

April 11, 2007

MEMORANDUM FOR: Luis A. Reyes
Executive Director for Operations

FROM: Annette L. Vietti-Cook, Secretary **/RA/**

SUBJECT: STAFF REQUIREMENTS - AFFIRMATION SESSION, 10:00
A.M., WEDNESDAY, APRIL 11, 2007, COMMISSIONERS'
CONFERENCE ROOM, ONE WHITE FLINT NORTH,
ROCKVILLE, MARYLAND (OPEN TO PUBLIC ATTENDANCE)

I. SECY-06-0220 - Final Rule to Update 10 CFR Part 52, "Licenses, Certifications, and Approvals for Nuclear Power Plants" (RIN AG24)

The Commission¹ approved a final rule amending 10 CFR Part 52, subject to the attached changes. The final rule enhances effectiveness and efficiency of the Part 52 licensing processes, and clarifies the applicability of requirements to each of the processes: early site permit (ESP), standard design approval, standard design certification, combined license (COL), and manufacturing license.

Following incorporation of these changes, the Federal Register notice should be reviewed by the Rules Review and Directives Branch in the Office of Administration and forwarded to the Office of the Secretary for signature and publication.

(EDO)

(SECY Suspense:

5/18/07)

The staff should ensure the scope of the NRC Reactor Operating Experience Program includes international operating experience that is relevant to designs under review by the staff or under construction in the U.S.

¹ Section 201 of the Energy Reorganization Act, 42 U.S.C. Section 5841, provides that action of the Commission shall be determined by a "majority vote of the members present." Commissioners McGaffigan, Jaczko and Lyons were present in the Conference Room. Commissioner Merrifield participated in the meeting via speakerphone. Chairman Klein was not present when these items were affirmed. Accordingly the formal vote of the Commission was 4-0 in favor of these decisions. Chairman Klein, however, had previously indicated that he would approve these items and had he been present he would have affirmed his prior votes.

II. SECY-07-0056 - Entergy Nuclear Vermont Yankee, LLC, and Entergy Nuclear Operations, Inc. (Vermont Yankee Nuclear Power Station), Docket No. 50-271-LR, LBP-06-20, 64 NRC 131, 175-82 (2006)

The Commission¹ approved a Memorandum and Order addressing the Atomic Safety and Licensing Board's admission of Contention 1 in the Vermont Yankee License Renewal proceeding. (See LBP-06-20) The Memorandum and Order reverses LBP-06-20 insofar as it admitted Contention 1 for litigation.

(Subsequently, on April 11, 2007, the Secretary signed the Memorandum and Order.)

Attachment: Changes and comments to the final rule in SECY-06-0220

cc: Chairman Klein
Commissioner McGaffigan
Commissioner Merrifield
Commissioner Jaczko
Commissioner Lyons
EDO
OGC
CFO
OCAA
OCA
OIG
OPA
Office Directors, Regions, ACRS, ACNW, ASLBP (via E-Mail)
PDR

Changes and comments to the final rule in SECY-06-0220

1. The rule should be modified in 52.99(a) to read 'The licensee shall submit to the NRC, no later than 1 year after issuance of the combined license or at the start of construction as defined in 10 CFR 50.10(b), whichever is later, its schedule for completing the inspections, tests, or analyses in the ITAAC.'
2. Additional discussion should be added to the statement of considerations regarding 52.99 to state that it is the licensee's burden to demonstrate compliance with the ITAAC. The staff should revise the discussion on this issue at pages 52-53, 116, 118, and 359-360 to reflect this point.
3. The language in section 52.99 should more closely follow the language of section 185b. of the AEA. Thus, 52.99(b) should be revised to read, "any one of the prescribed acceptance criteria have been met." Also, 52.99(c) should be revised to read, "the prescribed inspections, tests and analyses have been performed and that the prescribed acceptance criteria have been met."
4. Section 52.99(c)(1) states that licensees shall notify the NRC that inspections, tests, or analyses of ITAAC have been successfully completed and acceptance criteria have been met. The notification must contain "sufficient information" to demonstrate that this has been done. The term "sufficient information" should be explained in the SOC to require "at a minimum a summary description of the bases for the licensee's conclusion that the inspections, tests, or analyses have been performed and that the prescribed acceptance criteria have been met." Similar language should be provided in the SOC with respect to 10 CFR § 52.99(c)(2) for uncompleted ITAAC.
5. The guidance document should explain how the functional requirement to provide "sufficient information" with regard to ITAAC submittals could be met. This guidance document should be developed, in consultation with interested stakeholders, to provide clarity on what would constitute "sufficient information" and the appropriate threshold for the minimum information requirements necessary for the staff to make the findings necessary under Section 52.103.

The guidance document should also address the nature and content of the ITAAC schedule to be submitted under 10 CFR 52.99(a).

6. The Commission disapproved of the change allowing preparation of an environmental assessment with a finding of no new and significant information for a COL application referencing an ESP. The rule should be changed to require the staff to prepare an EIS for all COLs that is appropriately limited in scope.
7. COL applicants referencing an ESP must include any new and significant information for issues related to the impacts of construction and operation of the facility different from the ESP stage. The meaning of "new and significant" in this context is vague and could lead to confusion. For example, it seems that the standard for significance: whether a matter may "potentially affect" an NRC finding constitutes an unreasonably low threshold. Additional explanation should be provided in the guidance to describe what is

meant by 'new and significant.' If an EIS is to be prepared for the COL, the scoping process for that EIS could be used to define what issues should be considered that were not addressed in the EIS for the ESP.

8. Sections 52.79(a)(37) and 52.47(a)(22) should be modified to read, "The information necessary to demonstrate how operating experience insights have been incorporated into the plant design."
9. The staff should explain in the section-by-section discussion of the *Federal Register Notice* that for plant designs that are based on or are evolutions of plants that have operated in the U.S., the applicant should use NRC's generic letters and bulletins issued after the most recent revision of the applicable standard review plan and 6 months before the docket date of the application. Regarding the requirement to address comparable international operating experience, some future applications may be for designs that are not based on or are not evolutions of plants that have operated in the U.S.; therefore, those applications should address insights from relevant international operating experience.
10. Finally, section VIII.B.5.c should be modified to reflect that our focus in the severe accident change process is on ex-vessel severe accident design features.
11. Section 52.63(a)(1)(v) should be modified to make clear the provision which would allow changes to "correct errors in the design certification information" is only to be used to correct a material error, that is an error that significantly and adversely affects a design function or analysis conclusion described in the design control document. The language of section 52.63(a)(1)(v) should be modified to read "Is necessary to correct material errors in the design certification." Section 52.63(a)(1)(vi) should be revised to read as follows:
 - (vi) Substantially increases overall safety, reliability, or security of facility design, construction, or operation, and the direct and indirect costs of implementation of the rule change are justified in view of this increased safety, reliability, or security.
12. The Commission approved the staff addition of a design certification change process into the final rule at section 52.63(a) that would permit amendments of design certification rules to incorporate generic resolutions of design acceptance criteria, to correct errors, or increase standardization without meeting special backfit requirements. The staff should expand the discussion in section V.C.7.g of the supplementary information to discuss the application of the rule provisions for increases to reliability or efficiency.
13. With respect to design certification amendments, the rule allows amendments of certification information provided the amendment will be applied to all plants that reference the design certification rule. NRC will give special consideration to comments from applicants or licensees who reference the design certification rule regarding whether they want to backfit their plants with these additional design changes. See p. 341. Insert a new provision between 52.63(a)(1) and 52.63 (a)(2), providing that: 'In a rulemaking considering a change listed in (a)(1) other than (a)(1)(ii) (adequate protection), the Commission will give consideration to whether the benefits justify the

costs for plants that are already licensed or for which an application for a permit or license is under consideration.'

14. With respect to design certification rule changes, for the sake of clarity, the SOC should state that the phrase "certification information" as used in 52.63 is to distinguish the language in the DCRs from the information (Tier 1 and Tier 2) incorporated by reference in the DCRs.
15. ESPs currently under review should not be required to be modified by this rule. Instead a general grandfathering provision should be included in section 52.17(a) that states, "For applications submitted before [Insert Final Date of Rule], the rule provisions in effect at the date of docketing apply unless otherwise requested by the applicant in writing."
16. Additional rule text should be added requiring:
 - (a) Combined operating license (COL) licensees are required to develop and maintain a level I and level II probabilistic risk assessment (PRA) at the time of initial operation of the reactor. The PRA shall cover those initiating events and modes of operation for which NRC-endorsed consensus standards exist one year prior to initial operation.
 - (b) Licensees must maintain the PRA throughout the operational life of the facility, and it should be upgraded through periodic updates every four years.
 - (c) The updates of the PRA should be based on, and consistent with initiating events and modes of operation for which NRC-endorsed consensus standards were in effect one year prior to the update.
 - (d) COL licensees are required to develop and maintain an all-mode, all-initiating event level I and level II PRA by the time the licensee submits its first license renewal application.

The SOC's should be modified to reflect the NRC's expectation that industry will work with the NRC and appropriate codes and standard setting bodies to continually upgrade the relevant codes and standards, identify potential issues, resolve problems, and create relevant guidance to assist in periodically updating the quality and comprehensiveness of the PRA. Since an all mode, all-initiating event level II PRA is required by submittal of the licensee's first license renewal application (at least a quarter century from now), both NRC and industry should be motivated to complete the endorsement of the necessary standards well before this becomes a constraint on license renewal.

The SOC's should state that the requirement to develop and maintain an all-mode, all-initiating event level II PRA by the time the licensee submits its first license renewal application is intended only to establish a timing requirement for completing the update of the PRA, and does not have any implications on the current requirements for license renewal. The updated PRA is not an element of any (i.e., past, present, or future) review or approval of a license renewal application.

17. New section 52.39(c) states that intervenors in proceedings for applications that reference an early site permit may raise contentions to litigate the issue of whether "[a] variance requested ... is unwarranted or should be modified." 52.39 (c)(iii). As with other potential contentions, the SOC should make clear that a contention pertaining to a variance must meet the requirements of 2.309(f).

18. The language of 2.104 should be altered to ensure that the Commission has maximum flexibility in the conduct of mandatory hearings. The mandatory content of the notice of hearing should be reduced to eliminate all references to findings made by the presiding officer. The only findings a presiding officer should make should be those regarding contested issues. The current rule text is somewhat vague as to whether or not the separation of functions rule applies to uncontested proceedings. The language of 2.348 should be changed to make explicit that this rule has no applicability to uncontested proceedings, or uncontested issues in contested proceedings.
19. The text of the final rule should be modified to reflect that the Commission will handle initial determinations as to whether there is a prima facie showing that either one or more of the acceptance criteria in the COL have not been, or will not be met, and the attendant public health and safety consequences of such non-conformance.
20. Currently we have a consistent numbering system throughout our regulations where deliberate misconduct is found in XX.5, employee protection is XX.7 and completeness and accuracy of information is XX.9. In Part 52 this has been altered and the rule text has deliberate misconduct at 52.4, employee protection at 52.5, and completeness and accuracy of information at 52.6. The staff should consider whether the benefits of altering the numbering system outweighs the potential confusion that will result.
21. The staff should ensure that the document is internally consistent prior to publication of the final rule. For example, the requirement for a mandatory hearing for a manufacturing license has been eliminated, but there are still references in multiple places in the supplementary information to the findings that must be made by a presiding officer in an uncontested hearing on a manufacturing license (see page 297). Similarly, there are a few references to the appeal panel and the submission of views on antitrust aspects on a application (see pages 505 and 849).
22. The staff should make all the necessary conforming changes to the supplementary information and the rule before publication of the final rule. The changes should include any necessary discussion and documentation of the resolution of comments received after the close of the comment period as part of the final rule package, including as appropriate, the staff comments in response to the Nuclear Energy Institute letter of December 1, 2006.
23. Appendix Q of Part 52, which addresses early staff review of site suitability issues with respect to a specific site, should be removed from the final rule.
24. Page 52 contains the statement that “[i]n the event that licensees consider their schedule information to be proprietary, they can request that the schedule be withheld from public disclosure under § 2.390.” The SOC should be modified to reflect that if an applicant claims that construction schedule information submitted to the NRC is proprietary, and requests the NRC to withhold that information under FOIA, the NRC will consider that request under our existing rules governing FOIA disclosure in 10 C.F.R. § 2.390(a)(4).
25. The draft rule requires that the facility be evaluated against “NRC’s application and review guidance” instead of the SRP alone. See 52.17(a)(xii), 52.47(a)(9) and

52.79(a)(41). The staff should delete the requirement that applicants evaluate the facility against NRC's application and review guidance (but not the requirement to evaluate against the SRP) and include a discussion about the importance of applicants' use of application guidance in the SOC. The staff should retain the requirement to evaluate the facility against the set of acceptance criteria in the Standard Review Plan. The staff should also include in the SOC a discussion of how plants using the design centered approach could address the requirement.

Specific Changes to the Final Rule in SECY-06-0220

1. Page 12, 1st full paragraph, revise line 3 to read ' ... 50, (2) the ~~either~~ approaches are is legally'
2. Page 12, last paragraph, revise line 2 to read ' ... applications, that ~~the concept of~~ Commission' **Revise lines 3 through 5 to read ' ... level of finality as that associated with Commission review and acceptance of complete and integrated plans 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'**
3. Page 13, last paragraph, revise lines 3 through 5 to read ' ... finality associated with Commission acceptance of ~~a reasonable assurance finding by the NRC for a complete and integrated plan , including inspections, tests, analyses, and acceptance criteria (ITAAC), at the early site permit stage.~~'
4. Page 20, 1st full paragraph, revise line 7 to read ' ... be submitted, and the NRC'
5. Page 39, paragraph d., revise line 8 to read ' ... by repeating this ~~the~~ statutory'
6. **Page 41, paragraph k., revise line 3 to read ' ... 2.758(b) (which has now been designated as § 2.335) in order to'**
7. Page 46, 4th full paragraph, revise line 2 to read ' ... DCRs, which states that'
8. Page 49, 1st full paragraph, delete the sentence in lines 5 and 6 (If not, there is ... not required.)
9. Page 74, 1st full paragraph, revise line 7 to read ' ... was proposed), the Commission'
10. Page 94, 1st full paragraph, revise lines 7 and 8 to read ' ... concludes that a ~~adequately question supported about whether'~~ **Revise line 9 to read ' ... and appropriate for consideration'**
11. Page 94, last paragraph, revise line 7 to read ' ...met.) This is'
12. Page 105, last paragraph, revise line 9 to read ' ... and speculative, the ~~The~~ NRC'
13. Page 118, revise lines 14 through 16 from the top to read ' ... complete and detailed ; such that any licensee response to a contention on both completed and uncompleted ITAAC would ordinarily be answered solely by reference to information contained in the

- notification. Furthermore, the’
14. **Page 143, paragraph 2, revise lines 7 and 8 to read ‘ ... comment. First of all, this This requirement’** Revise line 9 to read ‘ ... reactor, not solely’
 15. Page 144, last paragraph, revise the last line to read ‘ ... where it is to be operated.’
 16. Page 191, last paragraph, line 7, insert a space prior to “§”.
 17. Page 206, last paragraph, line 5, insert a space prior to “§”.
 18. Page 209, revise line 9 from the top to read ‘ ... type of review is not conducted’
 19. Page 218, 1st full paragraph, revise line 1 to read ‘Paragraphs(e)(1) is’
 20. Page 223, 1st full paragraph, delete the last 2 sentences (These approvals, by ... design approval.)
 21. Page 226, revise line 7 from the top to read ‘ ... paragraph (e) (e), which extends’
 22. Page 227, last paragraph, revise line 3 to read ‘ ... or desirable in 2006. In the’
 23. Page 228, revise line 1 from the top to read ‘ ... NRC believes its it’s regulations’
 24. Page 236, paragraph 1, revise line 1 to read ‘ ... these sections is are removed, and’
 25. **Page 236, paragraph 2, insert at the end of the paragraph ‘to request that the NRC render an early decision on site suitability issues in accordance with subpart F of part 2.’**
 26. Page 265, delete the 2 sentences in lines 7 through 14 (Therefore, the environmental ... design certifications.)
 27. Page 272, last paragraph, revise line 4 to read ‘ ... the preparation of on an EIS’
 28. Page 275, paragraph 1, insert a period at the end of the paragraph.
 29. Page 290, paragraph 2, revise line 2 to read ‘ ... represents a’
 30. Page 317, 1st full paragraph, line 1, insert a space after “§”.
 31. Page 324, paragraph 1, revise lines 2 through 4 to read ‘ ... up to 20 years and the Commission will determine the duration of the ESP based, in part, on the quality and reliability of the site information that is provided to support the ESP application. Paragraph (b)’
 32. **Page 336, paragraph 1, revise lines 2 through 5 to read ‘ ... and analyze the possible operating various options for configurations of multi-reactor modules. nuclear power plants. Modular nuclear power plant designs are defined in § 52.1.**
 33. Page 346, last paragraph, revise lines 3 and 4 to read ‘ ... design parameters evaluated

in the NRC's review and specified in the'

34. Page 355, 2nd full paragraph, revise line 7 to read ' ... issued, if the combined'
35. Page 358, paragraph 2, revise line 2 to read ' ... that the burden to be'
36. Page 365, 3rd full paragraph, line 4, correct spelling of "statutory".
37. Page 374, paragraph 3, revise line 6 to read ' ... part 52 rule does not ~~no~~ provides for preliminary'
38. Page 375, 1st full paragraph, revise line 9 to read ' ... 50.33 requires the applicant'
39. Page 376, last paragraph, revise line 1 to read ' ... contain the principal ~~principle~~ design criteria'
40. Page 377, paragraph 1, revise line 2 to read ' ... to the principal ~~principle~~ design'
41. Page 392, revise line 2 from the top to read ' ... applicable and in effect'
42. Page 394, last paragraph, revise line 2 to read ' ... seeks a combined'
43. Page 396, last paragraph, revise line 3 to read ' ... manufactured reactor. "Physically include," means that' Revise line 4 to read ' ... reference to the common'
44. Page 399, revise line 9 from the top to read ' ... on the basis of ~~for~~ significant'
45. Page 401, revise line 2 from the top to read ' ... site permit or ~~of~~ combined'
46. Page 689, last paragraph, revise line 3 to read ' ... must identify ~~and~~ the activities'
47. Page 707, last paragraph, revise the last line to read ' ... describe and analyze the (i) possible operating ~~various options for the configurations of the reactor modules plant and site, including variations in, or~~'
48. Page 708, revise line 1 from the top to read ' ... with ~~sharing of, common systems,~~ (ii) interface requirements, and (iii) system' Revise line 2 to read ' ... differences among the configurations ~~various options~~ , including'
49. Page 708, 2nd full paragraph, insert a period at the end of the paragraph.
50. Page 715, revise line 1 from the top to read ' ... of an applicant is ~~must be~~ subject'
51. Page 731, paragraph 2, revise line 3 to read ' ... any combined licensed issued'
52. Page 761, last paragraph, revise lines 1 through 4 to read ' ... a description of (i) the ~~possible operating various options for the configurations of the reactor modules with plant and site, including variations in, or~~ sharing of, common systems, (ii) interface requirements, and (iii) system interactions. The final safety analysis must also account for the differences among the configurations ~~various options~~ , including any'