

April 22, 2002

ORGANIZATION: NUCLEAR ENERGY INSTITUTE

SUBJECT: SUMMARY OF MEETING WITH THE NUCLEAR ENERGY INSTITUTE(NEI) ON: (1) PROPOSED STAFF GUIDANCE ON AGING MANAGEMENT OF FIRE PROTECTION SYSTEMS, (2) STAFF RESPONSE TO INDUSTRY'S PROPOSED REVISIONS ON AGING MANAGEMENT OF CONCRETE ELEMENTS, AND (3) OTHER LICENSE RENEWAL ISSUES

On April 10, 2002, the U. S. Nuclear Regulatory Commission staff met with the NEI and other industry representatives to discuss NEI's draft response to the staff's proposed position on aging management of Fire Protection Systems which was transmitted for their comments on January 28, 2002, and the staff's comments on NEI's concrete response dated March 14, 2002. The staff also used this occasion to identify and discuss the status of other license renewal issues with the NEI.

The meeting began with an NEI representative stating that open dialog between the staff and NEI have been useful for those applicants who are preparing their license renewal applications (LRAs). He cited an open dialog was used for the resolution of the station blackout (SBO) issue and suggested that this process be continued for the resolution of other outstanding license renewal issues. NEI stated that information exchange between the staff and NEI provides an opportunity for the applicants to learn the staff's technical view and it offers an opportunity for participation when the staff position is being developed.

Attached are the agenda (Attachment 1), three handouts (Attachments 2, 3, and 4) provided during the meeting, and the list of meeting attendees (Attachment 5).

Aging Management of Fire Protection Systems (Attachment 2)

For aging management of fire protection systems, NEI agreed with the staff that the January 28, 2002, position is an enhancement over current aging management programs (AMPs), XI.M26 Fire Protection and XI.M27 Fire Water System, in the generic aging lessons learned (GALL) report and was receptive to the staff's proposed changes. Discussions were focused on the inspection frequencies for the fire protection piping and whether the piping inspection should be de-coupled from the sprinkler head test. However, NEI stated that the piping inspection frequency should be flexible according to each plant's specific operating experience. NEI stated that the inspection should not be limited to an ultrasonic inspection, but may also include a volumetric or visual inspection, if appropriate. During the meeting, the staff and NEI agreed that (1) a baseline inspection of the fire protection piping would occur before the end of the current license term, and at 10-year intervals during the extended period of operation, and (2) the fire protection sprinkler heads would be inspected in accordance with NFPA 25 at or before 50 years of sprinkler operation, and at 10-year intervals during the extended period of operation. NEI agreed with the staff's position on the inspection of the

internal surface of below grade fire protection piping and the elimination of the halon/carbon dioxide fire suppression systems inspections. NEI is to provide a formal response to the aforementioned staff position within 30 days.

Treatment of Seismic II/I and Application of 54.4(a)(2) Scoping Criteria (Attachment 3)

The staff presented background, requirements, current standing, and future actions associated with the above issues. The staff issued two position papers on December 3, 2001 and March 15, 2002. Upon receipt of NEI's comments, the staff will consolidate the staff positions.

Lessons Learned from GALL Demo Project and Ft. Calhoun's License Renewal Review (Attachment 4)

The staff had a presentation on lessons learned from the GALL demonstration project and the Ft. Calhoun Station (FCS) LRA review. The staff's presentation was focused on: (1) a missing link between Sections 2 and 3 in the application, (2) the AMPs that state "will be consistent with GALL" from FCS's LRA, and (3) the expected savings (about 30 %) using a new standard review plan (SRP) format. NEI suggested that a roll-up of lessons learned from the FCS LRA be included in a fall workshop to benefit those upcoming plants in 2002-2003.

NEI stated that they want a clear understanding of the "Appeal Process." To be fair to the industry and the public, the staff and NEI agreed that the rules of engagement and the process should be transparent, and the resolution of the appeal process should be timely.

NEI also stated that the staff should clarify its expectation of the meaning of "AMP will be consistent with GALL."

Concrete

The staff's latest response to the industry's proposed revision dated March 14, 2002 was based on: (1) the ACI standard requires regular inspections for concrete elements and cited its prescribed inspection intervals for various structures, (2) AMPs for concrete have been applied consistently to all past LRAs, and (3) the revision was only intended to clarify concrete AMPs in the GALL report for accessible and inaccessible areas.

The staff stated that the existing program, based on the maintenance rule, could be credited for aging management of the concrete structures and component supports. The staff, however, cautioned that the difference between the license renewal rule and the maintenance rule, where the maintenance rule is more performance based, may not address all age-related concrete degradation.

NEI agreed to close this concrete issue by forwarding a letter to the staff. The staff is to prepare a position paper along with any revisions needed in the SRP and GALL. NEI also could provide its comments on the staff position paper (a process similar to that used for SBO).

Electrical Non-Environmental Qualification (EQ) Cable Issues

For a Non-EQ cable AMP, an NEI representative stated that his understanding is that the applicant has a choice to use either XI.E1 (visual inspection) or XI.E2 (calibration test) from the GALL report. Thus, choosing the visual inspection over the calibration test for Non-EQ instrument cables should be acceptable for any applicant. However, the staff explained that each AMP (i.e., XI.E1 or XI.E2) in the GALL report has a specific application. Especially, for those cables that carry a low level signal such as radiation monitoring and nuclear instrumentation, the visual inspection is not sensitive enough to detect degradation (i.e., reduced insulation resistance) of the instrument cable and some mechanical damage may not be readily visible. The staff is to clarify its application in the AMP (i.e., XI.E1 or XI.E2, both).

For the definition of "significant moisture collection" stated in AMP XI.E3 for inaccessible medium voltage cables, NEI's Electrical Working Group will review whether any further clarification is necessary to define the duration of a significant moisture collection and they will let us know their findings.

Treatment of Housings for Active Components

During the Hatch LRA review, the staff identified that housings for fans, and dampers, along with valve bodies, and pump casings should be included in the AMP. NEI suggested, and the staff agreed, that the staff should identify those components in NEI 95-10 and the SRP for which the housings should be included in an aging management review. Upon its completion of interim staff guidance (ISG), the staff will issue the position for NEI comment.

Staff Guidance for Updating the Improved License Renewal Guidance Documents

NEI and the staff met on February 25, 2002 to discuss the above guidance. Subsequently, NEI provided their comments on March 1, 2002. The staff is to review NEI comments and finalize the guidance. The staff stated that this guidance should be added to the SRP as a part of the license renewal guidance document. Revision of this guidance should be done biannually. NEI suggested that specific implementation guidance be provided which considers the stage of the staff's LRA review when determining whether an applicant should implement an ISG.

License Renewal Lessons Learned Workshop

There were discussions for a need to have a lessons learned workshop for the Ft. Calhoun LRA. The purpose is to help prospective applicants who are preparing their LRAs. October 21 or 28, 2002 at the NRC auditorium was proposed.

List of outstanding License renewal Issues

NEI mentioned the following issues and items of interest that are still pending:

1. Non-EQ Cable issues
2. Treatment of housings for Active Components
3. Workshop - Ft. Calhoun Lessons Learned

4. Seismic II/I and 54.4(a)(2)
5. Fire Protection Position
6. Concrete Position
7. Five open items from the GALL report

NEI will review the five open items from the GALL report and let the staff know the status of each item to ensure that they are addressed through ISGs.

Scoping Guidance for Fire Protection Systems, Structures and Components (SSCs)

At the end of the meeting the staff introduced scoping for fire protection SSCs as another possible area that, based upon experience with previous application reviews, may warrant further guidance. NEI and the industry representatives present requested clarification of the intent of this guidance. The staff responded that the fire protection scoping reviews often have been challenging for applicants. This may arise from unclear licensing basis documentation for meeting fire protection requirements or an incomplete review thereof. The license renewal scoping guidance document would restate the requirements of 10 CFR 54.4(a)(3), 10 CFR 50.48, General Design Criterion 3 and Appendix R. The document would further define an array of documentation that an applicant would be expected to review to (1) determine how these requirements are being met, and (2) parlay that understanding of the licensing basis into an effective and thorough fire protection scoping review. The industry agreed that this type of guidance would be helpful. As such, the staff will develop a position paper on scoping for fire protection SSCs, which will be provided to NEI for comment.

/RA/

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License Renewal and Environmental Impacts Program
Division of Regulatory Improvement Programs
Office of Nuclear Reactor Regulation

Project No. 690

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- 5. Fire Protection Position
- 6. Concrete Position
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**License Renewal Meeting
Aging Management of Fire Protection Systems
and Concrete Elements**

**O-9B4
April 10, 2002
(8:30-3:30)
Meeting Agenda**

Welcome and Introductions	5 minutes
Opening Remarks - NRC/NEI	10 minutes
NEI Comments on NRC's January 18, 2002 Letter on Fire Protection	30 minutes
NRC Discussion on Industry Draft Fire protection Comments dated April 2, 2002	30 minutes
Follow up Actions and Summary for Fire Protection Issues	10 minutes
Treatment of Seismic II/I and 54.4(a)(2) (Greg Galletti)	30 minutes
Lessons Learned on Fort Calhoun's License Renewal Application (Butch Burton)	30 minutes
NRC Comments on NEI's March 14, 2002 Letter on Concrete	20 minutes
NEI Comments on NRC's April 05, 2002 Letter on Concrete	20 minutes
Follow up Actions and Summary for concrete issues	20 minutes
NEI Comments on Staff Guidance for Updating the Guidance Documents	20 minutes
Electrical Non-Environmental Qualification Cable Issues	20 minutes
New Issues - Treatment of Housings for Active Components	20 minutes

Attachment 1

NRC Meeting Attendance List (April 10, 2002)

Aging Management of Fire Protection Systems and Concrete Elements

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