep. No. 752, 79th Cong., 1st Sess. 16 (1945) (exempting inspections, tests, and elections "because those methods of determination do not lend themselves to the hearing process").

We believe that the APA Section 554(a)(3) exemption relieves the NRC from the obligation to conduct *any* hearing under Section 52.103 when the question of whether a new facility complies with an ITAAC can be decided solely on the basis of inspections or test results. In *Union of Concerned Scientists v. U.S. Nuclear Regulatory Commission*, the Court acknowledged that Congress did not mean to require a hearing where a hearing would serve no purpose. 735 F.2d 1437, 1449-1450 (D.C. Cir. 1984). In the *UCS* case, the Court described the generic APA provision as an exemption from AEA "Section 189(a)'s hearing requirement," *not* as an exemption from APA Section 554 procedures.

---

[14] 10 CFR 52.103(b) provides that a request for hearing under Section 52.103(a) must show, *prima facie*, that (1) one or more of the acceptance criteria in the COL have not been or will not be met, and (2) the specific operational consequences of nonconformance that would be contrary to providing reasonable assurance of adequate protection of the public health and safety.

Thus, consistent with APA Section 554(a)(3), the Commission could by regulation or order exclude those specific "inspections, tests, and analyses" referenced in AEA § 185b. that rely solely on detailed, objective, or self-implementing acceptance criteria that do not lend themselves to the hearing process.[15] By limiting the scope of Section 52.103 hearings to those ITAAC that actually have a component amenable to the informal hearing process, the Commission could more efficiently focus the pre-operational hearing process.

Given the short time frame for conducting ITAAC hearings, focusing on those ITAAC that involve issues that fall outside the APA exception would save valuable Staff, applicant, and intervener resources and reduce the potential for hearing-related delays. It would also promote stability in the licensing process.

Significantly, the approach that industry now is advocating is consistent with principles acknowledged by the Commission when it promulgated the original 10 CFR Part 52.[16] The industry approach also addresses the Commission's 1989 concern that it not prejudge whether every acceptance criteria raised under Section 52.103 will in fact be "self-limiting." Consistent with this proposal, there are various ways to make the specific NRC determination as to which ITAAC are susceptible to resolution based solely on the results of tests and inspections (and thus should not be adjudicated). In our view, the Commission should delegate this determination to the NRC Staff, particularly since many ITAAC will be technical in nature. The Staff conceivably could make such determinations generically. Or, it could make the determinations on a case-by-case basis, as proposed contentions arise on a particular ITAAC. Similarly, the presiding officer in the Section 52.103 hearing could make the determination, perhaps with Staff input.

---

[15] The NRC Staff has previously agreed that it may consider whether a contention is exempt from adjudication under the APA in the context of Section 52.103 hearing requests. *See* Nov. 20, 2003, NRC letter to NEI on combined license topic COL-5 concerning the 10 CFR § 52.103 hearing process, p. 4.

[16] *See* 54 Fed. Reg. 15372, 15380 (April 18, 1989):

> The Commission agrees that findings which rest solely on the results of tests and inspections should not be adjudicated [under APA Section 554(a)(3)], and the final rule so provides. See 52.103. However, not every finding the Commission must make before operation begins under a combined license will necessarily always be based on wholly self-implementing acceptance criteria and therefore encompassed within the APA exception. The Commission does not believe that it is prudent to decide now, before the Commission has even once gone through the process of judging whether a plant built under a combined license is ready to operate, that every finding the Commission will have to make at that point will be cut-and-dried - - proceeding according to highly detailed 'objective criteria' entailing little judgment and discretion in their application, and not involving questions of 'credibility, conflicts, and sufficiency' , questions which the Court in *UCS v. NRC* . . . held were marks of issues which should be litigated at least under the facts of that case.

In addition to the specific recommendations above relating to the Section 52.103 hearing, we further suggest that the NRC shorten many of the time intervals currently specified under Part 2 as applied to 10 CFR 52.103 hearing activities, to facilitate the earlier initiation and completion of Section 52.103 hearings. [17]

Proposed Rule Language

<u>10 CFR §52.103 (as proposed) (to provide for efficient resolution of an ITAAC issue.)</u>

§ 52.103 Operation under a combined license.

> (a) Not less than 180 days before the date scheduled for initial loading of fuel into a plant by a licensee that has been issued a combined license under subpart C of this part, the Commission shall publish notice of intended operation in the Federal Register. The notice must provide that any person whose interest may be affected by operation of the plant may, within 60 days, request that the Commission hold a hearing on whether the facility as constructed complies, or on completion will comply, with the acceptance criteria in the combined license, except that a hearing shall not be granted for those ITAAC which the Commission found were met under § 52.97(a)(2), *or for those ITAAC for which the Commission's determination of completion rests solely on inspections or tests.*

[17] *See* Nov. 20, 2003, letter to R. Simard, NEI, from J. Lyons, NRR, NRC, re "Resolution of Combined License Topic 5 (COL-5), the 10 CFR 52.103 Hearing Process," particularly the discussion of NEI Position 3.

NUCLEAR ENERGY INSTITUTE

Adrian P. Heymer
SENIOR DIRECTOR, NEW PLANT DEPLOYMENT
NUCLEAR GENERATION DIVISION

May 25, 2006

Annette L. Vietti-Cook
Secretary
U.S. Nuclear Regulatory Commission
Mail Stop 0-16C1
Washington, DC 20555-0001

ATTN: Rulemaking and Adjudications Staff

SUBJECT: 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 (Mar. 13, 2006) (RIN 3150-AG24)

Dear Ms. Vietti-Cook:

The Nuclear Energy Institute (NEI)[1] is pleased to submit the enclosed partial comments addressing certain aspects of the above-captioned Nuclear Regulatory Commission (NRC) rulemaking. That rulemaking includes proposed amendments relating to the NRC's existing process for issuance of limited work authorizations (LWAs) and site activities that may be conducted prior to issuance of a construction permit or combined operating license (COL). However, these proposed amendments would not revise the LWA process in a manner that would enhance its usefulness for prospective COL applicants. We therefore ask the NRC to modify its LWA process consistent with the industry proposals discussed in this letter.

In the business environment in which the nuclear industry operates, new plant applicants must seek to minimize the time interval between an applicant's decision to proceed with a COL application and the start of commercial operation. To do so, the industry must be able to take advantage of modern construction practices. The industry estimates that, based on innovative and successful overseas construction projects, non-safety related preconstruction activities currently categorized by the NRC as "LWA-1" activities will need to be initiated up to two

[1] The Nuclear Energy Institute (NEI) is the organization responsible for establishing unified industry policy on matters affecting the nuclear energy industry, including the regulatory aspects of generic operational and technical issues. NEI's members include all entities licensed to operate commercial nuclear power plants in the United States, nuclear plant designers, major architect/engineering firms, fuel fabrication facilities, nuclear materials licensees, and other organizations and individuals involved in the nuclear energy industry.

1776 I STREET, NW SUITE 400 WASHINGTON, DC 20006-3708 PHONE 202.739.8094 FAX 202.533.0147 aph@nei.org

years prior to commencement of "construction," as defined in 10 § CFR 50.10(b) (i.e., the start of safety-related concrete foundation pours).

The NRC's current LWA process constrains the industry's ability to utilize the modern construction practices. The current LWA process, even if amended as proposed in the Part 52 rulemaking, could needlessly add 18 months to estimated construction schedules for new plants if an early site permit (ESP) is not being referenced in a COL application. Even if an applicant holds an ESP with an LWA, commencement of safety-related preconstruction activities will not be permitted until the COL hearing is complete. Optimally, preconstruction activities for new nuclear plants should not wait until the final environmental impact statement (EIS) and the licensing hearing for the COL application are complete.

The resulting delay can challenge prospective applicants' business case assessments for building new nuclear power plants because those plants are not likely to be on-line by the time baseload power is needed. In our view, therefore, a fundamental change to the NRC's LWA process is needed.

LWA-1 Authorization Recommendations

The existing NRC LWA-1 requirements and the rulemaking proposals are inconsistent and confusing. To resolve these issues, the industry's recommendations would align the LWA provisions with the NRC's role under National Environmental Policy Act (NEPA) case law that post-dates the existing Section 50.10(c). More specifically, we believe the definition of "construction" reflected in 10 C.F.R. § 50.10(b) reflects the correct interpretation of the Commission's licensing responsibility under the Atomic Energy Act of 1954, as amended (AEA), and is entirely consistent with the agency's NEPA obligations. Conversely, we believe that the restrictions on the "commencement of construction" in § 50.10(c) and the prohibitions on pre-licensing activities in § 50.10(e)(1) are excessive and unnecessary under the relevant statutes, and should be changed.

Accordingly, the industry recommends that the NRC re-structure the LWA provisions to allow pre-construction activities currently contemplated by 10 C.F.R. § 50.10(b) and § 50.10(e)(1) without a prior ESP, an LWA, or other NRC authorization. These activities include site excavation; site preparation for construction of the facility; clearing of land for temporary equipment and equipment laydown and storage areas; and construction of non-nuclear facilities, such as waste treatment facilities, water treatment facilities, concrete plants, fabrication facilities and warehouses. Applicants would have to satisfy applicable state and local permits and authorizations before such activities take place. Note that these LWA-1 activities are not safety-related.

LWA-2 Authorization Recommendations

NRC regulations provide for a second set of limited work authorizations (beyond those in § 50.10(e)(1)-(2)) relating to preconstruction activities that have a nexus to nuclear safety. These LWA-2 authorizations create a process for obtaining permission to perform certain safety-related activities prior to the "start of construction." Significantly, however, an LWA-2 cannot be issued until the NRC Staff issues a final EIS and the presiding officer makes environmental findings under § 51.105 that there is reasonable assurance that the site is suitable from a radiological health and safety perspective, and finds that there are no unresolved safety issues related to the LWA-2 activities being proposed.

The industry recommends that the NRC revise its regulations to allow LWA-2 activities to start on a more accelerated schedule. Applicants would submit a partial Environmental Report (ER) addressing the potential LWA-2-related impacts. The NRC Staff would review the partial ER and document its conclusions on LWA-2 issues. Based on this limited environmental review, the Atomic Safety and Licensing Board would conduct a limited hearing and issue a partial initial decision on the LWA-2 activities. Issuance of an LWA-2 based on focused environmental findings would be acceptable under NEPA. Indeed, the Commission has employed similar processes on prior occasions.

The industry's proposals to amend the regulatory framework governing LWAs are being driven by the need for improved efficiencies in both construction and licensing. Our recommended changes are designed to enable projects to move ahead in the most efficient manner consistent with statutory requirements.

NEI is submitting these partial comments separately because they address significant legal, licensing and policy matters that likely will require further industry-NRC interactions. The industry's general proposals relating to LWAs were discussed with the NRC Staff during an April 18, 2006, public meeting, at which the NRC indicated its receptivity to considering suggestions for improving the LWA process if accompanied by the relevant legal bases for the proposed enhancements. We now request that NRC consider the industry's recommendations. 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. Our objective is to have in place a more timely and efficient LWA process to enable the first COL applicants to develop applications that include proposed use of LWAs.

NRC senior management and Commission involvement on these issues likely will be warranted, and the industry stands ready to support any meetings or other interactions. If you have any questions about the industry's perspective on the LWA issues discussed in this letter or the enclosure, please contact me at (202) 739-8094; aph@nei.org or Anne Cottingham (202) 739-8139; awc@nei.org.

Sincerely,

Adrian P. Heymer

Enclosure

c: The Honorable Nils J. Diaz, Chairman, NRC
The Honorable Edward McGaffigan, Jr., Commissioner, NRC
The Honorable Jeffrey S. Merrifield, Commissioner, NRC
The Honorable Peter B. Lyons, Commissioner, NRC
The Honorable Gregory B. Jaczko, Commissioner, NRC
Mr. Luis A. Reyes, Executive Director of Operations, NRC
Ms. Karen D. Cyr, General Counsel, NRC
Mr. James E. Dyer, Director, Office of Nuclear Reactor Regulation, NRC
Mr. Gary M. Holahan, NRC

Nuclear Energy Institute
Partial Comments on March 13, 2006, 10 CFR Part 52 Notice of Proposed Rulemaking:

Proposal for Conducting Pre-Licensing Activities and Enhancing Limited Work Authorizations

May 2006

TABLE OF CONTENTS

I. THE COMMISSION'S REGULATIONS AND PRECEDENT PERMIT CERTAIN PRE-LICENSING ACTIVITIES 3

A. Definition of "Construction" in 10 CFR § 50.10(b) 3

B. Definition of "Commencement of Construction" in 10 CFR § 50.10(c) ... 4

C. Other Forms of Permission to Conduct Pre-Licensing Activities 5

1. 10 CFR § 50.12 Exemption 5

2. Limited Work Authorizations under 10 CFR § 50.10(e) 5

a. LWA-1 6

b. LWA-2 6

3. Authorization for *de minimis* Activities 7

II. THE COMMISSION SHOULD ELIMINATE PRIOR APPROVAL FOR PRE-CONSTRUCTION ACTIVITIES 7

A. Industry's Proposal Is Consistent with the Atomic Energy Act 8

B. Industry's Proposal Is Consistent with NEPA 9

1. NEPA does not confer independent licensing or permitting authority over private activities not related to radiological health and safety 10

2. There is no illegal segmentation 13

III. THE COMMISSION SHOULD IMPROVE THE PROCESS FOR OBTAINING A LWA-2 CONSISTENT WITH THE CONGRESSIONAL GOALS OF DEVELOPING ADVANCED REACTORS 15

Partial Comments on March 13, 2006, 10 CFR Part 52 Notice of Proposed Rulemaking:

Proposal for Conducting Pre-Licensing Activities and Enhancing Limited Work Authorizations

INTRODUCTION

As the anticipated dates for submittal of the first Combined Operating License (COL) applications approach, the industry has begun to focus on the licensing schedule to identify opportunities to further improve and eliminate unnecessary steps in the new plant licensing process. Given modern construction management techniques and the high cost of delay, prospective COL applicants are exploring ways to maintain an integrated, orderly, and cost-efficient schedule for completing an entire new plant project.

The NRC's regulations governing Limited Work Authorizations (LWAs) provide a potentially useful tool for reducing the time interval between outlay of capital for new nuclear capacity and cost recovery through commercial operation. Minimizing the lengthy licensing time for nuclear plants is critical to prospective COL applicants, as one means of optimizing the overall schedule and, in doing so, reducing the overall costs. The LWA process, promulgated by the Commission during the early years of the commercial nuclear industry contemplates that applicants may perform certain activities in parallel with the NRC's licensing process and before issuance of a COL, with no increased risk to the public health and safety.

As discussed below, however, changes to the regulatory framework of the NRC's LWA process are necessary to enable applicants to better coordinate the licensing and construction schedules for new nuclear plants. Absent these changes, the overall schedule could be prolonged for up to 24 months because "pre-construction" activities may not commence until the final environmental impact statement (EIS) has been issued and the licensing hearing for the COL has been held. (The NRC has estimated that such hearings may not be completed until approximately 42 months after the COL application has been filed.)

The specific "pre-construction" activities that new plant applicants may need to initiate will be both site-specific and technology-dependent to a certain extent. Similarly, the schedule impacts that will drive the need for pre-construction activities will likely vary from one site and reactor design to another. In general, however, the types of activities contemplated are consistent with those allowed under existing 10 CFR § 50.10.

Data from international construction projects indicates that a COL applicant will need to initiate certain activities now categorized by the NRC as "LWA-1" activities up to two or more years prior to commencement of "construction" as defined in Section 50.10(b) (e.g., safety-related foundation/concrete pours). This time estimate is not surprising given that LWA-1 pre-construction activities could include (as permitted with existing Section 50.10(b)) the following:

- Site exploration and excavation;
- Preparation of the site for construction of the facility, including the driving of piles and construction of roadways, railroad spurs, and transmission lines;
- Clearing of land for temporary equipment laydown areas;
- Construction of non-nuclear facilities (such as waste treatment facilities, water treatment facilities, certain intake structures, water source modifications such as dams, lakes, ponds);
- Construction of temporary buildings (such as construction equipment storage sheds) for use in connection with the construction of the facility;
- Early purchase of components and fabrication of equipment, which is consistent with modern constructions methods and practices to be followed for new nuclear plants and allowed by existing Section 50.10(b). (To the extent that such fabrication might be performed on-site, some site preparation would be necessary to accommodate it.)

Additionally, commencement of certain pre-construction activities in parallel with the NRC licensing process will mitigate schedule impacts occasioned by placement of a new nuclear facility on a site with a currently operating reactor. Coordination with the operating plant would be needed for:

- Installation of barriers or other features between the operating plant and the construction site;
- Modifications of facilities to be shared (e.g., emergency facilities, storage facilities, maintenance facilities);
- Work on systems supporting the existing unit that must be modified to accommodate new unit construction (e.g., switchyard work, underground electrical cable or water pipe rerouting, relocation of storage tanks).[1]

---

[1] Activities affecting the existing unit that may need to be scheduled to coordinate with planned operating unit outages may also affect the new unit construction activity schedule. However, by using the flexibility offered by an LWA, the new plant applicant may be able to avoid adversely affecting the critical path schedule.

Specific activities that COL applicants might seek to perform under an "LWA-2" would similarly be project-specific and highly dependent on whether the COLA review/licensing schedule has been delayed beyond the current lengthy NRC estimates. A COLA applicant would have to balance the schedule delay cost impacts, the reasons for the delays, and the financial risks associated with proceeding with LWA-2 work. For example, some sites may require extensive post-excavation backfill work prior to pouring of concrete. Since the backfill is necessary for safety-related foundation support, an LWA-2 would be required.

This paper describes the current processes for obtaining NRC approval to conduct certain pre-licensing activities. It also identifies ways for the NRC to enhance those processes to promote timely and efficient completion of reactor construction, consistent with the Atomic Energy Act of 1954, as amended (AEA), the National Environmental Policy Act (NEPA), and the goals of the Energy Policy Act of 2005 (EPAct 2005).

We recommend that the NRC modify its regulations to allow applicants to conduct the activities currently contemplated by 10 CFR § 50.10(b) and Section 50.10(e)(1) without requiring a prior permit, LWA or other NRC authorization. We believe the definition of "construction" reflected in current 10 CFR § 50.10(b) reflects the correct interpretation of the Commission's licensing responsibility under the AEA and is consistent with the agency's obligations under NEPA. Conversely, the restrictions on the "commencement of construction" in Section 50.10(c) and the prohibitions on pre-licensing activities in Section 50.10(e)(1) are unnecessary under the relevant statutes and can be deleted. The industry's proposal would align NRC regulations with an evolved understanding of an agency's role under NEPA case law that post-dates existing Section 50.10(c).

Industry further recommends that LWA-2 findings be accelerated based on a partial environmental submittal by the applicant, a partial environmental review by the Staff, and related findings by the NRC Atomic Safety and Licensing Board focused only on the impacts of specific proposed LWA-2 activities.

DISCUSSION

I. THE COMMISSION'S REGULATIONS AND PRECEDENT PERMIT CERTAIN PRE-LICENSING ACTIVITIES

A. Definition of "Construction" in 10 CFR § 50.10(b)

The AEA prohibits the manufacture, production, possession, or use of a commercial nuclear reactor until the Commission, after a hearing, issues a license authorizing such activities. *See* 42 U.S.C. §§ 2131, 2133, 2232, 2235, 2239. While the license requirement in Section 101 of the AEA does not specifically identify "construction" of a utilization facility as an activity requiring a license, Section 185 of the Act defines construction permits, operating licenses, and combined construction and operating licenses for utilization facilities. Accordingly, the Commission has applied the AEA to require a permit or other approval prior to undertaking construction activities. The relevant issue this raises is: what constitutes "construction" for which a prior NRC license is required?

Neither the AEA itself nor any legislative history attempts to define "construction" (or otherwise define the point at which the licensing requirement is triggered). *See Carolina Power & Light Co.* (Shearon Harris Nuclear Power Plant, Units 1, 2, 3,

and 4), CLI-74-22, 7 AEC 939 (1974). Instead, the Commission takes the view that Congress entrusted the agency with the responsibility and discretion to determine the activities that actually constitute construction for which a prior license is required. *Id.* Therefore, the NRC promulgated regulations in 1960 to define the activities that would, or would not, be considered part of the construction of a reactor. 10 CFR § 50.10(b); 25 Fed. Reg. 8712 (Sept. 9, 1960).

The NRC concluded at that time that "construction" included pouring the foundation for, or the installation of, any portion of the permanent facility on the site. 10 CFR § 50.10(b). It went on to determine that "construction" of a commercial reactor did not include (1) site exploration, site excavation, preparation of the site for construction of the facility, including driving piles and constructing roadways, rail spurs, and transmission lines; (2) procurement or manufacture of components of the facility; or (3) construction of non-nuclear facilities and temporary buildings for use in connection with the construction of the facility. This conclusion remains today, embedded in Section 50.10(b).

In general, the intent was that there be no restriction on offsite activities of any kind or on the construction of onsite facilities which are not safety-related. *Tennessee Valley Authority* (Hartsville Nuclear Plant Units 1A, 2A, 1B and 2B), ALAB-380, 5 NRC 572, 575-576 and n.17 (1977). The NRC appropriately viewed its authority as restricted by the limits of Commission jurisdiction, which are "confined to scrutiny of and protection against hazards of radiation." *New Hampshire v. AEC*, 406 F.2d 170, 175 (1st. Cir 1969), *cert. denied*, 395 U.S. 962 (1969). Because the Section 50.10(b) activities are not "construction," they could be performed without any NRC authorization. This was the settled practice for over a decade.

B. Definition of "Commencement of Construction" in 10 CFR § 50.10(c)

Following the enactment of the NEPA and the D.C. Court of Appeals decision in the landmark *Calvert Cliffs* case, the NRC revised its regulations so that certain preliminary work could no longer be undertaken by the applicant without agency approval. *See* 36 Fed. Reg. 22848 (Dec. 1, 1971) (proposed rule); 37 Fed. Reg. 5745 (March 21, 1972) (final rule); *see also, Calvert Cliffs Coordinating Committee v. AEC*, 449 F.2d 1109 (D.C. Cir. 1971). The "newer" regulations state that, notwithstanding the activities permitted under Section 50.10(b), no person shall effect "commencement of construction" without a permit. 10 CFR § 50.10(c); *see also* 10 CFR § 51.101(a)(2). The subsection defines "commencement of construction" broadly to include "any clearing of land, excavation, or other substantial action that would adversely affect the environment of a site." *Id.* Subsection (c) thus had the effect of precluding, subject to NRC approval, much of what had previously been permitted under subsection (b). The restrictions on the "commencement of construction" under Section 50.10(c) are at odds with Section 50.10(b).

C. Other Forms of Permission to Conduct Pre-Licensing Activities

The general prohibitions in Section 50.10(c) are not absolute. Several paths are currently available to an applicant seeking to perform activities prior to the issuance of a construction permit or COL.

1. 10 CFR § 50.12 Exemption

An applicant may seek an exemption from the requirements of Section 50.10(c) under 10 CFR § 50.12(b), and thereby obtain approval to perform specific onsite activities as defined in the exemption request. Generally, the NRC may grant an exemption where the agency determines that the action is authorized by law, will not present an undue risk to the public health and safety, is consistent with the common defense and security, and that special circumstances are present. *See* 10 CFR § 50.12(a). Further, for a specific exemption from Section 50.10(c), the NRC may grant the exemption upon a balancing of four factors: (1) whether the activities will give rise to a significant adverse impact on the environment and the nature and extent of such impact; (2) whether redress of adverse environmental impacts can reasonably be effected, if necessary; (3) whether the activities would foreclose subsequent adoption of alternatives; and (4) the effect of delay on the public interest, including power needs, availability of alternative sources to meet those needs on a timely basis, and delay costs to consumers. 10 CFR § 50.12(b). The regulations further specify that issuance of an exemption does not constitute a commitment to issue a license nor does it relieve the applicant from carrying out activities in manner that will minimize or reduce their environmental impact. *Id.*

The exemption criteria in Section 50.12(b) were established to assure that significant environmental harm would not result from pre-licensing activities and that the work would not influence the ultimate NEPA assessment of the cost/benefit balance for the license application. *Shearon Harris*, 7 AEC at 940. Further, the Commission stated that exemptions should only be issued in the most compelling of situations to serve the public interest and even then, only sparingly. *Id.* In practice, using the exemption process, the site-preparation work that could be performed without approval before enactment of Section 50.10(c) could now be performed, but only after the weighing and balancing of relevant environmental factors and with the permission of the Commission. *Id.*

2. Limited Work Authorizations under 10 CFR § 50.10(e)

The Commission remained concerned that the exemption procedures in 10 CFR § 50.12(b) could be problematic in certain circumstances, *e.g.*, where activities could have a substantial effect on the environment before the NRC performed the final balancing of environmental costs and benefits required under NEPA. *See Hartsville*, 5 NRC at 577. Consequently, the Commission amended Section 50.10 in 1974 by adding subsection (e), which permits the Director of Nuclear Reactor

Regulation (NRR) to issue a "limited work authorization" that allows specified work otherwise prohibited by Section 50.10(c). Typically, the authorization in Section 50.10(e)(1) and (2) is referred to as "LWA-1," while the authorization allowed under Section 50.10(e)(3) is referred to as an "LWA-2." In both situations, the activities taken pursuant to the limited work authorization are entirely at the applicant's risk and have no bearing on the agency's decision on the underlying application. 10 CFR § 50.10(e)(4). These activities may also be subject to a requirement that the applicant submit a site redress plan. *See* 10 CFR § 52.91.

a. LWA-1

An LWA-1 would permit the following activities: (1) preparation of the site for construction of the facility (including such activities as clearing, grading, construction of temporary roads and borrow areas); (2) installation of temporary construction support facilities (including warehouses, utilities, concrete mixing plants, and construction support buildings); (3) excavation for facility structures; (4) construction of service facilities (including roadways, rail spurs, fencing, transmission lines, and sewers); and (5) construction of structures, systems, and components (SSCs) which do not prevent or mitigate the consequences of postulated accidents that could cause undue risk to the health and safety of the public. 10 CFR § 50.10(e)(1). The LWA-1 cannot be performed until after the Staff has completed a Final Environmental Impact Statement (FEIS) on the "construction permit." *Id.*[2]

Further, the regulations state that an LWA-1 shall only be granted after the presiding officer in the proceeding on the application has (1) made the findings required by 10 CFR §§ 51.104(b) and 51.105, and (2) 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 a radiological health and safety standpoint. 10 CFR § 50.10(e)(2).[3]

b. LWA-2

An LWA-2 would permit LWA-1 activities plus the installation of structural foundations, including any necessary subsurface preparation, for SSCs which prevent or mitigate the consequences of postulated accidents that could cause undue risk to the health and safety of the public. 10 CFR § 50.10(e)(3)(i). An LWA-2 may be granted only after the presiding officer has, in addition to making the findings required under § 50.10(e)(2), determined that there are no

---

[2] The language would appear to allow an LWA-1 after issuing an FEIS that addresses only construction, *i.e.*, an FEIS that excludes operational issues.

[3] It is unclear what findings would be required for a COL under 10 CFR § 51.104(b), since that regulation only applies in a "proceeding in which a hearing is held and where the NRC Staff has determined that no environmental impact statement need be prepared for the proposed action."

unresolved safety issues relating to the additional activities. 10 CFR § 50.10(e)(3)(ii).

3. Authorization for *de minimis* Activities

Certain activities are permissible even without an exemption to Section 50.10(c) or an LWA (*e.g.*, upgrading existing access roads, drilling exploratory borings, clearing trees, etc.). The NRC allows pre-LWA activities to be undertaken by an applicant if those activities would have a "trivial" environmental impact. *Kansas City Gas and Electric Co.* (Wolf Creek Nuclear Generating Station, Unit No. 1), CLI-77-1, 5 NRC 1, 12 (1977). The decisions on *de minimis* impacts stress that triviality in this context does not mean "zero" impact, but instead means impacts for which it can "safely be said that no conceivable harm would have been done to any of the interests sought to be protected by NEPA should the eventual outcome of the proceeding be a denial of the application."[4]

II. THE COMMISSION SHOULD ELIMINATE PRIOR APPROVAL FOR PRE-CONSTRUCTION ACTIVITIES

The definition of "construction" reflected in 10 CFR § 50.10(b) is based on the correct interpretation of the NRC's responsibility under the AEA and is consistent with the agency's NEPA obligations. Indeed, when viewed in light of current NEPA law, the prohibitions on pre-licensing activities in Sections 50.10(c) and 50.10(e)(1) are unnecessary. While the current regulations have been in place for some time, there has been little need to apply the LWA provisions since no new permit or license applications have been filed in recent years. However, changes are now needed to improve NRC regulations, while still meeting the requirements of the AEA and NEPA. The industry believes that applicants should be allowed to conduct the pre-construction activities contemplated by Sections 50.10(b) and 50.10(e)(1) without a prior NRC permit or an LWA.[5] Such a process would better enable companies to meet their energy needs and would promote the goals of EPAct 2005.

---

[4] *Puget Sound Power & Light Co.* (Skagit Nuclear Power Project, Units 1 and 2), ALAB-446, 6 NRC 870, 871 (1977); *see also, Washington Public Power Supply System* (Nuclear Project Nos. 3 and 5), CLI-77-11, 5 NRC 719, 723 (1977).

[5] There are alternative proposals that might accomplish similar results. For example, the Commission could consider a programmatic or Generic Environmental Impact Statement similar to that used in license renewal, a "generic exemption" under 10 CFR § 50.12(b), an OGC opinion letter, or a narrowed interpretation of "site" in Section 50.10. Additionally, in its comments on the Notice of Proposed Rulemaking issued on March 13, 2006 to revise Part 52, NEI is identifying other possible changes in Section 50.10 to facilitate issuance of an LWA-1 and LWA-2. None of these alternatives, however, resolves the dilemma posed by the current regulations. No matter the path that the NRC chooses, time is of the essence to make LWAs available to COL applicants on a schedule that meets their commercial requirements. The NRC should therefore choose an approach that addresses the LWA problem as promptly as possible.

A. Industry's Proposal Is Consistent with the Atomic Energy Act

The industry's proposal is consistent with NRC jurisdiction imposed by the AEA. The NRC's predecessor, the Atomic Energy Commission, interpreted the agency's jurisdiction under the AEA as limited to protecting against radiological hazards. *See New Hampshire*, 406 F.2d at 175. Courts have agreed with the AEC, recognizing that the Commission has jurisdiction under the AEA only to the extent necessary to "provide adequate protection to the health and safety of the public" with respect to the special hazards of radiological impacts. *Id.*, at 174-175; *see also Gage v. AEC*, 479 F.2d 1214, 1221 n.19 (D.C. Cir. 1973) (The Commission lacks the authority to mandate that an applicant take certain actions that are unrelated to radiological considerations.). As discussed below, the definition of "construction" in 10 CFR § 50.10(b) is fully consistent with the requirements in Section 185 of the AEA. In contrast, the restrictions on "commencement of construction" in Section 50.10(c) appear to reflect an overly-broad interpretation of that NRC jurisdiction under the AEA.

While the AEA describes construction permits and COLs, 42 U.S.C. § 2235, the AEA does not prohibit "construction" directly. *See supra*, Section I.A. Instead, the AEA requires a license to "transfer or receive in interstate commerce, manufacture, produce, transfer, acquire, possess, use, import, or export any utilization or production facility." 42 U.S.C. § 2131. Under the AEA, a "utilization facility" means "*any equipment or device* ... determined by rule of the Commission to be capable of making use of special nuclear material in such quantity as to be of significance to the common defense and security, or in such a manner as to affect the health and safety of the public." 42 U.S.C. § 2014cc. (emphasis added).

Consistent with this AEA definition, the pre-licensing activities in Section 50.10(b) are, by definition, limited to construction of facilities that are <u>not</u> a "utilization facility." The regulation allows an applicant to construct "non-nuclear facilities" and perform site exploration and site preparation for later construction. Section 50.10(b) also allows roads and railroads to facilitate subsequent utilization facility construction. These activities, *i.e.*, building roads, laying railroads, and clearing the site, are not safety-related and are not "devices" or "equipment" that can utilize special nuclear material. Similarly, the activities that are allowed in Section 50.10(e)(1) with prior Commission approval, *e.g.*, concrete mixing plants, sanitary sewerage plants, land clearing, etc., do <u>not</u> make use of special nuclear material. Rather, all those activities merely involve preparation of the site for eventual utilization facility construction. On their own, all could be carried out without any NRC approval under the AEA.

The Commission's interpretation of its licensing authority as originally enacted in Section 50.10(b) is consistent with the plain meaning of the AEA and would be entitled to appropriate deference. *See Chevron v. Natural Res. Def. Council*, 467 U.S. 837 (1984). The pre-licensing, pre-construction elements listed in Sections

50.10(b) and 50.10(e)(1) involve site-preparation and logistical support and, as such, do not involve making or forming devices or equipment capable of using special nuclear material that are prohibited without an NRC construction permit. The intent of Congress in the AEA is clear and unambiguous: "construction" can only mean activities related to assembling devices capable of utilizing special nuclear material.

The definition of "construction" reflected in Section 50.10(b) is also consistent with the Commission's jurisdiction under the AEA more generally. Certainly, construction of temporary roads, railroad spurs, or storage buildings — all activities permitted by Section 50.10(b), but restricted by Sections 50.10(c) and 50.10(e)(1) — lack any rational relationship to the radiological considerations that underpin AEA jurisdiction. *See New Hampshire*, 406 F.2d at 175. Any Commission bar on pre-licensing activities that goes beyond the agency's jurisdiction over radiological considerations would impermissibly obstruct traditional state and local powers over land use and land acquisition, and unconstitutionally interfere with private rights to the free use and enjoyment of land. This is especially true where the NRC's involvement is only triggered by an application that may be withdrawn at any time. *See Boston v. Volpe*, 464 F.2d 254 (1st Cir. 1972). Thus, the Commission's original interpretation of "construction of a utilization facility" referenced in Section 50.10(b) is reasonable and entitled to considerable deference. *See Chevron*, 467 U.S. at 844-845; *see also, United States v. Mead Corp.*, 533 U.S. 218, 228 (2001) (degree of deference due to agency depends on, among other things, the consistency of the agency's position).

In contrast with the reasonable interpretation of "construction" in Section 50.10(b), 10 CFR § 50.10(c) establishes an inexplicably circular definition of "commencement of construction." Activities in the definition of "commencement of construction" include activities that are not "construction" under Section 50.10(b) and do not require a construction permit. Logically, however, if activities are not "construction" under Section 50.10(b), they should not be "commencement of construction" under Section 50.10(c). If an activity does not fall within the definition of construction under Section 50.10(b) and does not require a construction permit under Section 185 of the AEA, prior NRC approval of that activity should not be necessary under the AEA.

B. Industry's Proposal Is Consistent with NEPA

Industry's proposal is also fully consistent with the NRC's responsibilities under NEPA. As a procedural statute, NEPA cannot impose licensing or permitting requirements on a private applicant more stringent than those authorized by the safety provisions of the AEA. The NEI proposal allows the NRC to fulfill its NEPA obligations without unduly expanding NRC licensing requirements. In doing so, the proposal supports timely and efficient construction of new reactors.

1. NEPA does not confer independent licensing or permitting authority over private activities <u>not related to radiological health and safety</u>

NEPA requires federal agencies that are contemplating a major action to perform an assessment of the impacts of the proposed action and discuss alternatives to the proposed action. 42 U.S.C. § 4332. The goals of NEPA are realized through a set of procedures that require an agency to take a "hard look" at environmental consequences of federal decisions and provide for broad dissemination of relevant environmental information. *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350 (1989). Although these procedures almost certainly affect an agency's decisions, it is "now well-settled" that NEPA does not mandate particular results, but simply prescribes the necessary process. *Id.*, at 350-51. As discussed below, the NRC's current regulations which, in effect, impose substantive licensing requirements and related environmental obligations on activities that do not require a construction permit, are "inconsistent with NEPA's reliance on procedural mechanisms" and the statute's focus on federal actions. *Id.*, at 353. NEPA does not expand the scope of the NRC's licensing and permitting authorities, as defined in the AEA.

The NRC initially promulgated 10 CFR § 50.10(c) in 1972, in response to its evolving understanding of NEPA's requirements. (Section 50.10(b) was promulgated in 1960.) In the Statements of Consideration accompanying the regulations promulgating Section 50.10(c), the Commission stated that, in its view, site preparation constitutes a key point, from the standpoint of environmental impact, in connection with the licensing of nuclear facilities, and that its amendments to Section 50.10 would 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 license is being sought. 37 Fed. Reg. at 5746. That statement accurately describes the NRC's responsibilities under NEPA to the extent that NEPA requires consideration and balancing of environmental impacts of the proposed action. The Commission, however, took its obligations under NEPA further than necessary. While the NRC is obligated under NEPA to consider non-radiological environmental impacts from construction and operation as part of its licensing process, NRC may not prohibit (or require prior NRC approval of) activities that do not entail construction under Section 50.10(b) and do not require a construction permit under AEA Section 185.[6] In a series of decisions addressing the prohibitions on certain activities under 10 CFR § 50.10(c), the Commission opined that NEPA and *Calvert Cliffs* gave it "general environmental jurisdiction under NEPA" *in addition to* its organic

[6] We are *not* suggesting that the NRC does not need to evaluate indirect or non-radiological impacts of federal actions. Those impacts will be reviewed in any EIS when a federal action becomes involved (*i.e.*, when the licensing requirement of the AEA is triggered). The point is that NEPA does not expand the licensing requirement.

jurisdiction under the AEA. *Hartsville*, 5 NRC at 576. Pursuant to its view of its expanded "jurisdiction under NEPA," the Commission empowered itself to "impose license conditions to mitigate [environmental] impacts," even if those impacts had no relationship to radiological health and safety. *Wolf Creek*, 5 NRC at 8-9.[7] This plainly reflects an outdated view of NEPA. Intervening Supreme Court and other judicial decisions have decisively established that NEPA is a procedural statute. Consistent with a more contemporary view, NEPA does not expand the Commission's authority to require a license or permit.

More specifically, the NRC's ability to exercise authority over applicants is limited to the power granted to it by Congress through the AEA. NEPA does not expand the jurisdiction of or mandate action beyond the agency's organic statute. *Gage*, 479 F.2d at 1221 n.19; *Kitchen v. FCC*, 464 F.2d 801 (D.C. Cir. 1972). NEPA only requires *consideration* of a range of activities, some of which may fall within the purview of the agency's jurisdiction, some that may not. NEPA does not impose requirements more stringent than those contained in the safety provisions of the AEA.[8] While activities necessary to complete a nuclear facility, including site preparation, may involve activities or impacts that eventually come within the jurisdiction of the Commission under the AEA, intervention to prevent environmental harm from private, non-federal action goes beyond the AEA. *Gage*, 479 F.2d at 1221. NEPA simply does not confer independent licensing or permitting authority, *i.e.*, jurisdiction, over activities that do not require a construction permit or license under the AEA.[9]

Council on Environmental Quality (CEQ) regulations state that "[i]f any agency is considering an application from a non-Federal entity, and is aware that the applicant is about to take an action *within the agency's jurisdiction* that would

---

[7] The Commission has consistently maintained the distinction between AEA (radiological) requirements, NEPA (environmental) requirements, and mixed (AEA and NEPA) requirements. For example, in creating the limited work authorizations in § 50.10(e), the Commission stated that on-site construction of non-nuclear facilities was prohibited only because it could adversely affect the environment and therefore fell within the Commission's perceived jurisdiction under NEPA. 39 Fed. Reg. 14506, 14507 (April 24, 1974). The Commission contrasted this jurisdiction with its jurisdiction over "site suitability issues, which are related to both environment and safety, and other safety issues directly related to any one-site [sic] work on safety related structures, systems and components." *Id.*

[8] *Philadelphia Electric Co.* (Limerick Generating Station, Units 1 and 2), ALAB-819, 22 NRC 681, 696 n.10 (1985) *citing Public Service Electric & Gas Co.* (Hope Creek Generating Station, Units 1 & 2), ALAB-518, 9 NRC 14, 39 (1979); *see also, Methow Valley*, 490 U.S. at 347 (1989) (An agency may not impose mitigation measures through NEPA on actions that lie outside of its jurisdiction).

[9] *Compare Dept. of Transportation v. Public Citizen*, 541 U.S. 752, 770 (2004) (holding that where an agency has no ability to prevent a certain effect due to its limited statutory authority over the relevant action, the agency need not consider those effects under NEPA).

[have an adverse environmental impact or limit the choice of reasonable alternatives], then the agency shall promptly notify the applicant that the agency will take appropriate action to insure that the objectives and procedures of NEPA are achieved." 40 CFR § 1506(b) (emphasis added). If the activity does not require a construction permit, then NEPA does not require the Commission to prohibit the activity pending NRC review and approval.[10] Pre-licensing site preparation activities are undertaken by private, not federal, entities and do not require separate NEPA review when taken on their own. While the Commission must assess the environmental impacts of its action, including the indirect impacts and impacts of connected, similar, and cumulative actions, the agency's ability to require prior approval or coerce action only extends to those matters for which approval is required by the AEA.

In the cases where courts have enjoined private or state action pending a federal agency's completion of an EIS, the critical and distinguishing factor has been that the underlying construction activity (*e.g.*, "dredging or filling" in "waters of the United States") fell within the jurisdiction of the federal agency under its organic statute. *See, e.g.*, *Florida Wildlife Fed'n v. U.S. Army Corps of Eng'rs*, 404 F. Supp. 2d 1352 (S.D.Fla. 2005) (enjoining non-party county from constructing research park pending Corps compliance with NEPA because the county was required to obtain a valid permit from the Corps before it could "begin construction" of its project where Corps also asserted it had jurisdiction over related projects and plans); *Fritiofsen v. Alexander*, 772 F.2d 1225, 1242 (5th Cir. 1985) *abrogated on other grounds*, *Sabine River Authority v. U.S. Dep't of the Interior*, 951 F.2d 669, 677 (5th Cir. 1992) (upholding continued injunction against private housing developer pending NEPA compliance by the Corps); *National Wildlife Federation v. Hanson*, 859 F.2d 313 (4th Cir. 1988) (remanding to the Corps for a proper wetlands determination and enjoining any dredging and filling until a proper determination was made and the necessary permits were obtained); *Save Greers Ferry Lake, Inc. v. Dept. of Defense*, 255 F.3d 498, 501 (8th Cir. 2001) (invalidating permits for construction of boat docks where the Corps acted arbitrarily and capriciously in issuing a finding of no significant impact (FONSI)).

These cases are all consistent with the larger principle that an agency's jurisdiction is limited to that granted by its organic statute. *Gage*, 479 F.2d at 1221 n.19; *Kitchen*, 464 F.2d at 801. The courts have <u>not</u> enjoined private action under NEPA where the activities fell wholly outside the permitting jurisdiction of a agency. *See e.g.*, *North Carolina v. City of Virginia Beach*, 951 F.2d 596 (4th Cir. 1996) (allowing continued construction by non-federal entity since a federal agency's environmental

[10] In addition, where a non-federal party voluntarily informs the NRC of its intended activities to ensure compliance with law and regulation and to facilitate the agencies monitoring activities for safety purposes, the agency' review of the plan does not constitute a major federal action requiring an environmental impacts statement pursuant to NEPA. *New Jersey v. Long Island Power Authority*, 20 F.3d 284, 293 (1st Cir. 1995).

review of project was binding only on those aspects that were within the jurisdiction of the agency, even if the agency elected to analyze under NEPA those portions of the project that were beyond its control). In the context of a COL applicant performing pre-licensing activities, no federal permit is required under the AEA to clear land, construct roads, or build a rail spur, and NEPA does not confer independent jurisdiction to preclude those activities.[11] Accordingly, neither a license nor an LWA (or related environmental impact statement (EIS)) should be required before an applicant performs the activities permitted under Section 50.10(b).

2. <u>There is no illegal segmentation</u>

NEPA requires that an agency consider "connected actions," which CEQ regulations define as proposed actions that (i) automatically trigger other actions which may require environmental impact statements, (ii) cannot or will not proceed unless other actions are taken previously or simultaneously, or (iii) are interdependent parts of a larger action and depend on the larger action for their justification. *See* 40 CFR §§ 1508.7, 1508.8, and 1508.25; *see Scientists' Institute for Public Information v. AEC,* 481 F.2d 1079, 1087 (D.C.Cir.1973) (EIS required for overall project where individual parts of project are related logically or geographically). Courts have therefore held that an agency may not consider portions of a project separately to avoid acknowledging significant environmental impacts. *See e.g. West Chicago v. NRC,* 701 F.2d 262 (7th Cir. 1983) (illegal "piecemealing" or "segmentation" allows agency to avoid requirements of NEPA). However, in the case of a COL applicant performing pre-licensing activities, there can be no illegal segmentation since there is only a single, unsegmented, federal action and since, in any event, the federal and private actions are not "connected."

Where a COL applicant seeks to perform pre-licensing activities, there is but a single federal action — the granting or denial of the COL — whose impacts must be considered. Here, the NRC is not attempting to avoid consideration of environmental impacts of a federal action or deprive the public of information related to those impacts by dividing a larger project into smaller units. Instead, the activities permitted by Sections 50.10(b) and (e)(1) are purely private actions and, under the NEI proposal, would not require NRC approval. The requirement to prepare an EIS applies only to proposals actually before the agency, not those under consideration by private parties. *Duke Energy Corp.* (McGuire Nuclear Station,

---

[11] Certainly, the need to comply with other federal, state, or local environmental regulations is unaffected by the NEI proposal. *See Hydro Resources Inc.* (2929 Coors Rd., Suite 101, Albuquerque, NM 87120), CLI-98-16, 48 NRC 119, 120 (1998) (whether non-NRC permits are required is the responsibility of the bodies that issue such permits, *e.g.,* the Environmental Protection Agency, state or local authorities, not the NRC). If the pre-licensing activities involved, for example, filling of a wetland, then, of course, the applicant would be required to comply with Corps of Engineers permitting requirements.

Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-14, 55 NRC 278, 294-296 (2002). Moreover, even if the non-federal portion of the project is dependent on the federal portion for its utility, the entire project (*i.e.*, the federal and non-federal portions together) does not constitute a single federal action that must be analyzed simultaneously since the Commission has no jurisdiction over the private pre-licensing activities. *See California Trout v. Schaefer*, 58 F.3d 469, 473-474 (9th Cir. 1995). Accordingly, there is no segmentation of a project into two components when there is but a single, unsegmented, federal action under consideration.

Even if the NRC considers the private and federal actions together for NEPA purposes, there is no segmentation since the pre-licensing activities are not "connected" to the NRC's decision on a COL application. When addressing segmentation issues, the Commission looks at the extent of the "nexus" between the two proposals. *Duke Energy Corp.*, CLI-02-14, 55 NRC at 296-297. Here, there is an insufficient nexus between the pre-licensing activities and the COL approval. Construction of a road or clearing a site of trees does not "automatically" trigger NRC approval of a COL. Nor does it represent a "practical commitment" to actually construct a nuclear power facility.[12] While the pre-licensing activities may relate to activities that would be taken under a COL, there is no underlying reciprocity of action that would require their treatment as inextricably "connected" actions. *See e.g.*, *South Carolina v. O'Leary*, 64 F.3d at 898-899 (holding that impermissible segmentation only exists where the component action has a "direct and substantial probability of influencing [the agency's] decision" on the larger project.); *City of Virginia Beach*, 951 F.2d at 605 (holding that non-federal construction can only be enjoined prior to federal approval of a project where the non-federal action has a direct and substantial probability of influencing the federal approval decision). Since a COL applicant would be undertaking redressible, pre-licensing actions at its own risk and without expenditure of federal funds, there is no chance of those private actions directly influencing the Commission's decision on whether the COL should be issued. Therefore, there can be no segmentation as there are no "connected actions."

NEPA also requires consideration of indirect effects of the federal action. Ultimately, for a COL application, NEPA may require an assessment of those indirect impacts, including the impacts of pre-licensing and pre-construction activities. It might be argued that the pre-licensing activities could affect the

---

[12] Similarly, the pre-licensing activities (*i.e.*, clearing land, constructing access roads, etc.) have an "independent utility" since those activities could be used to support alternative development of the site, including, for example, construction of a coal-fired power plant. *See Duke Energy*, CLI-02-14, 55 NRC at 296-297 *citing Webb v. Gorsuch*, 699 F.2d 157, 161 (4th Cir. 1983). Thus, it is neither "unwise" or "irrational" to complete the pre-licensing activities apart from a COL since those activities merely preserve the <u>option</u> of later COL construction. *Webb*, 699 F.2d. at 161; *South Carolina v. O'Leary*, 64 F.3d 892, 899 (4th Cir. 1995).

ultimate NEPA weighing and balancing of environmental considerations or limit consideration of reasonable alternatives. However, as discussed above, this argument would not provide a basis for the NRC to prohibit purely private action that does not require a construction permit under the AEA. The pre-licensing and pre-construction impacts would simply be considered during the overall NEPA evaluation of the subsequent federal action. Moreover, even if NEPA could prevent such private action, as discussed below in conjunction with an LWA-2, the applicant's at-risk activities are remediable and, in all likelihood, would be addressed in the required site redress plan. Likewise, those pre-construction activities would still be subject to applicable state and local permits and the related review processes.

III. THE COMMISSION SHOULD IMPROVE THE PROCESS FOR OBTAINING A LWA-2 CONSISTENT WITH THE CONGRESSIONAL GOALS OF DEVELOPING ADVANCED REACTORS

NRC regulations provide for a second set of limited work authorizations beyond those in Section 50.10(e)(1)-(2). The LWA-2 authorizations create a process for obtaining permission to perform certain safety-related activities, in addition to the activities allowed under LWA-1. *See* 10 CFR § 50.10(e)(3).

As discussed above, an LWA-2 cannot be issued until the Staff has issued an FEIS and the presiding officer has made the following findings: (1) satisfactory environmental findings under Sections 51.104(b) and 51.105; (2) a finding that there is reasonable assurance that the site is suitable from a radiological health and safety perspective; and (3) a finding that there are no unresolved safety issues. 10 CFR § 50.10(e)(2)-(3). The required COL hearing is, therefore, a key hurdle to meeting both requirements of the regulations and the goals of COL applicants. NEI therefore proposes that LWA-2 findings be accelerated based on a partial environmental review (and related findings) focused only on the impacts of specific proposed LWA-2 activities.[13]
Issuance of an LWA-2 based on focused environmental findings would be acceptable under NEPA. Indeed, the Commission has successfully employed similar processes on prior occasions. With respect to the environmental findings necessary for a LWA, the NRC may clearly consider separately different segments of a proposed project. *See Tennessee Valley Authority* (Clinch River Breeder Reactor Plant), CLI-82-23, 16 NRC 412, 424 (1982) (noting that separate consideration of different segments of a project is "well-established"). The NRC may also authorize an individual, sufficiently distinct, portion of an agency plan without awaiting the

[13] Alternatively, the Commission could remove the requirement that the presiding officer make environmental findings for LWA-2 activities and authorize the Staff to make those findings instead. *See Union of Concerned Scientists v. U.S. Nuclear Regulatory Commission*, 920 F.2d 50, 56 (D.C. Cir. 1990) ("While NEPA clearly mandates that an agency fully consider environmental issues, it does not itself provide for a hearing on those issues.").

completion of a comprehensive environmental impact statement so long as the environmental treatment under NEPA of the individual portion is adequate and approval of the individual portion does not commit the agency to approval of other portions of the plan.[14] Further, the NRC is not responsible for ensuring that the applicant has received the appropriate state, local, or federal permits needed to perform LWA activities. *See Public Service Co. of Oklahoma* (Black Fox Station, Units 1 & 2), LBP-78-26, 8 NRC 102, 123, 129 (1978) (holding that applicants are not required to have every permit in hand before a LWA is granted).

In the case of an LWA-2, all activities would be conducted at the risk of the applicant and a site redress plan would be required. 10 CFR § 50.10(e)(4); 10 CFR § 52.91(a). Any environmental impacts of pre-licensing activities performed pursuant to a LWA-2 can be redressed and would not involve an irretrievable commitment of resources. The Commission has previously concluded that site preparation activities may be addressed separately since they will not result in any irreversible or irretrievable commitment to the remaining segments of a reactor development project. *Clinch River*, 16 NRC at 424, *citing Kleppe v. Sierra Club*, 427 U.S. 390 (1976). It noted that modern construction techniques are adequate to restore disturbed landscape and, if the site is zoned industrial, full redress may not even be necessary to minimize environmental impacts. *Id.* at 427. Nor will such activities limit consideration of alternatives since "[s]ite preparation activities are too small a fraction of overall project activities to significantly affect the Commissioner's future consideration of alternatives sites or abandonment of the project." *Id.* at 428, *see also Wolf Creek*, CLI-77-1, 5 NRC 1 (a Licensing Board may permit pre-LWA activity so long as any potential environmental damage can be redressed and the applicant will commit to restoration of the site if necessary).

Further, no design alternatives will be foreclosed because no permanent plant structures (*i.e.*, radiological safety-related structures) would be constructed under Section 50.10(b). *See Clinch River*, 16 NRC at 428. These attributes, *i.e.*, redressibility, no foreclosure of alternatives, etc., ensure that performing the pre-licensing activities allowed under Sections 50.10(b) and (e)(1) would not unduly influence the overall cost/benefit balance of the project required by NEPA. Indeed, sunk costs are not appropriately considered in an operating license cost-benefit balance.[15]

---

[14] *Kerr-McGee Corp.* (West Chicago Rare Earths Facility), CLI-82-2, 15 NRC 232, 265 (1982), *aff'd sub nom. City of West Chicago v. NRC*, 701 F.2d 632 (7th Cir. 1983); *Peshlakai v. Duncan*, 476 F. Supp. 1247, 1260 (D.D.C. 1979); *Conservation Law Foundation v. GSA*, 427 F. Supp. 1369, 1374 (D.R.I. 1977).

[15] *Consumers Power Co.* (Midland Plant, Units 1 & 2), LBP-82-63, 16 NRC 561, 586-87 (1982), *citing Public Service Co. of New Hampshire* (Seabrook Station, Units 1 & 2), CLI-77-8, 5 NRC 503, 534 (1977).

With respect to any hearing on LWA-2 issues, the presiding officer may conduct separate hearings and issue separate partial decisions on issues pursuant to NEPA, on general site suitability issues specified by 10 CFR § 50.10(e), and on certain limited work authorization issues. *United States Dep't of Energy et al.* (Clinch River Breeder Reactor Plant), LBP-83-8, 17 NRC 158, 161 (1983), *vacated as moot,* ALAB-755, 18 NRC 1337 (1983). Separate LWA and COL hearings are simply separate phases of the same proceeding. *United States Dep't of Energy et al.* (Clinch River Breeder Reactor Plant), ALAB-761, 19 NRC 487, 492 (1984). The Commission may therefore appropriately direct the presiding officer, where appropriate (or requested by an applicant), to consider bifurcating, and conducting separately, the COL and LWA-2 portions of a proceeding. Accordingly, the NRC should take the steps necessary to enhance the LWA-2 process.

CONCLUSION

Production of economical nuclear power can best be achieved through a stable and predictable regulatory process that is consistent with the demands of modern construction management practices and project financing. Site preparation, access, and logistical support are necessary to support those goals. Revising Commission regulations and LWAs consistent with its authority under the AEA and NEPA, as described above, is a key step towards enhancing the COL process and meeting the objectives of EPAct 2005.