

AUDIT SUMMARY REPORT REGARDING THE LICENSE RENEWAL APPLICATION FOR THE VOGTLE ELECTRIC GENERATING PLANT UNITS 1 AND 2

I. INTRODUCTION

By letter dated, June 29, 2007, Southern Nuclear Operating Company, Inc. (the applicant), submitted to the U.S. Nuclear Regulatory Commission (NRC) its application for renewal of Operating License Nos. NPF-68 and NPF-81 for the Vogtle Electric Generating Plant Units 1 and 2, respectively. The license renewal application (LRA) was submitted pursuant to Title 10 of the *Code of Federal Regulations* Part 54 (10 CFR Part 54), "Requirements for renewal of operating licenses for Nuclear Power Plants."

In support of the staff's safety review of the LRA for VEGP, an NRC project team from the Division of License Renewal (DLR), conducted two onsite audits at the VEGP site at Augusta, GA, during the weeks October 15 -19, 2007, and December 10-14, 2007. The project team included NRC staff and engineers provided by Information Systems Laboratories, Inc. (ISL), DLR's technical assistance contractor.

II. PURPOSE AND SCOPE

The purpose of the audit was to review the aging management programs (AMPs), aging management reviews (AMRs), and time-limited aging analysis (TLAAs) assigned to the project team to ensure compliance with 10 CFR Part 54.

The project team performed its work in accordance with the requirements of 10 CFR Part 54; the guidance provided in Revision 1 of NUREG-1800, Standard Review Plan for Review of License Renewal Applications for Nuclear Power Plants (SRP-LR); and the guidance provided in Revision 1 of NUREG-1801, Generic Aging Lessons Learned (GALL) Report. Details of how the project team implemented these requirements and guidance are found in "Audit and Review Plan for Plant Aging Management Programs, Aging Management Reviews, and Time-Limited Aging Analyses," Docket Nos. 50-424 and 50-425 (Agencywide Documents Access and Management System (ADAMS)), Accession No. ML072610107.

In addition to the above, the project team reviewed the FSAR Supplement summary descriptions that were provided in LRA, Appendix A, for the AMPs and TLAAs. The project team verified that the supplements provided a sufficient description of the AMP activities or the TLAA description in accordance with the SRP-LR and required by 10 CFR 54.21(d). The project team also reviewed the applicant's regulatory commitments dated June 27, 2007, and confirmed that the new AMPs and enhancements to the existing programs are scheduled to be implemented before the period of extended operation.

III. SUMMARY OF AUDIT EFFORTS

During the onsite audit, Southern Nuclear Operating Company, Inc. (SNC) representatives provided a brief presentation regarding its operating experience, design features, plant programs, bases documents, and analyses pertaining to the LRA review. The project team reviewed the LRA and various bases documents, conducted several breakout meetings and technical interviews with the personnel, and conducted a walkdown of key plant areas. The list of documents reviewed and the personnel contacted or interviewed during the audits are provided in Appendices A and B of this audit summary report.

During the audits, the project team asked 193 questions which were all satisfactorily addressed by the applicant. The responses to 48 of the audit team's questions required the applicant to revise the LRA. The applicant's database containing the project team's questions and the applicant responses can be viewed through the ADAMS using Accession Number ML080430373.

The project team conducted a debriefing with the SNC staff and management at the conclusion of the onsite audits. Overall, the SNC staff provided excellent support to the project team.

The project team's detailed evaluation of the audit and review will be documented in the staff's safety evaluation report related to the VEGP LRA which is planned to be published in February, 2009.

APPENDIX A

LIST OF DOCUMENTS REVIEWED

The following is a list of documents reviewed by the project team, including documents prepared by the applicant as well as documents prepared by others for the applicant. Inclusion of a document on this list does not imply that the project team reviewed the entire document, but rather that selected sections or portions of the documents were reviewed as part of the overall effort documented in the staff's safety evaluation report. In addition, inclusion of a document in this list does not imply NRC acceptance of the document.

AMP Review

Applicant Aging Management Programs	GALL Aging Management Program	VEGP LRA-AMP Basis Document and Other Documents Reviewed
ACCW System Carbon Steel Components Program (AMP B.3.1)	N/A	<p>VEGP-LR-AMP-06, "Closed Cooling Water Program License Renewal Basis Document," Version 1.</p> <p>VEGP-LR-AMP-08, "External Surfaces Monitoring Program License Renewal Evaluation Document," Version 1.</p> <p>VEGP-LR-AMP-15, "Inservice Inspection Program License Renewal Evaluation Document," Version 1.</p> <p>VEGP-LR-AMP-42, "Quality Assurance for Aging Management Programs License Renewal Evaluation Document," Version 1.</p> <p>EPRI 1009721, "Stress Corrosion Cracking in PWR and BWR Closed Cooling Water Systems."</p> <p>SNC, "Inservice Inspection Program, Second 10-Year Interval, Vogtle Electric Generating Plant Units 1 and 2," Revision 3, July 31, 2000.</p> <p>SNC, "Vogtle Electric Generating Plant Unit 1 Second 10-Year Interval Inservice Inspection Plan," Revision 8, January 5, 2007.</p> <p>SNC, "Vogtle Electric Generating Plant</p>

Applicant Aging Management Programs	GALL Aging Management Program	VEGP LRA-AMP Basis Document and Other Documents Reviewed
		<p>Unit 2 Second 10-Year Interval Inservice Inspection Plan,” Revision 8, November 17, 2005.</p> <p>NMP-ES-002, “System Monitoring and Health Reporting,” Version 5.0.</p> <p>VEGP Procedure 11881-1, “Auxiliary Building Rounds Sheets,” Unit 1, Revision 54, June 6, 2007.</p> <p>VEGP Procedure 11881-2, “Auxiliary Building Rounds Sheets,” Unit 2, Revision 49, June 6, 2007.</p> <p>VEGP Procedure 14000-1, “Operations Shift and Daily Surveillance Logs,” Unit 1, Revision 77, May 18, 2007.</p> <p>VEGP Procedure 14000-2, “Operations Shift and Daily Surveillance Logs,” Unit 2, Revision 63, May 18, 2007.</p> <p>VEGP Procedure 14905-1, “RCS Leakage Calculation (Inventory Balance),” Unit 1, Revision 51, June 11, 2007.</p> <p>VEGP Procedure 14905-2, “RCS Leakage Calculation (Inventory Balance),” Unit 2, Revision 35, April 20, 2007.</p> <p>VEGP Procedure 17004-1, “Annunciator Response Procedures for ALB 04 on Panel 1A1,” Unit 1, Revision 22, July 4, 2007.</p> <p>VEGP Procedure 17004-2, “Annunciator Response Procedures for ALB 04 on Panel 2A1,” Unit 2, Revision 18, July 4, 2007.</p> <p>VEGP Procedure 17061-1, “Annunciator Response Procedures for ALB 61 on Process Control Panel,” Unit 1, Revision 19.2, October 21, 2006.</p>

Applicant Aging Management Programs	GALL Aging Management Program	VEGP LRA-AMP Basis Document and Other Documents Reviewed
		<p>VEGP Procedure 17061-2, "Annunciator Response Procedures for ALB 61 on Process Control Panel," Unit 2, Revision 18.0, January 10, 2007.</p> <p>VEGP Procedure 50026-C, "ESD - Operating Experience Program," Version 6.4.</p> <p>SNC Letter NL-07-1261, "Vogtle Electric Generating Plant Units 1 and 2 Application for License Renewal," June 27, 2007, Enclosure 2, "Future Action Commitment List," Item #1.</p>
Bolting Integrity Program (AMP B.3.2)	XI.M18	<p>VEGP-LR-AMP-08, "External Surfaces Monitoring Program License Renewal Evaluation Document," Version 1.</p> <p>VEGP-LR-AMP-15, "Inservice Inspection Program License Renewal Evaluation Document," Version 1.</p> <p>VEGP-LR-AMP-42, "Quality Assurance for Aging Management Programs License Renewal Evaluation Document."</p> <p>EPRI NP-5769, "Degradation and Failure of Bolting in Nuclear Power Plants," Volumes 1 and 2, April 1988.</p> <p>EPRI NP-5067, "Good Bolting Practices: A Reference Manual for Nuclear Power Plant Maintenance Personnel," 1987.</p> <p>EPRI TR-104213, "Bolted Joint Maintenance and Applications Guide," December 1995.</p> <p>EPRI Nuclear Maintenance and Applications Center, "Bolting Guidelines Consolidation Review," EPRI, 2006.</p> <p>ASME Boiler and Pressure Vessel Code, Section XI, 2001 Edition Including the 2002 and 2003 Addenda.</p>

Applicant Aging Management Programs	GALL Aging Management Program	VEGP LRA-AMP Basis Document and Other Documents Reviewed
		<p>Vogtle Electric Generating Plant Units 1 and 2, "Inservice Inspection Program, Second 10-Year Interval," Revision 3, July 2000.</p> <p>Vogtle Electric Generating Plant, Unit 1, "Second 10-Year Interval Inservice Inspection Plan," Revision 8, January 2007.</p> <p>Vogtle Electric Generating Plant, Unit 2, "Second 10-Year Interval Inservice Inspection Plan," Revision 8, December 2005.</p> <p>NMP-GM-008, "Operating Experience Program," Version 3.0.</p> <p>GEN-23, "VEGP Bolting/Torquing Manual," Revision 6, April 2005.</p> <p>VEGP Procedure 11881-1, Unit 1, "Auxiliary Building Rounds Sheets," Revision 54.0.</p> <p>VEGP Procedure 11881-2, Unit 2, "Auxiliary Building Rounds Sheets," Revision 49.0.</p> <p>VEGP Procedure 11882-1, Unit 1, "Outside Area Rounds Sheets," Revision 67.1.</p> <p>VEGP Procedure 11882-2, Unit 2, "Outside Area Rounds Sheets," Revision 63.</p> <p>VEGP Procedure 11887-1, Unit 1, "Control Building Rounds Sheets," Revision 49.1.</p> <p>VEGP Procedure 11887-2, Unit 2, "Control Building Rounds Sheets," Revision 38.1.</p> <p>VEGP Procedure 50026-C, "ESD - Operating Experience Program," Version 6.4.</p> <p>NMP-ES-002, "System Monitoring and Health Reporting," Version 4.0.</p> <p>SNC Letter NL-07-1261, "Vogtle Electric Generating Plant Units 1 and 2 Application for License Renewal," June 27, 2007,</p>

Applicant Aging Management Programs	GALL Aging Management Program	VEGP LRA-AMP Basis Document and Other Documents Reviewed
		Enclosure 2, "Future Action Commitment List," Item #2.
Boric Acid Corrosion Control Program (AMP B.3.3)	XI.M10	<p>VEGP-LR-AMP-42, "Quality Assurance for Aging Management Programs License Renewal Evaluation Document," Version 1.</p> <p>NRC Bulletin 2001-01, "Circumferential Cracking of Reactor Pressure Vessel Head Penetration Nozzles," August 3, 2001.</p> <p>NRC Bulletin 2002-02, "Reactor Pressure Vessel Head and Vessel Head Penetration Nozzle Inspection Programs," August 9, 2002.</p> <p>NRC Information Notice 2003-02, "Recent Experience with Reactor Coolant System Leakage and Boric Acid Corrosion," January 16, 2003.</p> <p>NRC Order No. EA-03-009, "Issuance of Order Establishing Interim Inspection Requirements for Reactor Pressure Vessel Heads at Pressurized Water Reactors," February 11, 2003.</p> <p>NRC RIS 2003-013, "NRC Regulatory Issue Summary 2003-13: NRC Review of Responses to Bulletin 2002-01, Reactor Pressure Vessel Head Degradation and Reactor Coolant Pressure Boundary Integrity."</p> <p>NRC Generic Letter 88-05, "Boric Acid Corrosion of Carbon Steel Reactor Pressure Boundary Components in PWR Plants," U.S. Nuclear Regulatory Commission, March 17, 1988.</p> <p>NRC Information Notice 86-108 S3, "Degradation of Reactor Coolant System Pressure Boundary Resulting from Boric Acid Corrosion," U.S. Nuclear Regulatory Commission, December 26, 1986; Supplement 1, April 20, 1987; Supplement 2, November 19, 1987; and</p>

Applicant Aging Management Programs	GALL Aging Management Program	VEGP LRA-AMP Basis Document and Other Documents Reviewed
		<p>Supplement 3, January 5, 1995.</p> <p>MRP Letter 2003-017, "Recommendation for PWR Owners with Alloy 600 Bottom-Mounted Reactor Vessel Instrument Nozzles," June 23, 2003.</p> <p>MRP Letter 2004-04, "BMI Integrated Industry Inspection Plan," May 14, 2004.</p> <p>"Guidance for Performing INPO Review Visits – PWR Primary Systems Integrity," Revision 1, January 5, 2004.</p> <p>ASME Boiler and Pressure Vessel Code, Section XI, 2001 Edition Including the 2002 and 2003 Addenda.</p> <p>NMP-ES-009, "Engineering Programs," Version 3.0.</p> <p>NMP-ES-009-003, "Engineering Programs - Oversight," Version 2.0.</p> <p>NMP-ES-019, "Boric Acid Corrosion Control Program," Version 2.0.</p> <p>NMP-ES-019-001, "Boric Acid Corrosion Control Implementation," Version 1.0.</p> <p>NMP-ES-019-GL03, "Boric Acid Corrosion Control NMP: Boric Acid Deposit Sampling, Analysis and Data Evaluation," Version 3.0.</p> <p>NMP-ES-024-202, "Visual Examination (VT-2)," Version 1.0.</p> <p>NMP-GM-008, "Operating Experience Program," Version 3.0.</p> <p>Vogtle Procedure 00435-C, "Boric Acid Corrosion Control Program," Version 5.1.</p> <p>Vogtle Procedure 11121-C, "Containment Coolers Condensate Collection Calculation," Version 5.1.</p>

Applicant Aging Management Programs	GALL Aging Management Program	VEGP LRA-AMP Basis Document and Other Documents Reviewed
		<p>Vogtle Procedure 14864-1, Unit 1, "Containment General Leak Inspection," Version 2.0.</p> <p>Vogtle Procedure 14864-2, Unit 2, "Containment General Leak Inspection," Version 2.0.</p> <p>Vogtle Procedure 14905-1, Unit 1, "RCS Leakage Calculation (Inventory Balance)," Version 51.0.</p> <p>Vogtle Procedure 14905-2, Unit 2, "RCS Leakage Calculation (Inventory Balance)," Version 35.0.</p> <p>Vogtle Procedure 34317-1, Unit 1, "Operation of the DRMS Containment Atmosphere Process Monitor 1RE-2526," Version 1.3.</p> <p>Vogtle Procedure 34317-2, Unit 2, "Operation of the DRMS Containment Atmosphere Process Monitor 2RE-2526," Version 1.2.</p> <p>Vogtle Procedure 50026-C, "ESD Operating Experience Program," Version 6.4.</p> <p>Vogtle Procedure 83201-C, "Corrosion Assessment," Version 7.0.</p> <p>Vogtle Procedure 83202-C, "Leakage Assessment Program," Version 8.2.</p> <p>Vogtle Procedure 84008-C, "RPV Alloy 600 Material Inspection Program," Version 4.0.</p> <p>Vogtle Electric Generating Plant Unit 1 and 2 Inservice Inspection Plan, Volumes 1 and 2.</p> <p>WCAP-15988-NP, "Generic Guidance for an Effective Boric Acid Inspection Program for Pressurized Water Reactors," Revision 1, February, 2005.</p>

Applicant Aging Management Programs	GALL Aging Management Program	VEGP LRA-AMP Basis Document and Other Documents Reviewed
		<p>EPRI TR-1000975, "Boric Acid Corrosion Guidebook," Revision 1, November 2001.</p> <p>SNC Letter NL-07-1261, "Vogtle Electric Generating Plant Units 1 and 2 Application for License Renewal," June 27, 2007.</p>
Buried Piping and Tanks Inspection Program (AMP B.3.4)	XI.M34	<p>VEGP-LR-AMP-04, "Buried Piping and Tanks Inspection Program," October 8, 2007.</p> <p>VEGP-LR-AMP-29, "One-Time Inspection Program for Selective Leaching," Version 1.0.</p> <p>VEGP-LR-AMP-42, "Quality Assurance for Aging Management Programs License Renewal Evaluation Document," Version 1.</p> <p>NMP-GM-008, "Operating Experience Program," Version 3.0.</p> <p>VEGP Procedure 25016-C, "Earthwork," Version 4.1.</p> <p>VEGP Procedure 25021-C, "Coating," Version 19.0.</p> <p>VEGP Procedure 50026-C, "ESD - Operating Experience Program," Version 6.4.</p> <p>VEGP Procedure 85020-C, "Visual Inspection," Version 12.0.</p> <p>Specification AX4DR001, "Piping Material Classifications," Version 47.0, General Notes Paragraph 6.a.</p> <p>Specification X4AH03, "Field Erected Atmospheric Tanks Built to Section III of the ASME Boiler and Pressure Code," Version 10.0.</p> <p>Specification X1AJ14, "Field Coatings During Operational Phase," Version 8.0.</p>

Applicant Aging Management Programs	GALL Aging Management Program	VEGP LRA-AMP Basis Document and Other Documents Reviewed
		<p>Specification X4AZ01, Division P8, "Field Installation of Welded Steel Buried Piping," Version 8.0.</p> <p>AWWA C203-02, "American Water Works Association Standard for Coal-Tar Protective Coatings and Linings for Steel Water Pipelines-Enamel and Tape-Hot Applied."</p> <p>NMP-ES-024-201, "Visual Examination (VT-1)," Version 1.0. NMP-ES-036, "Underground Pipe Monitoring Program," Version 1.0.</p> <p>SNC Letter NL-07-1261, "Vogle Electric Generating Plant Units 1 and 2 Application for License Renewal," June 27, 2007, Enclosure 2, "Future Action Commitment List," Item #4.</p> <p>VEGP-LR-CGR-G201, "Commodity Group Review: Carbon Steel Pipeline Components Exposed to Soil," Version 1.0.</p> <p>Condition Report 1999000700, June 18, 1999.</p> <p>Condition Report 2002002289, October 1, 2002.</p> <p>Condition Report 2003000679, July 21, 2004.</p> <p>Condition Report 2004003901, June 21, 2006.</p>
CASS RCS Fitting Evaluation Program (AMP B.3.5)	XI.M12	<p>VEGP-LR-AMP-05, "CASS RCS Fitting Evaluation Program License Renewal Evaluation Document," Version 1, October 8, 2007.</p> <p>VEGP-LR-AMP-42, "Quality Assurance for Aging Management Programs License Renewal Evaluation Document."</p>

Applicant Aging Management Programs	GALL Aging Management Program	VEGP LRA-AMP Basis Document and Other Documents Reviewed
		<p>VEGP-LR-OER-02, "Mechanical Operating Experience Report for Vogtle Electric Generating Plant License Renewal," Version 1.</p> <p>NRC Letter (Grimes) to NEI (Walters), License Renewal Issue No. 98-0030, "Thermal Aging Embrittlement of Cast Austenitic Stainless Steel Components," May 19, 2000.</p> <p>EPRI TR-106092, "Evaluation of Thermal Aging Embrittlement for Cast Austenitic Stainless Steel Components in LWR Reactor Coolant Systems," September 1997.</p> <p>WCAP-10551-P, "Technical Basis for Eliminating Large Primary Loop Pipe Rupture as the Structural Design Basis for the Alvin W. Vogtle Units 1 and 2 for the License Renewal Program," Addendum 1, Revision 0, December 2005.</p> <p>WCAP-11583, "Technical Basis for Eliminating Accumulator Line Rupture as the Structural Design Basis for VEGP Unit 2," October 1987.</p> <p>Westinghouse Letter GP-17870, "Transmittal of Primary Loop Piping Locations Potentially Susceptible to Thermal Aging Embrittlement," January 2006.</p> <p>1X6AB17-48, "VEGP Unit 1 10" x 45° Branch Outlets."</p> <p>2X6AB17-48, "VEGP Unit 2 10" x 45° Branch Outlets."</p> <p>ESCO Quality Assurance Department, "Statements of Compliance and Material Test Reports for VEGP 10" x 45° Branch Outlets, Heat Nos. 86434-3, 96278-4, 85047-2, 96278-3, 03953-3, 03863-3,</p>

Applicant Aging Management Programs	GALL Aging Management Program	VEGP LRA-AMP Basis Document and Other Documents Reviewed
		<p>04464-4, 03950-4.”</p> <p>ASME Boiler and Pressure Vessel Code, Section XI, 2001 Edition Including the 2002 and 2003 Addenda.</p> <p>NMP-GM-008, “Operating Experience Program,” Version 3.0.</p> <p>VEGP Procedure 50026-C, “ESD - Operating Experience Program,” Version 6.4.</p> <p>SNC Letter NL-07-1261, “Vogtle Electric Generating Plant Units 1 and 2 Application for License Renewal,” June 27, 2007, Enclosure 2, “Future Action Commitment List,” Item #5.</p>
<p>Closed Cooling Water Program (AMP B.3.6)</p>	<p>XI.M21</p>	<p>VEGP-LR-AMP-41, “ACCW System Carbon Steel Components Program License Renewal Evaluation Document,” Version 1.</p> <p>VEGP-LR-AMP-42, “Quality Assurance for Aging Management Programs License Renewal Evaluation Document,” Version 1.</p> <p>EPRI 1007820, “Closed Cooling Water Chemistry Guideline: Revision 1 to TR-107396, Closed Cooling Water Chemistry Guideline,” April 2004.</p> <p>EPRI 100793, “Aging Management Field Guide.”</p> <p>EPRI 1009721, “Stress Corrosion Cracking in PWR and BWR CCWS,” Appendix B, October 2004.</p> <p>NRC License Event Reports, 50-327/93-029-00 and 50-280/91-019-00.</p> <p>EPRI TR-107396, “Closed Cooling Water Chemistry Guideline,” October 1997.</p> <p>NMP-CH-001, “SNC Closed Cooling Water Program,” Version 2.0.</p>

Applicant Aging Management Programs	GALL Aging Management Program	VEGP LRA-AMP Basis Document and Other Documents Reviewed
		<p>NMP-CH-001-GL03, "SNC Closed Cooling Water Strategic Plan – Plant Vogtle Closed Cooling Water Strategy," Version 1.0.</p> <p>NMP-CH-001-GL04, "SNC Closed Cooling Water Program NMP – Closed Cooling Water Chemistry Performance Indicators," Version 1.0.</p> <p>NMP-GM-008, "Operating Experience Program," Version 3.0.</p> <p>VEGP Procedure 35311-C, "Chemical Control of Closed Cooling Water Systems," Version 39.3.</p> <p>VEGP Procedure 50026-C, "ESD - Operating Experience Program," Version 6.4.</p> <p>VEGP Self Assessment Report, "Vogtle Electric Generating Plant Team Self Assessment – Closed Cooling Water Program Self Assessment January 18-20, 2005," February 14, 2005.</p> <p>SNC Letter NL-07-1261, "Vogtle Electric Generating Plant Units 1 and 2 Application for License Renewal," June 27, 2007, Enclosure 2, "Future Action Commitment List," Item #6.</p>
Diesel Fuel Oil Program (AMP B.3.7)	XI.M30	<p>VEGP-LR-AMP-10, "Fire Protection Program," Version 1.</p> <p>VEGP-LR-AMP-13, "Diesel Fuel Oil Program License Renewal Evaluation Document," October 8, 2007.</p> <p>VEGP-LR-AMP-28, "One-Time Inspection Program," Version 1.</p> <p>VEGP-LR-AMP-31, "Periodic Surveillance and Preventive Maintenance Activities," Version 1.</p>

Applicant Aging Management Programs	GALL Aging Management Program	VEGP LRA-AMP Basis Document and Other Documents Reviewed
		<p>ASTM D130, "Copper Strip Corrosion Test."</p> <p>ASTM D484, "Standard Specification for Hydrocarbon Drycleaning Solvents."</p> <p>ASTM D664, "Standard Test Method for Acid Number of Petroleum Products by Potentiometric Titration."</p> <p>ASTM D975, "Standard Specification for Diesel Fuel Oils."</p> <p>ASTM D1796, "Standard Test Method for Water and Sediment in Fuel Oils by the Centrifuge Method."</p> <p>ASTM D2709, "Water and Sediment in Middle Distillate Fuels."</p> <p>ASTM D3227, "Standard Test Method for (Thiol Mercaptan) Sulfur in Gasoline, Kerosene, Aviation Turbine, and Distillate Fuels."</p> <p>ASTM D4057, "Manual Sampling of Petroleum and Petroleum Products."</p> <p>ASTM D4176, "Free Water and Particulate Contamination in Distillate Fuels (Clear and Bright Pass/Fail Procedures)."</p> <p>ASTM D6217, "Standard Test Method for Particulate Contamination in Middle Distillate Fuels by Laboratory Filtration."</p> <p>Technical Specifications, "Vogle Electric Generating Plant, Unit Nos. 1 and 2," Docket Nos. 50-424 and 50-425.</p> <p>VEGP Procedure 30025-C, "Periodic Analysis Scheduling Program," Version 55.1.</p> <p>VEGP Procedure 30080-C, "Diesel Fuel Chemistry Control," Version 36.1.</p>

Applicant Aging Management Programs	GALL Aging Management Program	VEGP LRA-AMP Basis Document and Other Documents Reviewed
		<p>VEGP Procedure 30090-C, "Chemistry Technical Specification Surveillance Performance Coordination," Version 21.1.</p> <p>VEGP Procedure 32510-C, "Determination of Clear and Bright Appearance of Diesel Fuel," Version 3.0.</p> <p>VEGP Procedure 32525-C, "Determination of Particulate Contamination of Diesel Fuel Oil," Version 5.1.</p> <p>VEGP Procedure 32526-C, "Determination of Neutralization Number," Version 16.2.</p> <p>VEGP Procedure 32527-C, "Determination of Mercaptan Content of Oil," Version 6.2.</p> <p>VEGP Procedure 37080-C, "Sampling Diesel Fuel Trucks," Version 2.2.</p> <p>VEGP Procedure 37081-C, "Sampling Fire Pump Diesel Fuel Storage Tanks #3 and #5," Version 2.</p> <p>VEGP Procedure 37082-1, "Sampling Unit One Emergency Diesel Fuel Storage Tanks," Version 2.2.</p> <p>VEGP Procedure 37082-2, "Sampling Unit Two Emergency Diesel Fuel Storage Tanks," Version 2.2.</p> <p>VEGP Procedure 50026-C, "ESD - Operating Experience Program," Version 6.4.</p>
External Surfaces Monitoring Program (AMP B.3.8)	XI.M36	<p>NMP-ES-002, "System Monitoring and Health Reporting," Version 4.0.</p> <p>VEGP-LR-AMP-42, "Quality Assurance for Aging Management Programs License Renewal Evaluation Document," Version 1.</p> <p>NMP-GM-008, "Operating Experience Program," Version 1.0.</p>

Applicant Aging Management Programs	GALL Aging Management Program	VEGP LRA-AMP Basis Document and Other Documents Reviewed
		<p>VEGP Procedure 50026-C, "ESD – Operating Experience Program," Version 6.4.</p> <p>VEGP Procedure 85020-C, "Visual Inspection," Revision 12.</p> <p>EPRI TR-104514, "How to Conduct Material Condition Inspections," September 1994.</p> <p>EPRI TR-1007933, "Aging Assessment Field Guide," December 2003.</p> <p>EPRI TR-1009743, "Aging Identification and Assessment Checklist," August 2004.</p> <p>SNC Letter NL-07-1261, "Vogtle Electric Generating Plant Units 1 and 2 Application for License Renewal," June 27, 2007, Enclosure 2, "Future Action Commitment List," Item #7.</p>
Fire Protection Program (AMP B.3.9)	XI.M26 XI.M27	<p>VEGP-LR-AMP-10, "Fire Protection Program License Renewal Evaluation Document," Version 1, October 8, 2007.</p> <p>VEGP FSAR, Chapter 9.5.1, "Fire Protection Program," Appendix 9A, "Fire Hazards Analysis."</p> <p>NMP-GM-008, "Operating Experience Program," Version 3.0.</p> <p>50026-C, "ESD – Operating Experience Program," Version 6.4.</p> <p>National Fire Protection Association (NFPA) 25 (2002), Section 5.3.1.1.1.</p> <p>VEGP-LR-OER-02, "Mechanical Operating Experience Report for Vogtle Electric Generating Plant License Renewal."</p> <p>92000-C, "Fire Protection Program," Version 21.0.</p> <p>92025-C, "Fire Protection Surveillance</p>

Applicant Aging Management Programs	GALL Aging Management Program	VEGP LRA-AMP Basis Document and Other Documents Reviewed
		<p>Program,” Version 19.0.</p> <p>29144-C, “Fire Boundaries and Fire Rated Penetration Seals 18 Month Visual Inspection,” Version 23.0.</p> <p>29145-C, “Cable and Raceway Fire Barrier and Radiant Energy Shield Assemblies 18 Month Visual Inspection,” Version 17.0.</p> <p>29124-C, “Fire Doors Inspection,” Version 21.0.</p> <p>29107-1, “Halon Systems Visual Inspection,” Version 6.0.</p> <p>29107-2, “Halon Systems Visual Inspection,” Version 4.0.</p> <p>29132-C, “Halon Systems Inspection and Test,” Version 13.0.</p> <p>29142-C, “Sprinkler System Visual Inspection and Cleaning,” Version 12.0.</p> <p>29133-C, “Fire Hydrant Flow Test, Hose Hydro Test, Barrel Inspection and Lubrication,” Version 12.0.</p> <p>29135-C, “Fire Hose Station 18 Month Inspection,” Version 8.0.</p> <p>SNC Letter NL-07-1261, “Vogle Electric Generating Plant Units 1 and 2 Application for License Renewal,” June 27, 2007, Enclosure 2, “Future Action Commitment List,” Item #8.</p>
Flow-Accelerated Corrosion Program (AMP B.3.10)	XI.M17	<p>VEGP-LR-AMP-15, “Inservice Inspection Program License Renewal Evaluation Document,” October 8, 2007.</p> <p>VEGP-LR-AMP-42, “Quality Assurance for Aging Management Programs License Renewal Evaluation Document,” Version 1.</p> <p>NSAC-202L-R3, “Recommendations for an</p>

Applicant Aging Management Programs	GALL Aging Management Program	VEGP LRA-AMP Basis Document and Other Documents Reviewed
		<p>Effective Flow-Accelerated Corrosion Program,” EPRI, Palo Alto, CA: 2006. 1011838.</p> <p>NRC Information Notice 2001-09, “Main Feedwater System Degradation in Safety-Related ASME Code Class 2 Piping Inside the Containment of a Pressurized Water Reactor.”</p> <p>NRC Generic Letter 89-08, “Erosion/Corrosion-Induced Pipe Wall Thinning,” U.S. Nuclear Regulatory Commission, May 2, 1989.</p> <p>AX4DR001, “Piping Material Classifications,” Version 46.0.</p> <p>ENG-008, “General Engineering Guidance,” Version 5.0, Appendix D, Section D.4.5.</p> <p>NMP-ES-011, “Flow-Accelerated Corrosion (FAC) Program,” Version 3.0.</p> <p>NMP-ES-011-001, “Flow-Accelerated Corrosion (FAC) Program Implementation,” Version 2.0.</p> <p>NMP-ES-024-510, “Ultrasonic Flow-Accelerated Corrosion Examination Procedure,” Version 1.0.</p> <p>NMP-GM-008, “Operating Experience Program,” Version 3.0.</p> <p>VEGP Procedure 50026-C, “ESD Operating Experience Program,” Version 6.4.</p> <p>VEGP Procedure 83301-C, “Flow-Accelerated Corrosion Program Implementation,” Version 6.0.</p>
Flux Thimble Tube Inspection Program (AMP B.3.11)	XI.M37	<p>NMP-GM-008, “Operating Experience Program,” Version 3.0.</p> <p>VEGP Procedure 50026-C, “ESD – Operating Experience Program,”</p>

Applicant Aging Management Programs	GALL Aging Management Program	VEGP LRA-AMP Basis Document and Other Documents Reviewed
		<p>Version 6.4.</p> <p>NRC Bulletin 88-09, "Thimble Tube Thinning in Westinghouse Reactors," July 26, 1988.</p> <p>WCAP-12866, "Bottom Mounted Instrumentation Flux Thimble Wear," January 1991.</p> <p>VEGP Drawing 1X6AB08-00056, "Bottom Mounted Instrumentation," Version 10.0.</p> <p>VEGP Drawing 2X6AB08-00056, "Bottom Mounted Instrumentation," Version 11.0.</p> <p>SNC Letter NL-07-1261, "Vogtle Electric Generating Plant Units 1 and 2 Application for License Renewal," June 27, 2007, Enclosure 2, "Future Action Commitment List," Item #9.</p> <p>VEGP-LR-AMP-42, "Quality Assurance for Aging Management Programs License Renewal Evaluation Document," Version 1.</p> <p>GP-17748, Letter from E. C. Arnold to D. E. Grissette, "Southern Nuclear Operating Company Vogtle Electric Generating Plant Unit 1 Flux Thimble Eddy Current Data Evaluation for 1R12 Refueling Outage," April 1, 2005.</p> <p>GP-18145, Letter from E. C. Arnold to T. E. Tynan, "Southern Nuclear Operating Company Vogtle Electric Generating Plant Unit 2 Flux Thimble Eddy Current Examination Results and Projected Wear – 2R12 Outage," March 28, 2007.</p>
Generic Letter 89-13 Program (AMP B.3.12)	XI.M20	<p>VEGP-LR-AMP-43, "Generic Letter 89-13 Program License Renewal Evaluation Document," October 8, 2007.</p> <p>VEGP FSAR, Version 14.0.</p> <p>NMP-ES-012, "Heat Exchanger Program,"</p>

Applicant Aging Management Programs	GALL Aging Management Program	VEGP LRA-AMP Basis Document and Other Documents Reviewed
		<p>Version 2.0.</p> <p>NMP-GM-008, "Operating Experience Program," Version 3.0.</p> <p>VEGP Procedure 11882-1, "Outside Area Rounds Sheets," Version 67.0.</p> <p>VEGP Procedure 11882-2, "Outside Area Rounds Sheets," Version 63.0.</p> <p>VEGP Procedure 11885A-1, "Diesel Generator 1A Operating Log," Version 3.0.</p> <p>VEGP Procedure 11885A-2, "Diesel Generator 2A Operating Log," Version 3.0.</p> <p>VEGP Procedure 11885B-1, "Diesel Generator 1B Operating Log," Version 3.0.</p> <p>VEGP Procedure 11885B-2, "Diesel Generator 2B Operating Log," Version 3.0.</p> <p>VEGP Procedure 27118-C, "Westinghouse Large Frame Motor Heat Exchanger Maintenance," Version 6.</p> <p>VEGP Procedure 27418-C, "Maintenance on the Non-Essential (Normal) and Essential Chillers," Version 21.1.</p> <p>VEGP Procedure 30025-C, "Periodic Analysis Scheduling Program," Version 56.0.</p> <p>VEGP Procedure 32540-C, "Sampling and Analysis of Plant Systems for Corbicula," Version 3.1.</p> <p>VEGP Procedure 35363-C, "Chemistry Control of the NSCW System," Version 3.1.</p> <p>VEGP Procedure 50026-C, "ESD - Operating Experience Program," Version 6.4.</p>

Applicant Aging Management Programs	GALL Aging Management Program	VEGP LRA-AMP Basis Document and Other Documents Reviewed
		<p>VEGP Procedure 83305-C, "Heat Exchanger Testing/Maintenance Program," Version 7.3.</p> <p>VEGP Procedure 83306-C, "CCW and ACCW Heat Exchanger Testing," Version 7.1.</p> <p>VEGP Procedure 83308-C, "Testing of Safety-Related NSCW System Coolers," Version 30.1.</p> <p>VEGP Procedure 83309-C, "Safety-Related Heat Exchanger Inspection," Version 6.1.</p> <p>VEGP Procedure 83310-C, "Emergency Diesel Generator Jacket Water Heat Exchanger Testing," Version 5.3.</p> <p>VEGP Procedure 84003-C, "Pressure Testing of Piping and Components," Version 9.0.</p> <p>VEGP Maintenance Checklist SCL00394, "Nuclear Service Cooling Tower," Version 1.0.</p> <p>VEGP Maintenance Checklist SCL02620, "Heat Exchanger Inspection," Version 2.0.</p> <p>VEGP Maintenance Checklist SCL03083, "Diesel Jacket Water Heat Exchanger," Version 1.0.</p> <p>VEGP Design Criteria DC-1202, "Nuclear Service Cooling Water (NSCW) System," Version 12.</p> <p>ELV-01212, Letter from W. G. Hairston, III, to USNRC, "Vogtle Electric Generating Plant Response to Generic Letter 89-13 Service Water System Problems Affecting Safety-Related Equipment," January 25, 1990.</p> <p>ELV-03258, Letter from C. K. McCoy to</p>

Applicant Aging Management Programs	GALL Aging Management Program	VEGP LRA-AMP Basis Document and Other Documents Reviewed
		<p>USNRC, "Vogtle Electric Generating Plant Response to Generic Letter 89-13 Service Water System Problems Affecting Safety-Related Equipment," December 5, 1991.</p> <p>SNC Letter NL-07-1261, "Vogtle Electric Generating Plant Units 1 and 2 Application for License Renewal," June 27, 2007, Enclosure 2, "Future Action Commitment List," Item #11.</p>
<p>Inservice Inspection Program (AMP B.3.13)</p>	<p>XI.M1</p>	<p>VEGP-LR-AMP-15, "Inservice Inspection Program License Renewal Evaluation Document," October 8, 2007.</p> <p>VEGP-LR-AMP-20, "Nickel Alloy Management Program for Reactor Vessel Closure Head Penetrations."</p> <p>VEGP-LR-AMP-21, "Nickel Alloy Management Program for Non-Reactor Vessel Closure Head Penetration Locations."</p> <p>VEGP-LR-AMP-33, "Reactor Vessel Internals Program."</p> <p>VEGP-LR-AMP-37, "Steam Generator Tubing Integrity Program."</p> <p>VEGP-LR-AMP-42, "Quality Assurance for Aging Management Programs License Renewal Evaluation Document."</p> <p>ASME Boiler and Pressure Vessel Code, Section XI, 2001 Edition Including the 2002 and 2003 Addenda.</p> <p>Vogtle Electric Generating Plant Units 1 and 2, "Inservice Inspection Program, Second 10-Year Interval," Revision 3, July 2000.</p> <p>Vogtle Electric Generating Plant, Unit 1, "Second 10-Year Interval Inservice Inspection Plan," Revision 8, January 2007.</p>

Applicant Aging Management Programs	GALL Aging Management Program	VEGP LRA-AMP Basis Document and Other Documents Reviewed
		<p>Vogtle Electric Generating Plant, Unit 2, "Second 10-Year Interval Inservice Inspection Plan," Revision 8, December 2005.</p> <p>Vogtle Electric Generating Plant, Units 1 and 2, "Inservice Inspection Plan Third Inspection Interval," Version 1.0.</p> <p>NMP-ES-018, "SNC Inservice Inspection Engineering Program," Version 1.0.</p> <p>NMP-ES-024, "Non-Destructive Examination and Certification Process," Version 2.1.</p> <p>NMP-ES-024-201, "Visual Examination (VT-1)," Version 1.0.</p> <p>NMP-ES-024-202, "Visual Examination (VT-2)," Version 1.0.</p> <p>NMP-ES-024-203, "Visual Examination (VT-3)," Version 1.0.</p> <p>NMP-ES-030, "Reactor Coolant System Materials Management Program (RCS MMP)," Version 1.0.</p> <p>NMP-GM-008, "Operating Experience Program," Version 3.0.</p> <p>VEGP Procedure 50026-C, "ESD - Operating Experience Program," Version 6.4.</p> <p>SNC Record No. NL-03-2096 – U.S. NRC "Vogtle Electric Generating Plant, Units 1 and 2 Re: Relief Request for Risk-Informed Inservice Inspection Program (TAC Nos. MB6118 and MB6119)," September 2003.</p>
Nickel Alloy Management Program for Non-Reactor Vessel Closure Head Penetrations (AMP B.3.14)	N/A	VEGP-LR-AMP-21, "Nickel Alloy Management Program for Non-Reactor Vessel Closure Head Penetrations License Renewal Evaluation Document," Version 1, October 8, 2007.

Applicant Aging Management Programs	GALL Aging Management Program	VEGP LRA-AMP Basis Document and Other Documents Reviewed
		<p>VEGP-LR-AMP-42, "Quality Assurance for Aging Management Programs License Renewal Evaluation Document."</p> <p>NRC IN 2005-02, "Pressure Boundary Leakage Identified on Steam Generator Bowl Drain Welds," February 2005.</p> <p>NEI-03-08, "Guideline for the Management of Materials Issues," May 2003.</p> <p>EPRI TR-105714, "EPRI Primary Water Chemistry Guidelines," Volumes 1 and 2.</p> <p>MRP Letter 2003-017, "Recommendation for PWR Owners with Alloy 600 Bottom-Mounted Reactor Vessel Instrument Nozzles."</p> <p>MRP Letter 2004-04, "BMI Integrated Industry Inspection Plan," May 14, 2004.</p> <p>MRP-126, "Generic Guidance for Alloy 600 Management," November 2004.</p> <p>MRP-139, "Primary System Piping Butt Weld Inspection and Evaluation Guideline," July 2005.</p> <p>ASME Boiler and Pressure Vessel Code, Section XI, 2001 Edition Including the 2002 and 2003 Addenda and 2004 Edition with 2005 Addenda.</p> <p>NMP-GM-008, "Operating Experience Program," Version 3.0.</p> <p>NMP-ES-029, "SNC Alloy 600 Program," Version 1.0.</p> <p>NMP-ES-029-GL01, "Alloy 600 Program Strategic Plan," Version 1.0.</p> <p>Vogtle Procedure 84008-C, "RPV Alloy 600 Material Inspections and Reports."</p>

Applicant Aging Management Programs	GALL Aging Management Program	VEGP LRA-AMP Basis Document and Other Documents Reviewed
		<p>Vogtle Procedure 50026-C, "ESD Operating Experience Program."</p> <p>Vogtle Electric Generating Plant Unit 1 and 2, "Inservice Inspection Plan," Volumes 1 and 2.</p> <p>SNC Letter NL-07-0355, "J.M. Farley Nuclear Plant, Vogtle Electric Generating Plant, Examination and Mitigation of Alloy 82/182 Pressurizer Butt Welds," February 21, 2007.</p> <p>SNC Letter NL-07-0483, "J.M. Farley Nuclear Plant, Vogtle Electric Generating Plant, Examination and Mitigation of Alloy 82/182 Pressurizer Butt Welds," March 6, 2007.</p> <p>SNC Letter NL-07-0803, "Vogtle Electric Generating Plant – Unit 2, Pressurizer Nozzle Full Structural Weld Overlay Examination Results Spring 2007 Outage (2R12)," April 13, 2007.</p> <p>SNC Letter NL-07-1320, "J.M. Farley Nuclear Plant, Vogtle Electric Generating Plant, Proposed Alternative for Application of Pressurizer Nozzle Full-Structural Weld Overlays," July 24, 2007.</p> <p>SNC Letter NL-07-1516, "Vogtle Electric Generating Plant Unit 1, Mitigation of Alloy 82/182 Pressurizer Butt Welds," August 1, 2007.</p> <p>SNC Letter NL-07-1261, "Vogtle Electric Generating Plant Units 1 and 2 Application for License Renewal," June 27, 2007, Enclosure 2, "Future Action Commitment List," Item #12.</p> <p>SNC Letter – M. Dove (SNC) to C. King (EPRI), "Report of BMN Inspection Results," October 12, 2006.</p>

Applicant Aging Management Programs	GALL Aging Management Program	VEGP LRA-AMP Basis Document and Other Documents Reviewed
		<p>SNC Letter – M. Dove (SNC) to C. King (EPRI), “Report of BMN Volumetric Examination Results,” April 3, 2007.</p> <p>NL-07-0122, “Vogtle Electric Generating Plant, Inservice Inspection Summary Report,” January 22, 2007.</p> <p>NL-07-1397, “Vogtle Electric Generating Plant Unit 2, Inservice Inspection Summary Report,” July, 19, 2007.</p> <p>Westinghouse Technical Bulletin TB-04-19, “Steam Generator Channel Head Bowl Drain Line Leakage,” October 18, 2004.</p>
<p>Nickel Alloy Management Program for Reactor Vessel Closure Head Penetrations (AMP B.3.15)</p>	<p>XI.M11A</p>	<p>VEGP-LR-AMP-20, “Nickel Alloy Management Program for Reactor Vessel Closure Head Penetration License Renewal Evaluation Document,” October 8, 2007.</p> <p>VEGP-LR-AMP-39, “Water Chemistry Control Program License Renewal Evaluation Document,” Version 1.</p> <p>VEGP-LR-AMP-42, “Quality Assurance for Aging Management Programs License Renewal Evaluation Document.”</p> <p>EA-03-009, “First Revised NRC Order Establishing Interim Inspection Requirements for Reactor Pressure Vessel Heads at Pressurized Water Reactors.”</p> <p>Letter, Richard Barrett, NRC, to Alex Marion, NEI, Subject: Flaw Evaluation Guidelines, April 11, 2003.</p> <p>NRC Bulletin 2001-01, “Circumferential Cracking of Reactor Pressure Vessel Head Penetration Nozzles,” August 2001.</p> <p>NRC Bulletin 2002-01, “Reactor Pressure Vessel Head Degradation and Reactor Coolant Pressure Boundary Integrity,” March 18, 2002.</p>

Applicant Aging Management Programs	GALL Aging Management Program	VEGP LRA-AMP Basis Document and Other Documents Reviewed
		<p>NRC Bulletin 2002-02, "Reactor Pressure Vessel Head and Vessel Head Penetration Nozzle Inspection Programs," August 9, 2002.</p> <p>NRC Generic Letter 97-01, "Degradation of Control Rod Drive Mechanism Nozzle and Other Vessel Closure Head Penetrations," April 1, 1997.</p> <p>NEI-03-08, "Guideline for the Management of Materials Issues," May 2003.</p> <p>EPRI TR-105714, "EPRI Primary Water Chemistry Guidelines," Volumes 1 and 2, Revision 4.</p> <p>MRP-126, "Generic Guidance for Alloy 600 Management," November 2004.</p> <p>MRP-139, "Primary System Piping Butt Weld Inspection and Evaluation Guideline," July 2005.</p> <p>ASME Boiler and Pressure Vessel Code, Section XI, 2001 Edition Including the 2002 and 2003 Addenda.</p> <p>NMP-ES-029, "SNC Alloy 600 Program," Version 1.0.</p> <p>NMP-ES-029-GL01, "Alloy 600 Program Strategic Plan," Version 1.0.</p> <p>NMP-GM-008, "Operating Experience Program," Version 3.0.</p> <p>VEGP Procedure 50026-C, "ESD - Operating Experience Program," Version 6.4.</p> <p>Letter NL-03-0390, "FNP-VEGP Answer to the Order Establishing Interim Inspection Requirements for Reactor Pressure Vessel Heads at Pressurized Water Reactors,"</p>

Applicant Aging Management Programs	GALL Aging Management Program	VEGP LRA-AMP Basis Document and Other Documents Reviewed
		<p>March 3, 2003.</p> <p>SNC Letter NL-06-2712, "Vogtle Electric Generating Plant, Results of Reactor Pressure Vessel Head Inspections Required by First Revised Order EA-03-009," December 22, 2006.</p> <p>SNC Letter NL-07-1260, "Vogtle Electric Generating Plant, Results of Reactor Pressure Vessel Head Inspections Required by First Revised Order EA-03-009," June 21, 2007.</p> <p>Letter NL-07-1261, "Vogtle Electric Generating Plant Units 1 and 2 Application for License Renewal," Enclosure 2, "Future Action Commitment List," Item #13, June 27, 2007.</p> <p>ML052300617, "Safety Evaluation by the Office of Nuclear Reactor Regulation," NRC Order (EA-03-009), "Relaxation Request, Alternate Examination Coverage for Reactor Pressure Vessel Head, Vogtle Electric Generating Plant, Units 1 and 2, Southern Nuclear Operating Company, Inc. Docket Nos. 50-424 and 50-425," September 13, 2005.</p> <p>ML062360585, "Safety Evaluation by the Office of Nuclear Reactor Regulation, First Revised NRC Order Modifying Licenses."</p>
Oil Analysis Program (AMP B.3.16)	XI.M39	<p>VEGP GEN -29, "Lubrication Guide."</p> <p>NMP-MA-004, "Preventative Maintenance Program," Version 1.</p> <p>VEGP SNC Letter NL-07-1261, "Future Action Commitments."</p> <p>VEGP FSAR, Sections 9.1.4, 9.1.5.</p> <p>VEGP Technical Requirements Manual, Section 13.9, Revision 0.</p>

Applicant Aging Management Programs	GALL Aging Management Program	VEGP LRA-AMP Basis Document and Other Documents Reviewed
		<p>VEGP Procedure 20411-C, "Control of Lubricant," Revision 13.</p> <p>VEGP Procedure 27315-C, "Spent Fuel Cask Crane Monthly, Quarterly and Annual Checkout," Revision 18.</p> <p>VEGP Procedure 27340-C, "Refueling Machine Maintenance," Revision 19.</p> <p>VEGP Procedure 27342-C, "Fuel Handling Machine Bridge Crane Service Check," Revision 9.</p> <p>VEGP Procedure 50026-C, "ESD - Operating Experience Program," Version 6.4.</p> <p>VEGP Procedure 93100-C, "Refueling Tools and Equipment Pre-service Inspection/Checkout," Revision 28.</p> <p>VEGP Procedure 93246-C, "Reactor Polar Crane Service Check," Revision 21.</p> <p>ANSI B30.2-1976, "Cranes and Overhead Gantry Equipment."</p> <p>NMP-GM-002, "Corrective Action Program," Version 1.0.</p> <p>X4AL01-72, "Operations and Maintenance Manual, Reactor Polar Crane," Whiting Corporation.</p> <p>AX4AL03-82, "Spent Fuel Cask Bridge Crane Equipment Maintenance Manual," PACECO, Version 4.</p> <p>VEGP-LR-TE-017, "Technical Evaluation VEGP Overhead Heavy Load Handling and Refueling Cranes."</p> <p>NMP-GM-008, "Operating Experience Program," Version 3.0.</p>
One-Time Inspection	XI.M32	VEGP-LR-AMP-28, "One-Time Inspection

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Program (AMP B.3.17)		<p>Program for License Renewal Evaluation Document,” Version 1, October 8, 2007.</p> <p>ANSI/ASME N45.2.6 – 1978, “Qualifications of Inspection, Examination, and Testing Personnel for Nuclear Power Plants,” January 15, 1979.</p> <p>VEGP Procedure 00704-C, “Personnel Qualification Program,” Version 17.2.</p> <p>VEGP Procedure 00744-C, “Engineering Training and Qualification,” Version 5.0.</p> <p>VEGP Procedure 85001-C, “Qualification of Inspection, Examination, and Testing Personnel,” Version 11.3.</p> <p>VEGP Procedure 85003-C, “Qualification and Certification of Nondestructive Examination and Testing Personnel,” Version 25.3.</p> <p>SNC Letter NL-07-1261, “Vogtle Electric Generating Plant Units 1 and 2 Application for License Renewal,” June 27, 2007, Enclosure 2, “Future Action Commitment List,” Item #15.</p>
One-Time Inspection Program for ASME Class 1 Small Bore Piping (AMP B.3.18)	XI.M35	<p>VEGP-LR-AMP-27, “Inservice Inspection Program License Renewal Evaluation Document,” Version 1, October 8, 2007.</p> <p>Root Cause Report CR2006103407 (February and March 2006), Document System Identification Number XX300173134.</p> <p>Event Report CR2006103407, Report Number 2-2006-1, Document System Identification Number XX300173288.</p> <p>Event Report CR2006103407, Signature Page, Document System Identification Number XX300174259.</p> <p>Nuclear Energy Institute (NEI) Publication,</p>

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		<p>NEI-03-08, "Guideline for the Management of Materials Issues," Revision 1, April 2007.</p> <p>NMP-GM-008, "Operating Experience Program," Version 3.0.</p> <p>SNC Letter NL-07-1261, "Vogtle Electric Generating Plant Units 1 and 2 Application for License Renewal," June 27, 2007, Enclosure 2, "Future Action Commitment List," Item #16.</p> <p>Memo, Copeland to Rodgers, CR200610340, April 14, 2006, Document System Identification Number XX300166777.</p>
<p>One-Time Inspection Program for Selective Leaching (AMP B.3.19)</p>	<p>XI.M33</p>	<p>VEG-LR-AMP-29, "One-Time Inspection Program for Selective Leaching Version 1.</p> <p>Vogtle Procedure 50026-C, "ESD Operating Experience Program," Version 6.4.</p> <p>SNC Letter NL-07-1261, "Vogtle Electric Generating Plant Units 1 and 2 Application for License Renewal," June 27, 2007, Enclosure 2, "Future Action Commitment List," Item #17.</p>
<p>Overhead and Refueling Crane Inspection Program (AMP B.3.20)</p>	<p>XI.M23</p>	<p>VEGP-LR-AMP-30, "Overhead and Refueling Crane Inspection Program," Version 1, October 8, 2007.</p> <p>VEGP Procedure 27315-C, "Spent Fuel Cask Crane Monthly, Quarterly and Annual Checkout," Revision 18.</p> <p>VEGP Procedure 27340-C, "Refueling Machine Maintenance," Revision 19.</p> <p>VEGP Procedure 27342-C, "Fuel Handling Machine Bridge Crane Service Check," Revision 9.</p> <p>VEGP Procedure 50026-C, "ESD - Operating Experience Program," Version 6.4.</p>

Applicant Aging Management Programs	GALL Aging Management Program	VEGP LRA-AMP Basis Document and Other Documents Reviewed
		<p>VEGP Procedure 93100-C, "Refueling Tools and Equipment Pre-service Inspection/Checkout," Revision 28.</p> <p>VEGP Procedure 93246-C, "Reactor Polar Crane Service Check," Revision 21.</p> <p>X4AL01-72, "Operations and Maintenance Manual, Reactor Polar Crane," Whiting Corporation.</p> <p>VEGP-LR-TE-017, "Technical Evaluation VEGP Overhead Heavy Load Handling and Refueling Cranes."</p> <p>NMP-GM-008, "Operating Experience Program," Version 3.0.</p> <p>Condition Report 2000000180, March 22, 2000.</p> <p>Condition Report 2000000523, April 25, 2000.</p> <p>Condition Report 2001000983, July 3, 2001.</p> <p>Condition Report 2005108396, September 28, 2005.</p>
<p>Periodic Surveillance and Preventive Maintenance Activities (AMP B.3.21)</p>	<p>N/A</p>	<p>VEG-LR-AMP-31, "Periodic Surveillance and Preventive Maintenance Activities, Version 1.</p> <p>NRC Information Notice 91-82, "Problems with Diaphragms in Safety-Related Tanks," December 18, 1991.</p> <p>NMP-ES-006, "Preventive Maintenance Implementation and Continuing Equipment Reliability Improvement," Version 4.0.</p> <p>NMP-ES-006-GL03, "Preventive Maintenance Feedback," Version 1.0.</p> <p>VEGP Procedure 00704-C, "Personnel Qualification Program," Version 17.2.</p>

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		<p>VEGP Procedure 16701-1, "Boric Acid Storage Tank Bladder Inspection," Version 1.1.</p> <p>VEGP Procedure 16701-2, "Boric Acid Storage Tank Bladder Inspection," Version 1.1.</p> <p>VEGP Procedure 27918-C, "Removal and Testing of the NSCW Cooling Tower Fill Test Specimens," Revision 0.</p> <p>VEGP Procedure 27919-C, "NSCW ACB Test Specimen Evaluations," Revision 0.</p> <p>VEGP Procedure 28711-C, "Diesel Fuel Oil Storage Tank Cleaning," Version 9.0.</p> <p>VEGP Procedure 50026-C, "ESD - Operating Experience Program," Version 6.4.</p> <p>VEGP Procedure 54056-1, "Control Building Control Room HVAC System HEPA Filters and Carbon Absorber Test 1-1531-N7-001 1-1531-N7-002," Version 6.0.</p> <p>VEGP Procedure 54056-2, "Control Building Control Room HVAC System HEPA Filters and Carbon Absorber Test 2-1531-N7-001 2-1531-N7-002," Version 4.0.</p> <p>VEGP Procedure 83320-C, "Heat Exchanger Maintenance Inspection Program for Non-Safety-Related Heat Exchangers," Version 5.0.</p> <p>VEGP Procedure 83321-C, "Non-Safety-Related Heat Exchanger Inspection," Version 2.1.</p> <p>VEGP Maintenance Checklist SCL00394, "Nuclear Service Cooling Tower,"</p>

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		<p>Version 1.0.</p> <p>VEGP Maintenance Checklist SCL00483, "SARCO Basket Strainer Model 529/SGBD Trim HX Inspection," Version 2.0.</p>
<p>Piping and Duct Internal Inspection Program (AMP B.3.22)</p>	<p>XI.M38</p>	<p>ASME Boiler and Pressure Vessel Code, Section XI, 2001 Edition Including the 2002 and 2003 Addenda.</p> <p>VEGP-LR-AMP-42, "Quality Assurance for Aging Management Programs License Renewal Evaluation Document."</p> <p>NMP-GM-008, "Operating Experience Program," Version 3.0.</p> <p>VEGP Procedure 50026-C, "ESD - Operating Experience Program," Version 6.4.</p> <p>SNC Letter NL-07-1261, "Vogtle Electric Generating Plant Units 1 and 2 Application for License Renewal," June 27, 2007, Enclosure 2, "Future Action Commitment List," Item #19.</p>
<p>Reactor Vessel Closure Head Stud Program (AMP B.3.23)</p>	<p>XI.M3</p>	<p>VEGP-LR-AMP-34, "VEGP Reactor Vessel Closure Head Stud License Renewal Program Evaluation Document," Version 1.</p> <p>VEGP-LR-OER-02, "Mechanical Operating Experience Report for Vogtle Electric Generating Plant License Renewal," Version 1.</p> <p>NMP-ES-024-504, "Manual Ultrasonic Examination of Bolts And Studs," Version 2, September 19, 2007.</p> <p>VEG-LR-AMP-32, "Reactor Vessel Internals Program License Renewal Evaluation Document," Version 1.</p> <p>NMP-ES-024-201, "Visual Examination (VT-1)," Version 1, February 1, 2006.</p>

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		<p>“Inservice Inspection Plan for Class 1, 2, and 3 Components for Vogtle-1 Third Inspection Interval,” Volume 2, June 1, 2007.</p> <p>“Inservice Inspection Plan for Class 1, 2, and 3 Components for Vogtle-2 Third Inspection Interval,” Volume 4, June 1, 2007.</p> <p>NL-07-0122, “Vogtle Electric Generating Plant Inservice Inspection Summary Report,” January 22, 2007.</p> <p>NL-07-1397, “Vogtle Electric Generating Plant Unit 2 Inservice Inspection Summary Report,” July 19, 2007.</p> <p>VEGP-LR-OER-02, “Mechanical Operating Experience Report for Vogtle Electric Generating Plant License Renewal,” Version 1.</p> <p>ASME Section XI, 2001 Edition with 2002 and 2003 Addenda.</p> <p>U.S. NRC Regulatory Guide 1.65, “Materials and Inspections for Reactor Vessel Closure Studs,” October 1973.</p> <p>U.S. NRC Regulatory Guide 1.85, “Materials Code Case Applicability, ASME Section III,” (Withdrawn June 10, 2004).</p> <p>U.S. NRC Regulatory Guide 1.84, “Design, Fabrication, and Materials Code Case Applicability, ASME Section III,” Revision 33, August 2005.</p> <p>U.S. NRC Regulatory Guide 1.147, Inservice Inspection Code Case Applicability, ASME Section XI, Division 1,” August 2005.</p> <p>ASME SA-540, “Specification for Alloy-Steel Bolting Materials for Special Applications.”</p>

Applicant Aging Management Programs	GALL Aging Management Program	VEGP LRA-AMP Basis Document and Other Documents Reviewed
		<p>Vogtle Electric Generating Plant Units 1 and 2, "Inservice Inspection Program, Second 10-Year Interval," Revision 3, July 2000.</p> <p>Vogtle Electric Generating Plant, Unit 1, "Second 10-Year Interval Inservice Inspection Plan," Revision 8, January 2007.</p> <p>Vogtle Electric Generating Plant, Unit 2, "Second 10-Year Interval Inservice Inspection Plan," Revision 8, December 2005.</p> <p>NMP-ES-030, "Reactor Coolant System Materials Management Program," Version 1.0.</p> <p>NMP-GM-008, "Operating Experience Program," Version 3.0.</p> <p>VEGP-LR-AMP-42, "Quality Assurance for Aging Management Programs License Renewal Evaluation Document."</p> <p>VEGP FSAR Section 5.3.1.7, Table 5.3.1-4, Table 5.3.1-5, Section 1.9.65; Revision 13, April 2006.</p>
Reactor Vessel Internals Program (AMP B.3.24)	XI.M16	<p>VEGP-LR-AMP-33, "Reactor Vessel Internals Program License Renewal Evaluation Document," October 8, 2007.</p> <p>MRP-134, "Materials Reliability Program: Framework and Strategies for Managing Aging Effects in PWR Internals," June 2005.</p> <p>MRP-135, "Materials Reliability Program: Development of Material Constitutive Model for Irradiation Austenitic Stainless Steels," December 2004.</p> <p>MRP-153, "Materials Reliability Program: Inspection and Evaluation Strategies for Managing Aging Effects in PWR Internals," December 2005.</p>

Applicant Aging Management Programs	GALL Aging Management Program	VEGP LRA-AMP Basis Document and Other Documents Reviewed
		<p>MRP-175, "Materials Reliability Program: PWR Internals Material Aging Degradation Mechanism Screening and Threshold Values," December 2005.</p> <p>MRP-191, "Materials Reliability Program: Screening, Categorization, and Ranking of Reactor Internals Components for Westinghouse and Combustion Engineering PWR Design," November 2006.</p> <p>MRP-205, "Materials Reliability Program: Pressurized Water Reactor Issue Management Tables," October 2006.</p> <p>Nuclear Energy Institute (NEI) Publication, NEI-03-08, "Guideline for the Management of Materials Issues," Revision 1, April 2007.</p> <p>ASME Section XI, Rules for Inservice Inspection of Nuclear Power Plant Components, ASME Boiler and Pressure Vessel Code, 2001 Edition Including the 2002 and 2003 Addenda.</p> <p>GP-17942, Westinghouse Letter, "Vogtle Electric Generating Plant Units 1 and 2: Revision of Reactor Internals Material Summary Table," May 31, 2006.</p> <p>SNC Document 1X6AA19-00608-0, "Control Rod Guide Tube Support Pin Replacement."</p> <p>SNC 50.59 Screen, "Modification to Thermal Sleeves at Spare CRDM Head Adapter Tube Locations," Vogtle Unit 2, March 27, 2007.</p> <p>GP-18142, Westinghouse Letter, "Vogtle Electric Generating Plant Unit 2: Removal of Thermal Sleeves from Unrodded Reactor Vessel Head Penetration Locations," March 26, 2007.</p> <p>NMP-ES-030, "Reactor Coolant System</p>

Applicant Aging Management Programs	GALL Aging Management Program	VEGP LRA-AMP Basis Document and Other Documents Reviewed
		<p>Materials Management Program (RCS MMP),” Version 1.0.</p> <p>NMP-GM-008, “Operating Experience Program,” Version 3.0.</p> <p>VEGP Procedure 50026-C, “ESD - Operating Experience Program,” Version 6.4.</p> <p>VEGP-LR-AMP-42, “Quality Assurance for Aging Management Programs License Renewal Evaluation Document.”</p> <p>SNC Letter NL-07-1261, “Vogtle Electric Generating Plant Units 1 and 2 Application for License Renewal,” June 27, 2007, Enclosure 2, “Future Action Commitment List,” Item #20.</p>
<p>Reactor Vessel Surveillance Program (AMP B.3.25)</p>	<p>XI.M31</p>	<p>VEGP-LR-AMP-35, “Reactor Vessel Surveillance Program License Renewal Evaluation Document,” October 8, 2007.</p> <p>ASTM E185, “Standard Practice for Conducting Surveillance Tests for Light-Water Cooled Nuclear Power Reactor Vessels,” 1982.</p> <p>NRC Regulatory Guide 1.99, “Radiation Embrittlement of RPV Materials,” Revision 2, May 1988.</p> <p>NRC Regulatory Guide 1.190, “Calculational and Dosimetry Methods for Determining Pressure Vessel Neutron Fluence,” March 2001.</p> <p>VEGP Final Safety Analysis Report, Section 5.3, Revision 14.</p> <p>10 CFR 50.60, “Acceptance Criteria For Fracture Prevention Measures For Light Water Nuclear Power Reactors For Normal Operation.”</p> <p>10 CFR 50.61, “Fracture Toughness</p>

Applicant Aging Management Programs	GALL Aging Management Program	VEGP LRA-AMP Basis Document and Other Documents Reviewed
		<p>Requirements for Protection Against Pressurized Thermal Shock Events.”</p> <p>LTR-PCAM-06-1, “Time-Limited Aging Analyses for the Vogtle Units 1 and 2 Reactor Pressure Vessels,” Revision 1, June 2007.</p> <p>WCAP-16278-NP, “Analysis of Capsule X from the Southern Nuclear Operating Company, Vogtle Unit 1 Reactor Vessel Surveillance Program,” July 2004.</p> <p>WCAP-16382NP, “Analysis of Capsule W from the Southern Nuclear Operating Company, Vogtle Unit 2 Reactor Vessel Surveillance Program,” January 2005.</p> <p>NMP-GM-008, “Operating Experience Program,” Version 3.0.</p> <p>VEGP Procedure 50026-C, “ESD - Operating Experience Program,” Version 6.4.</p> <p>NL-05-1323, “Standby Specimen Capsule Withdrawal Plans and Exemption Request,” SNC Letter to NRC, July 28, 2005.</p> <p>NRC Response to NL-05-1323, “Vogtle Electric Generating Plant, Units 1 and 2 (Vogtle 1 and 2) - Reactor Vessel Material Surveillance Program (RVMSP) Standby Specimen Capsule Withdrawal Plans And Exemption Request (TAC Nos. MC8217 and MC8218),” April 11, 2006.</p> <p>SNC Letter NL-07-1261, “Vogtle Electric Generating Plant Units 1 and 2 Application for License Renewal,” June 27, 2007, Enclosure 2, “Future Action Commitment List,” Item #21.</p>
Steam Generator Tubing Integrity Program (AMP B.3.26)	XI.M19	VEGP-LR-AMP-39, “Steam Generator Tubing Integrity Program License Renewal Evaluation Document,” Version 1, October 8, 2007.

Applicant Aging Management Programs	GALL Aging Management Program	VEGP LRA-AMP Basis Document and Other Documents Reviewed
		<p>Westinghouse Letter GP-18163, "Transmittal of 2R12 Steam Generator Condition and Operational Assessments," April 13, 2007.</p> <p>SG-CDME-07-13, "Vogtle Unit 2 2R12 Refueling Outage Condition Monitoring and Operational Assessments Based on Final Eddy Current Inspection Data," April 2007.</p> <p>Westinghouse Letter GP-18092, "Transmittal of 1R13 Steam Generator Condition and Operational Assessment Report," January 26, 2007.</p> <p>SG-CDME-07-5, "Vogtle Unit 1 1R13 Refueling Outage Condition Monitoring and Operational Assessments," January 2007.</p> <p>Regulatory Guide 1.121, "Bases for Plugging Degraded PWR Steam Generator Tubes," August 1976.</p> <p>NRC IN 2001-16, "Recent Foreign and Domestic Experience with Degradation of Steam Generator Tubes and Internals," October 31, 2001.</p> <p>NRC IN 2002-21, "Axial Outside-Diameter Cracking Affecting Thermally Treated Alloy 600 Steam Generator Tubing," June 25, 2002.</p> <p>NRC IN 2002-02, "Recent Experience With Plugged Steam Generator Tubes," Supplement 1, July 17, 2002.</p> <p>NL-06-0708, "VEGP Request for License Amendment Related to Technical Specifications 5.5.9," July 20, 2006.</p> <p>NL-06-1706, "VEGP Request for License Amendment Related to Technical Specifications 5.5.9," August 4, 2006.</p> <p>LCV-1174, "Vogtle 90-Day Response to</p>

Applicant Aging Management Programs	GALL Aging Management Program	VEGP LRA-AMP Basis Document and Other Documents Reviewed
		<p>Generic Letter 97-05, "Steam Generator Tube Inspection Techniques," March 3, 1998.</p> <p>LCV-1176, "Vogtle 90-Day Response to Generic Letter 97-06, Degradation of Steam Generator Internals," March 30, 1998.</p> <p>SNC M&IS Letter MI-06-2475, "M&IS Review of the VEGP 1R13 Condition Monitoring and Preliminary Operational Assessment," October 24, 2006.</p> <p>NEI 97-06, "Steam Generator Program Guidelines," Revision 1, January 2001.</p> <p>EPRI Steam Generator Integrity Assessment Guidelines, Revision 2, July 2006.</p> <p>EPRI TR-107569, "PWR Steam Generator Examination Guidelines," Revision 5, September 1997.</p> <p>EPRI TR-104788, "PWR Primary to Secondary Leak Guidelines."</p> <p>VEGP Procedure 50026-C, "ESD - Operating Experience Program," Version 6.4.</p> <p>NMP-ES-004, "SNC Steam Generator Program," Version 5.0.</p> <p>NMP-ES-004-GL01, "Steam Generator Program Strategic Plan," Version 2.0.</p> <p>NMP-ES-004-001, "Steam Generator Program Implementation," Version 3.0.</p> <p>NMP-ES-004-002, "Steam Generator Primary-Side Inspections," Version 2.0.</p> <p>NMP-GM-008, "Operating Experience Program," Version 3.0.</p>

Applicant Aging Management Programs	GALL Aging Management Program	VEGP LRA-AMP Basis Document and Other Documents Reviewed
		ASME Boiler and Pressure Vessel Code, Section XI, 2001 Edition Including the 2002 and 2003 Addenda.
Steam Generator Program for Upper Internals (AMP B.3.27)	N/A	<p>VEGP-LR-AMP-36, "Steam Generator Program for Upper Internals License Renewal Evaluation Document," Version 1, October 8, 2007.</p> <p>Westinghouse Letter GP-18163, "Transmittal of 2R12 Steam Generator Condition and Operational Assessments," April 13, 2007.</p> <p>SG-CDME-07-13, "Vogtle Unit 2 2R12 Refueling Outage Condition Monitoring and Operational Assessments Based on Final Eddy Current Inspection Data," April 2007.</p> <p>Westinghouse Letter GP-18092, "Transmittal of 1R13 Steam Generator Condition and Operational Assessment Report," January 26, 2007.</p> <p>SG-CDME-07-5, "Vogtle Unit 1 1R13 Refueling Outage Condition Monitoring and Operational Assessments," January 2007.</p> <p>EPRI 1003138, "PWR Steam Generator Examination Guidelines", Revision 6, October 2002.</p> <p>NL-06-1706, "Steam Generator Technical Specification Change," August 4, 2006.</p> <p>Westinghouse Letter GP-17690, "Transmittal of Steam Generator – Steam Drum Component Inspection Interval Assessment Report," (Technical Reports LTR-SGDA-02-195 and LTR-SGDA-04-68), November 1, 2004.</p> <p>VEGP Technical Specifications, Section 5.5.9, "Steam Generator Program."</p> <p>NEI 97-06, "Steam Generator Program Guidelines," Revision 1, January 2001.</p>

Applicant Aging Management Programs	GALL Aging Management Program	VEGP LRA-AMP Basis Document and Other Documents Reviewed
		<p>EPRI TR-102134, "PWR Secondary Water Chemistry Guidelines," Revision 5, May 2000.</p> <p>EPRI 1012987, "Steam Generator Integrity Assessment Guidelines," Revision 2, July 2006.</p> <p>VEGP-LR-AMP-42, "Quality Assurance for Aging Management Programs License Renewal Evaluation Document," Version 1.</p> <p>NMP-ES-004, "SNC Steam Generator Program," Version 5.0.</p> <p>NMP-ES-004-GL01, "Steam Generator Program Strategic Plan," Version 2.0.</p> <p>NMP-ES-004-001, "Steam Generator Program Implementation," Version 3.0.</p> <p>NMP-GM-008, "Operating Experience Program," Version 3.0.</p> <p>VEGP Procedure 50026-C, "ESD - Operating Experience Program," Version 6.4.</p>
Water Chemistry Control Program (AMP B.3.28)	XI.M2	<p>VEGP-LR-AMP-39, "Water Chemistry Control Program License Renewal Evaluation Document," Version 1.</p> <p>EPRI 1002884, "Pressurized Water Reactor Primary Water Chemistry Guidelines: Volumes 1 and 2," Revision 5, EPRI, Palo Alto, CA: 2003.</p> <p>EPRI 1008224, "Pressurized Water Reactor Secondary Water Chemistry Guidelines," Revision 6, EPRI, Palo Alto, CA: 2004.</p> <p>NMP-GM-008, "Operating Experience Program," Version 3.0.</p> <p>50026-C, "ESD – Operating Experience Program," Version 6.4.</p>

Applicant Aging Management Programs	GALL Aging Management Program	VEGP LRA-AMP Basis Document and Other Documents Reviewed
		<p>30201-C, "VEGP Primary Water Chemistry Strategic Plan," Revision 2, January 11, 2007.</p> <p>30202-C, "VEGP Secondary Water Chemistry Strategic Plan," Revision 2.1, October 23, 2006.</p> <p>35110-C, "Chemistry Control of the Reactor Coolant System," Revision 49, January 4, 2007.</p> <p>35210-C, "Chemistry Control of the Steam Generators," Revision 30, October 9, 2006.</p> <p>35220-C, "Chemistry Control of the Condensate and Feedwater Systems," Revision 24, December 5, 2005.</p> <p>30025-C, "Periodic Analysis Scheduling Program," Revision 55.1, August 24, 2006.</p> <p>50026-C, "ESD - Operating Experience Program," Version 6.4.</p> <p>VEGP-LR-OER-02, "Mechanical Operating Experience Report for Vogtle Electric Generating Plant License Renewal," Version 1.</p> <p>Condition Report 2002003412, "Sodium Phosphate Intrusion," November 24, 2002.</p>
10 CFR 50 Appendix J Program (AMP B.3.29)	XI.S4	<p>10 CFR 50 Appendix J Program Manual GEN-98, Revision 8.</p> <p>VEGP FSAR, Chapter 6, Section 6.2.6, "Containment Leakage Testing."</p> <p>Technical Specifications for Vogtle Units 1 and 2; Sections 3.6, B 3.6, and 5.5.</p> <p>NEI 94-01, "Industry Guideline for Implementing Performance-Based Option of 10 CFR 50 Appendix J," Nuclear Energy Institute, Revision 0.</p>

Applicant Aging Management Programs	GALL Aging Management Program	VEGP LRA-AMP Basis Document and Other Documents Reviewed
		<p>10 CFR 50 Appendix J, Primary Reactor Containment Leakage Testing for Water-Cooled Power Reactors.</p> <p>Regulatory Guide 1.163, "Performance-Based Containment Leak-Testing Program," September 1995.</p> <p>Procedure Number 84400-2, "Containment Integrated Leak Rate Test," Revision 1.</p> <p>Procedure Number 28916-C, "Containment Type B & C Leakage Totalization," Revision 8.</p> <p>VEGP-LR OER-03, "Civil Operating Experience Report for Vogtle Nuclear Plant License Renewal."</p> <p>NMP-GM-008, "Operating Experience Program," Version 3.0.</p> <p>VEGP Procedure 50026-C, "ESD - Operating Experience Program," Version 6.4.</p>
<p>Inservice Inspection Program – IWE (AMP B.3.30)</p>	<p>XI.S1</p>	<p>VEGP-LR-AMP-03, "Boric Acid Corrosion Control Program License Renewal Evaluation Document," Version 1.</p> <p>VEGP-LR-OER-02, "Mechanical Operating Experience Report for Vogtle Electric Generating Plant License Renewal," Version 1.</p> <p>"Containment Inservice Inspection Program Plan," Revision 3 (First Inspection Interval: September 9, 1996 to September 8, 2008).</p> <p>ASME Boiler and Pressure Vessel Code, Section XI, 1992 Edition Including the 1992 Addenda.</p> <p>ASME Boiler and Pressure Vessel Code, Section XI, 2001 Edition Including the 2002 and 2003 Addenda.</p>

Applicant Aging Management Programs	GALL Aging Management Program	VEGP LRA-AMP Basis Document and Other Documents Reviewed
		<p>NMP-ES-024-201, "Visual Examination (VT-1)," Version 1.0.</p> <p>NMP-ES-024-202, "Visual Examination (VT-2)," Version 1.0.</p> <p>NMP-ES-024-203, "Visual Examination (VT-3)," Version 1.0.</p> <p>NMP-ES-024-204, "Visual Examination (IWE)," Version 1.0.</p> <p>85053-C, "Visual Examination for ASME XI Subsection IWE and IWL, and General Visual Inspections," Revision 3.</p> <p>Condition Report 1997034884, March 2, 1997.</p> <p>Condition Report 1999000670, May 26, 1999.</p> <p>Condition Report 1999001448, February 4, 2000.</p> <p>Condition Report 2006100868, February 24, 2006.</p> <p>84303-C, "Containment Liner General Visual Inspection," Revision 1.</p> <p>NMP-ES-018, "SNC Inservice Inspection Engineering Program," Version 1.0.</p> <p>NMP-GM-008, "Operating Experience Program," Version 3.0.</p> <p>VEGP Procedure 50026-C, "ESD - Operating Experience Program," Version 6.4.</p> <p>VEGP-LR-AMP-16, "Inservice Inspection (IWE and IWL) Program," October 8, 2007.</p>
Inservice Inspection Program – IWL (AMP B.3.31)	XI.S2	"Containment Inservice Inspection Program Plan," Revision 3 (First Inspection Interval: September 9, 1996 to September 8, 2008).

Applicant Aging Management Programs	GALL Aging Management Program	VEGP LRA-AMP Basis Document and Other Documents Reviewed
		<p>ASME Boiler and Pressure Vessel Code, Section XI, 1992 Edition Including the 1992 Addenda.</p> <p>ASME Boiler and Pressure Vessel Code, Section XI, 2001 Edition Including the 2002 and 2003 Addenda.</p> <p>NMP-ES-024-201, "Visual Examination (VT-1)," Version 1.0.</p> <p>NMP-ES-024-202, "Visual Examination (VT-2)," Version 1.0.</p> <p>NMP-ES-024-203, "Visual Examination (VT-3)," Version 1.0.</p> <p>NMP-ES-024-204, "Visual Examination (IWE)," Version 1.0.</p> <p>85053-C, "Visual Examination For ASME XI Subsection IWE and IWL, and General Visual Inspections," Revision 3.</p> <p>84303-C, "Containment Liner General Visual Inspection," Revision 1.</p> <p>NMP-ES-018, "SNC Inservice Inspection Engineering Program," Version 1.0.</p> <p>Condition Report 2000001095, August 22, 2000.</p> <p>NMP-GM-008, "Operating Experience Program," Version 3.0.</p> <p>VEGP Procedure 50026-C, "ESD - Operating Experience Program," Version 6.4.</p> <p>VEGP-LR-AMP-16, "Inservice Inspection (IWE and IWL) Program," October 8, 2007.</p>
Structural Monitoring Program (AMP B.3.32)	XI.S6	<p>Westinghouse Owner's Group, "Life Cycle Management/License Renewal Program."</p> <p>EPRI 1007933, "Aging Assessment Field</p>

Applicant Aging Management Programs	GALL Aging Management Program	VEGP LRA-AMP Basis Document and Other Documents Reviewed
		<p>Guide.”</p> <p>Title 10, Code of Federal Regulations, “Energy,” Part 50, Section 50.65, “Requirements for Monitoring the Effectiveness of Maintenance of Nuclear Power Plants.”</p> <p>NUMARC 93-01, “Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants.”</p> <p>NEI 96-03, “Guideline for Monitoring the Condition of Structures at Nuclear Power Plants.”</p> <p>NRC Regulatory Guide 1.160, “Monitoring the Effectiveness of Maintenance at Nuclear Power Plants,” Revision 2, March 1997.</p> <p>NMP-ES-021, “Structural Monitoring Program for the Maintenance Rule,” Version 1.0.</p> <p>GEN-92, “Maintenance Rule Scoping Manual,” Revision 4.</p> <p>NMP-GM-008, “Operating Experience Program,” Version 3.0.</p> <p>VEGP Procedure 50026-C, “ESD - Operating Experience Program,” Version 6.4.</p> <p>SNC Letter NL-07-1261, “Vogtle Electric Generating Plant Units 1 and 2 Application for License Renewal,” June 27, 2007, Enclosure 2, “Future Action Commitment List,” Item #23.</p>
Structural Monitoring Program – Masonry Walls (AMP B.3.33)	XI.S5	<p>NRC IE Bulletin 80-11, “Masonry Wall Design,” May 8, 1980.</p> <p>NRC Information Notice 87-67, “Lessons Learned from Regional Inspections of Licensee Actions in Response to IE Bulletin</p>

Applicant Aging Management Programs	GALL Aging Management Program	VEGP LRA-AMP Basis Document and Other Documents Reviewed
		<p>80-11," December 31, 1987.</p> <p>Westinghouse Owner's Group, "Life Cycle Management/License Renewal Program."</p> <p>EPRI 1007933, "Aging Assessment Field Guide for Structural Monitoring."</p> <p>Title 10, Code of Federal Regulations, "Energy," Part 50, Section 50.65, "Requirements for Monitoring the Effectiveness of Maintenance of Nuclear Power Plants."</p> <p>NUMARC 93-01, "Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants."</p> <p>NEI 96-03, "Guideline for Monitoring the Condition of Structures at Nuclear Power Plants."</p> <p>NRC Regulatory Guide 1.160, "Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," Revision 2, March 1997.</p> <p>NMP-ES-021, "Structural Monitoring Program for the Maintenance Rule," Version 1.0.</p> <p>NMP-GM-008, "Operating Experience Program," Version 3.0.</p> <p>VEGP Procedure 50026-C, "ESD - Operating Experience Program," Version 6.4.</p> <p>GEN-92, "Maintenance Rule Scoping Manual," Revision 4.</p> <p>SNC Letter NL-07-1261, "Vogtle Electric Generating Plant Units 1 and 2 Application for License Renewal," June 27, 2007, Enclosure 2, "Future Action Commitment List," Item #24.</p>

Applicant Aging Management Programs	GALL Aging Management Program	VEGP LRA-AMP Basis Document and Other Documents Reviewed
Non-EQ Cables and Connections Program (AMP B.3.34)	XI.E1	<p>VEGP-LR-AMP-22, "Non-EQ Cables and Connection Program License Renewal Evaluation Document," Version 1, October 8, 2007.</p> <p>EPRI TR-109619, "Guideline for the Management of Adverse Localized Equipment Environments," Electric Power Research Institute, Palo Alto, CA, June 1999.</p> <p>IEEE Standard 1205-2000, "IEEE Guide for Assessing, Monitoring and Mitigating Aging Effects on Class 1E Equipment Used in Nuclear Power Generating Stations," March 2000.</p> <p>SAND96-0344, "Aging Management Guideline for Commercial Nuclear Power Plants - Electrical Cable and Terminations," prepared by Sandia National Laboratories for the U.S. Department of Energy, September 1996.</p> <p>NMP-GM-008, "Operating Experience Program," Version 3.0.</p> <p>VEGP Procedure 50026-C, "ESD - Operating Experience Program," Version 6.4.</p> <p>SNC Letter NL-07-1261, "Vogle Electric Generating Plant Units 1 and 2 Application for License Renewal," June 27, 2007, Enclosure 2, "Future Action Commitment List," Item #25.</p>
Non-EQ Inaccessible Medium-Voltage Cables Program (AMP B.3.35)	XI.E3	<p>VEGP-LR-AMP-24, "Non-EQ Inaccessible Medium-Voltage Cables Program License Renewal Document," Version 1, October 8, 2007.</p> <p>EPRI TR-103834-P1-2, "Effects of Moisture on the Life of Power Plant Cables," Electric Power Research Institute, Palo Alto, CA, August 1994.</p>

Applicant Aging Management Programs	GALL Aging Management Program	VEGP LRA-AMP Basis Document and Other Documents Reviewed
		<p>EPRI TR-109619, "Guidelines for the Management of Adverse Localized Equipment Environments," Electric Power Research Institute, Palo Alto, CA, June 1999.</p> <p>IEEE Standard 1205-2000, "IEEE Guide for Assessing, Monitoring and Mitigating Aging Effects on Class 1E Equipment Used in Nuclear Power Generating Stations," March 2000.</p> <p>SAND96-0344, "Aging Management Guideline for Commercial Nuclear Power Plants - Electrical Cable and Terminations," prepared by Sandia National Laboratories for the U.S. Department of Energy, September 1996.</p> <p>NMP-GM-008, "Operating Experience Program," Version 3.0.</p> <p>VEGP Procedure 50026-C, "ESD - Operating Experience Program," Version 6.4.</p> <p>NL-07-0950, Letter From L. M. Stinson to U. S. Nuclear Regulatory Commission in Response to NRC Generic Letter 2007-01, May 4, 2007.</p> <p>SNC Letter NL-07-1261, "Vogtle Electric Generating Plant Units 1 and 2 Application for License Renewal," June 27, 2007, Enclosure 2, "Future Action Commitment List," Item #26.</p>
<p>Non-EQ Cable Connections One-Time Inspection Program (AMP B.3.36)</p>	<p>XI.E6</p>	<p>VEG-LR-AMP-25, "Non-EQ Cable Connections One-Time Inspection Program License Renewal Evaluation Document," Version 1, October 8, 2007.</p> <p>EPRI TR-104213, "Bolted Joint Maintenance and Application Guide," Electric Power Research Institute, Palo Alto, CA, December 1995.</p>

Applicant Aging Management Programs	GALL Aging Management Program	VEGP LRA-AMP Basis Document and Other Documents Reviewed
		<p>EPRI TR-109619, "Guidelines for the Management of Adverse Localized Equipment Environments," Electric Power Research Institute, Palo Alto, CA, June 1999.</p> <p>IEEE Standard 1205-2000, "IEEE Guide for Assessing, Monitoring and Mitigating Aging Effects on Class 1E Equipment Used in Nuclear Power Generating Stations," March 2000.</p> <p>SAND96-0344, "Aging Management Guidelines for Commercial Nuclear Power Plants – Electrical Cable and Terminations," prepared by Sandia National Laboratories for the U.S. Department of Energy, September 1996.</p> <p>NMP-GM-008, "Operating Experience Program," Version 3.0.</p> <p>VEGP Procedure 50026-C, "ESD - Operating Experience Program," Version 6.4.</p> <p>SNC Letter NL-07-1261, "Vogtle Electric Generating Plant Units 1 and 2 Application for License Renewal," June 27, 2007, Enclosure 2, "Future Action Commitment List," Item #27.</p>
Environmental Qualification Program (AMP B.3.37)	X.E1	<p>VEGP-LR-AMP-07, "EQ Program License Renewal Evaluation Document," Version 1, October 8, 2007.</p> <p>VEGP-LR-AMP-42, "Quality Assurance for Aging Management Programs License Renewal Evaluation Document," Version 1.</p> <p>ENG-008, "General Engineering Guidance," Appendix B, Section B.2.1, Version 7.0.</p> <p>NMP-ES-016, "Environmental Qualification Program," Version 2.0.</p> <p>NMP-ES-016-001, "Environmental</p>

Applicant Aging Management Programs	GALL Aging Management Program	VEGP LRA-AMP Basis Document and Other Documents Reviewed
		<p>Qualification Program – Health Reports and Notebooks,” Version 1.0.</p> <p>NMP-ES-016-GL01, “Environmental Qualification Implementation,” Version 1.0.</p> <p>NMP-ES-016-002, “Environmental Qualification Central File Maintenance,” Version 1.0.</p> <p>NMP-GM-008, “Operating Experience Program,” Version 3.0.</p> <p>VEGP Procedure 50026-C, “ESD - Operating Experience Program,” Version 6.4.</p> <p>Regulatory Issue Summary (RIS) 2003-09, “Environmental Qualification of Low-Voltage Instrumentation and Control Cables,” May 2, 2003.</p>
Fatigue Monitoring Program (AMP B.3.38)	X.M1	<p>VEGP-LR-AMP-09, “Fatigue Monitoring Program License Renewal Evaluation Document,” October 8, 2007.</p> <p>GP-17940, “VEGP Units 1 and 2 – Use of Local Fatigue Monitoring in Lieu of Cycle Counting,” Westinghouse Letter to SNC. May 25, 2006.</p> <p>VEGP-LR-TE-018, “Technical Evaluation Impacts ok VEGP Fatigue Calculations,” Version 1.</p> <p>VEGP Procedure 83303-C, “Thermal Stratification Data Collection Unit – Common,” Version 4.1, April 28, 2006.</p> <p>WCAP-14574-A, “License Renewal Evaluation: Aging Management Evaluation for Pressurizers,” December 2000.</p> <p>VOG-01Q-301, “Environmentally Assisted Fatigue (EAF) Analysis for Vogtle Nuclear Plant Units 1 and 2,” Revision 0, March 2007.</p>

Applicant Aging Management Programs	GALL Aging Management Program	VEGP LRA-AMP Basis Document and Other Documents Reviewed
		<p>FP-VOG-315, "Baseline Evaluation and 60-Year Projection of Vogtle-1/2 Plant Cycles, Fatigue Usage, and Environmental Fatigue Usage," Revision 1, June 2007.</p> <p>AX5AB05A-00006, "Justification for Not Counting Certain FSAR Transients As Part of TFMS (Purchase Order 7016986)," Letter from Structural Integrity Associates, Inc. to Chalmer Myer, March 31, 1995.</p> <p>LTR-PCAM-06-1, "Time-Limited Aging Analyses for the Vogtle Units 1 and 2 Reactor Pressure Vessels," Revision 1, June 2007.</p> <p>VEGP Procedure 83101-C, "Fatigue and Cycle Monitoring Program," Version 11.1, May 4, 2007.</p> <p>VEGP-LR-OER-02 Version 1, "Mechanical Operating Experience Report for Plant Vogtle Electric Generating Plant License Renewal."</p> <p>VEGP Fatigue and Cycle Monitoring Report, (Sample) Initial Startup Through 03/31/2007.</p>

AMR Review

Applicant's AMR Sections and Systems for VEGP	VEGP LRA-AMR Basis Document and Other Documents Reviewed
<p>3.1 Reactor Vessel, Internals, and Reactor Coolant System</p>	<p>VEGP-LR-CGR-R101, "Reactor Pressure Vessel," Version 2.</p> <p>VEGP-LR-CGR-R102, "Reactor Vessel Internals," Version 2.</p> <p>VEGP-LR-CGR-R103, "Reactor Coolant System Piping," Version 2.</p> <p>VEGP-LR-CGR-R104, "Pressurizer," Version 2.</p> <p>VEGP-LR-CGR-R105, "Steam Generator," Version 2.</p> <p>VEGP-LR-CGR-RB01, "Mechanical Discipline Basis Document: Class 1 Materials, Environments, and Aging Effects," Version 2.</p> <p>VEGP-LR-OER-O2, "Mechanical Operating Experience for Vogtle Electric Generating Plant License Renewal," Version 1.</p> <p>VEGP-LR-CGR-G101, "Carbon Steel, Galvanized Steel, and Cast Iron Exposed to External Air," Version 2.</p> <p>VEGP-LR-CGR-G102, "Stainless Steel and Nickel Alloy Exposed to External Air," Version 2.</p> <p>VEGP-LR-CGR-M102, "Stainless Steel and Nickel Alloy Components Exposed to Borated Water," Version 2.</p> <p>VEGP-LR-CGR-M103, "Boral Exposed to Borated Water."</p> <p>VEGP-LR-CGR-M202, "Stainless Steel, Nickel Alloy and Titanium Exposed to Treated Water or Steam," Version 2.</p> <p>VEGP-LR-CGR-M501, "Metals Exposed to Lube Oil or Hydraulic Fluid," Version 2.</p> <p>VEGP-LR-CGR-M604, "Metals Exposed to Dried Air or Dried Gas."</p> <p>VEGP-LR-CGR-M601, "Carbon Steel, Cast Iron, and Galvanized Steel Exposed to Air (Internal)," Version 2.</p>

Applicant's AMR Sections and Systems for VEGP	VEGP LRA-AMR Basis Document and Other Documents Reviewed
	<p>VEGP-LR-CGR-M705, "Heat Exchangers – Raw Water Environment," Version 2.</p> <p>VEGP-LR-CGR-M301, "Carbon Steel And Cast Iron Components Exposed to Treated Water or Steam."</p> <p>VEGP-LR-CGR-M703, "Heat Exchangers – CCW Nitrite Chemistry Environment," Version 2.</p> <p>VEGP-LR-CGR-M801, "Carbon Steel Bolting in External Air," Version 2.</p> <p>VEGP-LR-CGR-M802, "Stainless Steel and Nickel Alloy Bolting in External Air," Version 2.</p> <p>CR 2005107942, "U2 SG Bowl Bare Metal Visual Inspections."</p>
3.2 Engineered Safety Features	<p>VEGP-LR-AMR-306, "Containment Spray System," June 22, 2007.</p> <p>VEGP-LR-AMR-306, "Emergency Core Cooling," June 22, 2007.</p> <p>VEGP-LR-CGR-G102, "Stainless Steel and Nickel Alloy Exposed to External Air," Version 2.</p> <p>VEGP-LR-CGR-M602, "Stainless Steel Exposed to Air (Internal)," Version 2.</p> <p>VEGP-LR-CGR-M605, "Carbon Steels Exposed to Ventilation Air," Version 2.</p> <p>VEGP-LR-CGR-M607, "Copper Alloys Exposed to Ventilation Air," Version 2.</p> <p>VEGP-LR-CGR-M706, "Heat Exchangers – Ventilation Environments," Version 2.</p> <p>VEGP-LR-CGR-M941, "Sprinkler Head Fusible Links and Expansion Bulbs in Fire Protection Systems."</p>
3.3 Auxiliary Systems	<p>VEGP-LR-AMR-306, "Plant Vogtle License Renewal AMR Report," Approved June 22, 2007.</p> <p>VEGP-LR-CGR-G101, "Carbon Steel, Galvanized Steel and Cast Iron Exposed to External Air," Version 2.</p>

Applicant's AMR Sections and Systems for VEGP	VEGP LRA-AMR Basis Document and Other Documents Reviewed
	<p>VEGP-LR-CGR-G102, "Stainless Steel and Nickel Alloy Exposed to External Air," Version 2.</p> <p>VEGP-LR-CGR-G103, "Copper Alloys Exposed to External Air," Version 2.</p> <p>VEGP-LR-CGR-G201, "Carbon Steel (and Cast Iron) Pipeline Components Exposed to Soil," Version 2.</p> <p>VEGP-LR-CGR-G503, "Glass," Version 2.</p> <p>VEGP-LR-CGR-G504, "Fibers, Foams and Ceramics," Version 2.</p> <p>VEGP-LR-CGR-M201, "Carbon Steel and Cast Iron Components Exposed to Treated Water or Steam," Version 2.</p> <p>VEGP-LR-CGR-M401, "Carbon Steel, Cast Iron and Galvanized Steel Exposed to Raw Water," Version 2.</p> <p>VEGP-LR-CGR-M407, "Polypropylene Tanks."</p> <p>VEGP-LR-CGR-M202, "Stainless Steel, Nickel Alloy and Titanium Exposed to Treated Water or Steam," Version 2.</p> <p>VEGP-LR-CGR-G401, "PVC Pipeline Components Exposed to External Ambient Environments and Soil," Version 2.</p> <p>VEGP-LR-CGR-G501, "Elastomers," Version 2.</p> <p>VEGP-LR-CGR-G502, "Fiberglass," Version 2.</p> <p>VEGP-LR-CGR-M102, "Stainless Steel Components Exposed to Borated Water," Version 2.</p> <p>VEGP-LR-CGR-M403, "Copper Alloys Exposed to Raw Water," Version 2.</p> <p>VEGP-LR-CGR-M404, "Carbon Steel and Cast Iron Drains," Version 2.</p> <p>VEGP-LR-CGR-M405, "Stainless Steel Drains," Version 2.</p> <p>VEGP-LR-CGR-M406, "PVC Pipeline Internal Surfaces – Air Drains and Chemical Solutions," Version 2.</p>

Applicant's AMR Sections and Systems for VEGP	VEGP LRA-AMR Basis Document and Other Documents Reviewed
	<p>VEGP-LR-CGR-M501, "Metals Exposed to Lube Oil or Hydraulic Fluid," Version 2.</p> <p>VEGP-LR-CGR-M601, "Carbon Steel, Cast Iron, and Galvanized Steel Exposed to Air (Internal)," Version 2.</p> <p>VEGP-LR-CGR-M602, "Stainless Steel Exposed to Air (Internal)," Version 2.</p> <p>VEGP-LR-CGR-M603, "Copper Alloys Exposed to Air (Internal)," Version 2.</p> <p>VEGP-LR-CGR-M604, "Metals Exposed to Dried Air or Dried Gas."</p> <p>VEGP-LR-CGR-M605, "Carbon Steels Exposed to Ventilation Air," Version 2.</p> <p>VEGP-LR-CGR-M606, "Stainless Steels Exposed to Ventilation Air," Version 2.</p> <p>VEGP-LR-CGR-M607, "Copper Alloys Exposed to Ventilation Air," Version 2.</p> <p>VEGP-LR-CGR-M608, "Diesel Exhaust Components," Version 2.</p> <p>VEGP-LR-CGR-M610, "Carbon Steel and Cast Iron Exposed to Gas - Miscellaneous," Version 2.</p> <p>VEGP-LR-CGR-M611, "Stainless Steel Exposed to Gas – Miscellaneous," Version 2.</p> <p>VEGP-LR-CGR-M905, "Aluminum Alloys Exposed to Raw Water in Fire Protection Systems," Version 2.</p> <p>VEGP-LR-CGR-M912, "Metals Exposed to Fuel Oil in Fire Protection Systems," Version 2.</p> <p>VEGP-LR-CGR-M924, "Metals Exposed to Dried Gas in Fire Protection Systems," Version 2.</p> <p>VEGP-LR-CGR-M941, "Sprinkler Head Fusible Links and Expansion Bulbs in Fire Protection Systems," Version 2.</p> <p>VEGP-LR-CGR-M609, "Aluminum Alloys Exposed to Air (Internal)," Version 2.</p>

Applicant's AMR Sections and Systems for VEGP	VEGP LRA-AMR Basis Document and Other Documents Reviewed
	<p>VEGP-LR-CGR-M703, "Heat Exchangers – CCW Nitrite Chemistry Environment," Version 2.</p> <p>VEGP-LR-CGR-M705, "Heat Exchangers – Lube Oil Environment," Version 2.</p> <p>VEGP-LR-CGR-M706, "Heat Exchangers – Ventilation Environments," Version 2.</p> <p>VEGP-LR-CGR-M801, "Carbon Steel Bolting in External Air," Version 2.</p> <p>VEGP-LR-CGR-M802, "Stainless Steel and Nickel Alloy Bolting in External Air," Version 2.</p> <p>VEGP-LR-CGR-M803, "Copper Alloy Bolting in External Air," Version 2.</p>
<p>3.4 Steam and Power Conversion Systems</p>	<p>VEGP-LR-CGR-M501, "Metals Exposed to Lube Oil or Hydraulic Fluid," Version 2.</p> <p>VEGP-LR-CGR-G101, "Carbon Steel, Galvanized Steel and Cast Iron Exposed to External Air," Version 2.</p> <p>VEGP-LR-CGR-M202, "Stainless Steel, Nickel Alloy and Titanium Exposed to Treated Water or Steam."</p> <p>VEGP-LR-CGR-M601, "Carbon Steel, Cast Iron and Galvanized Steel Exposed to Air (Internal)," Version 2.</p> <p>VEGP-LR-CGR-M604, "Metals Exposed to Dried Air or Dried Gas."</p> <p>VEGP-LR-CGR-G104, "Aluminum Alloys Exposed to External Air."</p> <p>VEGP-LR-CGR-M602, "Stainless Steel Exposed to Air," Version 2.</p>
<p>3.5 Containment, Structures, and Component Supports</p>	<p>VEGP-LR-CGR-S101, "Concrete Components."</p> <p>VEGP-LR-CGR-S102, "Carbon Steel, Galvanized Steel and Alloy Steel Exposed to an Air Environment."</p> <p>VEGP-LR-CGR-S103, "Carbon Steel, Galvanized Steel and Low Alloy Steel Materials Exposed to Raw Water Environment."</p>

Applicant's AMR Sections and Systems for VEGP	VEGP LRA-AMR Basis Document and Other Documents Reviewed
	<p>VEGP-LR-CGR-S104, "Stainless Steel Exposed to an Air Environment."</p> <p>VEGP-LR-CGR-S105, "Stainless Steel and Nickel-Based Alloy Materials Exposed to Raw Water Environment."</p> <p>VEGP-LR-CGR-S106, "Stainless Steel and Nickel-Based Alloy Materials Exposed to Borated Water."</p> <p>VEGP-LR-CGR-S107, "Elastomers."</p> <p>VEGP-LR-CGR-S108, "Aluminum Exposed to an Air Environment."</p> <p>VEGP-LR-CGR-S109, "Fire Barriers."</p> <p>VEGP-LR-CGR-S110, "Pre-stress System."</p> <p>VEGP-LR-CGR-S111, "Lubrite."</p> <p>VEGP-LR-CGR-SB01, "Civil Discipline Material Environment and Aging Effects."</p>
<p>3.6 Electrical and Instrumentation and Controls</p>	<p>VEGP-LR-CGR-E101, "Non-EQ Cable and Connections."</p> <p>VEGP-LR-CGR-E103, "Non-EQ Inaccessible Medium-Voltage Cables."</p> <p>VEGP-LR-CGR-E105, "Fuse Holders."</p> <p>VEGP-LR-CGR-E106, "Non-EQ Electrical Cable Connections."</p> <p>VEGP-LR-CGR-E108, "Switchyard Bus."</p> <p>VEGP-LR-CGR-E109, "High Voltage Insulators."</p> <p>VEGP-LR-CGR-E110, "Transmission Conductors."</p> <p>VEGP-LR-CGR-EB01, "Electrical Discipline Basis Document: Materials, Environment and Aging Effects."</p>

TLAA Review

Time-Limited Aging Analyses	VEGP Documents Reviewed
<p>4.0 Time-Limited Aging Analyses</p>	<p>Section 4.3, Metal Fatigue.</p> <p>FP-VOG-315, "Baseline Evaluation and 60-Year Projection of Vogtle-1/2 Plant Cycles, Fatigue Usage, and Environmental Fatigue Usage," Structural Integrity Associates, Revision 1, June 12, 2007.</p> <p>GP-17940, "Southern Nuclear Operating Company Vogtle Electric Generating Plant Units 1 and 2 Use of Local Fatigue Monitoring in Lieu of Cycle Counting," Letter from Westinghouse to SNC, May 25, 2006.</p> <p>LTR-PCAM-06-1, "Time Limited Aging Analysis for the Vogtle Units 1 and 2 Reactor Pressure Vessels," Revision 1, June 2007.</p> <p>GP-17286, "Vogtle Electric Generating Plant Units 1 and 2 Steam Generator Bolt Fatigue Tracking," Letter from Westinghouse to SNC, August 15, 2001.</p> <p>WCAP16688-P, "Vogtle Units 1 and 2 Pressurizer Safety/Relief, Spray and Surge Nozzles Full Structural Weld Overlay Qualification," Revision 0, January 2007 (Westinghouse Proprietary).</p> <p>NL-07-0837, "Vogtle Electric Generating Plant Unit 2 Pressurizer Nozzle Full Structural Weld Overlay Evaluation," SNC Letter to NRC, April 13, 2007.</p> <p>NL-07-0803, "Vogtle Electric Generating Plant Unit 2 Pressurizer Nozzle Full Structural Weld Overlay Nondestructive Examination Results Spring 2007 Outage (2R12)," SNC Letter to NRC, April 13, 2007.</p> <p>VOG-01Q-301, "Environmentally Assisted Fatigue (EAF) Analysis for Vogtle Nuclear Plant Units 1 and 2," Revision 0, December 2005.</p> <p>VEGP-LR-TE-018, "Technical Evaluation - Impacts on VEGP Fatigue Calculations," Version 1.0.</p> <p>VEGP-LR-TLAA-307, "Plant Vogtle License Renewal TLAA QA Report."</p> <p>X6CHH.28, "60-year Thermal Cycle Justification," Version 2, October 9, 2007.</p>

Time-Limited Aging Analyses	VEGP Documents Reviewed
	<p data-bbox="686 289 938 321">Section 4.7.1, LBB.</p> <p data-bbox="686 359 1354 489">WCAP-10551-P, "Technical Bases for Eliminating Large Primary Loop Pipe Rupture as the Structural Design Basis for the Alvin W. Vogtle Units 1 and 2," May 1984 (Westinghouse Proprietary).</p> <p data-bbox="686 527 1382 724">WCAP-10551-P, "Technical Bases for Eliminating Large Primary Loop Pipe Rupture as the Structural Design Basis for the Alvin W. Vogtle Units 1 and 2 for the License Renewal Program," Addendum 1, Revision 0, December 2005 (Westinghouse Proprietary).</p> <p data-bbox="686 762 1382 921">WCAP-11583-P, "Technical Bases for Eliminating Accumulator Line Rupture as the Structural Design Basis for the Alvin W. Vogtle Units 1 and 2 for the License Renewal Program," Addendum 1, Revision 0, July 2006 (Westinghouse Proprietary).</p> <p data-bbox="686 959 1373 1119">1X6AA10-10168, "WCAP-11583 Technical Bases for Eliminating Accumulator Line Rupture as the Structural Design Basis for Vogtle Unit 2," October 1987 (WCAP-11584 [1X6AA10-10167] is the non-proprietary version of this report).</p> <p data-bbox="686 1157 1373 1316">2X6AA10-10171, "WCAP-11599 Technical Bases for Eliminating RHR Line Rupture from the Structural Design Basis for Vogtle Unit 2," October 1987 (WCAP-11600 is the non-proprietary version of this report).</p> <p data-bbox="686 1354 1382 1493">1X6AA10-10060, 2X6AA10-10060, "WCAP-12218 Supplement 2 A Supplementary Assessment of Leak-Before-Break for the Pressurizer Surge Lines of Vogtle Units 1 and 2," March 1990.</p> <p data-bbox="686 1530 1330 1627">Letter LTR-PAFM-07-94, "Validity of Vogtle Unit 2 Pressurizer Surge Line Leak-Before-Break After SWOL Application," July 31, 2007.</p> <p data-bbox="686 1665 1354 1791">Letter LTR-PAFM-07-90, "Impact of Vogtle Unit 2 Pressurizer Surge Line Structural Weld Overlay Shrinkage Analysis on the Leak Before Break Input Loads," July 25, 2007.</p>

APPENDIX B

PERSONNEL CONTACTED OR ATTENDED DURING NRC MEETINGS/ AUDIT AND REVIEW

NRC Project Team

Roy Mathew, Sr. Reviewer, Electrical/ Fire Protection
James Medoff, Sr. Reviewer – Materials/Mechanical
Dan Hoang, Reviewer – Civil/Structural
Zuhan Xi, Reviewer – Civil/Structural
Usman Baig, Reviewer - Mechanical
Farideh Saba, Reviewer- Mechanical
Donnie Ashley, Sr. Project Manager
Mike Kennedy, Reviewer- Systems (ISL)
Cliff Marks, Reviewer- Systems/Materials (ISL)
Jon Woodfield, Reviewer- Systems/Structural (ISL)
Yeonki Cheung, Reviewer- Mechanical TLAA
Qi Gan, Reviewer, Mechanical TLAA
Christy Hines, Administrative Support (ISL)

NRC Project Team Support

Kenneth Chang, Chief, RER1
Rajender Auluck, Chief, RER2
Evelyn Gettys, Project Manager, RLRB

Applicant Personnel

Jim Williams, Site Support Manager
Ashley Wesley, Engineering Support Supervisor
Patrick Conley, Engineering Support Supervisor
Mike Macfarlane, License renewal Manager
Chalmer Myer , License Renewal
Jon Hornbuckle, License Renewal
Louis Bohn, License Renewal
Wayne Lanceford, License Renewal
Jeff Muluehill, License Renewal
Ed Davidson, License Renewal
Larry Orr, License Renewal
Partha Ghosal, License Renewal
Cary Martin, License Renewal
Danny Stephens, License Renewal
Willie Jennings, License Renewal
Bob Masse, License Renewal
Lavon Fabian, License Renewal
Scott Harris, Engineering Support
William Copeland, Performance Improvement
Mark Crisler, License Renewal