

UNITED STATES NUCLEAR REGULATORY COMMISSION

REGION II 245 PEACHTREE CENTER AVENUE NE, SUITE 1200 ATLANTA, GEORGIA 30303-1257

October 13, 2017

Mr. Darin Myers Vice President Southern Nuclear Operating Company, Inc. Vogtle Electric Generating Plant 7821 River Road Waynesboro, GA 30830

SUBJECT: VOGTLE ELECTRIC GENERATING PLANT – U.S. NUCLEAR

REGULATORY COMMISSION 95001 SUPPLEMENTAL INSPECTION

REPORT 05000424/2017011 AND 05000425/2017011

Dear Mr. Myers:

On August 31, 2017, the U.S. Nuclear Regulatory Commission (NRC) completed a supplemental inspection using inspection procedure 95001 "Supplemental Inspection Response to Action Matrix Column 2 Inputs." The NRC inspection team discussed the results of this inspection and the implementation of your corrective actions with Mr. Daniel Komm and other members of your staff. The results of this inspection are documented in the enclosed report.

The NRC performed this inspection to review your station's actions in response to a White finding in the Emergency Preparedness cornerstone which was documented in NRC Inspection Reports (IR) 05000424/2017504 and 05000425/2017504. On July 22, 2017, you informed the NRC that Vogtle Electric Generating Plant was ready for the supplemental inspection.

The NRC determined that your staff's evaluation identified the root and apparent cause of the white finding to a level of detail commensurate with the significance of the problems, and reached reasonable conclusions as to the root and contributing causes of the event. The NRC also concluded that you identified reasonable and appropriate corrective actions for each root and contributing cause, and that the corrective actions appeared to be prioritized commensurate with the safety significance of the issues.

Based on the results of this inspection, no findings were identified. However, the inspectors documented a licensee-identified violation, which was determined to be of very low safety-significance, in this report. The NRC is treating this violation as a non-cited violation (NCV) consistent with Section 2.3.2.a of the Enforcement Policy. If you contest the violation or significance of the NCV, you should provide a response within 30 days of the date of this inspection report with the basis for your denial, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001; with copies to the Regional Administrator, Region II; the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC Resident Inspector at Vogtle.

D. Myers 2

The NRC determined that the completed or planned corrective actions were sufficient to address the performance issues that led to the White finding. Therefore, the performance issue will not be considered as an Action Matrix input after the end of the third quarter of 2017.

This letter, its enclosure, and your response (if any) will be made available for public inspection and copying at http://www.nrc.gov/reading-rm/adams.html and at the NRC Public Document Room in accordance with 10 CFR 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

/RA/

Eugene Guthrie, Chief Operator Licensing Branch 2 Division of Reactor Safety

Docket Nos. 50-424 and 50-425 License Nos. NPF-68 and NPF-81

Enclosure:

IR 05000424/2017011 and 05000425/2017011 w/Attachment: Supplementary Information

cc: Distribution via Listserv

SUBJECT: VOGTLE ELECTRIC GENERATING PLANT – U.S. NUCLEAR

REGULATORY COMMISSION 95001 SUPPLEMENTAL INSPECTION

REPORT 05000424/2017011 AND 05000425/2017011

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E-MAIL COPY?

YES NO

YES

NO

YES

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U.S. NUCLEAR REGULATORY COMMISSION REGION II

Docket Nos: 50-424 and 50-425 License Nos: NPF-68 and NPF-81 Report Nos: 05000424/2017011 and 05000425/2017011 Southern Nuclear Operating Company, Inc. Licensee: Facility: Vogtle, Units 1 and 2 Waynesboro, GA Location: Dates: August 28 – 31, 2017 S. Sanchez, Senior Emergency Preparedness Inspector Inspectors: J. Hickman, Emergency Preparedness Inspector Eugene Guthrie, Chief Approved by: Operator Licensing Branch 2 Division of Reactor Safety

SUMMARY

Inspection Report (IR) 05000424/2017011; 05000425/2017011; 08/28/2017 – 08/31/2017; Vogtle Electric Generating Plant, Units 1 and 2; Supplemental Inspection – Inspection Procedure (IP) 95001

Two regional emergency preparedness inspectors performed this inspection. One licensee-identified violation was identified. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process."

Cornerstone: Emergency Preparedness

The NRC staff performed the supplemental inspection in accordance with IP 95001, "Supplemental Inspection Response to Action Matrix Column 2 Inputs," to assess the licensee's evaluation associated with an administrative error involving the transposition of the threshold values for radiological effluent Emergency Action Levels (EALs) RG1 (General Emergency) and RS1 (Site Area Emergency), as required by 10 CFR 50.54(q) and the licensee's Emergency Plan. This error resulted in the EAL threshold values being approximately 42 times different than analyzed from October 2014 until October 2016. The NRC staff previously characterized this issue as having low to moderate safety significance (White), as documented in NRC IR 05000424/2017504 and 05000425/2017504.

During this inspection, the inspectors determined that your staff performed an adequate evaluation of the cause of the White finding. Your staff's evaluation identified the root cause to be Site and Corporate Emergency Preparedness (EP) management's failure to effectively use a systematic decision making process during EP procedure revisions. The inspectors found the extent of condition and extent of cause reviews were adequate, and the corrective actions implemented were adequate. All immediate and most long term corrective actions have been completed, except for completion of the corrective action effectiveness reviews.

<u>Licensee-Identified Violations</u>

A violation of very low safety significance was identified by the licensee and has been reviewed by the inspectors. Corrective actions taken, or planned, by the licensee have been entered into the licensee's corrective action program (CAP). This violation and corrective action tracking numbers are listed in Section 4OA7 of this report.

REPORT DETAILS

4. OTHER ACTIVITIES

4OA4 <u>SUPPLEMENTAL INSPECTION (95001)</u>

.1 Inspection Scope

The NRC staff performed this supplemental inspection in accordance with Inspection Procedure (IP) 95001 to assess the licensee's evaluation of a White finding that affected the Emergency Preparedness (EP) cornerstone in the Reactor Safety strategic performance area. The inspection objectives were:

- To assure that the root causes and contributing causes of the White finding are understood
- To independently assess and assure that the extent of condition and extent of cause are identified
- To assure that corrective actions taken to address and preclude repetition of the significant performance issues associated with the White finding were prompt and effective
- To assure that corrective actions direct prompt actions to effectively address and preclude repetition of the significant performance issues associated with the White finding.

The finding was characterized as having (White) safety significance as discussed in NRC inspection report (IR) 05000424 and 05000425/2017504, and was associated with radiological effluent Emergency Action Level (EAL) threshold values for radiological release (RS1 and RG1) being approximately 42 times different than analyzed. The condition existed from October 2014 until October 2016.

The licensee informed the NRC staff on July 22, 2017, that they were ready for the supplemental inspection. In preparation for the inspection, the licensee performed a root cause investigation documented in Root Cause Analysis Report 267056, to identify weaknesses that existed in various organizations and processes that resulted in the risk-significant (White) finding.

The inspectors reviewed the licensee's Root Cause Evaluation (RCE) and other assessments conducted in support of, and as a result of, the investigation. Corrective actions taken to address the identified root and contributing causes were also reviewed. Additionally, inspectors interviewed licensee personnel to ensure that the root and contributing causes, and the contribution of safety culture components, were understood and corrective actions were appropriate to address the causes and preclude repetition.

.2 Evaluation of Inspection Requirements

2.1 Problem Identification

a. <u>Determine that the evaluation identifies who identified the issue, and under</u> what conditions the issue was identified.

During review of a License Amendment Request, the NRC identified and informed the licensee of a potential transposition error on two EAL values impacting RS1 (Site Area Emergency) and RG1 (General Emergency). Subsequently, the licensee confirmed the errors and entered the issue into their corrective action program (CAP), developed immediate compensatory measures to correct the EAL threshold values, and initiated appropriate apparent and root cause investigations. The inspectors verified that this information was documented in the licensee's evaluation.

b. <u>Determine that the evaluation documents how long the issue existed, and prior opportunities for identification.</u>

The licensee identified that the radiation monitor values for RG1 and RS1 were in error from when they were incorporated from the base document calculations into a 10 CFR 50.54(q) document in October 2014 until corrected in October 2016. The licensee identified eight prior opportunities for identification. Ranging from the Plant Review Board (PRB) and Management Review Committee (MRC) missing multiple opportunities, Nuclear Oversight and Operations reviews, and most notably, a vendor identified the error but fleet and site EP did not recognize or act upon the information.

The inspectors determined that the licensee's evaluation and assessments were adequate with respect to identifying how long the issue existed, and the prior opportunities for identification. The inspectors did not identify any additional missed opportunities.

c. <u>Determine that the evaluation documents the significant plant-specific</u>
<u>consequences, as applicable, and compliance concerns associated with the issue.</u>

The NRC determined this issue was a White finding, as documented in NRC Inspection Report (IR) 05000424 and 425/2017504 dated April 24, 2017. The licensee's RCE documented the consequences of the issue, including potential adverse impacts on the ability of decision-makers to evaluate the effects of events during an emergency, and the licensee's responsibility to protect the health and safety of the public. Upon discovery, the licensee took action to implement corrective actions to establish the correct threshold values.

The inspectors concluded that the licensee appropriately documented the risk consequences and compliance concerns associated with the finding.

d. Findings

No findings were identified.

2.2 Root Cause and Extent of Condition Evaluation

a. <u>Determine that the problem was evaluated using a systematic methodology to identify the root and contributing causes.</u>

The licensee investigation was performed by a diverse, qualified team of four members and two team leads using licensee procedure NMP-GM-002-GL03, Cause Analysis and Corrective Action Guidelines. The following systematic methods and tools were used to perform the RCE:

- Event and Causal Factor Chart Analysis
- Barrier Analysis
- Interviews
- Extent of Condition and Extent of Cause Evaluation
- Operating Experience Review
- Safety Culture Attributes Assessment
- Organization and Programmatic Review

The licensee used an independent team to perform a mock inspection to determine their readiness for inspection and the need for additional corrective actions.

The inspectors determined that the licensee adequately evaluated the issue using systematic methodologies to identify root and contributing causes.

b. <u>Determine that the root cause evaluation was conducted to a level of</u> detail commensurate with the significance of the problem.

The RCE was detailed in the scope of investigation and performed the following activities in support of the evaluation:

- conducted interviews with key personnel involved with the issue
- directed a third-party review to perform an independent review comparing the NRC-approved NEI 99-01 Revision 4 Vogtle EALs with the EALs contained in the current Emergency Plan and EAL procedure
- performed reviews of industry and internal operating experience associated with Emergency Plan errors.

The following represent a synopsis of the root cause and contributing causes:

- (1) The root cause and a contributing cause of this issue was determined to be Corporate and Site EP management's failure to effectively use a systematic decision making process during EP procedure revisions which reflected a value and priority for nuclear safety.
- (2) Management failed to mitigate the impact of staffing changes resulting in a reduction in program expertise and a less than adequate number of qualified 10 CFR 50.54(q) preparers and reviewers.
- (3) Management allowed a production mindset to be developed within the Corporate and Site EP staffs.

(4) Poor line ownership of Site EP relative to closing long-standing gaps in Emergency Response Organization staffing and repeated Drill/Exercise Performance failures created distractions for EP staff.

Based on a review of the RCE and supporting documentation, the inspectors concluded that the evaluation was conducted to a level of detail commensurate with the significance of the problem.

c. <u>Determine that the root cause evaluation included a consideration of prior occurrences of the problem and knowledge of prior operating experience.</u>

The RCE identified eight opportunities where the EAL transposition error either was or could have been identified and corrected. Additionally, the RCE team performed a common cause analysis of these eight opportunities to determine cross-cutting themes.

The following represent a synopsis of the identified common causes:

- (1) There was a less than adequate adherence to the CAP procedure by Corporate and Site EP. Specifically, in November 2015 and again in July 2016, there were two failures to properly identify in the CAP, the transposition errors.
- (2) Station management, through their oversight functions in the PRB and MRC, failed to identify and appropriately prioritize errors in EP documents. Specifically, the PRB and MRC did not adequately review the material presented to them for approval.

Based on the licensee's detailed evaluation and conclusions, the inspectors determined that the licensee's root cause investigation included adequate consideration of prior occurrences of the problem, and knowledge of prior operational experience.

d. <u>Determine that the root cause evaluation addressed the extent of condition and the extent of cause of the problem.</u>

The licensee limited the extent of condition review to evaluate if other incorporation errors occurred in EAL documents relying on values from calculations. Other EALs were identified as being revised via calculations, but these values were properly transposed into associated documents. However, the potential existed for similar EP documents to contain change errors if rigor in process was not implemented. In addition, the licensee performed an independent review comparing the NRC-approved NEI 99-01 Revision 4 Vogtle EALs with the EALs contained in the current Emergency Plan and EAL procedure. Discrepancies that were identified were placed in the licensee's CAP for tracking and resolution.

The extent of cause evaluation determined whether the root cause had affected the performance of other individuals, the quality of other programs or processes, and/or the reliability of other types of equipment. The RCE team also performed an extent of cause evaluation for the significant contributing causes.

The inspectors concluded that the licensee's root cause investigation adequately addressed the extent of condition and the extent of cause of the issue. A review of the subsequently identified EAL issues did reveal one new performance deficiency which will be discussed in Section 4OA7.

e. <u>Determine whether the root cause, extent of condition, and extent of cause evaluations appropriately considered the safety culture traits in NUREG-2165, "Safety Culture Common Language," referenced in Inspection Manual Chapter (IMC) 0310, "Aspects Within Cross-Cutting Areas."</u>

The licensee's evaluation determined that there was a concern in the following safety culture crosscutting aspects:

 Work Control aspect of the Human Performance component (H.3.b and H.4.c); specifically, the impact of work on different job activities, and the need for work groups to maintain interfaces with offsite organizations, and communicate, coordinate, and cooperate with each other during activities in which interdepartmental coordination is necessary

The inspectors determined that the licensee's root cause investigation either adequately evaluated whether weaknesses in any safety culture component were root or significant contributing causes of the issue. It should be noted that the licensee referenced the older version of IMC 0310 to identify the crosscutting aspects. The corresponding aspects in the newer revision are H.2, Field Presence, H.4, Teamwork, and H.5, Work Management.

f. Examine the common cause analyses for potential programmatic weaknesses in performance when a licensee has a second White input in the same cornerstone.

Not applicable.

g. <u>Findings</u>

A licensee-identified violation (LIV) is documented in Section 4OA7 of this report.

- 2.3 <u>Corrective Actions Taken</u>
- a. <u>Determine that appropriate corrective actions are specified for each root and contributing cause or that the licensee has an adequate evaluation for why no corrective actions are necessary.</u>

The licensee identified the following root cause and implemented the corresponding corrective action:

Corporate and Site EP management failed to effectively use a systematic
decision making process during EP procedure revisions which reflect a value
and priority for nuclear safety. For a corrective action to prevent recurrence
(CAPR), the Corporate Functional Area Manager (CFAM) evaluated existing
supervision and staff, acquired new personnel with industry experience, reorganized,
and coached all personnel involved. Additionally, procedure NMP-EP-312,
Development of Emergency Preparedness Technical Products, was issued to provide

guidance for preparing, reviewing, and approving EP technical work products produced by Southern Nuclear Company (SNC).

The inspectors found that the licensee developed corrective actions to address contributing causes as summarized below:

- Contributing Cause 1: Management Failed to mitigate the impact of staffing changes resulting in a reduction in program expertise and the number of qualified 50.54(q) preparers and reviewers. The licensee took actions to acquire new personnel with industry experience and the Fleet EP CFAM developed a case study of this event and trained EP personnel on the opportunities to identify this issue and the importance of documenting issues in the CAP.
- Contributing Cause 2: A production mindset developed within the Corporate
 and Site EP staff. The licensee took actions to revise procedure NMP-EP- 300,
 SNC Emergency Preparedness Conduct of Operations, to reinstate the
 direction to use applicable checklists in the enclosed forms of the procedure.
 An additional corrective action completed was to revise procedure NMP-EP310, Maintaining the Emergency Plan, to review data formatting needs with
 outside groups when requesting information for procedure change or creation.
- Contributing Cause 3: Poor line ownership of site EP relative to closing longstanding gaps in Emergency Response Organization (ERO) staffing and repeated Drill and Exercise Performance failures created distractions for EP staff. The licensee took actions to acquire new personnel with industry experience and to add this event to pre-job briefings as Operating Experience during major procedure revisions.
- Contributing Cause 4: Corporate and Site EP Management failed to effectively
 use a systematic decision making process during EP procedure revisions
 which reflect a value and priority for nuclear safety. The licensee took actions
 as defined in the above described CAPR.

The inspectors determined that the corrective actions were appropriate and addressed the root and contributing causes in the licensee's detailed evaluation and conclusions.

b. <u>Determine that corrective actions have been prioritized with consideration of significance and regulatory compliance</u>.

The licensee immediately determined the correct EAL threshold values, and provided these to appropriate decision-makers in Operations and the ERO. The licensee completed apparent cause and RCEs, and a subsequent independent assessment to determine root/contributing causes, and developed appropriate corrective actions with consideration of risk significance. The inspectors determined that the immediate and follow-on corrective actions were adequately prioritized with consideration of the risk significance and regulatory compliance.

c. <u>Determine that corrective actions taken to address and preclude repetition of</u> significant performance issues are prompt and effective.

The licensee established due dates for the corrective actions in accordance with their CAP. The inspectors reviewed the status of each corrective action assignment and determined that an appropriate schedule had been established for implementing the corrective actions. The only remaining open action item was to complete corrective action effectiveness reviews.

d. <u>Determine that each Notice of Violation (NOV) related to the supplemental inspection</u> is adequately addressed, either in corrective actions taken or planned.

The licensee established an effectiveness review plan. Final effectiveness reviews are currently scheduled to be completed by January 31, 2018. The inspectors determined that the effectiveness review plan actions would adequately test and/or measure corrective actions to ensure minimal impact from future transposition errors, and therefore the NOV was adequately addressed.

e. Findings

No findings were identified.

2.4 Corrective Action Plans

a. Repeat 2.3.a and 2.3.b for Corrective Action Plans.

The inspectors determined that the licensee's Corrective Action Plan identified the appropriate corrective actions for each root cause, contributing causes, extent of condition, and extent of cause for the White finding. The Corrective Action Plan actions to address the root and contributing causes were assigned in accordance with the procedure NMP-GM-002-GL03, Cause Analysis and Corrective Actions Guideline, as well as procedure NMP-GM-002-001, Corrective Action Program Instructions.

The inspectors concluded that the Corrective Action Plan prioritized corrective actions appropriately. Immediate corrective actions to communicate the issue to all operating crews and issue a standing order to aid operators in properly determining EAL threshold criteria were completed promptly and with consideration of significance and regulatory compliance.

b. <u>Determine that corrective plans direct prompt actions to effectively address and preclude repetition of significant performance issues.</u>

The licensee's Corrective Action Plan actions were determined to be prompt and effective in addressing the performance deficiency and the possibility of recurrence. Other corrective actions to preclude recurrence for the root cause and contributing causes described in Section 2.3 above were considered to be timely and effective in addressing the organizational weaknesses which contributed to the performance deficiency.

c. <u>Determine that appropriate quantitative or qualitative measures of success have been developed for determining the effectiveness of planned and completed corrective actions.</u>

The inspectors found that the one action that remained open was the corrective action effectiveness review. The inspectors determined that the licensee's effectiveness review plan actions should adequately test and/or measure the corrective actions by using quantitative and qualitative measures to ensure minimal impact of, and prevention from, future transposition errors.

d. <u>Determine that each NOV related to the supplemental inspection is adequately</u> addressed in corrective actions taken or planned.

Refer to Section 2.4.c above.

e. Findings

No findings were identified.

2.5 <u>Evaluation of IMC 0305 Criteria for Treatment of Old Design Issues</u>

Not applicable.

4OA6 Exit Meeting

On August 31, 2017, the inspectors presented the inspection results to Mr. D. Komm and other members of the staff, who acknowledged the results. The inspectors asked the licensee if any of the material examined during the inspection should be considered proprietary. The licensee did not identify any proprietary information.

4OA7 Licensee-Identified Violations

Title 10 CFR 50.54(g)(2) requires, in part, that a licensee shall follow and maintain the effectiveness of an emergency plan which meets the planning standards of 10 CFR 50.47(b). Title 10 CFR 50.47(b)(4) requires that a standard emergency classification and action level scheme, the bases of which include facility system and effluent parameters, is in use by nuclear facility licensees, and State and local response plans call for reliance on information provided by facility licensees for determinations of minimum initial offsite response measures. Contrary to the above, from July 1, 2017, to July 25, 2017, the licensee failed to maintain the effectiveness of its emergency plan. Specifically, the omission of key words in SS2.1 for System Malfunctions rendered the EAL ineffective. The licensee implemented immediate compensatory actions by issuing a Standing Order providing corrected EAL threshold values to Emergency Response Organization management and decision makers (Shift Managers/Emergency Directors). The issue was placed in the licensee's CAP as condition report (CR) 10390754. The inspectors evaluated this issue as an ineffective EAL per IMC 0609, Appendix B, Figure 5.4-1. Since the Initiating Condition was correct, an appropriate declaration would likely be made, but in a degraded (delayed) manner, and therefore this issue screened as a Green NCV.

ATTACHMENT: SUPPLEMENTARY INFORMATION

<u>SUPPLEMENTARY INFORMATION</u>

KEY POINTS OF CONTACT

Licensee

- T. Aiken, Maintenance Director
- T. Baker, Security Manager
- E. Berry, Engineering Director
- M. Brett, Emergency Preparedness Specialist
- R. Collins, Fleet Emergency Preparedness
- J. Deal, Emergency Preparedness Supervisor
- J. Dixon, Radiation Protection Manager
- T. Fowler, Chemistry Manager
- D. Komm, Plant Manager
- T. Krienke, Operations Director
- H. Mahan, Licensing Manager
- L. Mansfield, Fleet Emergency Preparedness Director
- L. Noblett, Work Controls Manager
- C. Pierce, Regulatory Affairs Support Director
- M. Redden, Emergency Preparedness Specialist
- T. Schenk, M&T Training Manager
- K. Schneider, NOS Manager
- T. Simmons, Performance Improvement Manager
- D. Sutton, Regulatory Affairs Manager
- E. Tew, Licensing Supervisor
- J. Thomas, Leader In-Training
- J. Wahl, Cause Analyst
- K. Walden, Licensing Engineer
- J. Wheat, Licensing Manager
- J. Weslg, Manager of Projects

LIST OF ITEMS OPENED, CLOSED, DISCUSSED, AND UPDATED

Closed

VIO

Transposition Error Results in Significantly Non-Conservative EAL Threshold Values 05000424, 425/2017504

DOCUMENTS REVIEWED

Plans and Procedures

NMP-ES-039, Engineering Analysis, Ver. 4.0

NMP-ES-039-001, Calculations – Preparation and Revision, Ver. 7.0

NMP-EP-110-GL03, VEGP EALs – ICs, Threshold Values and Basis, Versions 3 through 10

NMP-EP-300, SNC Emergency Preparedness Conduct of Operations, Ver. 24

NMP-EP-310, Maintaining the Emergency Plan, Ver. 5.0

NMP-GM-002-001, Corrective Action Program Instructions, Ver. 36.0

NMP-GM-002-GL03, Cause Analysis and Corrective Actions Guideline, Ver. 28.0

NMP-GM-002-002, Effectiveness Review Instructions, Ver. 5.1

NMP-GM-002-004, CAP Training and Qualification Instruction, Ver. 5.0

NMP-GM-013, Performance Improvement Model, Ver.8.3

NMP-GM-013-002, Performance Assessment and Trending, Ver. 5.0

NMP-EP-141-003, Vogtle Unit 1 and Unit 2 Emergency Action Levels and Basis (NEI 99-01 Revision 4). Ver.2.0

NMP-GM-024-GL01, Nuclear Safety Culture Monitoring and Review Process, Ver. 1.0

Corrective Action Documents

CR 10283097, Transpositions of threshold values for EALs CR 10390754, Issue identified with NMP-EP-141-003 Threshold Value CAR 0267056, Root Cause Analysis, dated 7/5/17

Miscellaneous Documents

LIST OF ACRONYMS

CAP Corrective Action Program

CAPR Corrective Action to Prevent Recurrence
CFAM Corporate Functional Area Manager

CR Condition Report

EAL Emergency Action Level EP Emergency Preparedness

ERO Emergency Response Organization

IMC Inspection Manual Chapter
IP Inspection Procedure
IR Inspection Report

LIV Licensee-identified Violation MRC Management Review Committee

NCV Non-Cited Violation
NEI Nuclear Energy Institute
NOV Notice of Violation

NRC Nuclear Regulatory Commission

PD Performance Deficiency
PRB Plant Review Board
RCE Root Cause Evaluation
ROP Reactor Oversight Process
SER Safety Evaluation Report
SNC Southern Nuclear Company