

August 12, 2003

LICENSEE: Carolina Power and Light Company (CP&L)

FACILITY: H. B. Robinson Steam Electric Plant, Unit 2

SUBJECT: AUDIT REPORT RELATED TO THE LICENSE RENEWAL APPLICATION FOR  
H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT 2, ON MAY 28 AND 29,  
2003 (TAC NO. MB5223)

The License Renewal and Environmental Impacts (RLEP) Branch conducted an audit at H. B. Robinson Steam Electric Plant, Unit 2, known as Robinson Nuclear Plant (RNP) on May 28 and 29, 2003. The purpose of the audit was to verify the consistency of the applicant's aging management programs (AMPs) described in the license renewal application (LRA) with the AMPs in NUREG-1801, "Generic Lessons Learned (GALL) Report." The NRC audit team examined 29 AMPs that the applicant stated were consistent with GALL. The remaining four AMPs are site specific and were provided to the U.S. Nuclear Regulatory Commission (NRC) staff for review in the LRA.

The team concluded that the applicant's AMPs were consistent with the GALL Report AMPs with the potential exception of the Non-EQ Insulated Cable and Connection Program that was documented in a format different from other RNP programs. RNP has since submitted this program for staff review. The Audit Report is included in Attachment 1.

**/RA/**

Sikhindra K. Mitra, Project Manager  
License Renewal Section  
License Renewal and Environmental Impacts Program  
Division of Regulatory Improvement Programs  
Office of Nuclear Reactor Regulator

Docket No. 50-261

Attachment: As stated

cc w/attachment: See next page

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Accession no.: **ML032250040**

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Document name: C:\ORPCheckout\FileNET\ML032250040.wpd

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U. S. NUCLEAR REGULATORY COMMISSION

NRR/DRIP/RLEP

Docket No: 50-261

License No: DPR-23

Licensee: Carolina Power and Light Company (CP&L)

Facility: H. B. Robinson Steam Electric Plant, Unit 2

Location: 3581 West Entrance Road  
Hartsville, SC 29550

Dates: May 28 - 29, 2003

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AUDIT REPORT REGARDING CONSISTENCY WITH GALL  
FOR THE H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT 2,  
MAY 28 AND 29, 2003

The Standard Review Plan for Review of License Renewal Applications for Nuclear Power Plants (NUREG-1800) provides staff guidance for reviewing a license renewal application (LRA). The Standard Review Plan allows an applicant to reference in its LRA the aging management programs (AMPs) described in NUREG-1801, "Generic Aging Lessons Learned (GALL) Report." By referencing the GALL AMPs, the applicant concludes that its AMPs are consistent with those AMPs, which are reviewed and approved in the GALL Report, and that no further staff review is required. If an applicant credits an AMP as being consistent with a GALL program, it is incumbent on the applicant to ensure that the plant program contains all of the elements of the referenced GALL program. The applicant's determination should be documented in an auditable form and maintained on site.

Those AMPs that are not claimed to be consistent with the GALL Report and those attributes that are deviations from the attributes described in the GALL Report AMPs were provided to the NRC staff for review in the LRA and in the applicant's responses to requests for additional information.

The purpose of the U.S. Nuclear Regulatory Commission (NRC) audit was to confirm the applicant's determination of consistency between the applicant's AMPs and the AMPs described in the GALL Report. The audit team evaluated each of the 10 attributes of an applicant's AMP claimed to be consistent with the related attribute of the associated AMP described in the GALL Report. The audit team reviewed the applicant's license renewal aging management program basis documents, the AMPs described in the GALL Report, applicant's responses to the final requests for additional information (RAI), and selected implementing procedures. The audit team identified differences between the applicant's AMPs and the associated GALL AMPs and evaluated whether they constituted a deviation from the GALL Report.

The NRC audit team examined 29 of the 33 AMPs that the applicant stated were consistent with GALL. The details of the audit finding are provided below.

### B.2.2 Water Chemistry Program

The applicant's water chemistry program is discussed in LRA Section B.2.2, "Water Chemistry Program." The applicant states that the program is consistent with GALL Program XI.M2, "Water Chemistry," with two exceptions. The team reviewed the RNP LRA, Calculation No. RNP-L/LR-0600, Rev. 2, applicable referred documents in the calculation, the RNP final RAI response, commitments list dated April 28, 2003, the GALL Report Section XI.M2, and interviewed with applicant's knowledgeable technical staff.

On the basis of its review and audit of the applicant's AMP, the team found that those portions of the program for which the applicant claims consistency with GALL were consistent with GALL except for the following items:

- 1) The team found AMP calculation in Section 3-1, Parameter Monitored/Inspected, mentions an exception to GALL with respect to monitoring of hydrogen peroxide, but the exception was not mentioned in LRA. The applicant revised Section 3-1 AMP calculation to clarify that hydrogen peroxide monitoring was consistent with GALL.
- 2) Also, in the same calculation, Section 4-1, Detection of Aging Effect, the applicant discussed "one time inspection" for the Chemistry Program, since GALL recommended inspection without specifying any type of inspection. The applicant's proposed one time inspection is acceptable and consistent with GALL.

On the basis of its review of this AMP, GALL AMP XI.M2, and the associated program basis document, the audit team determined that this AMP is consistent with GALL.

### B.2.3 Reactor Head Closure Studs

In Appendix B, Section B.2.3 of the LRA, the applicant states that its Reactor Head Closure Studs Program is consistent with GALL Program XI.M3, "Reactor Head Closure Studs." The audit team reviewed the license renewal AMP basis document, Calculation No. RNP-L/LR-0619 "Reactor Head Closure Studs Program," Revision 1 and applicable referred documents listed in the calculation, and interviewed applicant's responsible technical staff.

The applicant stated in Calculation No. RNP-L/LR-0619 that while RNP is not committed to Regulatory Guide 1.65, head closure stud fabrication details and preventive measures are consistent with the recommendations of the regulatory guide, and claims that AMP B.2.3, Reactor Head Closure Studs, is consistent with GALL Subsection XI.M3. The audit team finds that a clarification is required to reflect that replacement studs must be like those initially installed. The applicant responded that replacement parts are controlled by the material and design control processes delineated in the QA Program manual.

On the basis of its review of this AMP, GALL AMP XI.M3, the associated program basis document, and the above clarifications, the audit team determined that this AMP is consistent with the GALL Report.

#### B.2.4 Steam Generator Tube Integrity

In Appendix B, Section B.2.4 of the LRA, the applicant states that its Steam Generator Tube Integrity Program is consistent with GALL Program XI.M19, Steam Generator Tube Integrity. The audit team reviewed the license renewal AMP basis document, Calculation No. RNP-L/LR-0604 Steam Generator Tube Integrity Program, Rev. 0, and applicable referred documents listed in the calculation and interviewed applicant's responsible technical staff.

The staff finds that Robinson's AMP B.2.4 is consistent with NEI 97-06 guidelines, which according to GALL AMP XI.M19, has not yet been endorsed by the NRC. Robinson specific criteria for plugging or repairing are provided in response to RAI B.2.4-3. The staff finds the response acceptable as addressed in the SER.

On the basis of its review of this AMP, GALL AMP XI.M19, the associated program basis document, and the above review comments, the audit team determined that this AMP is consistent with the GALL Report.

#### B.3.1 Fire Protection program

The applicant's fire protection program is discussed in LRA Section B.3.1, "Fire Protection Program." The applicant states that the program is consistent with GALL Program XI.M26, "Fire Protection," with exceptions. The team reviewed the RNP LRA, Calculation No. RNP-L/LR-0612, Rev. 2, applicable referred documents in the calculation, the RNP final RAI response, commitments list dated April 28, 2003, the GALL Report Section XI.M26, and interviewed with applicant's knowledgeable technical staff.

On the basis of its review and audit of the applicant's AMP, the team found that those portions of the program for which the applicant claims consistency with GALL were consistent with GALL except for the following items:

- 1) The team found AMP calculation in Section 3-3, Parameter Monitored/Inspected, mentions an exception to GALL's requirement of bi-monthly inspection of fire door clearance. RNP fire protection procedures require inspections of the fire door on a semi-annual basis. The LRA is not clear regarding this exception for inspection of fire door clearance. The applicant addressed the issue in RAI Clarification L2 describing RNP's fire door inspection program, related to Program B.3.1 in a letter to NRC on June 13, 2003. The staff reviewed the clarification and found it acceptable (SER Section 3.3.2.3.2.2.)
- 2) Also, in the same calculation, Section 5.2, Monitoring and Trending, the applicant takes exception relative to the inspection frequency for fire barriers. The LRA is not clear regarding inspection frequency. The applicant addressed the issue in RAI Clarification L2, related to Program B.3.1 in a letter to NRC on June 13, 2003, under oath and affirmation. The staff reviewed the clarification and found it acceptable (SER Section 3.3.2.3.2.2.)

On the basis of its review of this AMP, GALL AMP XI.M26, and the associated program basis document, the audit team determined that this AMP is consistent with GALL.

### B.3.2 Boric Acid Corrosion Program

The applicant's boric acid program is discussed in LRA Section B.3.2, "Boric Acid Corrosion Program." The applicant states that the program is consistent with GALL Program XI.M10, "Boric Acid Corrosion," with program enhancements. An enhancement defines that the applicant's implementing procedure (or other document) requires revision to achieve consistency with some element of the related GALL Chapter XI or SRP Appendix A.1 program. The team reviewed the RNP LRA, Calculation No. RNP-L/LR-0601, Rev. 1, applicable referred documents in the calculation, the RNP final RAI response, commitments list dated April 28, 2003, the GALL Report Section XI.M10, and interviewed with applicant's knowledgeable technical staff.

On the basis of its review and audit of the applicant's AMP, the team found that those portions of the program for which the applicant claims consistency with GALL were consistent with GALL except for the following items:

The team found AMP calculation includes additional components that are not covered by GALL, while conclusion of the calculation claims it is consistent with GALL. The applicant explains the philosophy/approach of the AMP calculation are as follows:

- 1) A conclusion that the aging management review is consistent with the GALL Report means that the combination of component material, environment, aging effect requiring management, and aging management program are the same as specified in Volume 2 of the GALL Report.
- 2) RNP considered an aging management review to be consistent with the GALL Report despite differences in the names of plant-specific components or commodities provided the above combination of material, environment, aging effect requiring management, and aging management program were as identified in the GALL Report.

The team finds the applicant's approach is acceptable, and on the basis of its review of this AMP, GALL AMP XI.M10, the associated program basis document, and the revised implementing procedure, the audit team determined that this AMP is consistent with GALL. This issue is being addressed generically in the new application format developed by NEI.

### B.3.3 Flow -Accelerated Corrosion Program

In Appendix B, Section B.3.3 of the LRA, the applicant states that its Flow-Accelerated Corrosion Program, with enhancements is consistent with GALL Program XI.M17, "Flow Accelerated Corrosion." The audit team reviewed the license renewal aging management program basis document RNP-L/LR - 0603, "Flow Accelerated Corrosion."

The audit team identified a difference in the scope of program attribute. GALL Program XI.M17, requires that valve bodies retaining pressure in high-energy systems are covered by the program. Calculation RNP-L/LR-0603 states that RNP does not specifically identify valves in the scope of the Flow-Accelerated Corrosion Program.



The audit team identified a difference in the detection of aging effects attribute. GALL Program XI.M17, requires that ultrasonic and radiographic testing is used to detect wall thinning. Calculation RNP-L/LR-0603 states that visual inspection is used in lieu of ultrasonic and radiographic testing where it provides better indication of wear.

The applicant revised the attribute for detection of aging effects to clarify that detection of wall thinning is by visual, ultrasonic and radiographic techniques in accordance with NSAC-202L-R2. In addition, the applicant clarified that valve bodies are in the scope of the AMP. On the basis of its review of this AMP, GALL AMP XI.M17, the associated program basis document, and the above review comments, the audit team determined that this AMP is consistent with the GALL Report.

#### **B.3.6 Inspection of Overhead Heavy Load & Light Load (Related to Refueling) Handling Systems Program**

The applicant's inspection of refueling load handling program is discussed in LRA Section B.3.6, "Inspection of Overhead Heavy Load & Light Load (Related to Refueling) Handling Systems Program." The applicant states that the program is consistent with GALL Program XI.M23, with program enhancements. An enhancement defines that the applicant's implementing procedure (or other document) requires revision to achieve consistency with some element of the related GALL Chapter XI or SRP Appendix A.1 program. The team reviewed the RNP LRA, Calculation No. RNP-L/LR-0628, Rev. 1, applicable referred documents in the calculation, the RNP final RAI response, commitments list dated April 28, 2003, the GALL Report Section XI.M23, and interviewed with applicant's knowledgeable technical staff.

On the basis of its review and audit of the applicant's AMP, the team found that those portions of the program for which the applicant claims consistency with GALL were consistent with GALL except for the following items:

The team found AMP calculation Section 1, Scope of Program, the applicant enhanced their program; however, in the conclusion the applicant indicated their program is consistent with GALL, without mentioning the enhancements. The applicant explains that for RNP AMP calculations, the conclusion column of the evaluation table indicates "Consistent with GALL" or "Consistent with GALL with Exceptions." Enhancements are not identified in this column. Enhancements, when required, are discussed in Section 6.4, of the calculation, which is referred in the summary statement from Section 8 of the calculation. The enhancement to this program is included in commitment number 17 in the LRA.

The team finds the applicant's approach is acceptable, and on the basis of its review and audit, the team concludes that the applicant has demonstrated that the Inspection of Overhead Heavy Load & Light Load (Related to Refueling) Handling Systems Program is consistent with GALL.

#### **B.3.19 Metal Fatigue of Reactor Coolant Pressure Boundary**

In Appendix B, Section B.3.19 of the LRA, the applicant states that, with enhancements, its Metal Fatigue of Reactor Coolant Pressure Boundary (Fatigue Monitoring Program, FMP) is

consistent with GALL Program X.M1, "Metal Fatigue of Reactor Coolant Pressure Boundary." The audit team reviewed the license renewal AMP basis document, Calculation No. RNP-L/LR-0605 "Fatigue Monitoring Program," Rev. 0, and applicable referred documents listed in the calculation, and interviewed applicant's responsible technical staff.

The applicant claims that the program, with the enhancement identified in B.3.19 of the LRA is consistent with GALL. The audit team found that Sections 2-1, 6-1 and 7-1 of AMP Calculation No. RNP-L/LR-0605, Rev. 0, contain one exception to the GALL. The pressurizer surge line and the nozzle have CUF > 1.0 in the extended period of operation. GALL requires CUF to be less than the allowable value of 1.0 at any time and does not accept this non-compliance even with the implementation of periodic inspection unless the details of the inspection is submitted by the applicant to the NRC for review and approval prior to the extended period of operation.

Calculation No. RNP-L/LR-0605 was revised to reflect the changes made in RAI 4.3-10 that indicates that the EAF-adjusted CUF values will be maintained below 1.0 at any time of the current and the extended periods of operation. This is listed as Commitment 1a under corrective action and a confirmative item in the AMR section of the Robinson license renewal SER.

On the basis of its review of this AMP, GALL AMP X.M1, and the revised program basis document, the audit team determined that AMP B.3.19 is consistent with GALL.

#### B.4.1 Nickel-Alloy Nozzles and Penetration Program

This is a new AMP to be implemented. In Appendix B, Section B.4.1 of the LRA, the applicant described its Nickel-Alloy Nozzles and Penetration Program and compared it with GALL Program XI.M11, "Nickel-Alloy Nozzles and Penetration." The audit team reviewed the license renewal AMP basis document, Calculation No. RNP-L/LR-0620 "Nickel-Alloy Nozzles and Penetration Program," Rev. 0 and applicable referred documents listed in the calculation, and interviewed applicant's responsible technical staff.

The applicant claims that AMP B.4.1, Nickel-Alloy Nozzles and Penetration Program, is consistent with GALL AMP XI.M11. The audit team finds that Sections 1-4, 1-5, and 2-1 of Calculation No. RNP-L/LR-0620 contain enhancements and identified clarifications. In response to RAI B.4.1-1, the applicant made the commitment (31) to submit the inspection plan for NRC review and approval which makes Robinson's AMP B.4.1 consistent with GALL AMP XI.M11.

On the basis of its review of this AMP, GALL AMP XI.M11, the associated program basis document, and the enhancements and identified clarifications, the audit team determined that this AMP is consistent with the GALL report.

#### B.4.2 Thermal Aging Embrittlement of Cast Austenitic Stainless Steel

This is a new AMP to be implemented. In Appendix B, Section B.4.2 of the LRA, the applicant described its Thermal Aging Embrittlement of Cast Austenitic Stainless Steel (CASS) Program and compared with GALL Program XI.M12, "Thermal Aging Embrittlement of Cast Austenitic Stainless Steel (CASS)." The audit team reviewed the license renewal AMP basis document,

Calculation No. RNP-L/LR-0621 "Thermal Aging Embrittlement of Cast Austenitic Stainless Steel (CASS) Program," Rev. 0 and applicable referred documents listed in the calculation, and interviewed the applicant's responsible technical staff.

The applicant claims that AMP B.4.2, "Thermal Aging Embrittlement of Cast Austenitic Stainless Steel Program," is consistent with GALL Subsection XI.M12. The audit team finds that the scope of program is not consistent with GALL. Section 1-1 of Robinson Calculation No. RNP-L/LR-0621 did not address the last paragraph of GALL on how the aging management is accomplished for potentially susceptible components. Robinson AMP B.4.2 limits the scope to Class 1 boundaries only. Section 1-2 of Calculation No. RNP-L/LR-0621 made no mention about the many materials listed in the GALL Report. Section 1-3 of the RNP Calculation does not address the ISI requirements on valve bodies less than 4-inches in diameter.

Elements 1-1, 1-2, and 1-3 of RNP Calculation No. RNP-L/LR-0621 were revised to clarify this new AMP. Element 1-1 was modified to state that there are no Class 2 or 3 CASS components exceed threshold temperature criteria. Element 1-2 clarified that the criteria is applicable to all CASS components irrespective of material. Element 1-3 referenced the criteria set forth in the May 19, 2000, NRC letter to justify that screening is not required for valve bodies and pump casings, deemed not susceptible to thermal aging embrittlement, and therefore, consistent with NRC guidance. The revised Calculation No. RNP-L/LR-0621, Revision 1, makes Robinson's AMP B.4.2 consistent with GALL AMP XI.M12.

On the basis of its review of this AMP, GALL AMP XI.M12, the associated program basis document, RNP Calculation No. RNP-L/LR-0621, Rev.1, the audit team determined that this AMP is consistent with the GALL report.

#### B.4.3 PWR Vessel Internals Program

This is a new AMP to be implemented. In Appendix B, Section B.4.3 of the LRA, the applicant described its PWR Vessel Internals Program and compared with GALL Program XI.M16, "PWR Vessel Internals." The audit team reviewed the license renewal AMP basis document, Calculation No. RNP-L/LR-0614 "PWR Vessel Internals Program," Rev. 1 and applicable referred documents listed in the calculation, and interviewed applicant's responsible technical staff.

The applicant claims that Robinson AMP B.4.3, "PWR Vessel Internals Program," is consistent with GALL AMP XI.M16 with two exceptions listed in B.4.3 of the LRA. In addition, the staff finds that the scope of program is not consistent with GALL. Section 1-2 of AMP Calculation No. RNP-L/LR-0614 did not address the GALL requirement of using ISI to monitor the effects of cracking. Section 1-5 of the Calculation did not define the appropriate inspection techniques required by the GALL Report and Commitment number 33 only vaguely stated to "factor them into RNP....." without a clear commitment to an appropriate inspection technique. Section 3 of the RNP Calculation stated that the determination of consistency can not be made at this time. Sections 3, 4, 5, and 6 deferred augmented inspections during the extended period of operation to the results of CP&L's participation in the industry research led by EPRI. Therefore, this AMP is consistent with EPRI's MRP guidelines, not the GALL Report.

These items are acknowledged and addressed in responses to RAI B.4.3-1 and RAI B.4.3-2. In particular, Commitment number 33 was supplemented as follows: "RNP will submit, for NRC review and approval, the inspection plan for the PWR Vessel Internals Program, as it will be implemented based on participation in industry initiatives, 24 months prior to the augmented inspection."

On the basis of its review of this AMP, GALL AMP XI.M16, the associated program basis document, RNP's responses to RAI B.4.3-1 and B.4.3-2, and the above supplemented Commitment number 33, the audit team determined that this AMP will be consistent with the GALL Report when the inspection plan is submitted and approved by the NRC.

#### B.4.4 One-Time Inspection

This is a new program to be implemented. In Appendix B, Section B.4.4 the LRA, the applicant states that its One-Time Inspection Program is consistent with GALL Program XI.M32, "One-Time Inspection." The audit team reviewed the license renewal aging management program basis document RNP-L/LR-0632, "One-Time Inspection Program."

The audit team identified a difference in the detection of aging effects attribute. GALL specifies that inspections include a representative sample of the population, and where practical, should focus on bounding or lead components most susceptible to aging due to time in service, severity of operating conditions, and lowest design margins. However, the applicants basis document is silent with regards to what type of components (i.e. those most susceptible to aging), should be included in the sample population.

The applicant revised the attribute for detection of aging effects to clarify that locations for inspection would focus on bounding or lead components most susceptible to aging. The audit team determined that revising the attribute for detection of aging would be to make this attribute consistent with the GALL AMP.

On the basis of its review of this AMP, GALL AMP XI.M32, and the associated program basis document, and the applicant's revising the attribute, the audit team determined that this AMP is consistent with the GALL Report.

#### B.4.6 Non-EQ Insulated Cables and Connections Program

This is a new AMP to be implemented. The applicant's insulated cable and connector program is discussed in LRA Section B.4.6, "Non-EQ Insulated Cables and Connections Program." The applicant states that the program is consistent with GALL Program XI.E1, "Electrical Cables and Connections Not Subject to 10 CFR 50.49 Environmental Qualification Requirements." The team reviewed the RNP LRA, Calculation No. RNP-L/LR-0390, Rev.1, applicable referred documents in the calculation, the RNP final RAI response, commitments list dated April 28, 2003, the GALL Report Section XI.E1, and interviewed with applicant's knowledgeable technical staff.

On the basis of its review and audit of the applicant's AMP, the team found the Calculation No. RNP-L/LR-0390, Rev.1, was not in a similar format consistent with that of other RNP AMP calculations reviewed and the calculation did not provide sufficient details for the team to

conclude consistency with GALL. The applicant was requested to submit the AMP calculation to the staff describing the ten program attributes for staff review. The applicant submitted the revision in a similar format with the other AMP calculation and with detail description of the program to the staff for review in a June 13, 2003, letter to NRC. The staff reviewed the clarification and found it acceptable (SER Section 3.6.2.3.1.3).

### Other Aging Management Programs

The audit team reviewed the following applicant's AMPs, associated GALL AMPs, associated license renewal (LR) aging management program basis documents, applicant's responses to the final requests for additional information (RAI), selected implementing procedures, and interviewed applicant's responsible technical staff. The audit team determined that the following programs were consistent with GALL:

Applicant's Aging Management Program	GALL Aging Management Program	LR-AMP Basis Document and Other Documents Reviewed
B.2.1, "ASME Section XI ISI, Subsections IWB, IWC, and IWD"	XI.M1, ASME Section XI Inservice Inspection Subsections IWB, IWC, and IWD	Calculation RNP-L/LR-0606, Rev. 2
B.2.5, "Closed-Cycle Cooling Water System Program"	XI-M-21, Closed-Cycle Cooling Water System	Calculation RNP-L/LR-0627, Rev. 1
B.2.6, "ASME Section XI, Subsection IWF Program".	XI.S3, ASME Section XI, Subsection IWF Inservice Inspection	Calculation RNP-L/LR-0618, Rev. 2
B.2.7, "10 CFR 50, Appendix J Program".	10 CFR 50, Appendix J	Calculation RNP-L/LR-0615, Rev. 0
B.3.7 Fire Water System Program	XI.M27, Fire water System	Calculation No. RNP-L/LR-0611, Rev.6
B.3.8, "Buried Piping and Tanks Surveillance Program"	XI.M28, Buried Piping and Tanks Surveillance Program	Calculation RNP-L/LR-0629, Rev. 0
B.3.9, "Above Ground Carbon Steel Tanks Program"	XI.M29, Above Ground Carbon Steel Tanks	Calculation RNP-L/LR-0603, Rev. 3
B.3.13, "ASME Section XI, Subsection IWE Program"	XI.S1, ASME Section XI, Subsection IWE Inservice Inspection	Calculation RNP-L/LR-0616, Rev. 0
B.3.14, "ASME Section XI, Subsection IWL Program"	XI.S2, ASME Section XI, Subsection IWL Inservice Inspection	Calculation RNP-L/LR-0617, Rev. 1
B.3.15, "Structures Monitoring Program"	XI.S6, Structures Monitoring Program	Calculation RNP-L/LR-0608, Rev. 2
B.4.5,"Selective Leaching of Materials Program"	XI.M33, Selective Leaching of Materials	Calculation RNP-L/LR-0633, Rev. 3

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