

APPENDIX E

DISPOSITION OF THE NRC ADVISORY COMMITTEE ON REACTOR SAFEGUARDS (ACRS) CONSULTANTS' ELECTRICAL AND STRUCTURAL COMMENTS

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E.1 INTRODUCTION

The NRC Advisory Committee on Reactor Safeguards (ACRS) consultants have reviewed the August 2000 version of the draft Standard Review Plan (SRP) for License Renewal and GALL report. Comments were provided in two consultant reports, which were included as attachments to a November 1, 2001 memorandum (see References, Section E.3). The specific technical areas reviewed by the ACRS consultants are electrical components (S. Carfagno) and containment structures (C. Chen). Each of these comments has been evaluated, and the guidance documents have been revised, as needed, based on the staff's disposition of these comments.

E.2. EVALUATION AND DISPOSITION OF COMMENTS

Table E, at the end of Appendix E, provides the evaluation and disposition for each of the ACRS consultants' comments. The column heading "Comment Number" is primarily intended to provide the source of the comment, meaning the organization or individual that submitted the comment. For example, ACRS-CARFAGNO-1 indicates that the comment was made by the ACRS electrical consultant Carfagno and the "1" segregates this comment from all other electrical consultant comments. All comments are in alphanumeric order, based first on the organization, which is the ACRS, and second on the consultant's name. The references in Appendix E.3. provide the sources of all comments.

E.3 REFERENCES

NRC memorandum dated November 1, 2000, "Consultant Reports Concerning License Renewal Guidance Documents," James E. Lyons, ACRS to Christopher L. Grimes, NRC.

Table E: Disposition of the NRC Advisory Committee on Reactor Safeguards (ACRS) Consultants' Electrical and Structural Comments

Comment Number	Item Number	Comment/Proposed Change	Basis for Comment	NRC Disposition
ACRS-CARFAGNO-1	SRP Ch. 3.6, Table 3.6-1 and 3.6-2 Non-EQ electrical cables and connections	It is suggested that consideration be given to adding moisture to heat and radiation as the causes of adverse environments.	None provided.	Moisture is a potential cause of aging degradation for electric cables and should be included as a cause of an adverse environment. The proposed change is acceptable and has been incorporated. The SRP Section 3.6 was revised to address this comment. Also, conforming changes were made to GALL Chapter XI.
ACRS-CARFAGNO-2	SRP Ch. 3.6, Table 3.6-2 Non-EQ electrical cables and connections	It is suggested that the inspection interval of "at least once every 10 years" be reduced after the age of the component reaches approximately 40 years, or after testing indicates that significant degradation has taken place. It is questioned whether visual inspection for surface anomalies is an adequate indicator of component degradation.	None provided.	Inspections at an interval of 10 years have been accepted in past license renewal applications on the basis that operating experience shows aging degradation to be a slow process and visual inspections have been shown to be effective at identifying indicators of aging degradation. Using a frequency of 10 years will provide two data points in a 20-year period that can be used to characterize the degradation rate. Neither the SRP nor the GALL report was revised to address this comment.

Table E: Disposition of the NRC Advisory Committee on Reactor Safeguards (ACRS) Consultants' Electrical and Structural Comments (continued)

Comment Number	Item Number	Comment/Proposed Change	Basis for Comment	NRC Disposition
ACRS-CARFAGNO -3	SRP Ch. 3.6, Table 3.6-2 Non-EQ inaccessible medium-voltage cables	A weakness in the aging management program for this category is that the testing is defined only as "to be determined prior to each test," so that a reviewer has no specific guidance as to what constitutes an acceptable test.	None provided.	<p>The test to be used for medium-voltage, inaccessible cables will have to be based on technology that is state-of-the-art at the time the test is performed have to be approved by the NRC staff before performing the test.</p> <p>The SRP Section 3.6 and GALL Chapter XI, E3 were revised to address this comment by including the above requirements.</p>
ACRS-CARFAGNO -4	SRP Ch. 3.6, Table 3.6-2 Non-EQ inaccessible medium-voltage cables	It is suggested that a testing interval shorter than "at least once every 10 years" would be more appropriate after the age of the component exceeds approximately 40 years, or after testing indicates that significant degradation has taken place.	None provided.	<p>An interval of 10 years has been accepted in past license renewal applications on the basis that operating experience shows aging degradation to be a slow process. Using a frequency of 10 years will provide two data points in a 20-year period that can be used to characterize the degradation rate.</p> <p>Neither the SRP nor the GALL report was revised to address this comment.</p>

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Comment Number	Item Number	Comment/Proposed Change	Basis for Comment	NRC Disposition
ACRS-CARFAGNO-5	SRP Ch. 3.6, Table 3.6-2 Non-EQ connectors subject to borated water leakage	It is not obvious how visual inspection of connectors and enclosure external surfaces can provide a reliable determination of "the possible intrusion of borated water" into the components.	None provided.	<p>Past operating experience has shown that components subjected to borated water leakage are left with a stain or discoloration that is indicative of boric acid corrosion, even after accumulations of boric acid are removed. Visual inspections will be able to identify evidence of exposure to borated water leakage, which, if noted on the surface of components, would indicate the need for further examination and testing to determine if intrusion of the borated water occurred and, if so, if it is a concern.</p> <p>Neither the SRP nor the GALL report was revised to address this comment.</p>
ACRS-CARFAGNO-6	SRP Ch. 3.6, General	A flow chart guiding reviewers to the appropriate review category and checklists for each category could simplify the task of reviewers.	None provided.	<p>Flowcharts and checklists might be useful; however, they are not necessary. The SRP provides sufficient guidance to the reviewer under "Review Procedures." However, flowcharts and checklists are options for future revisions to the SRP, based on implementation experience.</p> <p>Neither the SRP nor the GALL report was revised to address this comment.</p>

Table E: Disposition of the NRC Advisory Committee on Reactor Safeguards (ACRS) Consultants' Electrical and Structural Comments (continued)

Comment Number	Item Number	Comment/Proposed Change	Basis for Comment	NRC Disposition
ACRS-CARFAGNO-7	SRP Ch. 4.1 4.1.3	[It is unclear] how a reviewer chooses a TLAA that was not listed by the applicant but which is likely to satisfy all six acceptance criteria.	None provided.	<p>The review of the TLAA identification list is to be based on the updated safety analysis report and other CLB documents, such as SERs. This is stated in Section 4.1.3 and provides sufficient guidance on where to look for such TLAA's.</p> <p>Neither the SRP nor the GALL report was revised to address this comment.</p>
ACRS-CARFAGNO-8	SRP Ch. 4.1 4.1.1	The applicant's listing [of TLAA's] is required to include sufficient detail to permit identification of the type of calculation, but there is evidently no requirement that the review covered by Chapter 4.1 include a technical review of the adequacy of the calculation.	None provided.	<p>The review covered by Chapter 4.1 deals only with the identification of TLAA's. Technical reviews to determine the adequacy of any calculations in a TLAA are covered in other sections of the SRP. This was clarified by including references to the sections dealing with the technical reviews.</p> <p>The SRP, Chapter 4, was revised to address this comment.</p>

Table E: Disposition of the NRC Advisory Committee on Reactor Safeguards (ACRS) Consultants' Electrical and Structural Comments (continued)

Comment Number	Item Number	Comment/Proposed Change	Basis for Comment	NRC Disposition
ACRS-CARFAGNO-9	SRP Ch. 4.4 4.4.1.1	<p>Section 4.4.1.1 states "<i>Compliance with 10 CFR 50.49 provides evidence that the component will perform its intended functions...</i>"</p> <p>While the wording "provides evidence" is relatively less objectionable than "provides assurance", it is suggested, as elsewhere in this [ACRS consultant] report, that "provides reasonable assurance" is preferable wording.</p>	Compliance with 10 CFR 50.49 does not provide absolute assurance that a component will perform its intended function. Rather, 10 CFR 50.49 provides reasonable assurance that a component can perform its intended function.	<p>The purpose of 10 CFR 50.49 is to provide reasonable assurance that components can perform their intended function in a harsh environment. Therefore, the proposed change is acceptable and has been incorporated.</p> <p>The SRP, Chapter 4, and GALL Chapter X were revised to address this comment.</p>
ACRS-CARFAGNO-10	SRP Ch. 4.4 4.4.1.1	Paragraph 4.4.1.1.1 states how the DOR Guidelines will be used for the review of equipment subject to significant degradation due to aging where a qualified life was previously established; it should also state how equipment for which a qualified life was not established will be reviewed.	None provided.	<p>EQ equipment using materials susceptible to significant age degradation and for which a qualified life was not established are expected to be rare. However, Section 7 of the DOR guidelines addresses such equipment and requires that ongoing programs be implemented at the plant to review surveillance and maintenance records to assure that equipment that is exhibiting age-related degradation will be identified and replaced, as necessary. This was clarified by referencing Section 7 of the DOR guidelines as the requirements to be used in reviewing EQ equipment for which a qualified life was not established.</p> <p>The SRP, Chapter 4.4, was revised to address this comment.</p>

Table E: Disposition of the NRC Advisory Committee on Reactor Safeguards (ACRS) Consultants' Electrical and Structural Comments (continued)

Comment Number	Item Number	Comment/Proposed Change	Basis for Comment	NRC Disposition
ACRS-CARFAGNO-11	SRP Ch. 4.4 4.4.1.1.2	(Paragraph 4.4.1.1.2, covering NUREG-0588 Category II components, states that the qualification programs for valve actuators and motors committed to conform with IEEE Standards 382-72 and 334-71, respectively, will be reviewed against Category II requirements; it is not clear what is to be done with components other than valve actuators and motors that fall under Category II.	None provided.	Components other than valve actuators and motors that fall under Category II should also be addressed. This was clarified by revising Paragraph 4.4.1.1.2 to include a statement similar to that in Paragraph 4.4.1.1.3 for Category I components. The SRP Chapter 4.4 was revised to address this comment.
ACRS-CARFAGNO-12	SRP Ch. 4.4 4.4.3.1.2	In paragraph 4.4.3.1.2, referring to aging analyses, the meaning of the last phrase, "...and the period of time prior to the end of qualified life" is not clear. It seems to mean that the applicant should identify how long before the end of qualified life the analyses will be completed.	None provided.	The intended meaning of the referenced statement is to verify that the reanalysis is completed in sufficient time before the end of the component's qualified life to allow component replacement or refurbishment in the event the reanalysis cannot extend the component's qualified life, pursuant to 10 CFR 54.21(c)(1)(ii). This statement was clarified. The SRP, Chapter 4.4, was revised to address this comment.

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Comment Number	Item Number	Comment/Proposed Change	Basis for Comment	NRC Disposition
ACRS-CARFAGNO-13	SRP Ch. 4.4 4.4.3.3	Paragraph 4.4.3.3, on the FSAR supplement, allows applicants to make program changes in the supplement, without prior Commission approval, "provided that the applicant evaluates each such change pursuant to the criteria set forth in 10 CFR 50.49." It is not clear at what point the staff is to review such changes.	None provided.	The requirements for submitting program changes for staff review are set forth in 10 CFR 50.59, as stated in the SRP. Neither the SRP nor the GALL report was revised to address this comment.
ACRS-CARFAGNO-14	SRP General	Clearer language would be helpful in eliminating potential confusion as to the definition of components within the scope of license renewal.	On the one hand, components with an active function are excluded and passive components are included, the rationale being that performance monitoring makes aging management easier for active components. Similarly, components whose replacement is based on a qualified life or a specific replacement interval are excluded. On the other hand, EQ components most of which have active functions and do have a qualified life, are included; but their evaluation is essentially limited to the review of TLAA's and any aging monitoring programs that may be used to justify operation beyond their qualified life.	The language used to define components within the scope of license renewal is based on, and is consistent with, that in the license renewal rule 10 CFR 54. Neither the SRP nor the GALL report was revised to address this comment.

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Comment Number	Item Number	Comment/Proposed Change	Basis for Comment	NRC Disposition
ACRS-CARFAGNO-15	SRP General	One critical area of review concerns condition monitoring (CM) programs that may be used for EQ components with a qualified life less than 60 years.	While the documents reviewed contain a wealth of information on the criteria that must be met for CM programs to be acceptable, the fact remains that practical CM techniques probably do not exist that meet the key criterion (i.e., that the method be capable of predicting with reasonable assurance the remaining period during which the intended function can be performed.) The regulatory documents state specifically that simply verifying that equipment is functional in the normal service environment is not sufficient.	<p>While currently available CM techniques may not be capable of predicting with reasonable assurance the remaining period during which the intended function can be performed, they can provide information that can be used to make informed decisions regarding the acceptability of components for continued service. In addition, as advances in CM technology are made, and experience with monitoring the condition of aged equipment increases, predictions of future performance may become more practical. Thus, even with the current limitations in technology, CM is an effective tool for managing aging and the option of using CM in an aging management program should be available.</p> <p>Neither the SRP nor the GALL report was revised to address this comment.</p>

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Comment Number	Item Number	Comment/Proposed Change	Basis for Comment	NRC Disposition
ACRS-CARFAGNO-16	SRP General	[An] area of review that may present difficulty concerns components designed and built prior to the existence of the present criteria and inspection programs. This area is also related to the question of whether equipment qualified in accordance with older regulations and IEEE standards are adequate for use during the period of continued operation.	Earlier qualification standards did not require the establishment of a qualified life.	Components qualified to older standards, and for which there is no qualified life, are expected to be rare. In the event there are such components, they will be evaluated in a similar manner as components with a qualified life less than the period of extended operation. The SRP, Chapter 4.4, was revised to address this comment by adding a statement for clarification.
ACRS-CARFAGNO-17	SRP General	[A] caution [related to the guidance for evaluating time-limited aging analyses] applies to the choice of activation energy.	Activation energy is known to depend critically on the specific composition of materials analyzed – making the use of generic values of activation energy questionable.	The use of generic activation energies was accepted in the CLB and is outside the scope of license renewal. In evaluating TLAAAs for EQ equipment, changes in activation energy are closely monitored and will only be allowed with proper justification on a plant-specific basis. This is specifically stated in the evaluation of EQ as an aging management program in Chapter X. Neither the SRP nor the GALL report was revised to address this comment.
ACRS-CARFAGNO-18	GALL Vol. 1 Summary	It is recommended that elements 4 and 5 [of the aging management programs] be reworded to be consistent with existing technology.	The description of element 4 states, <i>"Detection of aging effects should occur before there is a loss of any...component intended function."</i> The description of element 5 states, in part, <i>"Monitoring and trending</i>	The intent of elements 4 and 5 is to encourage the detection of aging degradation at the earliest possible time and to monitor that degradation so that informed decisions can be made as to when corrective actions are needed to

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ACRS-CARFAGNO-18 (cont.)			<p><i>should provide for prediction of the extent of the effects of aging and timely corrective or mitigating actions."</i></p> <p>It must be kept in mind that the most important "intended function" is the one required when an accident occurs. For non-environmentally qualified electrical cables and connections this point is relatively less important than it is for environmentally qualified equipment,</p> <p>because the environment of non-EQ cables and connections is not likely to change from the normal environment when an accident occurs. However, for EQ equipment the environment will be more severe than normal when an accident occurs; therefore, it is difficult to determine whether the intended function can be performed based on inspection and testing conducted under normal service conditions.</p> <p>For EQ equipment, although components with a QL or specified replacement interval are excluded from license renewal review, EQ equipment is included because it involves TLAAAs. This concern also applies if CM is depended upon to accommodate a QL (now usually 40</p>	<p>provide reasonable assurance that a component can perform its intended function.</p> <p>As worded, element 4 does not require that acceptance criteria be established. It does require that actions be taken to detect aging degradation before a loss of component intended function. Similarly, element 5 also does not require that acceptance criteria be established; it does require that</p> <p>Degradation be monitored and trended, if applicable.</p> <p>In the case of the aging management programs evaluated for non-EQ electrical components, none of them rely on monitoring and trending to manage the effects of aging.</p> <p>Neither the SRP nor the GALL report was revised to address this comment.</p>

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Comment Number	Item Number	Comment/Proposed Change	Basis for Comment	NRC Disposition
ACRS-CARFAGNO-18 (cont.)			<p>years) which is less than the desired life, e.g., 60 years. Consequently, while it is possible to detect aging effects, it is usually not feasible to determine when the aging effects have progressed to the level that there remains reasonable assurance that the intended function can be performed during the period before the next surveillance is scheduled to take place. This dilemma is described more fully in Section 4.3 of this [ACRS consultant] report on Condition Monitoring. Since decision criteria are generally not available, it is inconsistent to imply that the evaluation of aging programs has demonstrated that element 4 is satisfied.</p> <p>The comments concerning element 4 apply even more strongly here, because element 5 emphasizes the requirement for predicting future intended function capability.</p>	
ACRS-CARFAGNO-19	GALL Vol. 1 Summary	It is suggested that a checklist be prepared similar to the one (see Appendix B [of the ACRS consultant report]) for the review of equipment qualification programs.	A checklist would facilitate the review process.	See NRC disposition of comment ACRS-CARFAGNO-6 in this Table E.

Table E: Disposition of the NRC Advisory Committee on Reactor Safeguards (ACRS) Consultants' Electrical and Structural Comments (continued)

Comment Number	Item Number	Comment/Proposed Change	Basis for Comment	NRC Disposition
ACRS-CARFAGNO-20	GALL Ch. X P. X-10	Reword references to 10 CFR 50.49 to state that "...compliance provides reasonable assurance that the component can perform its required functions."	<p>On this page [of the GALL report], in items 9 and 10, it is stated that compliance with 10 CFR 50.49 demonstrates that <i>"a component will perform required functions"</i> and that <i>"Compliance with 10 CFR 50.49 provides evidence that a component will perform its intended functions..."</i></p> <p>It is more accurate to state that compliance with 10 CFR 50.49 provides reasonable assurance that the component can perform its required functions. This comment is based on extensive past discussions among qualification standards writing groups, but it is also consistent with the statement in the first paragraph of Chapter XI.E1, <i>"The purpose of the aging management program described herein is to provide reasonable assurance that the intended functions of electrical equipment will be maintained..."</i>, where, unfortunately, the word "will" is repeated.</p>	<p>The purpose of compliance with 10 CFR 50.49 is to provide reasonable assurance that components can perform their intended function in a harsh environment. Therefore, the proposed change is acceptable and has been incorporated.</p> <p>GALL, Chapter X, was revised to address this comment.</p>

Table E: Disposition of the NRC Advisory Committee on Reactor Safeguards (ACRS) Consultants' Electrical and Structural Comments (continued)

Comment Number	Item Number	Comment/Proposed Change	Basis for Comment	NRC Disposition
ACRS-CARFAGNO-21	GALL Ch. XI E1 and E2	Add moisture to heat and radiation as an environmental condition of interest.	None provided.	Moisture is a potential cause of aging degradation for electric cables and should be included as a cause of an adverse environment. The proposed change is acceptable and has been incorporated. GALL, Chapter XI, was revised to address this comment. Also, conforming changes were made to the SRP, Section 3.6.
ACRS-CARFAGNO-22	GALL Ch. XI E1 and E3	Particularly with increasing age, a shorter [inspection] interval [than once every 10 years] would be more appropriate.	In Chapters XI.E1 and XI.E3, [it is stated that] an inspection interval of "at least once every 10 years is an adequate period to preclude failures of the conductor insulation." With increasing age, a shorter interval would be more appropriate.	An interval of 10 years has been accepted in past license renewal applications on the basis that operating experience shows aging degradation to be a slow process. Using a frequency of 10 years will provide two data points in a 20-year period that can be used to characterize the degradation rate. Neither the SRP nor the GALL report was revised to address this comment.
ACRS-CHEN-1	SRP 3.5.1	Guidance is needed for sources of information for "non-recent vintage plants. SRP 2.4 on scoping and screening is a good source.	SRP 3.5.1 does not address older plants.	For older plants, the location of applicable information is plant-specific because the FSAR may have predated NUREG-0800. Section 3.5.1 of the SRP was revised to address this comment.

Table E: Disposition of the NRC Advisory Committee on Reactor Safeguards (ACRS) Consultants' Electrical and Structural Comments (continued)

Comment Number	Item Number	Comment/Proposed Change	Basis for Comment	NRC Disposition
ACRS-CHEN-2	SRP 3.5.2.2.1 and 3.5.3.2.1	Mark I steel and concrete containments and Mark II steel containment should also be added to have a complete list. (GL 87-05 Table 1 lists Brunswick 1 & 2 as Mark I concrete containments.)	For completeness.	<p>The SRP is consistent with the GALL tables for BWR containments. Concrete elements are not identified for Mark I and II steel containments. Mark I concrete containment was previously in the 12/6/99 draft but was deleted in the August 2000 draft as a result of an NEI Comment. This was deleted because it only covered one (1) plant, Brunswick.</p> <p>Neither the SRP nor the GALL report was revised to address this comment.</p>
ACRS-CHEN-3	SRP Table 3.5-1, p.3.5-18	Add "potential loose expansion anchor bolts due to vibration or waterhammer." It can be managed by an in-service inspection program.	Concern this was overlooked.	<p>"Potential loose expansion anchor bolts due to vibration or waterhammer" is covered in GALL Chapter IIIB —Component Supports. A structures monitoring program can be credited to manage this. SRP, Table 3.5-1, identifies "concrete surrounding anchor bolts" as the area of concern. Cracking of the concrete would lead to reduction in anchor capacity.</p> <p>Neither the SRP nor the GALL report was revised to address this comment.</p>

Table E: Disposition of the NRC Advisory Committee on Reactor Safeguards (ACRS) Consultants' Electrical and Structural Comments (continued)

Comment Number	Item Number	Comment/Proposed Change	Basis for Comment	NRC Disposition
ACRS-CHEN-4	SRP 3.5.1, p. 3.5-1	The words "ASME Class MC piping and components" is unclear as to the meaning. Class MC is for metal containments.	Improve clarity.	See NRC disposition of NEI comment GIIIB1-1 in Appendix B, Table B.2.2. The SRP was revised to address this comment.
ACRS-CHEN-5	SRP 3.5	SRP refers to GALL report at many places, but does not mention specific chapters. However, it is not too difficult to find the right chapters of GALL using the GALL report TOC.	Response to ACRS Requirement 3.2 concerning guidance in SRP for referencing GALL chapters.	The ACRS consultant did not propose any revision. Neither the SRP nor the GALL report was revised to address this comment.
ACRS-CHEN-6	SRP 4.6.1	SRP states "If a plant's code of record requires a fatigue analysis, then this fatigue analysis may be a TLAA." No guidance if code of record does not require a fatigue analysis. Should the Backfit Rule be applied or is fatigue analysis not required for LR also?	Concern there is no guidance provided for containments designed prior to present criteria and inspection program.	The Backfit Rule does not apply; fatigue analysis is not required for LR unless it is part of CLB for the containment structure. A separate entry in GALL tables was specifically created for this case. "Cracking due to cyclic loading" has been identified when a CLB fatigue analysis does not exist. Neither the SRP nor the GALL report was revised to address this comment.
ACRS-CHEN-7	General comment	GL 87-05 pointed out that details of the "sand cushion design" for Mark I drywells varies depending on the AE and may be significant in the occurrence of degradation. This should be added to SRP and highlighted for the reviewers.	Same as directly above.	In GALL Chapter IIB, the "sand pocket region" is identified for Mark I and II steel containments for loss of material due to corrosion. Reference to GL 87-05 was added to the "Operating Experience" discussion in GALL, Chapter XI.S1. The GALL report was revised to address this comment.

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Comment Number	Item Number	Comment/Proposed Change	Basis for Comment	NRC Disposition
ACRS-CHEN-8	GALL Vol. 1, Table 5	Same as ACRS-CHEN-3.	Same as ACRS-CHEN-3.	See NRC disposition of comment ACRS-CHEN-3 in this Table E.
ACRS-CHEN-9	GALL, p. II B2-3	Paragraph refers to Mark II steel containment as having both steel and concrete elements, which is inconsistent with ps. II B2-1 and II B2-6, which only address steel elements. Also Mark I steel and concrete containments not properly identified.	Correct inconsistency.	<p>According to NUREG-1557, there are no concrete elements for Mark I and II steel containments that require aging management. Mark I concrete containment is no longer included in GALL.</p> <p>See NRC disposition of comment ACRS-CHEN-2 in this Table E.</p> <p>The GALL report was revised to address this comment by revising Page II B2-3 to delete the word "concrete" in regard to Mark II steel containments.</p>
ACRS-CHEN-10	GALL Item II A1.1 "leaching of calcium hydroxide, aggressive chemical attack, corrosion of embedded steel" and GALL Item IIA1.2 "corrosion" requiring evaluation of inaccessible areas	Evaluation of inaccessible areas when conditions in accessible areas may not indicate the presence of or result in degradation to such inaccessible areas goes beyond the inaccessible area requirements of 10 CFR 50.55a(b)(2)(ix). It is more reasonable to require this in cases when the applicant cannot show that the environments in accessible and inaccessible areas are similar.	GALL is too restrictive on "inaccessible areas."	See NRC disposition of NEI comment G-IIA1-1 in Appendix B, Table B.2.1.

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ACRS-CHEN-11	General comment	It appears that adequate technical bases for the AMPs are provided in the referenced ASME codes, Reg. Guides and relevant NUREGs.	Response to ACRS Requirement 3.5 concerning the technical bases for the AMPs.	The consultant concluded that the AMPs have adequate technical bases in codes and regulatory standards. Neither the SRP nor the GALL report was revised to address this comment.
ACRS-CHEN-12	GALL Section II.B1, "Mark I Containments"	See comments ACRS-CHEN-2, -7, -9.	Response to ACRS Requirement 3.6 that a more in-depth review of Mark I containments be conducted.	See NRC dispositions of comments ACRS-CHEN-2, -7, and -9 in this Table E.
ACRS-CHEN-13	General Comment	Adequate technical bases to support LR decisions are provided.	Response to ACRS Guidance 4.1: Do LR documents provide adequate technical bases to support license renewal decisions?	The consultant concluded that adequate technical bases are provided for LR decisions. Neither the SRP nor the GALL report was revised to address this comment.
ACRS-CHEN-14	General Comment	SRP-LR provides an adequate roadmap, with one (1) minor editorial difference. There is an inconsistency between NEI 95-10, Rev. 2 and SRP-LR in Table 6.2-1 of 95-10.	Response to ACRS Guidance 4.2: Are LR documents effectively integrated to provide a consistent and understandable process?	The consultant concluded that the SRP-LR provides an adequate roadmap. There was an inconsistency between NEI 95-10, Rev. 2, and SRP-LR in Table 6.2-1 of 95-10. NEI 95-10 was subsequently revised to eliminate inconsistencies. Neither the SRP nor the GALL report was revised to address this comment.

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Comment Number	Item Number	Comment/Proposed Change	Basis for Comment	NRC Disposition
ACRS-CHEN-15	General Comment	Adequate scoping/screening criteria is applied to old plants because non-safety-related and regulated-events are included, in addition to safety-related, in the scoping.	Response to ACRS Guidance 4.3: Is scoping/screening guidance adequate for old plants?	The consultant concluded that adequate scoping/screening guidance is provided for older plants. Neither the SRP nor the GALL report was revised to address this comment.
ACRS-CHEN-16	General Comment	Lessons learned from Calvert Cliffs and Oconee are listed in SRP Table 4.1-3 and described in detail in GALL Chapter X. To help future reviewers, SRP should include a more detailed description of lessons learned.	Response to ACRS Guidance 4.3: Are lessons learned from Calvert Cliffs and Oconee adequately conveyed to future reviewers?	The consultant identified GALL Chapter X and SRP, Table 4.1-3, for lessons learned. It is noted that lessons learned from Calvert Cliffs and Oconee have been implemented in the development of the SRP and GALL report; incorporating lessons learned is expected to continue as more applications are reviewed. Neither the SRP nor the GALL report was revised to address this comment.
ACRS-CHEN-17	General Comment	SRP directs the staff to develop comprehensive understanding of technical issues concerning scoping/screening and identification of TLAAs. It also directs the staff to verify the existence of AMPs.	Response to ACRS Guidance 4.4: Does SRP direct the staff to develop comprehensive understanding of technical issues and proposed technical solutions or to verify the existence of AMPs?	The consultant concluded that the SRP provides appropriate direction on technical matters and how to verify existence of AMPs. Neither the SRP nor the GALL report was revised to address this comment.

Table E: Disposition of the NRC Advisory Committee on Reactor Safeguards (ACRS) Consultants' Electrical and Structural Comments (continued)

Comment Number	Item Number	Comment/Proposed Change	Basis for Comment	NRC Disposition
ACRS-CHEN-18	General Comment	Plant-specific operating experience is one of the ten attributes evaluated for AMPs, as shown in GALL Vol. 1, p. 2 and in GALL Vol. 2, Chapters X and XI.	Response to ACRS Guidance 4.5: Is review of plant-specific operating experience adequately emphasized by the SRP? Is guidance adequate for evaluation of AMPs that address unique types of plant-specific aging degradation?	The consultant concluded that the SRP adequately addresses plant-specific operating experience and unique plant-specific aging degradation. Neither the SRP nor the GALL report was revised to address this comment.
ACRS-CHEN-19	General Comment	Guidance could be more specific. The tendon access gallery is one example where more detailed guidance should be included. Suggest that increased inspection frequency where high moisture and humidity is present be added in GALL page IIA1-13 and SRP Table 2.4-1, p. 2.4-6.	Response to ACRS Guidance 4.5: Is review of plant-specific operating experience adequately emphasized by the SRP? Is guidance adequate for evaluation of AMPs that address unique types of plant-specific aging degradation?	See NRC disposition of NEI comment G-IIA1-13 in Appendix B, Table B.2.1.
ACRS-CHEN-20	General Comment	Recommend some examples of plant-specific operating experience be described under attribute 10 in GALL Chapters X and XI.	Response to ACRS Guidance 4.5: Is review of plant-specific operating experience adequately emphasized by the SRP? Is guidance adequate for evaluation of AMPs that address unique types of plant-specific aging degradation?	As appropriate, GALL references specific IEBs, GLs, INs and other documents that discuss significant industry operating experience, including plant-specific experience. Operating experience unique to the applicant's plant would be addressed in the LRA. Neither the SRP nor the GALL report was revised to address this comment.

Table E: Disposition of the NRC Advisory Committee on Reactor Safeguards (ACRS) Consultants' Electrical and Structural Comments (continued)

Comment Number	Item Number	Comment/Proposed Change	Basis for Comment	NRC Disposition
ACRS-CHEN-21	General Comment	The concerns of the public, and possibly the interveners, are taken into consideration. SRP Sections 2.1.2.1 and 2.1.2.2 refer specifically to NEI 95-10, Rev. 2 and GALL Vol. I page 1 refers to reports provided by UCS which the staff considered.	Response to ACRS Guidance 4.6: Have the issues and concerns raised by all stakeholders been properly considered in the SRP and supporting documents?	All public comments received by the NRC have received the same consideration and the same level of review and disposition. Neither the SRP nor the GALL report was revised to address this comment.
ACRS-CHEN-22	General Comment	Generic issues as discussed in SRP Appendix A.3 are adequately resolved.	Response to ACRS Guidance 4.7: Are LR generic issue resolutions adequately reflected in the guidance documents?	The consultant concluded that generic issues are adequately reflected in the guidance documents. Neither the SRP nor the GALL report was revised to address this comment.

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