



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION II**

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September 1, 2016

Mr. Michael Yox  
Regulatory Affairs Director  
Southern Nuclear Operating Company  
7835 River Road, Bldg. 140, Vogtle 3&4  
Waynesboro, GA 30830

**SUBJECT:** VOGTLE UNIT 3 COMBINED LICENSE, VOGTLE UNIT 4 COMBINED  
LICENSE - NRC PROGRAM INSPECTION FOR CORRECTIVE ACTION  
PROGRAM IMPLEMENTATION INSPECTION, REPORTS 05200025/2016007,  
05200026/2016007

Dear Mr. Yox:

On July 22, 2016, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Vogtle Electric Generating Plant Units 3 and 4. The enclosed inspection report documents the inspection results, which the inspectors discussed on July 22, 2016, with Mr. Mark Rauckhorst and other members of your staff, and on August 10, 2016, with Ms. Helen Agha.

The inspection examined a sample of construction activities conducted under your license as it relates to safety and compliance with the Commission's rules and regulations and with the conditions of these documents. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

Based on the results of this inspection, no findings of significance were identified.

In accordance with 10 CFR 2.390, "Public inspections, exemptions, requests for withholding," of the NRC's "Agency Rules of Practice and Procedure," a copy of this letter, its enclosure, and your response (if any) will be made available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's Agencywide Document Access and Management System (ADAMS). ADAMS is accessible from the NRC Website at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room). To the extent possible, your response should not include any personal privacy or proprietary information so that it can be made available to the public without redaction.

M. Yox

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Should you have any questions concerning this letter, please contact us.

Sincerely,

***/RA/***

Rebecca Nease, Chief  
Construction Projects Branch 2  
Division of Construction Projects

Docket Nos.: 5200025, 5200026

License Nos: NPF-91, NPF-92

Enclosure: NRC Inspection Report (IR) 05200025/2016007, 05200026/2016007  
w/Attachment: Supplemental Information

Should you have any questions concerning this letter, please contact us.

Sincerely,

**/RA/**

Rebecca Nease, Chief  
 Construction Projects Branch 2  
 Division of Construction Projects

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 w/Attachment: Supplemental Information

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 ADAMS:  Yes      ACCESSION NUMBER: ML16245A895       SUNSI REVIEW COMPLETE       FORM 665 ATTACHED

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DATE	8/31/2016	9/ /2016	8/30/2016	8/30/2016	8/31/2016	8/31/2016	9/1/2016
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Letter to M. Yox from Michael Ernstes dated September 1, 2016

SUBJECT: VOGTLE UNIT 3 COMBINED LICENSE, VOGTLE UNIT 4 COMBINED  
LICENSE - NRC PROGRAM INSPECTION FOR CORRECTIVE ACTION  
PROGRAM IMPLEMENTATION INSPECTION, REPORTS 05200025/2016007,  
05200026/2016007

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**U.S. NUCLEAR REGULATORY COMMISSION**  
**Region II**

Docket Numbers: 5200025  
5200026

License Numbers: NPF-91  
NPF-92

Report Numbers: 05200025/2016007  
05200026/2016007

Licensee: Southern Nuclear Operating Company, Inc.  
Southern Nuclear Operating Company, Inc

Facility: Vogtle Unit 3 Combined License  
Vogtle Unit 4 Combined License

Location: Waynesboro, GA

Inspection Dates: July 18, 2016 through July 22, 2016

Inspectors: G. Crespo, Senior Construction Inspector, RII  
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Ryan Taylor, Senior Project Inspector, RII

Approved by: Rebecca Nease, Chief  
Construction Projects Branch 2  
Division of Construction Projects

Enclosure



## SUMMARY OF FINDINGS

Inspection Report (IR) 05200025/2016007, 05200026/2016007; 07/18/2016 through 07/22/2016; Vogtle Unit 3 Combined License, Vogtle Unit 4 Combined License, NRC Program Inspection for Annual Corrective Action Program Implementation.

This report covers an announced team inspection for corrective action program implementation by regional inspectors. The Nuclear Regulatory Commission's (NRC's) program for overseeing the construction of commercial nuclear power reactors is described in Inspection Manual Chapter 2506, "Construction Reactor Oversight Process General Guidance and Basis Document."

### Problem Identification and Resolution

Based on the inspection sample, the inspection team concluded that the implementation of the corrective action program and overall performance related to identifying, evaluating, and resolving problems at the Vogtle Electric Generating Plant Units 3 and 4 was effective. Licensee and contractor identified problems were entered into the corrective action program at an appropriate threshold. Problems were effectively prioritized and evaluated commensurate with the safety significance of the problems. Corrective actions were effectively implemented in a timely manner commensurate with their importance to safety and addressed the identified causes of problems. Lessons learned from industry construction experience were effectively reviewed and applied when appropriate. Audits and self-assessments were generally used to identify problems and appropriate actions. The inspectors did not identify any trends that were not already being addressed in the corrective action program. Based on the independent assessment of safety culture results, interviews conducted during the inspection, and a review of the employee concerns program, the majority of those interviewed felt free to raise safety concerns without fear of retaliation.

### **A. NRC-Identified and Self Revealed Findings**

No findings were identified

### **B. Licensee-Identified Violations**

The following violation of very low safety significance (Green) was identified by the licensee and is a violation of NRC requirements which meet the criteria of the NRC Enforcement Policy for being dispositioned as a Noncited Violation.

Criterion IV, "Procurement Document Control," of 10 CFR 50, Appendix B states, in part, "Measures shall be established to ensure applicable regulatory requirements, design bases, and other requirements which are necessary to assure adequate quality are suitably included or referenced in the documents for procurement of material, equipment, and services, whether purchased by the applicant or by its contractors or subcontractors." Contrary to this requirement, in December 2014, Chicago Bridge and Iron (CB&I), a contractor for Southern Company, discovered that they failed to provide procurement specifications necessary to ensure adequate quality for procurement of coatings for approximately 1000 in-containment, pipe supports. The inadequate procurement specification resulted in non-compliant coatings being applied to the pipe supports. Additionally, in July 2015, as part of the extent of condition for this issue, CB&I discovered that coatings for in-containment, ventilation dampers were also

coated with non-conforming material. Procurement of the pipe supports and ventilation dampers was completed and the components were delivered and accepted at Vogtle for Units 3 and 4. This licensee-identified violation is material to the ITAAC 2.2.03.08c.x acceptance criteria. This condition was documented in the licensee's corrective action program as Corrective Action Record (CAR) 2014-0372. (Section 4OA7)

This issue was more than minor because procurement documents did not adequately specify material to be used for in-containment coatings and the non-compliant coatings would adversely impact the function of the containment recirculation cooling screens. The issue is of very low safety significance (Green) because the issue was identified prior to the non-compliant coatings being installed in containment.

## REPORT DETAILS

### 1. CONSTRUCTION REACTOR SAFETY

#### Cornerstones: Design/Engineering, Procurement/Fabrication, Construction/Installation, Inspection/Testing

IMC 2504, Appendix A, Inspection of Construction Programs

#### Quality Assurance - Construction

1P01 IP 35007, "Quality Assurance Program Implementation During Construction And Pre-Construction Activities," Appendix 16, Inspection of Criterion XVI, "Corrective Action"

#### .1 Assessment of the Corrective Action Program Effectiveness

##### a. Inspection Scope

The inspectors reviewed the licensee's corrective action program (CAP) to determine if the licensee was effectively implementing their 10 CFR Part 50, Appendix B quality assurance program as required by 10 CFR Part 50.55. During this CAP inspection period, Westinghouse Electric Company, LLC (WEC) completed its acquisition of CB&I Stone & Webster, Inc., the nuclear construction and integrated services business of Chicago Bridge & Iron N.V. (CB&I). Additionally, Fluor Corporation (Fluor) was subcontracted, by WEC, as the construction manager for the project. The licensee delegated responsibility for implementing elements of the CAP to these engineering, procurement, and construction contractors. The delegation was permitted by the licensee's quality assurance plan; however, the plan also stated that the licensee maintained responsibility for the effectiveness of corrective action measures. Consequently, the inspection scope included a review of programs established by both the licensee and the contractors.

The inspectors reviewed corrective action documents and a selection of completed root cause investigations. The inspectors determined if personnel were identifying issues at the proper threshold, entering the issues into the CAP in a timely manner, and assigning the appropriate prioritization for resolution of the issues. The inspectors also determined whether personnel assigned the appropriate investigation method for issues entered into the CAP to ensure the proper determination of root, apparent, and/or contributing causes. The inspectors evaluated the timeliness and effectiveness of corrective actions and actions to prevent recurrence if required by 10 CFR Part 50, Appendix B.

The inspectors reviewed the Licensee's corrective action documents to determine if the licensee appropriately followed applicable implementing procedures and addressed the following licensee's Quality Assurance Program Description (QAPD) performance attributes, as applicable:

- complete and accurate identification of the problem in a timely manner commensurate with its significance and ease of discovery;
- screening of items entered into the CAP, as necessary to determine the proper level of evaluation;

- identification and correction of: procurement document errors, deviations from procurement document requirements, defective items, proper qualification requirements, proper interpretation of vendor instructions, and generic procurement related deficiencies;
- identification and evaluation of design concerns. For significant deficiencies, this includes determining the cause and instituting fixes to the design process and Quality Assurance (QA) program to prevent recurrence of similar deficiencies;
- classification and prioritization of the resolution of the problem commensurate with its safety significance; and
- identification of root and contributing causes, as well as actions to preclude recurrence for significant conditions adverse to quality.

The inspectors reviewed a selection of items from the licensee's CAP program that were screened as significant conditions adverse to quality. Specifically, the inspectors reviewed the associated corrective action reports, root cause analysis reports, Part 21 reportability reviews, and Part 21 notifications to determine if:

- the issues were adequately screened and addressed;
- actions were taken to prevent recurrence;
- root cause analyses were adequately performed; and
- reportability screening and notifications met the requirements of 10 CFR Part 21.

The inspectors reviewed 10 CFR Part 50.55(e) Event Notification (EN) 51704, issued to address pipe spool fabrication issues, including dimensional deviations, and EN 50798, issued to resolve programmatic fabrication issues associated with structural steel modules and submodules. The inspectors reviewed the events and circumstances related to the issues, including the associated corrective action reports, however at the time of the inspection the required corrective actions had not been fully implemented. Therefore, the review of these events was limited to determine if the licensee:

- effectively classified, prioritized, and evaluated the condition for reportability;
- completely and accurately identified the problem in a timely manner, commensurate with its significance and ease of discovery;
- reported the issue in accordance with the reporting requirements of 10CFR50.55(e);
- identified the cause to prevent recurrence of similar deficiencies when required;
- considered the extent of condition, generic implications, common cause, and previous occurrences;
- classified and prioritized corrective actions commensurate with the safety significance of the issue; and
- identified corrective actions that were appropriately focused to correct the problem;

The inspectors reviewed a sample of corrective documents associated with NRC identified findings to determine if the licensee and their contractors were handling NRC findings in accordance with the requirements of 10 CFR Part 50 Appendix B and NQA-1. The non-cited violations (NCVs) will remain open for further review when the corrective actions are fully developed and implemented. The inspectors reviewed the selected corrective action documents to determine if the following CAP performance attributes as applicable were met:

- complete and accurate identification of the problem in a timely manner commensurate with its significance and ease of discovery;
- screening of items entered into the CAP, as necessary to determine the proper level of evaluation;
- classification and prioritization of the resolution of the problem commensurate with its safety significance;
- identification of root and contributing causes, as well as actions to preclude recurrence for significant conditions adverse to quality.

The inspectors reviewed the selected corrective action documents to determine if the licensee appropriately followed applicable implementing documents and addressed the following CAP performance attributes, as applicable:

- documentation of corrective actions associated with Regulatory Treatment of Non-safety systems (RTNSS);
- complete and accurate identification of the problem in a timely manner commensurate with its significance and ease of discovery;
- screening of items entered into the CAP, as necessary to determine the proper level of evaluation;
- identification and correction of: procurement document errors, deviations from procurement document requirements, defective items; proper qualification requirements, proper interpretation of vendor instructions, and generic procurement related deficiencies;
- identification and evaluation of design concerns. For significant deficiencies, this includes determining the cause and instituting fixes to the design process and QA program to prevent recurrence of similar deficiencies;
- classification and prioritization of the resolution of the problem commensurate with its safety significance; and
- identification of root and contributing causes, as well as actions to preclude recurrence for significant conditions adverse to quality.

The inspectors reviewed a sample of corrective documents associated with module CA-03 to determine if the licensee and their contractors were identifying and correcting conditions adverse to quality in accordance with the requirements of 10 CFR Part 50 Appendix B and NQA-1. The inspectors reviewed the selected corrective action documents to determine if the following CAP performance attributes as applicable were met:

- complete and accurate identification of the problem in a timely manner commensurate with its significance and ease of discovery;
- screening of items entered into the CAP, as necessary to determine the proper level of evaluation;
- classification and prioritization of the resolution of the problem commensurate with its safety significance; and
- identification of root and contributing causes, as well as actions to preclude recurrence for significant conditions adverse to quality.

Documents reviewed are listed in the Attachment.

### Assessment – Effectiveness of Problem Identification

The inspectors determined that problem identification was adequate and at an appropriate threshold. The sample of issues reviewed by the inspectors that were entered into the various CAPs indicated a low threshold across all three organizations. Where corrective actions involved multiple organizations, the integrated corrective actions programs, including hand offs of corrective action program tasks between the licensee and the members of the EPC consortium, were effective in ensuring that identified issues were entered into all applicable corrective action programs. Thresholds for identifying conditions adverse to conditions were adequate to ensure that adverse conditions were evaluated and corrected.

### Assessment – Effectiveness of Prioritization and Evaluation of Issues

The inspectors determined that the overall performance in prioritization and evaluation of issues was acceptable and in accordance with the respective CAP procedures. The timeliness of initial classifications and the level of classification appeared to be consistent with the respective CAP procedures. Based on the samples selected, the inspectors determined that the evaluations adequately considered the risk, safety significance, complexity of design and fabrication, and needs for special controls or surveillance over activities. Significant conditions adverse to quality addressed the extent of conditions, extent of cause, generic implications, and previous occurrences and were reported to appropriate levels of management. The inspectors determined that the cause evaluations for significant conditions adverse to quality were adequately thorough to determine the causes and to identify the appropriate corrective actions.

### Assessment – Effectiveness of Corrective Actions

The inspectors concluded that corrective actions for identified deficiencies were generally timely, adequately implemented and commensurate with their safety significance. Problems identified using either root or apparent cause methodologies were resolved in accordance with applicable program and NRC requirements. The inspectors also sampled corrective action assignments for selected NRC documented violations and findings and determined that the actions were generally effective and timely. Corrective actions implemented for significant conditions adverse to quality were appropriately focused on preventing recurrence.

## .2 Assessment - Use of Construction Experience

### a. Inspection Scope

The inspectors performed an assessment of the licensee's use of internally and externally identified construction and operating experience to ensure that the licensee adequately screened and evaluated this experience for applicability to their project. The inspectors noted that the licensee routinely entered this information in their corrective action program for evaluation and/or tracking. The inspectors reviewed a sample of condition reports that were initiated in order to capture and evaluate relevant external and internal construction experience. The inspectors reviewed the construction experience program and a sample of items in the program to determine if:

- relevant internal and external construction and operating experience items were collected;

- collected experience items were adequately evaluated;
- relevant experience items were communicated to affected stakeholders; and
- experience was used to inform plant design and work processes.

Documents reviewed are listed in the Attachment.

b. Assessment

The inspectors determined that the licensee had established adequate measures to identify and evaluate construction and operating experience to ensure the licensee and contractor properly communicated relevant operating and construction experience commensurate with the safety significance of the issue. The inspectors determined that construction experience items were appropriately screened, stored and evaluated for potential effects on plant systems and work being performed by the licensee and its contractors.

c. Findings

No findings were identified

.3 Assessment of Self-Assessments and Audits

a. Inspection Scope

The inspectors reviewed a sample of audits, self-assessments, and surveillance reports issued by the licensee and WEC. The review was performed to determine whether the licensee and engineering, procurement, and construction (EPC) consortium oversight of the corrective action program was sufficient to verify the health of the corrective action program and to identify areas for improvement as needed. The inspectors also compared the results of the audits and self-assessments to the results of the inspection to determine if there were any discrepancies between the results of the inspection and the conclusions of the licensee.

Documents and records reviewed for this assessment are listed in the Attachment.

b. Assessment

The inspectors determined that the conduct of audits and self-assessments by the licensee and EPC consortium members were accomplished in accordance with appropriate procedures. The implementation of the oversight and independent verifications provided adequate assessments of program effectiveness, including the interfaces of corrective action program tasks across organizational boundaries. Where weaknesses were identified, corrective action documents were created. Corrective actions to address the identified issues were generally prioritized, evaluated, and completed within applicable procedural requirements.

c. Findings

No findings were identified.

#### .4 Assessment of Safety Conscious Work Environment

##### a. Inspection Scope

The inspectors conducted reviews to provide insight into whether a safety conscious work environment (SCWE) is being maintained, to confirm that SNC and contractors are complying with NRC requirements, to assess SNC and contractor Employee Concern Programs' (ECP) effectiveness, and to evaluate management oversight of the corrective action process including anonymous CAP entries. These reviews were used to help determine if licensee and contractor personnel were reluctant to report safety issues via the different avenues available (CAP, ECP, management, etc.).

The inspectors interviewed staff and observed other activities involving licensee personnel during the inspection to identify areas and issues that may represent challenges to the free flow of information, such as areas where employees may be reluctant to raise concerns or report issues in the CAP. The inspectors interviewed ECP personnel and other staff who were the designated SCWE subject matter experts. Interviews with SCWE subject matter experts were conducted to:

- determine if the staff was knowledgeable of SCWE processes and procedures;
- understand the interrelationship between SNC and WEC Employee Concerns Programs; and
- understand any current perceived challenges as they related to SCWE.

SNC and WEC ECP procedures and files were reviewed to determine if:

- procedures were adequate;
- files contained adequate documentation;
- issues were entered and reviewed in a timely manner;
- concerns were adequately addressed;
- corrective actions were tracked; and
- whether individuals were provided feedback.

SNC and WEC ECP audits and self-assessments were reviewed to determine if identified issues were addressed and actions to prevent recurrence were put in place.

The inspectors evaluated SCWE training material to determine if:

- the SCWE guidance provided clear, concise, and complete information regarding how to report concerns;
- the material included contact information for reporting concerns, roles and responsibilities, and the importance of reporting safety concerns and their impact; and
- whether training was effective.

The inspectors evaluated both a sample of anonymous concerns entered into the CAP and the methods used to resolve safety significant issues where the methods represented alternatives to the CAP, such as ECP.



The inspectors reviewed both SNC and CB&I anonymous CAP entries, CAP entries made by ECP or about ECP, and CAP entries pertaining to SCWE issues to determine if:

- these were entered into the corrective action program in a timely manner consistent with the safety significance of the issue;
- recurring issues were adequately evaluated and trended;
- the identified issues were adequately resolved;
- area trends raised via different avenues (e.g. management, ECP and CAP programs) were promptly identified and addressed; and
- the various programs were identifying the cross-cutting and underlying causes.

The inspectors also reviewed repeat issue identification in anonymous CAP entries to determine if these had been the result of inadequate corrective action which could cause personnel to be reluctant to identify additional related issues.

Additionally, interviews were conducted with approximately 25 randomly selected employees from SNC, WEC, and Wachs Services. Interviews were conducted with random personnel to determine if they knew how to raise safety concerns, if they felt free to raise such concerns, and if they were aware of alternate means for reporting safety concerns.

Documents reviewed are listed in the Attachment.

### Assessment

Based on the independent assessment of safety culture results, interviews conducted during the inspection, and a review of the employee concerns program, employee freedom to raise nuclear safety concerns without fear of reprisal appeared to be demonstrated. Although the majority of those interviewed felt free to raise safety concerns without fear of retaliation the team did note several observations from the interviews. These observations are as follows:

- The majority of those interviewed did not fully understand the distinction between industrial and nuclear safety.
- Some of those interviewed indicated that they did not receive adequate feedback on identified issues.
- There was a general lack of knowledge of the ECP. While those interviewed knew there was an ECP program the majority did not know where and how to utilize the program.
- Several individuals interviewed could not recall what SCWE training was received during site orientation.

These interview observations are consistent with items previously identified as areas needing improvement by the site. The team was briefed on the Vogtle Nuclear Safety Recovery Plan which includes actions to address these and other areas needing improvement.

b. Findings

No findings were identified.

**4. OTHER INSPECTION RESULTS**

4OA4 Supplemental Inspections

No Supplemental Inspection was performed.

4OA6 Meetings, Including Exit

On July 22, 2016, the inspectors presented the inspection results to Mr. Mark Rauckhorst, Executive Vice President, Vogtle Units 3&4 Construction, along with other licensee and consortium staff members. The inspectors stated that no proprietary information would be included in the inspection report. Following completion of additional review in the Region II office, another exit meeting was conducted by telephone with Ms. Helen Agha and other members of the licensee's staff on August 10, 2016, to discuss the results of this in-office review.

4OA7 Licensee-Identified Violations

The following violation of very low safety significance (Green) was identified by the licensee and is a violation of NRC requirements which meet the criteria of the NRC Enforcement Policy for being dispositioned as a Noncited Violation.

Criterion IV, "Procurement Document Control," of 10 CFR 50 Appendix B states, in part, "Measures shall be established to ensure applicable regulatory requirements, design bases, and other requirements which are necessary to assure adequate quality are suitably included or referenced in the documents for procurement of material, equipment, and services, whether purchased by the applicant or by its contractors or subcontractors." Contrary to this requirement, in December 2014, CB&I discovered that they failed to provide procurement specifications necessary to ensure adequate quality for procurement of coatings for approximately 1000 in-containment, pipe supports. The inadequate procurement specification resulted in non-compliant coatings being applied to the pipe supports. Additionally, in July 2015, as part of the extent of condition for this issue, CB&I discovered that coatings for in-containment, ventilation dampers were also coated with non-conforming material. Procurement of the pipe supports and ventilation dampers was completed and the components were delivered and accepted at Vogtle for Units 3 and 4. This licensee-identified violation (LIV) is material to the ITAAC 2.2.03.08c.x acceptance criteria. This condition was documented in the licensee's corrective action program as Corrective Action Record (CAR) 2014-0372. (LIV 05200025/2016007-01, 05200026/2016007-01 "Failure to Provide Adequate Procurement Specifications for Coatings")

This issue was more than minor because procurement documents did not adequately specify material to be used for in-containment coatings. The non-compliant coatings would adversely impact the function of the containment recirculation cooling screens. The issue is of very low safety significance (Green) because the issue was identified prior to the non-compliant coatings being installed in containment.

## SUPPLEMENTAL INFORMATION

### KEY POINTS OF CONTACT

#### Licenses and Contractor Personnel

F. Willis, SNC Licensing Manager  
M. Washington, SNC Licensing Supervisor  
J. O'Dell, SNC Licensing  
H. Agha, SNC Licensing  
J. Keys, SNC Licensing  
M. Patel, SNC, Electrical Engineer  
R. Hirmanpour, SNC, Digital Systems and HFE Regulatory Interface

### LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

<u>Item Number</u>	<u>Type</u>	<u>Status</u>	<u>Description</u>
05200025,26/2016007-01	LIV	Open	Failure to Provide Adequate Procurement Specifications for Coatings (Section 4OA7)

### LIST OF DOCUMENTS REVIEWED

#### Quality Assurance - Construction

##### 1P01

#### SNC Procedures

Southern Nuclear Operating Company – Nuclear Development Corrective Action Program, ND-AD-002, Version 24.0, dated: 03/21/2016  
Southern Nuclear Operating Company – Nuclear Development Interface of Corrective Action Processes, ND-AD-VNP-001, Version 5.0, dated: 9/15/2015  
ND-AD-VNP-004, Construction Experience Program, Version 10.0, 4/13/2015  
ND-AD-002-010, Performance Monitoring and Trending, Version 2.0, 5/28/2014

#### Westinghouse Procedures

W2-5.1-101, Westinghouse Corrective Action Program Procedure, Rev. 1.0, 3/15/2016  
APP-GW-GAP-106 / APIP 4-3-8, Corrective Action Interface, Rev. 8, 5/1/2016  
W2-5.1-102, Issue Review Committee, Rev. 1.0, 5/1/2016

#### WECTEC Procedures

QS 16.05, Corrective Action Program, Rev. 9.0, 6/1/2016  
NCSP02-13, Best Practices and Improvement Opportunities, Rev. 03.02, 6/03/2016

#### CB&I Procedures

NCAP 02.01, CAR Trending, Rev. 01.00, 8/31/2015  
NCAP 03.01, Power Group Construction/Operating Experience/Lessons Learned Program, Rev. 04.00, 12/01/2015

QS 15.01, Nonconformance & Disposition Report, Rev. 06.02, 3/24/2016  
 QS 16.06, Causal Analysis, Rev. 02.00, 8/31/2015

Employee Concerns Program Documents

Southern Nuclear Concerns Program Guideline, Version 12, July 2013  
 WECTEC Procedure, WECTEC-ECP-PR-01, Employee Concerns Program (ECP), Rev. 0, 4/13/2016  
 WECTEC Procedure, WECTEC-ECP-PR-02, Employee Concerns Board (ECB), Rev. 0, 4/13/2016

SNC Audits

CAR 258722  
 CAR 263095  
 CAR 263096  
 CAR 263098  
 CAR 263099  
 CAR 263227  
 CR 10086613  
 CR 10181495  
 CR 10181500  
 CR 10181502  
 CR 10181506  
 CR 10183448

ND-16-0232, Nuclear Development Quality Assurance (NDQA) Audit of Performance Improvement and Corrective Action Program (PI&CAP), ND-CS-CAP-2016, 2/11/16

SNC Self-Assessments

CAR 258528  
 CR 10061778  
 CR 10062337  
 CR 10066605  
 CR 10071326  
 CR 10072800  
 CR 10091568  
 NMP-GM-003-F19, Focused Area Self-Assessment (FASA) Plan and Report, 12/7/15  
 WSA-QEHS-16-08, 6/29/16

10 CFR Part 21, 50.55(e), SQAC Documents

Evaluation Number 14-157, Fifty-six nonconforming items on CA03 Submodules CA03-06, CA03-08, and CA03-09.  
 Evaluation Number 15-0186, CB&I Laurens ASME III Pipe Spools Fabrication Deficiencies  
 Evaluation Number 15-0140, Coatings Issue  
 Event Notification Number 51704  
 Event Notification Number 50798  
 CB&I Reportability Evaluation 15-0090, Dated 10/29/15  
 Mistras UT thickness report, V-14-UT-303-810 Dated 5/28/15  
 CB&I Inspection Report Q445-008-15-0158, Dated 5/5/15  
 10 CFR Part 21 report dated 10/29/2015  
 Root Cause Analysis Report 2015-4015, Dated 2/19/16  
 10 CFR Part 21 report dated 2/2/16  
 CB&I reporting evaluation 15-0205, 2/2/16

Root Cause Analysis Report 2016-0427, 4/14/16 [Interview with Kimberly Dukes]

CAR 2015-1361

CAR 2015-4015

CAR 2015-4187

CAR 2016-0427

CAR 2015-2798

CAR 2015-4320

CAR 263177

CAR 2014-1700

CAR 2014-1961

CR 10060139

CR 100224197

CR 823683

CR 824468

CR 835092

CR 837191

CR 837111

CR 850266

CR 861037

CR 862311

RCA 2014-1961, Southern Company Letter ND-14-1513

RCA 2013-1870, Adverse Trend – AP 1000 Modules Design Configuration Management  
ND-14-1513, Ineffective and Untimely Corrective Actions Related to Quality and Compliance  
Deficiencies for 10 CFR 50, Appendix B Modules and Submodules

ND-15-0284, Southern Letter to NRC

#### Drawings

APP-CA03-S5B-16001, Containment Building Module CA03 – Submodule CA03\_16 Bill of  
Materials, Rev. 5

APP-CA03-S5B-16005, Containment Building Module CA03 – Submodule CA03\_16 Structural  
Outline Specific Details, Rev. 4

APP-CA03-S5B-16004, Containment Building Module CA03 – Submodule CA03\_16 Structural  
Outline Horizontal Sections/Views, Rev. 4

#### Quality Inspection Reports

IR 5561-004-14-0377

#### Nonconforming and Disposition Reports

APP-CA03-GNR-850071

APP-CA03-GNR-850072

APP-CA03-GNR-850078

APP-CA03-GNR-850096

APP-CA03-GNR-850104

APP-CA03-GNR-850093

SV3-CA03-GNR-000007

SV3-CA03-GNR-000012

SV3-CA03-GNR-000015

SV3-CA03-GNR-000019

SV3-CA03-GNR-000023

SV3-CA03-GNR-000036

SV3-CA03-GNR-000082

SV0-VCS-GNR-000001

RTNSS related Specifications

APP-GW-G1-002, AP1000 Equipment Qualification Methodology, Rev. 4

APP-GW-VP-030, AP1000 Environmental Conditions (for Equipment Qualifications), Rev. 5

Specifications

APP-GW-GLR-079, AP1000 Verification of Water Sources for Long Term Recirculation Cooling Following a LOCA

Miscellaneous

NRC Log No. 2015-69-00, Interim Part 21 Report Regarding Deviations of Pipe Spools for V. C. Summer Units 2 & 3 AP1000 Project, 09/24/2015

NRC Log No. 2015-29-03, Closure of Interim Report Regarding One Inch Schedule 80A312 Stainless Steel, Class 2 and Class 3 Seamless Pipe for AP1000 Nuclear Projects, 09/25/2015

NRC Log No. 2015-29-02, Updated Interim Report Regarding One Inch Schedule 80A312 Stainless Steel, Class 2 and Class 3 Seamless Pipe for AP1000 Nuclear Projects, 07/25/2015

NRC Log No. 2015-29-01, Updated Interim Report Regarding One Inch Schedule 80A312 Stainless Steel, Class 2 and Class 3 Seamless Pipe for AP1000 Nuclear Projects, 06/26/2015

NRC Log No. 2015-29-00, Interim Report Regarding One Inch Schedule 80A312 Stainless Steel, Class 2 and Class 3 Seamless Pipe for AP1000 Nuclear Projects, 04/25/2015

Discrete Issue/Suggestion for Improv. #100334367, "CBI CAR 2015-2024 Westinghouse use of non-flanged cable tray covers", 10/15/2015.

RTNSS Related Documents

CAR 2016-0228

CAR 262197

CAR 262820

CAR 2634479

CR 578238

CR 10163938

CR 705951

CR 10090627

CR 10081790

CR 10120162

CR 10136928

CR 10129605

CR 10150835

TE 576481 - Action to Perform: Verify upon receipt of documentation from the consortium what the specific signals are that initiate an auto start from the Diesel Generator and to verify that this information is correctly documented in the appropriate documents. 1/22/2013.

TE 580711 - Investigate inconsistencies in documentation for Standby D/G response to LOOP w/ Main Generator online. 1/29/2013.

TE 651773 – Verification of D/G auto start signals. Verification of resolved design document inconsistencies. 6/7/2013

TE 708156 - Incorporate DAS "re-flash" requirement into Maintenance Strategy. Dated: 9/25/2013

TE 765560 - Determine strategy for DRCS FPGA reflash. 1/30/2014

TE 765561 – Determine Strategy for FPGA reflashes. 1/30/2014

CA-03 Engineering and Disposition Coordination Reports  
APP-CA03-GEF-067

CA-03 Discrete Issues

CAPAL 100024988  
CAPAL 100032065  
CAPAL 100046438  
CAPAL 100169840  
CAPAL 100341254  
CAPAL 100360984  
CAPAL 100371981  
CAPAL 100384125  
CAPAL 100398869

CAPALs

CAPAL 100362456  
CAPAL 100353417  
CAPAL 100353416  
CAPAL 100344209  
CAPAL 100315137  
CAPAL 100080431

CA-03 Condition Report  
CR 10251538-IOC 16-026

CA-03 Corrective Action Records

CAR 2014-1700  
CAR 2014-2013  
CAR 2015-2974  
CAR 2015-3727  
CAR 2015-4482  
CAR 2016-0100  
CAR 2016-0558  
CAR 2016-0896  
CAR 2016-0932  
CAR 2016-1968

CA-03 Other

QA IR S561-004-14-0377 dated 8/25/14  
Weld Record/Weld Data Sheet for weld CV5041-1 Dated 9/12/14

Construction Experience Corrective Action Documents

CR 10066426  
CR 10181008  
CR 10213268

NRC Findings Documents

CAR 257604  
CAR 257615  
CAR 263177  
CAR 263554

CAR 2015-1585 (CB&I)

Inadequate Technical Justifications

CAR 2014-2574  
CAR 2014-0372  
CAR 2014-2068  
CAR 254709  
CAR 255475  
CAR 257882  
CAR 258544  
CAR 258737  
CAR 258742  
CAR 259012  
CAR 259058  
CAR 259061  
CAR 262370  
CAR 262407  
CAR 262418  
CAR 262604  
CAR 262628  
CAR 262848  
CAR 262856  
CAR 263540  
CAR 263657  
CAR 263671  
CAR 263786  
CAR 263889  
CAR 263890  
CAR 263897  
CAR 264309  
CAR 264392  
CAR 264393  
CAR 265478

WECTEC Corrective Action Records

CAR 2015-4328  
CAR 2015-3998