October 2, 2001

MEMORANDUM TO: Christopher I. Grimes, Chief
License Renewal and Standardization Branch
Division of Regulatory Improvement Programs

FROM: Christian Araguas, Electrical Engineer ***/RA/***
License Renewal and Standardization Branch
Division of Regulatory Improvement Programs

SUBJECT: NRC STAFF MEETING WITH NUCLEAR ENERGY INSTITUTE (NEI)

DATE & TIME: Thursday, October 11, 2001
9:00 a.m. - 12:30 p.m.

LOCATION: U.S. Nuclear Regulatory Commission
Two White Flint North
11545 Rockville Pike
Rockville, Maryland
Room T2B1

PURPOSE: This meeting is being held to discuss lessons learned and observations prepared by the staff and NEI from the license renewal demonstration project. Recommendations for guidance documents enhancements will also be discussed as well as any implementation issues that may arise. The meeting agenda is in ADAMS: ***ML012700052***.

PARTICIPANTS: Participants from the NRC include members of the Office of Nuclear Reactor Regulation (NRR) and the Office of Nuclear Regulatory Research.

NRC	NEI
C. Grimes, NRR	A. Nelson
S. K. Mitra, NRR	et al.
J. Vora, RES	
et al.	

cc: See next page

CONTACT: Christian Araguas, NRR
301-415-3639

*Meetings between NRC technical staff and applicants or licensees are open for interested members of the public, petitioners, intervenors, or other parties to attend as observers pursuant to the Commission Policy Statement on "Staff Meetings Open to the Public: Final Policy Statement," 65 *Federal Register* 56964, 9/20/2000. Persons attending the meeting will be given the opportunity to express their individual views on topics under discussion during the course of the meeting.

AGENDA FOR NUCLEAR ENERGY INSTITUTE (NEI)
LICENSE RENEWAL DEMONSTRATION PROJECT PUBLIC MEETING

October 11, 2001

Objectives:

- Discuss lessons learned prepared by the staff and NEI from demonstration project
- Discuss recommendations for guidance document enhancements from the staff and NEI, including the basis for enhancements.
- Discuss any implementation issues that NEI may identify for appeal to NRC management

Success:

- Provide timely input, through lessons learned, to applicant who plans to submit application in year 2002
- Identify areas where documents can be enhanced
- Identify industry implementation issues, if any, for further dialogue

Agenda:

	Introduction	9:00-9:05AM
1.	Lessons learned report by industry and recommendation of potential enhancements of guidance documents	9:05-9:45AM
	Break	9:45-10:00AM
2.	Lessons learned report by the staff and recommendation of potential enhancements of guidance documents	10:00-10:40AM
3.	Discussion of differences between the staff and industry observations, if any, and potential for NEI appeal to NRC management	10:40-11:15AM
4.	Future Plans	11-15-12.00PM

NUCLEAR ENERGY INSTITUTE

Alan P. Nelson
SENIOR PROJECT MANAGER,
LICENSING
NUCLEAR GENERATION

October 3, 2001

Mr. Christopher I. Grimes
Chief, License Renewal and Standardization Branch
Division of Regulatory Improvement Programs
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

SUBJECT: License Renewal Application Approaches
Lessons Learned

PROJECT NUMBER: 690

Dear Mr. Grimes:

On May 1, the NEI License Renewal Implementation Guideline Task Force met with the NRC License Renewal staff at NRC White Flint offices. The purpose of the meeting was to discuss how the Generic Aging Lessons Learned (GALL) report would be used in a license renewal application. Based on these discussions we provided Plant X demonstrating the use of GALL in an application that follows the format delineated in the draft August 2000 License Renewal Standard Review Plan. The example titled Plant Y demonstrated the use of GALL in an application that follows the six-column format, which is consistent with previously submitted applications.

The purpose of the demonstration project was to consider the following:

- Which approach optimizes the time to prepare an application and results in the most efficient NRC staff review?
    - Does the staff and industry prefer one approach to the other?
    - Will one approach be more review efficient?
    - If an applicant's program is consistent with the GALL program, can the applicant include a statement of such in lieu of full description of the program's 10 attributes?
    - Can programs evaluated in GALL be applied to non-GALL evaluated components?

We compliment the staff for their professionalism, efficient use of staff resources, and interactions with the industry to complete the assessment in timely fashion. While the demonstration project evaluated a limited sample the industry strongly supports the lessons learned format and process. It is recognized that the true test of the project recommendations will be in the efficiencies of the reviews using GALL, April 2001.

It is our understanding that the staff may revise the GALL and SRP based on the demonstration program lessons learned. NEI will be evaluating NEI 95-10 Revision 3, "Industry Guideline for Implementing the Requirements of 10 CFR Part 54 – The License Renewal Rule," for applicable revisions.

In this regard the industry believes that there is an inconsistent interpretation of the GALL on various line items by the industry and the NRC staff that warrants further discussion. We will be prepared to discuss these lessons learned issues during the October 11, 2001 meeting.

During the course of this initiative the staff provided requests for additional information, held public meetings to review the responses and alternative approaches, and conducted a tabletop inspection exercise to confirm their project conclusions.

The industry concurs with the following staff conclusions:

- The staff prefers the "SRP" format to the "Six-column" format because the review is based upon the guidance in the SRP. NEI Task Force indicated that the applicants would make a business decision on the basis of cost effectiveness as to which format they would follow in preparing their applications. NEI expects that the majority of the future or 2002 and beyond applicants would follow "SRP" format.

- An applicant may reference another program evaluated in the GALL report for a component not covered by the GALL report if it involves the same environment, material, aging effect and ASME Code Class (if applicable) with another component, provided it is clearly identified and explained in the application.

- When a GALL report identifies specific conditions that should be met by the report's conclusion to apply, the applicant should provide a statement in the application indicating that the conditions are met.

- The GALL report addresses operating experience up to the time of preparation of the GALL report. The applicant should address any

relevant subsequent operating experience information in their license renewal application.

- The appropriate word to indicate that an applicant meets the evaluation as described in the GALL report should be "consistent with". The applicants in making this determination may use engineering judgement. When there is some expectation that NRC staff may not come to the same determination, the applicants should identify these as differences from GALL report in their applications.

- The SRP-LR summarizes the component and program as evaluated in the GALL report. If an applicant does not have a specific component in the scope for license renewal or elects not to rely on a particular program listed in the SRP-LR, the applicant could identify them in their applications to facilitate staff review.

- If a program name in the license renewal application is plant specific and different from the name used in the GALL report, the applicant should identify the plant specific name in the application.

- The staff plans to update the improved guidance document, but the update schedule is yet to be decided. NEI should be the focal point for industry comments or suggested revisions to the guidance documents.

As a result of this project the industry gained numerous lessons learned on the level of detail of information to provide in an application in a number of areas when using the new license renewal guidance documents.

We appreciate the opportunity to work with the NRC staff on this project that promises efficiencies in NRC and licensee resources. If you have any questions, please call me at (202) 739- 8110.

Sincerely,

Alan Nelson

c: P.T. Kuo
S.K. Mitra

October 3, 2001

Mr. Alan P. Nelson
Nuclear Energy Institute
1776 I Street, NW., Suite 400
Washington, DC 20006-3708

SUBJECT: LESSONS LEARNED AND OBSERVATIONS FROM THE LICENSE RENEWAL DEMONSTRATION PROJECT

Dear Mr. Nelson:

By letter dated May 24, 2001, the Nuclear Energy Institute (NEI) submitted sample sections of a license renewal application to demonstrate how an applicant would use the Generic Aging Lessons Learned (GALL) report in preparing its application. By letter dated August 29, 2001, the NRC staff provided you sample draft Safety Evaluation Reports (SERs) to similarly demonstrate how the staff would use the improved license renewal guidance documents to perform its review. The purpose of this letter is to provide you with lessons learned and observations gathered by the staff from our participation in the NEI Demonstration Project, which is enclosed.

In this Demonstration Project, the industry and the staff have successfully prepared license renewal application and SER samples, respectively, using the improved renewal guidance documents. Even though the Demonstration Project is limited in scope, we believe it has provided valuable lessons to ensure regulatory stability and predictability. Lessons learned should further enhance the usefulness of the guidance documents. For example, we observed that aging management of concrete structures should be clarified in the GALL report.

Your May 24, 2001, letter also raised two specific questions that were discussed at a July 25, 2001, public meeting. The staff response was documented in the first two bullets in a meeting summary that was issued on September 5, 2001 (ADAMS accession number ML012490017).

We are exchanging lessons learned and observations from the NEI Demonstration Project to enhance communication and facilitate our discussion at an October 11, 2001, public meeting. At that meeting, we would also welcome any feedback on the draft SERs and recommendations for future activities. If you have any questions regarding this matter, please contact S. K. Mitra at (301) 415-2783.

Sincerely,

/RA/

Christopher I Grimes, Chief
License Renewal and Standardization Branch
Division of Regulatory Improvement Programs
Office of Nuclear Reactor Regulation

Project No. 690
Enclosure: As stated
cc w/encl: See next page

Table 1. Observations and Lessons Learned Regarding Application Format

No.	Observations	Lessons Learned
	Plant X:	
1.1	The Plant X sample license renewal application presents information in a five column table, with headings of component group, aging effect/mechanism, aging management program, Generic Aging Lessons Learned (GALL) report further evaluation recommended, and discussion. Each section of the Standard Review Plan for License Renewal (SRP-LR) provides a table that summarizes the component and program evaluations in the GALL report. It would be helpful to the reviewer for each of these table listings in the SRP-LR to be addressed in the application. Also, if an applicant does not have a specific component in the scope or aging effect for license renewal or elects not to rely on a particular program listed in the SRP-LR, the applicant could identify them in their applications to facilitate staff review.	With the Plant X format, it is difficult to determine if all the material and environment combinations in GALL have been addressed in the sample license renewal application. Nuclear Energy Institute (NEI) 95-10 and other license renewal guidance documents may need to be updated to encourage the use of the SRP-LR format and to request the applicant to address specific areas delineated in the SRP-LR. In other words, if the applicant deviates from the SRP-LR, it should be disclosed in the application and should be explained in sufficient detail to preclude a request for additional information.
1.2	The staff prefers the "SRP-LR" format over the "Six-column" format because the review is based upon the guidance in the SRP-LR which provides consistency and an adequate depth of review.	The applicant has flexibility in providing various formats. However, to minimize staff review effort and therefore to maximize Nuclear Regulatory Commission (NRC) efficiency, NEI 95-10 and other license renewal guidance documents may need to be updated to encourage the SRP-LR format.

No.	Observations	Lessons Learned
1.3	The appropriate wording to indicate that an applicant's program meets the evaluation as described in the GALL report should be "consistent with." Engineering judgement may be used by the applicants in making this determination. When there is some expectation that NRC staff may not come to the same determination with respect to a particular program element, the applicants should identify these as differences from the GALL report in their license renewal application.	NEI 95-10 and other license renewal guidance documents may need to be updated to provide guidance for the use of the words "consistent with GALL."
1.4	If a program name in the license renewal application is plant specific and different from the name used in the GALL report but the program is consistent with the GALL report, the applicant should reference which section in chapter XI of the GALL report that the plant specific program is consistent with.	NEI 95-10 and other license renewal guidance documents may need to be updated to help the staff correlate plant specific program names to programs in the GALL report.
1.5	In the aging management program general descriptions in appendix B of the sample license renewal application, there is a listing of the systems to which the aging management program applies. This listing of systems in the description that is consistent with the GALL report was not required for the aging management program review since it was already covered on a component basis in the tables.	It is not necessary to duplicate the list of systems in the general description of the aging management program in Appendix B if it is already addressed in the tables and is consistent with the GALL report.
1.6	Many parts of the SRP-LR Section 3.5 were revised in the April 2001 version. The August 2000 version of the SRP-LR Section 3.5 did not reflect current staff positions. A true assessment of the SRP-LR format was not achieved for Section 3.5 of the demonstration.	The applicant uses the latest approved version of the SRP-LR.

No.	Observations	Lessons Learned
	Plant Y:	
1.7	The Plant Y sample application presents information in a 6-column table, with headings of components, intended functions, materials, environment, aging effects, and aging management programs. This information is presented differently from the SRP-LR format. As a result, much of the information though available in the sample application, is located at various places in the document. The difference in format with which the information is presented does not affect the final results of the review. However, additional effort is necessary to cross reference the information. Therefore, reviewing this format takes more time and it impacts the efficiency of the review process (this is true for the preparation of the request for additional information and even more so for the preparation of the safety evaluation report).	The Plant Y format is not efficient because of the need for the staff to constantly cross reference the GALL report.
1.8	The Plant Y format is currently more familiar to license renewal application reviewers, which provides a level of confidence for the reviewer. The Plant X format, however, appears to be a more efficient process and review times should improve as reviewer proficiency with the format increases.	The Plant X format is more efficient for the staff review.
1.9	The limited scope of Section 3.5 for Plant Y did not provide sufficient information for a thorough assessment of application format.	Section 3.5 for Plant Y did not provide sufficient information for a thorough assessment of the application format.

Table 2. Observations and Lessons Learned During Preparation of Safety Evaluation to Identify Need for Request for Additional Information

No.	Observations	Lessons Learned
2.1	The GALL report presents one acceptable way to manage aging. During the preparation of the request for additional information, the GALL report was sometimes treated as the only acceptable way. This is not consistent with the purpose of the GALL report.	The GALL report indicates that it contains one acceptable way and not the only way to manage aging. However, this observation indicates that the GALL report or the other license renewal guidance documents should be revisited to see if further enhancement is necessary.
2.2	There is a need for the applicant to reference a program evaluated in the GALL report for a component, not covered by the GALL report, if it involves similar intended function, environment, material, aging effect, system, and ASME Code Class (if applicable) with another component.	The license renewal guidance documents need to be updated to allow an applicant to reference a program evaluated in the GALL report for a component not covered by the GALL report if it involves similar intended function, environment, material, aging effect, system, and ASME Code Class (if applicable) with another component. An expectation for allowing this would be that the basis is provided and it is clearly identified and explained in the application.
2.3	When the GALL report identifies specific conditions that should be met for the GALL report's conclusion to apply, the applicant should provide a statement in the license renewal application indicating that the conditions specified in the GALL report are met.	Provide guidance in NEI 95-10 and the SRP-LR.
2.4	In the July 25, 2001 public meeting, NEI indicated they needed a consistent review process. The staff indicated that the SRP-LR approach used in the Plant X demonstration provided the most consistency. The SRP-LR provides a review procedure for the reviewer to follow which helps to make a more consistent review.	Modify NEI 95-10 and other license renewal guidance documents to encourage the use of the SRP-LR format in order to provide as much consistency as possible.

No.	Observations	Lessons Learned
2.5	The SRP-LR review approach for Plant X application format tended to have less requests for additional information than the Plant Y application format.	It is not necessary to modify any of the license renewal guidance documents in response to this lesson learned.
2.6	In the application of the GALL report, the applicant must include a certification in the license renewal application that the verifications have been completed and are documented on-site in an auditable form. NEI had questions on what this certification process really meant. The certification process is the same as in the past where information is submitted to the NRC under oath and affirmation.	NEI 95-10 and other license renewal guidance documents may need to clarify what is meant by the certification process. Recent guidance is provided in Regulatory Issue Summary 2001-18.
2.7	The GALL report is based on industry operating experience prior to June, 2001. Operating experience after that date should also be evaluated. In the license renewal application, there should be some statement that indicates that future operating experience will be evaluated. In particular to license renewal, the staff is most interested in how a generic communication, such as a bulletin or an information notice, will effect the applicant's aging management program. The evaluation could identify a new aging effect or new component/location experiencing an already identified aging effect. Guidance regarding the evaluation of recent experience may be included in Section 3.1.1.1, "Aging Management Programs Evaluated in the GALL Report that Are Relied on for License Renewal," of the SRP-LR (NUREG-1800). An example of the need for such guidance is as follows: Information Notice 2001-09 discusses the flow accelerated corrosion of the main feedwater system inside the containment that was not considered to be susceptible to flow accelerated corrosion. This new experience has led to inspection of feedwater piping inside the containment and modification of the CHECWORKS program.	Modify the SRP-LR and NEI 95-10 to address operating experience identified after the issuance of the GALL report.

No.	Observations	Lessons Learned
2.8	There is no guidance for how the applicant should address programs that have not been developed at the time the license renewal application is submitted where the applicant intends to develop the program at a later time to be consistent with GALL.	Modify the SRP-LR to address programs that the applicant intends to develop in the future that are consistent with the GALL report.
2.9	For an aging effect not addressed in the GALL report, the applicant should evaluate industry-wide operating experience in addition to plant-specific operating experience. Review of industry-wide operating experience provides reasonable assurance that applicable aging effects are identified.	The guidance for reviewing the industry-wide experience is presented in Appendix A of Branch Technical Positions in the SRP-LR (NUREG-1800), A.1, "Aging Management Review – Generic (RLSB-1)."
2.10	In preparing the 10 element evaluation of programs in the safety evaluation report, the reviewer was able to reference the SRP-LR as a basis to provide the justification for concluding the acceptability of the program element.	Provide direction in the safety evaluation report style guide to incorporate this lesson learned.
2.11	When the SRP-LR points to GALL for further evaluation, the reviewer should be using the information from both the SRP-LR and the GALL report.	The information between these two document should be consistent. Although no such inconsistency has been identified in the demonstration project, if changes are made to the GALL report then it will be necessary to ensure the corresponding SRP-LR sections are made consistent.
2.12	The guidance in the SRP-LR that references the GALL report was used during the preparation of the safety evaluation and resulted in the development of a request for additional information for the electrical sample license renewal application. The application of the SRP-LR guidance pointed out an inconsistency in the application in which Appendix B of the sample license renewal application relied on a visual inspection of inaccessible medium voltage cables to detect aging. The request for additional information requested clarification of the intended aging management program.	The guidance in the SRP-LR that references the GALL report for the electrical components is adequate. No further action is required.

No.	Observations	Lessons Learned
2.13	Additional description of uncommon components not addressed in the GALL report should be included in the license renewal application to facilitate staff review of the aging management program. For example, Table 3.5.2 indicates that Plant X has trisodium phosphate baskets that have no aging effects. The staff was not familiar with these baskets and additional descriptions in the sample license renewal application would have facilitated the staff review of the applicable aging effects.	NEI should consider providing guidance in NEI 95-10 regarding components not addressed in the GALL report.
2.14	During the demonstration project, NEI identified that the GALL program determination for structures and containment may need to be clarified. If an applicant identifies such clarification issues, they should submit them to NEI for formal transmission to the NRC for consideration for future document updates. However, before the documents are updated, the applicant may use judgement to determine if the issue belongs in one of these two categories: (1) If the applicant can determine the technical meaning, the applicant should treat this as an editorial comment and document on site. (2) If the applicant can not determine the technical meaning, the applicant should treat its program as different from the GALL report and submit its plant-specific program in the application.	NEI should evaluate industry comments and submit them formally for staff consideration. License renewal guidance documents may also need to be updated to address clarification issues.
2.15	The Plant X demonstration project highlighted that the "fuel transfer tube", which penetrates containment and is exposed to a unique set of environments, is not currently addressed in the SRP-LR or the GALL report. The Plant X demonstration project identified it as part of the containment pressure boundary.	Revise SRP 3.5 and GALL Chapter II to include the fuel transfer tube.

Table 3. Observations and Lessons Learned During Preparation of Request for Additional Information

No.	Observations	Lessons Learned
3.1	It is expected that in future license renewal applications there will be components not addressed in the GALL report. In reviewing the application, the reviewer must concur that the applicable aging effects for materials and environments are applicable. To minimize that different reviewers may have different conclusions and to prevent re-analysis of these components, aging effects, and aging management programs, more guidance may be necessary to promote consistency with the reviewers.	Update the GALL report as more components and aging effects are evaluated. Possibly develop a handbook, guide, or catalogue of safety evaluation report references based on the acceptance from earlier applications to ensure future reviews of components not addressed in GALL are consistent.
3.2	It is the applicants responsibility to provide the basis for the determinations on materials and aging effects that are not addressed in GALL and justify them in the application. The staff should not have to do extensive research to provide a basis for the staff conclusion if the supporting information is not in the application.	Consider modifying NEI 95-10 and other license renewal guidance documents to provide further direction in the description of aging effects that are not addressed in the GALL report.
3.3	The GALL report should not be used as a component checklist to identify requests for additional information. The GALL report also should not be used as a scoping document (all items in the GALL report do not have to be addressed nor does the GALL report include every possible component that should be addressed).	Consider modifying license renewal guidance documents to further emphasize that GALL is not a scoping document.
3.4	When writing requests for additional information, the staff should not allege that a system is exposed to a certain environment unless it is provided in the application. More appropriately, the request for additional information should start with something like "Are the components in the steam and power conversion system exposed to raw water?"	Modify the request for additional information writer's guide to incorporate this lesson learned.
3.5	Preparation of the requests for additional information was easier for the Plant X application than the Plant Y application because a one-to-one comparison could be made of the aging management program information in the license renewal application and the SRP-LR.	Modify the license renewal guidance documents to encourage the use of the SRP-LR format.

No.	Observations	Lessons Learned
3.6	Since the Plant Y application does not follow the SRP-LR format, the staff must rely more on engineering judgement and experience to develop the requests for additional information. In this situation, the request for additional information requires extensive justification and clarity to obtain appropriate responses from the applicant since the reviewer cannot point to GALL. This leads to responses to requests for additional information that do not provide staff with complete information and may result in additional requests for additional information.	Provide clear guidance for the development of the requests for additional information and/or encourage the use of the SRP-LR format.
3.7	The staff asked more requests for additional information than should have been necessary for Plant X because of the lack of complete descriptions of structures, environments, and aging management programs.	Encourage the use of the SRP-LR format and reliance on an inspection process to validate the information in the application which the applicant claims is consistent with the GALL report.
3.8	There was no guidance regarding the numbering system for request for additional information designation and how the system should be tied to the section numbering of the safety evaluation report.	Recommendations regarding the numbering of requests for additional information should be provided in the request for additional information style guide.
3.9	In both the Plant X and Plant Y license renewal sample applications, the applicant concluded that there were no aging effects requiring management for concrete elements of the containment structure and other Class I structures. The staff believes that aging management is required.	Degradation of concrete should be clarified in the GALL report and the SRP-LR.
3.10	In general, the limited scope of the demonstration project for structures and structural components caused some confusion for the reviewers. This resulted in a significant number of proposed requests for additional information related to scoping of the demonstration project. Considerable time was spent preparing these requests for additional information, sorting out the scope of the demonstration project, and eliminating the scope-related requests for additional information.	In any future activities of this nature, the scope of the demonstration project that is subject to review needs to be defined at the beginning of the review and the reviewer's understanding needs to be clarified.

Table 4. Observations and Lessons Learned During Review of NEI Response to Request for Additional Information

No.	Observations	Lessons Learned
4.1	The staff observed that one response to a request for additional information did not address the issue because the request for additional information was not sufficiently focused.	The license renewal guidance or the request for additional information style guide should be revised to indicate that the request for additional information should identify the underlying issue and should indicate the information to be provided to resolve the underlying issue.
4.2	The original guidance from the staff was that the evaluation of this demonstration license renewal application should be based on the information in the August, 2000 version of the GALL report. The applicant used either the August 2000 version or the April 2001 version interchangeably depending on which version would support their position.	Revise NEI 95-10 and other license renewal guidance documents to clarify that the applicant is to use the latest version of GALL and to clearly identify the version.
4.3	The staff noted that some of the applicant's request for additional information responses were rather brief and did not provide complete information. Thus, it was difficult for the staff to make a reasonable assurance conclusion in the safety evaluation report. The applicant indicated that many of the demonstration samples were work in progress which contributed to their inability to provide complete information.	This requires no updating of the license renewal guidance documents since all information would be available in an actual full license renewal application.

No.	Observations	Lessons Learned
4.4	During request for additional information preparation, the reviewer should have a clear understanding of when a request for additional information or an inspection verification is the best vehicle for accomplishing the desired outcome.	Propose clarification in the license renewal guidance documents as follows. If the license renewal application does not contain enough information to make a reasonable assurance finding then the reviewer should submit a request for additional information. If the license renewal application states that the program is consistent with GALL, the reviewer would accept this based on oath and affirmation but may request an inspection verification of this item during the onsite inspection.
4.5	The response to the request for additional information pointed out the fact that the Plant X license renewal application sample for the electrical inspection was written independent and separate from the electrical component inspection as described in Appendix B (Aging Management Program).	When applicants prepare a license renewal application, they should implement quality control to ensure that license renewal application sections which reference each other are consistent.

Table 5. Observations and Lessons Learned During Preparation of Inspection/Verification list

No.	Observations	Lessons Learned
5.1	Although the staff's intent is to focus on items that are modified or new programs for license renewal, the staff needs to have confidence that when the applicant claims to be consistent with the GALL report that sufficient verification is performed to support this conclusion.	The staff reviewer should prepare a list of proposed inspection/verification items for the regional inspection consideration.
5.2	A good opportunity for the reviewer to identify items that are desirable for inspection is during the review process. Onsite verification by a group of people, other than the reviewers, requires coordination and communication. (The demonstration project did not fully exercise the coordination and communication issues because NRC staff reviewers also conducted the "table-top" inspection/verification.)	Consider modifying the SRP-LR and project manager guidance to provide direction for the identification of inspection items and coordination of these items with regional inspection staff.
5.3	One aspect of the demonstration project was to inspect the applicant's aging management program documentation. During an actual application review, a scoping inspection would have been performed prior to the inspection of the aging management programs. The scoping review is Division of Systems Safety Analysis (DSSA) responsibility.	Consider modifying license renewal guidance documents and project manager guidance to complete the scoping inspection prior to the aging management review inspection.

No.	Observations	Lessons Learned
5.4	The inspection/verification is a regional inspection to confirm the accuracy of information in the application. During the preparation of the inspection/verification list, there are cases where the reviewer identified an inspection/verification item and made it an open item in the safety evaluation report pending the result of the inspection/verification. Open items should not be inspection/verification items. The reviewer should trust the accuracy of the information submitted by the applicant and prepare the safety evaluation report accordingly. The inspection/verification by the Region is an independent confirmation step. This is the "trust but verify" approach. If the reviewer has valid reason to question the information in the application that affects a reasonable assurance finding, these issues should be addressed during the request for additional information and safety evaluation report part of the review process and not through the inspection/verification step.	The review guidance, to be determined, should be enhanced to indicate that it is inappropriate to identify an open item in the safety evaluation report pending the result of the inspection/verification. The purpose of the regional inspection/verification should be clarified.
5.5	The staff is supposed to focus its review on programs that are modified or new programs for license renewal. However, experience thus far with license renewal applications indicates that in many instances, these programs have not been developed by the applicant, since they are not required until the license renewal period.	Consider modifying the inspection procedure to ensure new programs are inspected when they are developed prior to the renewal period.
5.6	Several responses indicated that data or further information is available at the plant site. Unless the information is needed for a reasonable assurance finding by the reviewer, inspection/verification requests provided an effective and necessary means for clarification of information and programs proposed to meet the requirements of 10 CFR54.21(a)(3).	The inspection program for license renewal is to confirm that onsite documentation is auditable and retrievable to support the information in the application.

Table 6. Observations and Lessons Learned During Preparation of Draft Safety Evaluation Report with Open Items

No.	Observations	Lessons Learned
6.1	The NRC style guide indicates that the staff safety evaluation report should use abbreviations, such as AMR, AMP, AERM, and OI. During the preparation of the safety evaluation report, management suggested the use of plain language and such abbreviations are not easily understood by the public. The safety evaluation report was revised to spell out all these terms. However, common abbreviations may remain.	The NRC style guide should be revised to indicate that the use of abbreviations should be minimized.
6.2	The SRP-LR provides a step-by-step review procedure. During the preparation of the safety evaluation report for Plant X, using the SRP-LR format, it is observed that following the step-by-step review procedure in the SRP-LR is a structured and efficient method to prepare the safety evaluation report.	The step-by-step review procedure in the SRP-LR provides a structured and efficient method to prepare the safety evaluation report.
6.3	In some cases, the final safety evaluation report descriptions in the application were very general compared with those in the SRP-LR. For example, the flow accelerated corrosion program did not reference NSAC-202L-R2. The buried piping monitoring program also did not make reference to any code or standard such as NACE-RP-01-69.	The applicant would probably have less requests for additional information if the final safety evaluation report descriptions were similar to the level of detail provided in the SRP-LR. NEI should consider incorporating this into NEI 95-10.
6.4	The safety evaluation report for the 6-Column format for Plant Y requires the staff to address each aging management program and to write an extensive justification for its acceptance. As a result, the quality and consistency of the safety evaluation report may not be consistent among the reviewers because of different experience levels.	Modify the license renewal guidance documents to encourage the applicant to use of the SRP-LR format in preparing its application.
6.5	Several items (e.g., A1.1, A2.1, A3.1, A4.1, etc) in GALL Chapter III associated with the structures monitoring program contain the following unclear statement under the Evaluation and Technical Basis column, "Therefore, if these conditions are satisfied, aging management is not required."	The staff needs to clarify the structures monitoring program in GALL Chapter III.

No.	Observations	Lessons Learned
6.6	The staff modified the "Staff Evaluation" section of the safety evaluation report to explain how the "Staff Evaluation Table" is used in writing the SRP-LR format safety evaluation report.	Provide guidance in the safety evaluation report style guide on the need to explain the use of the table.
6.7	The style guides for the safety evaluation report and the request for additional information need to be revised to provide consistent writeups from staff and contractors. Also, need to incorporate staff, Office of General Council (OGC), and technical editor comments. <u>Proposed Revisions</u>: 1. Two spaces after period for memo, letter, etc... and one space for NUREGs. 2. Technical editor rule - Use lower case for aging management programs, system names, etc. Use capital letters for proper nouns only. 3. Give example of bullets - text description is not clear. 4. Review/revise standard terms and acronyms. 5. Update section 2.k & 2.l to use revised statements from e-mail dtd 7/15/01 which standardize the referencing of requests for additional information in the safety evaluation report. 6. Section 6, "Standard text for safety evaluation report," not similar to demonstration project paragraphs. This standard introductory, conclusion, & open/confirmatory statements may need to be different for SRP-LR & 6-columns safety evaluation report versions. (Ex. SRP-LR uses "consistent with the GALL report.") 7. Add example of metrication. Ex. 66°C (150°F). Dual units is specified by NRC Form 426. 8. Review and incorporate technical editor comments on the style guide dtd 6/4/2001.	The current style guide for safety evaluation report and requests for additional information needs to be revised to incorporate comments from staff, OGC, technical editors, and management to make the documents easier for the public to understand.

Table 7. Observations and Lessons Learned During "Table-Top" Inspection/Verification

No.	Observations	Lessons Learned
7.1	An application based on the SRP-LR table consists of a number of components in GALL that are "rolled up" into a general component description. This roll up consists of several items that may be different from plant to plant. Information providing this roadmap should be available for onsite inspection so that an inspector could determine how individual components in the GALL report that are referenced by the applicant were addressed.	Consider revising NEI 95-10 and other license renewal guidance documents as appropriate.
7.2	For the one time inspection, the reviewer is to verify that the applicant's selection of susceptible locations is based on severity of conditions, time of service, and lowest design margin. The reviewer also verifies that the proposed inspection would be performed using techniques similar to those used by the ASME Code and ASTM standards. In one case, the applicant proposed a periodic surveillance and preventive maintenance program as its aging management program. The staff could not verify these activities met the bounding condition for the corresponding GALL aging management program. This was primarily because of the inprecision of the staff's request on what documentation should be provided.	Guide should be provided to focus the inspection/verification description to the underlying issue.
7.3	The Plant X sample application presents summary information in a five column table using the SRP-LR format, with headings of "component group," "aging effect/mechanism," "aging management program," "GALL further evaluation recommended," and "discussion." This format does not include detailed information such as material types and environments that are in the GALL report. The inspection/verification is a regional inspection to confirm the accuracy of information in the application. On-site documentation should be clearly linked to the summary application details to facilitate the regional inspection.	NEI should consider incorporating this lesson learned into NEI 95-10 to indicate that applicants need a clear paper trail that is auditable and retrievable for onsite inspections.

No.	Observations	Lessons Learned
7.4	During the staff's table-top inspection, the applicant revealed that their response to a request for additional information was incomplete. The applicant stated that the information will be complete and verified in their upcoming full license renewal application that will be officially submitted to the NRC. For example, the applicant submitted partially completed aging management programs in the sample license renewal applications for the demonstration project. In addition, the applicant could not provide the completed aging management program for the staff to review during the table-top inspection (e.g., structures monitoring program).	Many of the demonstration samples were work in progress and were not completed during the demonstration project.
7.5	The table top inspection/verification conducted at the NRC headquarters was only a sample of the inspection items. The proposed inspection items were to test the process for the demonstration project. Guidance for how to implement the on-site inspection/verification should be developed with clearly stated goals and objectives. Guidance for the key items to be reviewed/checked or confirmed should also be developed.	Consider the need to update inspection guidance to provide clarification.
7.6	The staff identified 3 specific items from the demonstration sections which should be verified by inspections. The applicant only produced documentation for one item because they had not completed development of the other two items.	Documents were not available for inspection of two items because the demonstration project represents a work in progress.

No.	Observations	Lessons Learned
7.7	When the staff examined the plant procedure for Plant X for the Boric Acid Corrosion Program there was no mention in the procedure for the plant inspectors to look at electrical equipment for boric acid exposure. The staff was looking at the procedure to verify a statement made in the application that electrical components were inspected under the boric acid corrosion program. The applicant stated that adding the words "electrical components" to the procedure would take the emphasis away from looking at carbon steel boric acid exposure.	The staff could not confirm the assertions made in Plant X's license renewal application regarding the inclusion of electrical components in the boric acid program. The staff considered that one option would be to review records of inspections performed using the applicant's procedure to verify that boric acid deposits were being identified on the electrical equipment. Clear guidance should be developed for the NRC inspectors regarding differences between the applicant's license renewal application and aging management program implementing procedures.