

Discussion of the Potential Optimization of the Subsequent License Renewal Application Review Process

Division of License Renewal
Office of Nuclear Reactor Regulation

**Category 2 Public Meeting
May 11, 2017**

Agenda

| Topic | Time |
|--|-----------------|
| • Opening Remarks | 08:30AM-08:40AM |
| • Overview and Discussion of Action Items from the November 10, Subsequent License Renewal (SLR) Optimization Public Meeting | 08:40AM-11:00AM |
| • Pre-Application Discussions with Applicant on Environmental Topics | 11:00AM-11:20AM |
| • Revising Aging Management Program (AMP) Enhancements in the Final Safety Analysis Report (FSAR) after License Renewal | 11:20AM-11:40AM |
| • Industry Remarks • Public Comments | 11:40AM-11:50AM |
| • Summary of Action Items and Closing Remarks | 11:50AM-12:00PM |

Opening Remarks

George Wilson, Director
Steve Bloom, Branch Chief
Division of License Renewal
Office of Nuclear Reactor Regulation

Purpose

- Discuss initial decisions from the SLR optimization working group
- Identify areas and topics for future public meetings and plan for future interactions
- Discuss communication and documentation of SLR optimization results

Summary of Recommendations

- Increased use of portals, teleconferencing and video conferencing to:
 - Review documents for the subsequent license renewal application (SLRA) and
 - Support discussions with the applicant
- Start developing the safety evaluation report (SER) and environmental impact statement (EIS) prior to attending the on-site audit
- Elimination of redundant inspections for SLR
- Reduced staff and time for on-site audits
- Elimination of SER with open items

Overview of Action Items

Heather Jones
Project Manager
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Action Items

- Today's discussion will include:
 - Expectations for “quality” SLRA
 - SLRA review schedule and milestones
 - Operating experience keyword list
 - Submitting multiple versions of the SLRA
 - Resolving emerging issues that would rise to the level of interim staff guidance (ISG) and/or warrant a specific technical issues audit
 - Years of operating experience available
 - How long the portal needs to be active

Quality SLRAs, Schedules and Milestones, Operating Experience Review and Key Word List, Resolution of Emergent Technical Issues

Bill Rogers
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Quality SLRAs

- A quality SLRA will include sufficient detailed information on all issues included in the submittal, as described in 10 CFR Part 54, to support the staff's review.
- One approach to ensuring the inclusion of sufficient detailed information is for the peer reviews to focus on a comparison of the SLRA to previously issued license renewal and SLR SERs, audit reports, inspection reports, requests for additional information (RAIs), staff guidance, interim staff guidance (ISGs) and generic communications.
- In addition, a quality SLRA includes sufficient detailed information on any plant-specific issues identified during pre-submittal meetings, to support the staff's review.

Proposed Schedule

| Milestones | Current License Renewal Schedule | Proposed SLR Schedule |
|--|----------------------------------|-----------------------|
| Application Received, Acceptance Review Begins | Month 0 | |
| Acceptance Review Complete | Month 1.5 | Month 0 |
| Technical Review Complete | Month 12 | Month 10 |
| Issue SER with open items | Month 14 | N/A |
| Issue draft SER | N/A | Month 11 |
| ACRS Subcommittee meeting | Month 16 | Month 12 |
| Issue final SER | Month 18 | Month 14 |
| ACRS full committee meeting | Month 19 | Month 15 |
| Decision – Director, NRR (no hearing) | Month 22 | Month 18 |

- The technical review will consist of:
 - Reviewing information using a portal
 - On-site operating experience audit early in the review
 - In-office audit with breakout sessions
 - On-site audit with walkdowns
 - RAIs developed and issued
 - Frequent communication with applicant to discuss review

Operating Experience Review and Key Word List

- The staff determined that the guidelines contained in the staff endorsed industry document Nuclear Energy Institute (NEI) 95-10, which indicate that the applicant should review 5-10 years of operating experience during LRA development, are appropriate for SLRA development.
- The operating experience review period should end during SLRA development, near the time of SLRA submittal and cover the preceding 5-10 year period.
- The applicant should consider a 10 year period, which would include the results of the majority of AMP inspections during the operating experience review period.

Operating Experience Review and Key Word List

- The staff determined that a generic operating keyword list will be included on the public website (as is, for example, the GALL AMR line item excel sheet) for applicants to use during SLRA preparation.
- It is incumbent on the applicant to identify to the staff any plant-specific variations on the generic keyword list to support the staff's review (this would be a parallel plant-specific key word list). The plant-specific keyword list should be provided during pre-submittal meetings.

Emerging Technical Issues

- The staff considered the process for resolving emerging issues that would rise to the level of an ISG and/or warrant a specific technical issues audit.
- Technical issues will be addressed through the RAI process until an ISG is developed (if determined necessary) or the GALL-SLR Report has been revised to incorporate the ISG, as applicable. This process would apply to all applications currently under review having applicable operating experience.
- Technical issues will be evaluated and addressed through the RAI process, public meetings or site-specific audits as determined appropriate for the issue.

Web-Based Versions of the SLRA

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SLRA Submittals

- When an applicant submits the LRA to NRC, they typically provide:
 - An electronic version with no hyperlinks or bookmarks
 - An electronic version with hyperlinks and bookmarks (no proprietary info)
 - A compact disk (CD) with hyperlinks and bookmarks to proprietary information such as licensee drawings
- According to ADAMS, the applicant can submit a hyperlinked, bookmarked version, which will be included in ADAMS, but all hyperlinks have to be to sources within the document
- This will reduce the number of SLRA submittals to:
 - An electronic, non-proprietary version with hyperlinks and bookmarks to sources within the document, for ADAMS
 - A CD version with hyperlinks and bookmarks to proprietary information, for technical reviewers

QUESTIONS?

Pre-application Discussions with Applicant on Environmental Topics

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Office of Nuclear Reactor Regulation

Pre-Application Discussions

10 CFR 51.40:

(a) A prospective applicant or petitioner for rulemaking is encouraged to confer with NRC staff as early as possible in its planning process before submitting environmental information or filing an environmental report.

Pre-Application Discussions

10 CFR 51.40:

(b) Requests for guidance or information on environmental matters may include inquiries relating to:

(1) Applicable NRC rules and regulations;

(2) Format, content and procedures for filing environmental reports and other environmental information, including the type and quantity of environmental information likely to be needed to address issues and concerns identified in the scoping process described in § 51.29 in a manner appropriate to their relative significance;

(3) Availability of relevant environmental studies and environmental information;

(4) Need for, appropriate level and scope of any environmental studies or information which the Commission may require to be submitted in connection with an application or petition for rulemaking;

(5) Public meetings with NRC staff.

Pre-Application Discussions

- Would pre-application discussions with the applicant about new site-specific information and other information needs improve the efficiency of SLR environmental reviews?
- Applicants should consider requesting pre-application meetings prior to submitting an SLRA to make the NRC staff aware of information early in the process

Pre-Application Discussions

- Pre-application discussions could include the following topics:
 - Projected consultations with environmental agencies
 - Recent environmental survey data (e.g., data collected within last 5 years or as agreed to with the Services)
 - New and significant information relating to Category 1 issues.
 - Analysis of high burnup fuel transportation impacts during the period of extended operation.
 - Changes in environmental conditions at the power plant site (e.g., unplanned releases, spills, etc. with a nexus to the environment)
 - Assessments of new GEIS Category 1 and 2 issues not previously conducted (e.g., groundwater and soil contamination)

Upcoming Public Meeting on Environmental Topics

- On July 19, 2017 the NRC staff will host a SLR biological consultation workshop with NEI.

QUESTIONS?

Revising Aging Management Program (AMP) Enhancements in the Final Safety Analysis Report (FSAR) after License Renewal

Aaron Mink
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Office of Nuclear Reactor Regulation

Issue Summary

- Specific interpretation of guidance may lead to deletion of critical AMP elements from the FSAR and from site procedures such that there might not be reasonable assurance of appropriate aging management

Applicability

- License renewal and SLR
 - FSAR supplements in the format of the example on the following slide with enhancements related to AMP elements in Standard Review Plan (SRP) Table 3.0-1, “FSAR Supplement for Aging Management of Applicable Systems”

FSAR Supplement

- SRP Table 3.0-1 describes the critical elements of each AMP that should be included in the FSAR supplement
- FSAR supplement example:

A.1.18 External Surfaces Monitoring Program

The External Surfaces Monitoring Program manages aging effects through visual inspection of external surfaces for evidence of loss of material, cracking and change in material properties. Physical manipulation to detect hardening or loss of strength for elastomers and polymers is also used.

The External Surfaces Monitoring Program will be enhanced as follows.

- Include instructions for monitoring aging effects for flexible polymeric components through manual or physical manipulation of the material, with a sample size for manipulation of at least 10 percent of available surface area.
- Clearly identify underground components within the scope of this program in program documents. Underground components are those for which access is physically restricted.
- Provide instructions for inspecting all underground components within the scope of this program during each 5-year period, beginning 10 years prior to the entry into the period of extended operation.

Enhancements will be implemented prior to the period of extended operation.

Description of Existing Program

Enhancements List

Element XYZ

Issue Part 1:

Updating the FSAR and Procedures

1. The FSAR supplement contains statements such as “The AMP will be enhanced to conduct step XYZ.”
2. Prior to the period of extended operation the existing FSAR will be updated to include the FSAR supplement.
 - In addition, the site procedures will be enhanced in accordance with the Updated FSAR such that the procedures of the AMP now require step XYZ.
3. In updating the FSAR, the licensee might delete the text from the FSAR that states “The AMP will be enhanced to conduct step XYZ” because the applicable site procedure has already been enhanced to conduct step XYZ.
 - The FSAR no longer includes the requirement for element XYZ.

Issue Part 2: Revising Site Procedures

4. Later in the period of extended operation, the licensee might decide that step XYZ is too burdensome and will consider deleting the step from the procedure.
5. The licensee will perform a 10 CFR 50.59 screening to determine if the change would require a 10 CFR 50.90 submittal to the NRC.
6. Screening of the change to remove XYZ from the procedure would show that the Updated FSAR does not contain a requirement for the procedure to include step XYZ. (See item 3 on previous slide.)
7. The procedure step could be deleted without appropriate regulatory review or notice to the NRC, which is required in accordance with the regulations.

Implications

- In this example, program element XYZ was used when the NRC formed its conclusions that the Updated FSAR summary for the AMP contained adequate detail. Details of element XYZ should have been retained in the FSAR, which would have resulted in a 10 CFR 50.59 review and likely a license amendment request to modify step XYZ in the site procedures.

Suggestions for Revising AMP Enhancements in the FSAR

- A. Do not delete enhancement statements after program enhancements have been completed.
- B. If the enhancement statements are deleted, ensure that the AMP descriptions in the Updated FSAR are augmented to include details for enhancements related to elements of SRP Table 3.0-1.
- C. Format future FSAR supplements to describe the AMPs as they would exist once all enhancements have been implemented such that no enhancements list is necessary.

QUESTIONS?

Industry Remarks and Public Comments

Summary of Action Items and Closing Remarks

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