Agenda for Discussions on Consistency Between SRP-LR and NEI 95-10, Revision 2

January 26, 2001

Meeting Purpose: Discuss the following comments made by both NRC (No. 1-19) and NEI (No. 20-26) to achieve consistency between the SRP-LR and NEI 95-10.

Meeting Outcome: Achieve (1) agreement regarding necessary changes to either SRP-LR or NEI 95-10, (2) understanding of how NEI will reflect resolution of outstanding issues in NEI 95-10, and (3) understanding of how NEI will reflect NRC positions which it does not agree with in NEI 95-10

1. An example in Section 4.1.1, paragraph 4 of NEI 95-10, rev. 2 states "...the component boundary between an electrical cable and a switchgear enclosure is at the point where the cable enters the switchgear enclosure. Electrical cables inside the switchgear enclosure are part of the switchgear and are inspected and maintained as part of the switchgear". However, this is not consistent with the SRP-LR, Table 2.1-2 for Complex Assemblies, which refers to a prior review that would have the component boundary for the cable at the point where it connects inside the enclosure, not at the point where it enters the enclosure. Please make conforming changes to NEI 95-10.

2. NEI removed Appendix C "Examples to Demonstrate the License Renewal Process" from NEI 95-10 rev. 0. On page 5 of NEI 95-10, rev. 2, NEI added the paragraph "Earlier versions of NEI 95-10 included examples to illustrate the different steps involved in preparing a license renewal application. The examples are no longer included. Instead, applicants are encouraged to review applications that have been submitted and the resulting safety evaluation reports that are issued in the form of NUREGs." On page 2.1-13 of the SRP-LR, the staff refers to NUREG-1723 "Safety Evaluation Report Related to the License Renewal of Oconee Nuclear Station Units 1, 2, and 3" from a previous review as an example. Please expand the last sentence on page 5 of NEI 95-10, rev. 2 to include NUREG-1723 as an example for the treatment of complex assemblies or revise NEI 95-10, rev. 2 to reinstate Appendix C "Examples to Demonstrate the License Renewal Process" which was removed from NEI 95-10, rev. 0.

3. SRP-LR has potential Time Limited Aging Analysis (TLAA) examples in Tables 4.1-2 and 4.1-3 which are different from the examples in Table 5.1-2 of NEI 95-10, rev. 2. Please revise Table 5.1-2 of NEI 95-10, rev. 2 to be consistent with the SRP-LR or clearly describe the differences or purpose of these tables.

4. Section 4.2.2 of NEI 95-10, rev. 2 should reference the GALL report as part of the library of reports which document aging management reviews.

5. Please make the following changes to NEI 95-10, rev. 2, Appendix B which is entitled "Typical Structure, Component, and Commodity Groupings and Active/Passive Determinations for the Integrated Plant Assessment ."

    a) Split item 83 for electric heaters and heat tracings into two separate items. For heat tracings, the column entitled "Structure, Component, or Commodity Grouping is Passive? (Yes/No)" should remain "No, See Appendix C Reference 2". For electric heaters, the column entitled "Structure, Component, or

Commodity Grouping is Passive? (Yes/No)" should be changed to "No, Yes for a Pressure Boundary if applicable, See Appendix C Reference 2" since reference 2 states that for electric heaters "The pressure boundary intended function would still be subject to an aging management review."

b) Item 86, the column entitled "Structure, Component, or Commodity Grouping is Passive? (Yes/No)" states "Reference 1" which is a letter from C. Grimes, NRC to D. Walters, NEI dated November 19, 1999. The correct reference which identifies fuses as not requiring aging management review is the letter from C. Grimes, NRC to D. Walters, NEI dated April 27, 1999.

c) Item 107, the column entitled "Structure, Component, or Commodity Grouping is Passive? (Yes/No)" states "No." For Terminal Block this should be "Yes" as stated in the draft SRP-LR.

d) The last column in the table entitled "Structure, Component, or Commodity Grouping is Passive? (Yes/No)" should be changed to "Structure, Component, or Commodity Group Meets 10 CFR 54.21(a)(1)(i) (Yes/No)." This will make Appendix D in NEI 95-10, rev. 2 consistent with Table 2.1-5 in the SRP-LR.

6. The table on page 25 of NEI 95-10, rev. 2 lists the disposition of consumables. The left column of the table identifies the consumables and the right column lists the disposition. The disposition of each consumable is in accordance with the letter from S. Koenick, NRC to D. Walters, NEI dated January 20, 2000, with the exception of the statement "This process of addressing this category of consumables during the aging management review should be summarized in the application during the methodology for conducting the aging management review." Please add this statement to each row of the table in the disposition column to ensure the application contains information that each consumable meets the staff position for exclusion from aging management.

7. Please revise sections 4.3.1 through 4.3.3 to be consistent with the 10-element criteria as an Aging Management Program (AMP) by locating the discussions under the appropriate element.

8. Please incorporate the resolution of License Renewal Issue No. 98-0102, "Screening Equipment that is Kept in Storage" in NEI 95-10, rev.2.

9. Table 3.1-1 of NEI 95-10, rev. 2 and Table 2.1-1 of the SRP-LR are both entitled Sample Listing of Potential Information Sources. These tables are inconsistent. Please revise Table 3.1-1 to be consistent with Table 2.1-1.

10. In section 1.5 entitled "Resolution of Current Safety Issues (e.g., GSIs and USIs)", add criteria to review NUREG-0933 and identify GSIs/USIs that need to be addressed in a license renewal application to be consistent with the draft SPR-LR, Appendix A.3.

11. In section 3.1.1 entitled " Safety-Related Systems, Structures and Components", add guidance to clarify that an applicant whose Current Licensing Basis (CLB) definition of safety related does not match the one in 54.4(a)(1) must still scope to the 54.4(a)(1) three-part definition.

Editorial Comments

12. The “Purpose and Scope” section on page 1 of NEI 95-10, rev. 2 should be changed as follows to be consistent with “Table of Contents” on page ii.

    a) “Identifying the systems, structures, and components within the scope of the Rule (Section 3.1);” should be changed to “Identifying the systems, structures, and components within the scope of license renewal (Section 3.1);”

    b) “Identifying the intended functions of systems, structures, and components within the scope of the Rule (Section 3.2);” should be changed to “Identifying the intended functions of systems, structures, and components within the scope of license renewal (Section 3.2);”

    c) “Identifying the structures and components subject to an aging management review (Section 4.1);” should be changed to “Identifying the structures and components subject to an aging management review and intended functions (Section 4.1);”

13. Consider adding the following to Section 4.2.1.2 “Demonstrate that the Effects of Aging are Managed”:

    a) The third paragraph should be changed to: “Aging management programs are generally of four types: prevention, mitigation, condition monitoring, and performance monitoring. Prevention programs preclude the effects of aging from occurring, for example, coating programs to prevent external corrosion of a tank. Mitigation programs attempt to slow the effects of aging, for example, water chemistry programs to mitigate internal corrosion of piping. Condition monitoring programs inspect and examine for the presence and extent of aging effects, for example, visual inspection of concrete structures for cracking and ultrasonic measurement of pipe wall for erosion-corrosion induced wall thinning. Performance monitoring programs test the ability of a structure or component to perform its intended function(s), for example, heat balances on heat exchangers for the heat transfer intended function of the tubes (see appendix C, reference 1). In many instances, more than one type of aging management programs are implemented to ensure that aging effects are managed. For example, in managing internal corrosion of piping, a mitigation program (water chemistry) may be used to minimize susceptibility to corrosion. However, it may also be necessary to have a condition monitoring program (ultrasonic inspection) to verify that corrosion is indeed insignificant.”

    b) In the last sentence of the sixth paragraph, change the word “may” to “should”

    c) In the first paragraph after the 10 element list, add that any non-applicable attributes should be discussed.”

14. In Section 4.2.3.1, paragraph number 2, line number 8, change “demonstration” to “demonstrate”

15. In Section 5.1.4, leave a blank space between the third and fourth bullets

16. Table 6.2.1 “Standard License Renewal Application Format” and Table 6.2.2 “Guidance for Preparing the Standard License Renewal Application Format” are not consistent with the SRP-LR format and section titles. Please make the following changes to Table 6.2.1 and Table 6.2.2:

a) Change “2.0 Structures and Components Subject to Aging Management Review” to “2.0 Scoping and Screening Methodology for Identifying Structures and Components Subject to Aging Management Review, and Implementation Results”

b) Change “2.3 System Scoping and Screening Results: Mechanical” to “2.3 Scoping and Screening Results: Mechanical”

c) Change “2.4 Structures and Structural Components Scoping and Screening Results” to “2.4 Scoping and Screening Results: Structures”

d) Change “2.5 System Scoping and Screening Results: Electrical and Instrumentation and Controls” to “2.5 Scoping and Screening Results: Electrical and Instrumentation and Controls”

e) Delete “3.1 Common Aging Management Programs” and the associated subsection which include 3.1.1, 3.1.2, and 3.1.3

f) Change “3.2 Reactor Coolant System” to “3.1 Aging Management of Reactor Coolant System”

g) Change “3.3 Engineered Safety Features” to “3.2 Aging Management of Engineered Safety Features”

h) Change “3.4 Auxiliary Systems” to “3.3 Aging Management of Auxiliary Systems”

i) Change “3.5 Steam and Power Conversion System” to “3.4 Aging Management of Steam and Power Conversion System”

j) Change “3.6 Structure and Structural Components” to “3.5 Aging Management of Structure and Structural Components”

k) Change “3.7 Electrical and Instrumentation Controls” to “3.6 Aging Management of Electrical and Instrumentation Controls”

l) Change “4.4 Environmental Qualification (EQ)” to “4.4 Environmental Qualification (EQ) of Electric Equipment”

m) Change “4.6 Containment Liner Plate Fatigue Analysis” to “4.6 Containment Liner Plate, Metal Containments, and Penetrations Fatigue Analysis”

n) Delete “4.7 Aging of Neutron Absorber in Spent Fuel Rack”

o) Change “4.8 Other Plant-Specific TLAAs” to “4.7 Other Plant-Specific TLAAs”

17. In Table 6.2.2, the section entitled “Appendix D: Technical Specifications”, the title for Supplement 1 to Regulatory Guide 4.2 should be “ Preparation of Supplemental Environmental Reports for Applications to Renew Nuclear Power Plant Operating Licenses.”

18. The Rule requires the Final Safety Analysis Report (FSAR) Supplement to contain a summary description of the programs and activities for managing the effects of aging. NEI 95-10, rev. 2 should be revised to include examples of description of programs such as those listed on page 3.2-14 of the draft SRP-LR.

19. Does description regarding the application of GALL need enhancement in SRP-LR (“Application of GALL”)?

20. NEI 95-10, Section 1.5 discusses resolution of current safety issues. SRP Appendix A.2 provides a similar discussion. The current descriptions are not consistent and the threshold for addressing new issues may be too low. An approach needs to be developed to address any new issues that reveal themselves over the course of the review of license renewal applications.

21. NEI 95-10, Section 5.1.3 should be revised to delete the following statement: “ For example, poisons in the high density spent fuel racks have coupons that are periodically removed and tested to verify that the rack continues to be capable of performing its intended function.” Aging of neutron absorber in the spent fuel rack is no longer considered to be a generic TLAA. Note that Section X of the SRP-LR contains several TLAA program descriptions

22. NEI 95-10, Section 6.2, Table 6.2-1 should be revised to delete Section 3.1 of the Application Table of Contents and renumber the remaining Chapter 3 sections to align with equivalent sections of the SRP-LR. Alignment of the documents. NRC SRP-LR no longer has a section 3.1 describing common aging management programs.

23. NEI 95-10, Section 6.2, Table 6.2-1 should be revised to delete Section 4.7 of the Application Table of Contents and renumber the remaining Chapter 4 section to align with equivalent sections of the SRP-LR. Alignment of the documents – As noted above, aging of neutron absorber in the spent fuel rack is no longer considered to be a generic TLAA.

24. NEI 95-10, Section 6.2, Table 6.2-2 should be revised to delete Section 4.7 of the Application Table of Contents and renumber the remaining Chapter 4 section to align with equivalent sections of the SRP-LR. Alignment of the documents – As noted above, aging of neutron absorber in the spent fuel rack is no longer considered to be a generic TLAA.

25. NEI 95-10, Section 6.2, Table 6.2-2 should be revised to delete Section 3.7 of the Application Table of Contents and renumber the remaining Chapter 3 section to align with equivalent sections of the SRP-LR. Alignment of the documents. NRC SRP-LR no longer has a section 3.1 describing common aging management programs

26. NEI 95-10, Section 6.2, Table 6.2-2 should be revised to offer guidance to applicants for using the GALL report as part of the aging management review. TBD.