

APPENDIX B, TABLE B.2.12

DISPOSITION OF NEI COMMENTS
ON CHAPTER 3 OF SRP-LR

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Table B.2.12-1: Disposition of NEI Comments on Chapter 3, Section 3.1, of SRP-LR

Comment Number	Item Number	Comment/Proposed Change	Basis for Comment	NRC Disposition
S3.1-1	SRP-LR 3.1	SRP-LR Section 3.1.1 Areas of Review, describes “connected systems.” Statements describing the “connected systems” should be deleted.	SRP-LR 3.1 covers the aging management review of the reactor coolant systems. Connected systems are not part of the review of the reactor coolant system.	<p>The section SRP-LR 3.1 covers the reactor vessel, vessel internals, and the reactor coolant system (including connected systems). Connected systems up to the second containment isolation valve were included in this chapter to keep Class 1 components with similar programs together in the GALL report. The title of SRP-LR 3.1 was changed to be consistent with the GALL report. The title of SRP-LR 3.5 was also changed to be consistent with GALL Chapters II and III.</p> <p>The SRP-LR was revised to address a portion of this comment as stated in above paragraph.</p>
S3.1-2	SRP-LR 3.1	AMPs Evaluated in the GALL report that are Relied on for License Renewal – Inservice Inspection	GALL Section I applies. The presentation of the Inservice Inspection program in the GALL is different than any other program evaluated in the GALL that is relied upon for license renewal. What specifically is an applicant supposed to do that allows this program to be credited without further review?	<p>Chapter 1 of the GALL report, Vol. 2, “Application of the ASME Code,” does not give specifics of a 10-element inservice inspection program. XI.M1, “ASME, Section XI, Inservice Inspection, Subsections IWB, IWC, and IWD” in NUREG-1801, Vol. 2 does. In places where ISI is acceptable, no further evaluation is annotated in the further evaluation column.</p> <p>The SRP-LR was not revised to address this comment.</p>

Table B.2.12-1: Disposition of NEI Comments on Chapter 3, Section 3.1, of SRP-LR (continued)

Comment Number	Item Number	Comment/Proposed Change	Basis for Comment	NRC Disposition
S3.1-3	SRP-LR 3.1	AMPs Evaluated in the GALL report that are Relied on for License Renewal – Water Chemistry	GALL Section XI.M.11 applies. Refer to comments on Aging Management programs.	See NRC disposition of NEI comments G-XIM11-1 through G-XI.M11-2 in this Appendix B, Table B.2.9-2. The SRP-LR was revised to address this comment to make it consistent with the GALL report.
S3.1-4	SRP-LR 3.1	AMPs Evaluated in the GALL report that are Relied on for License Renewal – Minimization and Control of SCC Delete this program from all locations in all documents.	For PWRs, this topic is discussed in GALL IV.A2.1.3. Regulatory Guide 1.65 is referenced within this GALL entry. Regulatory Guide 1.65 entitled, “Materials and Inspections for Reactor Vessel Closure Studs,” which was published in 1973 was reviewed by the B&W Owners Group during the licensing of BAW-2251, “Demonstration of the Management of Aging Effects for the Reactor Vessel.” In a letter to the NRC staff dated April 1, 1997 (Project No.683), the B&WOG addressed Regulatory Guide 1.65 in response to RAI # 14. In brief, the B&WOG concluded that all recommendations (i.e., examination methods and acceptance standards) of the RV studs in Regulatory Guide 1.65 have been superceded by the current examination requirements specified in the 1989 Edition of ASME Section XI. The examination requirements specified in ASME Section XI, Examination Category B-	See NRC disposition of NEI comments G-IVA2-3 in this Appendix B, Table B.2.3. References to the design requirements of Regulatory Guide 1.65 were removed from the GALL report as recommended in NEI comment G-IV A2-3 in Appendix B and in this comment. However, the preventive features of Regulatory Guide 1.65 remain in GALL Chapter XI.M3. Also, programs were not deleted from the SRP-LR for minimization and control of SCC as a result of this comment. The SRP-LR was not revised to address this comment.

Table B.2.12-1: Disposition of NEI Comments on Chapter 3, Section 3.1, of SRP-LR (continued)

Comment Number	Item Number	Comment/Proposed Change	Basis for Comment	NRC Disposition
S3.1-4 (cont.)			G-1 are sufficient to manage that potential for IGSCC of the RV studs during the period of extended operation.	
S3.1-5	SRP-LR 3.1	AMPs Evaluated in the GALL report that are Relied on for License Renewal – Fatigue Monitoring Program	GALL Section X.M1 applies. Refer to comments on Aging Management programs.	The SRP-LR was revised to address this comment by deleting fatigue monitoring program from section 3.1 because it is addressed in Table 4.3-2.
S3.1-6	SRP-LR 3.1	AMPs Evaluated in the GALL report that are Relied on for License Renewal – Bolting Integrity	GALL Section XI.M.12 applies. Refer to comments on Aging Management programs.	See NRC disposition of NEI comments G-XIM12-1 through G-XIM12-4 in this Appendix B, Table B.2.9-2. The SRP-LR was not revised to address this comment.
S3.1-7	SRP-LR 3.1	AMPs Evaluated in the GALL report that are Relied on for License Renewal – Reactor Vessel Surveillance	GALL Section XI.M.13 applies. Refer to comments on Aging Management programs.	There were no NEI comments on Chapter XI, program M13. The SRP-LR was not revised to address this comment.
S3.1-8	SRP-LR 3.1	AMPs Evaluated in the GALL report that are Relied on for License Renewal – Boric Acid Corrosion	GALL Section XI.M.5 applies. Refer to comments on Aging Management programs.	See NRC disposition of NEI comments G-XIM5-1 through G-XIM5-2 in this Appendix B, Table B.2.9-2. The SRP-LR was revised to address this comment to make it consistent with the GALL report.
S3.1-9	SRP-LR 3.1	AMPs Evaluated in the GALL report that are Relied on for License Renewal – Thermal Aging and neutron irradiation embrittlement (CASS)	GALL Section XI.M.2 applies. Refer to comments on Aging Management programs.	There were no NEI comments on Chapter XI, program M2. The SRP-LR was not revised to address this comment.

Table B.2.12-1: Disposition of NEI Comments on Chapter 3, Section 3.1, of SRP-LR (continued)

Comment Number	Item Number	Comment/Proposed Change	Basis for Comment	NRC Disposition
S3.1-10	SRP-LR 3.1	AMPs Evaluated in the GALL report that are Relied on for License Renewal – Flow Accelerated Corrosion	GALL Section XI.M.6 applies. Refer to comments on Aging Management programs.	See NRC disposition of NEI comment G-XIM6-1 in this Appendix B, Table B.2.9-2. The SRP-LR was revised to address this comment to make it consistent with the GALL report.
S3.1-11	SRP-LR 3.1	AMPs Evaluated in the GALL report that are Relied on for License Renewal – Quality Assurance	GALL Appendix A and SRP-LR Appendix A.2 apply. Refer to comments on Aging Management programs.	Quality Assurance for Aging Management of Nonsafety-Related Components is described in Branch Technical Position IQMB-1 (Appendix A.2 of the standard review plan.) The SRP-LR was not revised to address this comment.
S3.1-12	SRP-LR 3.1	AMPs Evaluated in the GALL report that are Relied on for License Renewal – Vessel Closure Head Penetrations Delete the requirement for further review of this program in SRP-LR 3.1.2.2.7.	GALL Section IV A2.2.1 applies. The applicable GALL section states “No Further Evaluation Recommended” as does Table 3.1-1 of the SRP-LR. Actions will be taken by the applicant to address this topic within the bounds of the program.	There is no further evaluation necessary for item A2.2.1, “CRD pressure housing,” in chapter IV of the GALL report. SRP-LR statement 3.1.2.2.7 does not apply to this item. The SRP-LR was not revised to address this comment since there is no further evaluation required.

Table B.2.12-1: Disposition of NEI Comments on Chapter 3, Section 3.1, of SRP-LR (continued)

Comment Number	Item Number	Comment/Proposed Change	Basis for Comment	NRC Disposition
S3.1-13	SRP-LR 3.1	AMPs Evaluated in the GALL report that are Relied on for License Renewal – Steam Generator Tube Integrity	GALL Sections IV D1.2.1, D1.2.3, D2.2.1, and D2.2.2 apply. Refer to comments on Aging Management programs.	See NRC disposition of NEI comments G-IVD1-3 through G-IVD1-8 in this Appendix B, Table B.2.3. There were no NEI comments on item numbers D1.2.3, D2.2.1, and D2.2.2 The SRP-LR was revised to address this comment by making conforming changes consistent with changes to the Steam Generator Tube Integrity Program.
S3.1-14	SRP-LR 3.1	AMPs Evaluated in the GALL report that are Relied on for License Renewal – Loose Part monitoring Delete this program from all locations in all documents.	ASME Section XI, Examination Category B-N-3 has been found to be acceptable to manage loss of prestress by the staff in previous reviews. (i.e., BAW-2248, NUREG-1723). Operating experience provided in GALL IV B2.1.7 does not support the assertion that loose parts monitoring is an effective program to detect loss of preload from stress relaxation.	See NRC disposition of NEI comment G-IV-6 in Appendix B, Table B.2.3. ISI alone was considered inadequate in the Oconee SER. The SRP-LR was not revised to address this comment.

Table B.2.12-1: Disposition of NEI Comments on Chapter 3, Section 3.1, of SRP-LR (continued)

Comment Number	Item Number	Comment/Proposed Change	Basis for Comment	NRC Disposition
S3.1-15	SRP-LR 3.1	<p>AMPs Evaluated in the GALL report that are Relied on for License Renewal – Neutron Noise monitoring</p> <p>Delete this program from all locations in all documents.</p>	<p>ASME Section XI, Examination Category B-N-3 has been found to be acceptable to manage loss of prestress by the staff in previous reviews. (i.e., BAW-2248, NUREG-1723).</p> <p>Operating experience provided in GALL IV B2.1.7 does not support the assertion that neutron noise monitoring is an effective program to detect loss of preload from stress relaxation.</p>	<p>See NRC disposition of NEI comment G-IV-6 in this Appendix B, Table B.2.3. ISI alone was considered inadequate in the Oconee SER.</p> <p>The SRP-LR was not revised to address this comment.</p>
S3.1-16	SRP-LR 3.1	<p>SRP-LR 3.1.2.2.2 addresses loss of material due to pitting and crevice corrosion in the steam generator shell assembly and refers to IN 90-04. GALL Sections (IV D1.1.3, 1.1.4, 2.1.4) apply.</p> <p>This requirement should be deleted.</p>	<p>IN 90-04, Cracking of the Upper Shell-to-Transition Cone Girth Welds in Steam Generators was issued to alert licensees to problems related to cracking of the upper shell-to-transition cone girth welds in certain steam generators. The aging mechanism is related to the weld itself. The cracking was found during a scheduled ISI. While a common factor was general corrosion pitting on the inside surface of the SGs, the cracks were initiated at the welds not in the base metal.</p> <p>IN 90-04 does not appear to support the GALL/SRP-LR conclusion that further evaluation is necessary. General corrosion pitting of base metal remote from the weld is not likely to result in a loss of component intended function.</p>	<p>See NRC disposition of NEI comment GIV D1-1 in this Appendix B, Table B.2.3.</p> <p>The SRP-LR was not revised to address this comment.</p>

Table B.2.12-1: Disposition of NEI Comments on Chapter 3, Section 3.1, of SRP-LR (continued)

Comment Number	Item Number	Comment/Proposed Change	Basis for Comment	NRC Disposition
S3.1-17	SRP-LR 3.1	SRP-LR 3.1.2.2.3, 2 nd paragraph should be revised to read as follows: "Appendix H of 10 CFR 50, Section III.B.3 requires staff review of the plant surveillance program for the period of licensed operation."	While it is true that the GALL recommends staff approval, the more correct reason is that such review and approval is required by the regulations.	Staff review is required of surveillance programs for period of licensed operation. The SRP-LR was revised to address this comment by modifying Section 3.1.2.2.3, second paragraph per the comment.
S3.1-18	SRP-LR 3.1	SRP-LR 3.1.2.2.3, 3 rd paragraph states that the GALL report recommends an enhanced inservice inspection to detect tight cracks and supplemental examinations for crevice regions of reactor pressure vessel beltline shell and nozzles. Contrary to what the SRP-LR states, there are no such recommendations in the GALL report. This statement should be deleted.	The pertinent GALL report locations for the reactor vessel beltline shell and nozzles are IV.A2.5 and IV A2.3. Both sections address loss of fracture toughness. Neither section identified the recommendation for further evaluation nor the basis for such an issue.	The third paragraph of SRP-LR 3.1.2.2.3 recommending an enhanced ISI and supplemental examinations was not consistent with GALL and was an error. Therefore, the recommendation was removed from the SRP-LR to be consistent with the GALL report. The SRP-LR was revised to address this comment.
S3.1-19	SRP-LR 3.1	SRP-LR 3.1.2.2.4 states that unanticipated thermal and mechanical loading can cause crack initiation and growth. This requirement should be deleted.	SRP-LR A.1.2.1 discusses the process to determine applicable aging effects. Item number 6 specifically states that "abnormal events need not be postulated specifically for license renewal." Unanticipated thermal and mechanical loading is an abnormal event that is outside the design of the plant.	See NRC disposition of NEI comments G-IVC2-3 through G-IVC2-5 in Appendix B, Table B.2.3. GALL was revised to remove the wording "unanticipated" from thermal and mechanical loading. The SRP-LR, Section 3.1.2.2.4, was revised to address this comment consistent with the changes in the GALL report.

Table B.2.12-1: Disposition of NEI Comments on Chapter 3, Section 3.1, of SRP-LR (continued)

Comment Number	Item Number	Comment/Proposed Change	Basis for Comment	NRC Disposition
S3.1-20	SRP-LR 3.1	<p>SRP-LR Sections 3.1.2.2.4 and 3.1.2.2.7 SRP-LR States that GALL recommends enhanced inspection and one-time inspections for small bore piping.</p> <p>The statement needs to be revised to state: GALL recommends one-time inspections for small bore piping.</p>	<p>GALL Chapter IV item C2.1.5 applies to this comment.</p> <p>This GALL section does not recommend enhanced inspections. It only recommends the one-time inspection.</p>	<p>The words “enhanced inspection” were removed from the GALL report on Page C2-9, the last sentence under “Aging Management Programs.” A plant-specific destructive examination or a nondestructive examination (NDE) that permits inspection of the inside surfaces of the piping needs to be conducted to ensure that cracking has not occurred and the component intended function will be maintained during the extended period is the recommendation of GALL for small bore piping.</p> <p>The SRP-LR, Sections 3.1.2.2.4 and 3.1.2.2.7, were revised to address this comment.</p>
S3.1-21	SRP-LR 3.1	<p>Section 3.1.2.2.7 indicates that further evaluation is recommended of CRD nozzles (page 3.1-5). This statement should be deleted.</p>	<p>GALL IV A2.2.1 also indicates that there are actions for the applicant to take but that no further evaluation is recommended by the staff. Also Table 3.1-1, PWR, CRD nozzle item (page 3.1-20) indicates that no further evaluation is recommended.</p>	<p>Program M11, “Nickel-Alloy Nozzles/ and Penetrations,” was placed in Chapter XI of GALL. An applicant that meets this program is not required to provide further evaluation. Table 3.1-2 was also modified to reflect that this is an existing program.</p> <p>The SRP-LR was revised to address this comment.</p>

Table B.2.12-1: Disposition of NEI Comments on Chapter 3, Section 3.1, of SRP-LR (continued)

Comment Number	Item Number	Comment/Proposed Change	Basis for Comment	NRC Disposition
S3.1-22	SRP-LR 3.1	<p>Section 3.1.2.2.7 indicates that further evaluation is required to address the potential for cracking of cladding remote from the welds (GALL D1.1.9).</p> <p>This statement needs to be deleted.</p>	<p>The GALL basis for this requirement relies inappropriately on inadvertent introduction of contaminants into the RCS. This activity is an abnormal event and need not be specifically postulated for license renewal unless the event has occurred at the plant. (SRP-LR A.1.2.1)</p> <p>Welds and the heat-affects zones adjacent to them are inspected because they are known to be the leading indicator of potential cracks.</p> <p>The consideration of potential cracks beyond the welds and HAZ is not required in order to provide reasonable assurance that the intended functions will be maintained during the period of extended operation.</p>	<p>It is true that SRP-LR A.1.2.1, item 6, indicates that aging effects from abnormal events need not be postulated specifically for license renewal. However, if an abnormal event has occurred at a particular plant, its contribution to the aging effects on structures and components for license renewal should be considered for that plant. For example, if a resin intrusion has occurred in the reactor coolant system at a particular plant, the contribution of this resin intrusion event to aging should be considered for that plant.</p> <p>The SRP-LR was revised to address this comment.</p>
S3.1-23	SRP-LR 3.1	Sections 3.1.3.2.2, 3.1.3.2.3, 3.1.3.2.4 and 3.1.3.2.7 need to be revised to be consistent with the equivalent revisions to the 3.1.2 sections listed above.	Conforming changes, technical justification provided above.	<p>This is a conforming change.</p> <p>SRP-LR, section 3.1.3, was revised to address this comment by making it consistent with changes made in SRP-LR section 3.1.2.</p>

Table B.2.12-1: Disposition of NEI Comments on Chapter 3, Section 3.1, of SRP-LR (continued)

Comment Number	Item Number	Comment/Proposed Change	Basis for Comment	NRC Disposition
S3.1-24	SRP-LR 3.1	Table 3.1-1 should be revised to include the specific GALL sections that apply to the specific component group. Merge Table 1 of GALL Volume 1 with Table 3.3-1.	See Generic comments covering all aging management program summary tables.	<p>Table 1 of GALL Volume 1 was designed as a TOC or pointer to assist the applicant in finding the components in GALL.</p> <p>Table 3.1-1 was designed for easy reference to the NRC reviewer and it was determined that duplication was not desired.</p> <p>The SRP-LR was not revised to address this comment.</p>
S3.1-25	SRP-LR 3.1	Table 3.1-1, BWR/PWR, Reactor vessel beltline shell and welds item (page 3.1-16): Revise "Aging Management Program" entry to be "Plant Specific." Revise "Further Evaluation Recommended" entry to be "Yes, staff review of plant reactor vessel surveillance program required (see subsection 3.1.2.2.3)."	Proposed change makes entry consistent with proposed change to subsection 3.1.2.2.3.	<p>Table 3.1-1 was made consistent with subsection 3.1.2.2.3.</p> <p>The SRP-LR was revised to address this comment by making it internally consistent in Section 3.1.</p>
S3.1-26	SRP-LR 3.1	Table 3.1-1, PWR, Primary Nozzles and Safe Ends (page 3.1-18), delete further revaluation item consistent with comments provided above.	Technical justification provided above.	<p>Program M11, "Nickel-Alloy Nozzles and Penetrations," was placed in Chapter XI of GALL. An applicant that meets this program is not required to provide further evaluation. Tables 3.1-1 and 3.1-2 were also modified to reflect that this is an existing program.</p> <p>The SRP-LR was revised to address this comment.</p>

Table B.2.12-1: Disposition of NEI Comments on Chapter 3, Section 3.1, of SRP-LR (continued)

Comment Number	Item Number	Comment/Proposed Change	Basis for Comment	NRC Disposition
S3.1-27	SRP-LR 3.1	Table 3.1-1, BWR/PWR, Reactor Vessel closure studs and stud assembly item (page 3.1-18): Under the "Aging Management Programs" delete "Minimization and control of SCC" consistent with comments provided above.	Technical justification provided above.	Tables 3.1-1 and 3.1-2 were made consistent with section 3.1 verbiage and/or the GALL report. The GALL report and the SRP-LR were revised to address this comment.
S3.1-28	SRP-LR 3.1	Table 3.1-1, PWR, Upper and lower internals assembly (Westinghouse) item (page 3.1-21). Credit for neutron noise monitoring program should be deleted.	Technical justification provided above.	Tables 3.1-1 and 3.1-2 are consistent with section 3.1 verbiage and/or the GALL report. The GALL report and the SRP-LR were not revised to address this comment.
S3.1-29	SRP-LR 3.1	Table 3.1-1, PWR, Upper and lower internals assembly (Westinghouse) item (page 3.1-21). Credit for loose part monitoring program should be deleted.	Technical justification provided above.	Table 3.1-1 and 3.1-2 are consistent with section 3.1 verbiage and/or the GALL report. The GALL report and the SRP-LR were not revised to address this comment.
S3.1-30	SRP-LR 3.1	Table 3.1-2, delete the "Minimization and control of SCC" program summary (page 3.1-22).	Conforming change to proposed change noted above.	Tables 3.1-1 and 3.1-2 are consistent with section 3.1 verbiage and/or GALL. The GALL report and the SRP-LR were not revised to address this comment.
S3.1-31	SRP-LR 3.1	Table 3.1-2, delete the "Loose part monitoring" program summary (page 3.1-26).	Conforming change to proposed change noted above.	Tables 3.1-1 and 3.1-2 are consistent with section 3.1 verbiage and/or the GALL report. The GALL report and the SRP-LR were not revised to address this comment.

Table B.2.12-1: Disposition of NEI Comments on Chapter 3, Section 3.1, of SRP-LR (continued)

Comment Number	Item Number	Comment/Proposed Change	Basis for Comment	NRC Disposition
S3.1-32	SRP-LR 3.1	Table 3.1-2, delete the "Neutron noise monitoring" program summary (page 3.1-26).	Conforming change to proposed change noted above.	Tables 3.1-1 and 3.1-2 are consistent with section 3.1 verbiage and/or the GALL report. The GALL report and the SRP-LR were not revised to address this comment.
S3.1-33	SRP-LR 3.1	Table 3.1-2, delete summary of Steam Generator Tube Integrity program as this program is already required by technical specifications.	Technical specifications are part of the facility operating license and are approved and issued by the NRC staff. A description of the Steam Generator Tube Integrity program is contained in Chapter 5 of the facility technical specifications. Due to the hierarchy of regulatory documents, requirements contained in the technical specifications supercede any statements contained in the FSAR.	A tube integrity program has been added to Chapter XI of the GALL report, that includes the requirements in the Technical Specification. Tables 3.1-1 and 3.1-2 were made consistent with the wording in SRP-LR section 3.1 and/or the GALL report. The GALL report and the SRP-LR were revised to address this comment.