

September 1, 1998

Mr. Anthony R. Pietrangelo  
Director, Licensing  
Nuclear Energy Institute  
Suite 400  
1776 "I" Street, NW  
Washington, DC 20006-3708

SUBJECT: NRC STAFF COMMENTS ON DRAFT REVISION 0 OF NEI 98-03,  
"GUIDELINES FOR UPDATING FINAL SAFETY ANALYSIS REPORTS"

Dear Mr. Pietrangelo:

Enclosed are issues identified by the NRC staff with regard to Draft Revision 0 of NEI 98-03, "Guidelines for Updating Final Safety Analysis Reports," which was provided to the staff by your letter dated July 8, 1998. The staff has also included an evaluation of the extent to which its previous issues on the preliminary draft NEI 98-03 were addressed in the Draft Revision 0. These previous staff issues were attached to a meeting summary dated June 15, 1998. Of the 26 issues identified in that meeting summary, only 2 remain open; the remainder are considered closed (some are now addressed by a much more specific new issue in the attachment to this letter).

The staff has identified 21 new issues (some are multi-part) on Draft Revision 0, and has categorized the issues as either a comment, editorial change, or suggestion. In order for the staff to endorse NEI 98-03 without exception, it is necessary that the comments be addressed. Editorial changes and suggestions are proposed modifications that should improve the clarity of NEI 98-03, although their incorporation into the document is not currently considered an endorsement issue. In most cases, the staff has provided specific language so that the comments, editorial changes, and suggestions can be made efficiently; however, NEI is encouraged to propose alternatives if it so desires.

If you have any questions, please contact Tom Bergman at (301) 415-1021, or email [tab@nrc.gov](mailto:tab@nrc.gov)

Sincerely,

Frank Akstulewicz for

Thomas H. Essig, Acting Chief  
Generic Issues and Environmental  
Projects Branch  
Division of Reactor Program Management  
Office of Nuclear Reactor Regulation

Enclosure: As stated

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20556-0001

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Sincerely,

Thomas H. Essig, Acting Chief  
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## STAFF COMMENTS ON NEI 98-03 (CUMULATIVE)

### EVALUATION OF PRIOR STAFF COMMENTS

The staff reviewed Draft Revision 0 of NEI 98-03 to verify that the staff's comments provided in Attachment 3 to the meeting summary dated June 15, 1998, were addressed. Except as noted below, the staff determined that the comments were addressed. As stated in the June 17, 1998, meeting with NEI, new comments will begin with comment number 27, to reduce confusion with the comments provided on June 15, 1998.

#### Prior Comments That Remain Open

6. Terminology should be consistent throughout the guidance document

It appears that NEI 98-03 primarily uses UFSAR, but updated FSAR is still used in some situations where UFSAR could be used instead. NEI 98-03 should be reviewed to ensure consistent terminology. In addition, NEI 98-03 has not consistently replaced "facility" versus "plant."

23. Temporary Changes

NEI 98-03 has not fully adopted the guidance in the proposed generic letter, as recommended in comment 23. The staff has provided more specific language in Comment 37 that, if adopted, will close this comment.

#### NRC Staff Comments on Draft Revision 0 of NEI 98-03 (In order of appearance)

The following staff comments are identified as either a comment, an editorial change, or a suggestion.

- **Comments** must be addressed in order for staff endorsement to be considered. If the comments are not addressed within NEI 98-03, the staff will likely address the comment as regulatory position (exception to NEI 98-03) in the regulatory guide. NEI does not necessarily need to incorporate comments verbatim, alternatives may be proposed. However, incorporating the comment as written will expedite the staff review of the next NEI 98-03 submittal.
- **Editorial changes** are changes proposed by the staff for NEI to consider to clarify or improve consistency in NEI 98-03.
- **Suggestions** are changes that the staff considers potentially beneficial to NEI 98-03, but incorporation of the suggestions is not necessary for endorsement and is left to NEI. In some cases, as indicated in the individual suggestion, the staff may address the suggestion in the regulatory guide if it is not addressed in NEI 98-03; however, it would not be considered an 'exception' to NEI 98-03.

ENCLOSURE



### SECTION 3.0, DEFINITIONS

27. Definition of "Original FSAR" (comment)

The definition of the original FSAR should be modified to conform to its use in NEI 98-03 and to reflect the fact that the staff does not "approve" the FSAR. Specifically, revise the definition to:

The original FSAR is the FSAR ~~that~~ submitted with the application for the operating license, as amended and supplemented, and reviewed by the NRC ~~approved~~ in granting the initial license to operate the facility.

28. Definition of "limits on operation" (comment)

Although the staff previously commented (Comment 2 in June 15, 1998, memorandum) that "limits on operation" could be defined in NEI 98-03, the proposed definition in Draft Revision 0 of NEI 98-03 may cause confusion due to its similarity to the description of technical specifications. Section 50.34(b) requires that the FSAR include a description of the "limits on its operation", where "its" is in reference to the facility. In the staff's proposed generic letter this was referred to as 'operating limits.' Furthermore, §50.34(b)(4) requires an update in the FSAR to the information provided in the preliminary safety analysis report (PSAR) by 50.34(a)(4), which requires, in part, a determination of "the margins of safety during normal operations and transient conditions anticipated during the life of the facility." The staff proposes that this aspect of the FSAR (and UFSAR) should result in the inclusion of a discussion of normal operations and transients (and the associated limits). The staff proposes that the following definition be substituted for the definition of "limits on operation" in NEI 98-03:

Operating Limits

Section 50.34(b) requires a discussion in the FSAR of the limits on the facility's operation. These operating limits are those parameters and methods of operation established for systems, structures, and components during normal operations and expected transients. The purpose of the operating limits in the UFSAR is to provide an understanding of how the facility will perform during normal operations and transients.

Similarly, replace the term "limits on operation" with "operating limits" throughout the document.

29. Definition of "safety analyses" (comment)

The definition of safety analyses should be modified to more closely conform to the language used to define safety-related in the December 11, 1996, rulemaking (61 FR 65173). NEI is requested to modify its definition so that, beginning on the fourth line it reads: "...capability to prevent or mitigate the consequences of accidents that could

result in potential offsite exposures comparable to the guidelines in 10 CFR 50.34(a)(1) or 10 CFR 100.11."

30. Definition of "Historical Information" (**editorial changes**)

Three separate editorial changes are proposed:

- a. Modify the first criterion to read, "information relateding only to initial ..."
- b. Delete the portion of the third criterion that reads: ", and even if updated, would be unlikely to affect plant operation, the plant design bases or the conclusions of safety analyses relative to public health and safety."
- c. Modify the fourth criterion to read, "information that does not change, ~~or does not change significantly,~~ with time"

31. Definition of "Periodic Update Cycle" (**suggestion**)

The current definition of periodic update cycle in NEI 98-03 is confusing. It appears that the update rule is sufficiently clear on the reporting period. It is recommended that this definition be deleted.

**SECTION 4.0, ROLE OF THE UPDATED FSAR**

32. Two **editorial changes** are proposed:

- a. The quote in the first sentence is not accurate. Modify the first sentence to read, "UFSARs provide an up-to-date description of each plant and, per the Supplementary Information for the FSAR update rule, serve as a "reference document to be used for recurring safety analyses performed by licensees, the Commission, and other interested parties."
- b. Modify the second sentence to read, "The UFSAR is used by the NRC in its regulatory oversight of a nuclear power plant, including its use as a reference ..."

**SECTION 5.0, SCOPE OF THE UPDATED FSAR**

33. Two **editorial changes** are proposed:

- a. In the first full paragraph on page 4, add "the" between "establish" and "content" on the third and fourth lines.
- b. In the third full paragraph on page 4, replace "Certain" with "Some" in the first word of the second sentence.

## SECTION 6.0, UPDATING FSARs TO MEET 10 CFR 50.71(e)

34. An **editorial change** to the last sentence of Item 3, (begins "If the NRC-requested..."), change "either" to "any".

## SECTION 6.1, LEVEL OF DETAIL FOR FSAR UPDATES

35. Level of detail for new issues (**comment**)

Two comments are provided to be more consistent with the language in the Supplementary Information that the level of detail must be at least that provided in the original FSAR. It is clear that the update rule did not intend licensees to rewrite their FSARs to be much more detailed than were originally submitted; however, for new issues, there is no logical reason to explain why licensees should address the new issue at different levels of detail solely on the basis of the level of detail in the FSAR at the time of original licensing. Rather, the staff proposes that all licensees should address new issues at the same level of detail, i.e., that information required by Section 50.34(b).

- a. The second paragraph of Section 6.1 is proposed to read as follows:

When updating the UFSAR to reflect new or modified information, licensees should ensure that the level of understanding provided by the new or updated information is sufficient to meet the requirement in 10 CFR 50.34(b)(2) cited above. ~~great as that provided previously.~~ In particular, information to be included in UFSAR updates must be sufficiently detailed to permit understanding of new or modified safety analyses, design bases and operating limits ~~limits on operation~~.

- b. The following sentence should be added to the end of third paragraph:

In some cases it may be necessary to provide more detail than was provided in the original FSAR to ensure that the update provides an understanding of the new or modified safety analyses, design bases, and operating limits.

## SECTION 6.2, EXAMPLES

36. One **editorial change** to add the following statement to the end of the last sentence of the second example (page 10), "and the minimum flow rates required to perform the necessary functions."

## SECTION 8.0, TREATMENT OF LONG-TERM TEMPORARY MODIFICATIONS

37. Three **comments** that will make NEI 98-03 consistent with the guidance in the staff's proposed generic letter. Specifically, comment 37.b addresses the fact that NEI 98-03 does not include guidance to modify the UFSAR for those temporary modifications for which there is no established schedule to remove the temporary



modification, or for those temporary modifications that the licensee does not intend to restore the facility to its condition as described in the current version of the UFSAR.

- a. On page 12, the first sentence states that, "Moreover, temporary changes, by their nature, do not alter the design bases of the plant." This sentence should be deleted since some temporary modifications have been observed to alter the design bases.
- b. The following changes should be made to the current text of the first full paragraph on page 12:

~~While it is generally unnecessary and inappropriate for~~In general, UFSARs ~~teshould~~ should not duplicate the licensee's tracking and reporting of temporary changes. However, the licensee should evaluate for inclusion in the periodic FSAR updates those temporary modifications, ~~expected to be few in number, that are expected to be in place for two years or more.~~ If a temporary modification is expected to be in place for two or more years, it should be reflected in the next required UFSAR update if ~~both~~ that meet one of the following criteria ~~are met~~:

- The licensee has not established a schedule for removal of the temporary modification, or
- The temporary modification will be in place throughout the next periodic UFSAR update cycle, ~~and/or~~
- The licensee does not intend to restore the facility to its condition as described in the current version of the UFSAR (i.e., when the temporary modification is removed, a different design than that which preceded the temporary modification will be installed).

It is expected that licensees with effective temporary modification programs will have only a small number of temporary modifications installed that meet one of the above criteria.

Even if a temporary modification meets one of the above criteria, the temporary modification must only be incorporated into the UFSAR if the temporary modification meets the

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~~The licensee determines based on the update guidance in~~ Section 6 that the temporary modification should be reflected in the next required for information required to be included in an UFSAR update.

- c. Similarly, modifications are necessary to examples 1 and 3. In the last sentence of example 1, replace the phrase "in place less than two years" with "removed prior to the end of the next periodic update cycle". In the last sentence of example 3, replace the phrase "within two years" with "prior to the end of the next periodic update cycle."

## SECTION 9.0, TREATMENT OF DISCREPANCIES BETWEEN THE FACILITY AND THE UFSAR

38. It is **suggested** NEI consider including a statement to identify that NEI 98-03 does not address reporting requirements under Sections 50.9, 50.72, or 50.73.

## SECTION A-2, CONTROLLING MODIFICATIONS TO THE UPDATED FSAR

39. An **editorial change** is proposed to the third bullet such that it read, "~~As part of the periodic updates issued in accordance with 50.71(e), the licensee should submit, in~~ addition to the changed pages and a list of effective pages currently required by 50.71(e), a description of the information removed, and the basis for the licensee's determination that such information may be removed from the UFSAR should be separately identified to the NRC as part of the required UFSAR updates."

## SECTION A-3, REFORMATTING OF UPDATED FSAR INFORMATION

40. An **editorial change** is proposed to revise the last sentence of the last paragraph as follows: "Thus, reformatted information remains subject to ~~the~~ applicable requirements, including ~~of~~ 10 CFR 50.59 and 10 CFR 50.71(e)."

## SECTION A-4, SIMPLIFICATION OF UPDATED FSAR INFORMATION

41. An **editorial change** is proposed to revise the second sentence to read, "Licensees may simplify ~~updated the UFSAR information by removing excessive detail information from the UFSAR and removing information that is duplicative of other controlling licensee documents~~ and by using references to other documents."

### SECTION A-4.1, REMOVING EXCESSIVE DETAIL FROM UFSARS

42. Two **editorial changes** are proposed:
- For the second through fourth bullets at bottom of page A-3, remove "Detailed" from beginning of each bullet.
  - In the fourth line of the third paragraph on page A-4, add "in" between "rule" and "that".
43. It is **suggested** that examples be provided for all of the bullets in "Removing Excessively Detailed Text," as was done for the second bullet.



## SECTION A-4.2, REFERENCING OTHER DOCUMENTS IN UFSARS

44. Two **suggestions** are proposed for the discussion on "Incorporation by Reference"

- a. In some cases, identifying "the document or portion thereof" to be incorporated by reference would be insufficient to precisely delineate the specific information being made part of the UFSAR (and thereby becoming subject to 50.59). Additional guidance should be included suggesting that licensees identify with specificity (perhaps through bolding or underlining) information in the document to be incorporated by reference, where only a specific portion of the document is actually intended to be subject to 50.59.
- b. NEI 98-03 states that all material incorporated by reference must be on the docket. It is not clear that all the example documents that are listed in NEI 98-03 are on the docket, such as the Fire Protection Plan (which 50.48 states must be kept as record, but does not require that it be kept on the docket). This section of NEI 98-03 should be modified so that licensees do not have to put material on the docket that is not required, as follows:

"Incorporation by reference" refers to a method by which all or part of a ~~separately docketed~~ source document can be made part of the UFSAR without duplicating the desired information in the UFSAR. Information that is appropriate to include in the UFSAR that is also part of a separate licensee-controlled document or technical report ~~previously submitted on the docket~~ may be incorporated in the UFSAR by appropriate reference to that information. By relying on information "incorporated by reference" licensees may simplify their UFSARs by removing information that is duplicated in ~~docketed~~; controlling program documents such as the Emergency Plan, Offsite Dose Calculation Manual, Fire Protection Plan and Fire Hazards Analysis Report, Security Plan, Environmental Protection Plan and Quality Assurance Plan.

If the preceding changes are made, a conforming change should be made to the second bullet so that it reads as follows:

For a document to be incorporated by reference, it must be a document that has been provided to the NRC on the licensee's docket (i.e., publicly available), unless the specific requirements governing the document do not require that it be placed on the docket.

## SECTION A-5, REMOVAL OF OBSOLETE AND REDUNDANT INFORMATION

45. Removal of Obsolete Information from UFSARs (suggestions)
- a. The terms "functional description" and "physical description" used in last paragraph of the first bullet in Section A-5 should be clarified or defined in the Definitions section. If these terms are well understood by industry, then no change is necessary.
  - b. An example of removal of obsolete information associated with equipment that has been retired-in-place should be added for the first bullet in Section A-5 to demonstrate the type and level of detail of information that is to be retained in the UFSAR.
46. An **editorial change** should be made to the last paragraph in first bullet in Section A-5. Add the following to the end of the paragraph, "consistent with the guidance in Sections 6.0, 6.1 and A-4.1."

## SECTION A-6, REPORTING INFORMATION REMOVED FROM THE UFSAR TO THE NRC

47. Two **editorial changes** are proposed:
- a. Revise the first sentence should as follows, "In addition to the changed pages and a list of effective pages currently required by 10 CFR 50.71(e), information removed from the UFSAR should be **separately** identified to the NRC as part of the required UFSAR updates ~~in addition to the changed pages and a list of effective pages currently required by 10 CFR 50.71(e).~~"
  - b. Revise the first example in Section A-6 to read, "Removed ~~excessive detail from [UFSAR subsection number]~~ in the form of model number information for components of the Reactor Equipment Cooling System previously contained in UFSAR Section [X.X]."