



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
REGION II
245 PEACHTREE CENTER AVENUE NE, SUITE 1200
ATLANTA, GEORGIA 30303-1257

April 24, 2017

EA-17-014

Mr. B. Keith Taber
Vice President Nuclear Plant Site
Southern Nuclear Operating Co., Inc.
Vogtle Electric Generating Plant
7821 River Road
Waynesboro, GA 30830

SUBJECT: VOGTLE ELECTRIC GENERATING PLANT – FINAL SIGNIFICANCE DETERMINATION OF A WHITE FINDING AND NOTICE OF VIOLATION AND ASSESSMENT FOLLOW-UP LETTER (NRC INSPECTION REPORT NOS. 05000424/2017-504 AND 05000425/2017-504)

Dear Mr. Taber:

This letter provides you the final significance determination of the preliminary White finding discussed in the U.S. Nuclear Regulatory Commission (NRC) Inspection Report (IR) 05000424, 425/2017-503, dated February 8, 2017. The finding involved Southern Nuclear Operating Company (SNC) emergency classification scheme for Vogtle Radiological Effluent emergency action levels (EALs) RG1 (General Emergency) and RS1 (Site Area Emergency), which contained radiation monitor threshold values that were significantly different (forty-two times different) than analyzed due to an administrative error involving the transposition of the threshold values in the classification procedures.

In a letter dated March 16, 2017, you provided a response to the NRC staff's preliminary determination regarding the finding. Your response indicated that SNC acknowledges the facts regarding the finding, and that a performance deficiency occurred. Furthermore, you stated that SNC believed that the redundant and diverse avenues which lead to event declaration would have ensured timely and accurate event classification and protective action recommendations (PARs) if an actual event had occurred during the time these threshold values were transposed. After careful consideration of the facts, the NRC disagrees with your conclusion that other redundant and diverse avenues would ensure timely and accurate event classification in all event scenarios.

The transposed radiation monitor threshold values degraded your ability to make timely and accurate general emergency and site area emergency classifications based on abnormal radiological effluent initiating conditions. Decision-makers would have had to rely on other means to classify the event (e.g. dose assessments or field monitoring data), which could have delayed such a declaration. Additionally, the overly conservative threshold values could result in over-classification and unnecessary PARs to the public before dose assessment could be completed. The NRC acknowledged that the EALs contained a note that dose assessment results were the preferred methodology for determining whether the EAL thresholds had been

met. However, the EALs also contained a note that necessary declarations should not be delayed awaiting dose assessment results and the Emergency Director should not wait until the 15 minutes have elapsed. The NRC concluded that during a rapidly escalating radiological event it was unlikely that a dose assessment would have been available within 15 minutes because augmented emergency response personnel would not have had sufficient time to staff the emergency response facilities and the Vogtle site dose assessment tool did not include a rapid dose assessment program. Therefore, the NRC concludes that, the redundant and diverse avenues would likely not ensure timely and accurate event classification.

After considering the information developed during the inspection, and the information you provided in your letter dated March 16, 2017, the NRC has concluded that the finding is appropriately characterized as White, or a finding of low to moderate safety-significance.

You have 30 calendar days from the date of this letter to appeal the staff's significance determination for the identified White finding. Such appeals will be considered to have merit only if they meet the criteria given in the Inspection Manual Chapter (IMC) 0609, Attachment 2. An appeal must be sent in writing to the Regional Administrator, Region II, 245 Peachtree Center Avenue NE, Suite 1200, Atlanta, Georgia 30303-1257.

The NRC has determined that your failure to maintain the effectiveness of an emergency plan and have a standardized EAL scheme in use based on facility system and effluent parameters is a violation of 10 CFR 50.47(b)(4) and Part 50 Appendix E, as cited in the enclosed Notice of Violation (Notice). The circumstances surrounding the violation were described in detail in the subject IR. In accordance with the NRC Enforcement Policy, the Notice is considered escalated enforcement action because it is associated with a White finding.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. If you have additional information that you believe the NRC should consider, you may provide it in your response to the Notice. The NRC's review of your response to the Notice will also determine whether further enforcement action is necessary to ensure compliance with regulatory requirements.

The NRC has determined the performance at Vogtle Units 1 and 2 to be in the Regulatory Response Column of the ROP Action Matrix beginning 4th quarter of 2016. Therefore, the NRC plans to conduct a supplemental inspection in accordance with Inspection Procedure (IP) 95001, "Supplemental Inspection for One or Two White Inputs in a Strategic Performance Area," when you have notified us of your readiness. This IP is conducted to provide assurance that the root and contributing causes for the performance issues are understood; to provide assurance that the extent of condition and extent of cause of the performance issues are understood; and to provide assurance that the corrective actions are sufficient to address the root and contributing causes and prevent recurrence. This letter supplements, but does not supersede, the annual assessment letter issued on March 1, 2017.

In accordance with 10 CFR 2.390 of the NRC's "Public Inspections, Exemptions, Request for Withholding," a copy of this letter, its Enclosure, and your response, will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's Agency wide Documents Access and Management System (ADAMS), accessible from the NRC Web site at <https://www.nrc.gov/reading-rm/adams.html>.

K. Taber

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To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the public without redaction.

Sincerely,

/RA: Leonard D. Wert for/

Catherine Haney
Regional Administrator

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

Enclosure:
Notice of Violation

cc: Distribution via Listserv

SUBJECT: VOGTLE ELECTRIC GENERATING PLANT – FINAL SIGNIFICANCE DETERMINATION OF A WHITE FINDING AND NOTICE OF VIOLATION AND ASSESSMENT FOLLOW-UP LETTER (NRC INSPECTION REPORT NOS. 05000424/2017-504 AND 05000425/2017-504) – DATED April 24, 2017

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NOTICE OF VIOLATION

Southern Nuclear Operating Company, Inc.
Vogtle Electric Generating Plant

Docket Nos.: 50-424 and 50-425
License Nos.: NPF-68 and NPF-81
EA-17-014

During an NRC inspection completed on December 28, 2016, a violation of NRC requirements was identified. In accordance with the NRC Enforcement Policy, the violation is listed below.

10 CFR Part 50.54(q)(2) requires that a holder of a nuclear power reactor operating license under this part, shall follow and maintain the effectiveness of an emergency plan that meets the planning standards in 10 CFR Part 50.47(b) and the requirements in Appendix E to this part.

10 CFR Part 50.47(b)(4) requires a standard emergency classification and action level scheme, the bases of which include facility and system effluent parameters, is in use by the nuclear facility licensee, and State and local response plans call for reliance on information provided by facility licensees for determinations of minimum initial offsite response measures.

10 CFR Part 50, Appendix E, Section IV.B., "Assessment Actions," requires that means to be used for determining the magnitude of, and for continuously assessing the impact of, the release of radioactive materials shall be described, including emergency action levels (EALs) that are to be used as criteria for determining the need for notification and participation of local and State agencies, the Commission, and other federal agencies. The EALs shall be based on in-plant conditions and instrumentation, in addition to onsite and offsite monitoring.

Contrary to the above, from October 2014 to October 2016, the licensee failed to maintain the effectiveness of their emergency plan and a standard emergency classification scheme which included facility effluent parameters. Specifically, the emergency classifications RG1 (General Emergency) and RS1 (Site Area Emergency) contained effluent radiation monitor threshold values for RE-12444E (plant vent radiation monitor) and RE-12839E (steam jet air ejector radiation monitor) that were forty-two times different than the correct values. These radiation monitors were being relied upon to determine the magnitude of, and for continuously assessing the impact of, the release of radioactive materials, as well as providing criteria for determining the need for notification and participation of local and State agencies.

This violation is associated with a White significance determination process (SDP) finding.

Pursuant to the provisions of 10 CFR 2.201, Southern Nuclear Operating Company, Inc. is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001, with a copy to the Regional Administrator, Region II, and a copy to the NRC Resident Inspector at the Vogtle Electric Generating Plant, within 30 days of the date of the letter transmitting this Notice of Violation (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation; EA-17-014" and should include for each violation: (1) the reason for the violation, or, if contested, the basis for disputing the violation or severity level; (2) the corrective steps that have been taken and the results achieved; (3) the corrective steps that will be taken; and (4) the date when full compliance will be achieved. Your response may reference or include previous docketed correspondence, if the correspondence adequately addresses the required response. If an adequate reply is not received within the time specified in this Notice, an Order or a Demand for Information may be issued as to why the license should not be modified, suspended, or revoked, or why such other action as may be proper should not be taken. Where good cause is shown, consideration will be given to extending the response time.

Enclosure

If you contest this enforcement action, you should also provide a copy of your response, with the basis for your denial, to the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington DC 20555-0001.

Because your response will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS), accessible from the NRC Web site at <https://www.nrc.gov/reading-rm/adams.html>, to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the public without redaction. If personal privacy or proprietary information is necessary to provide an acceptable response, then please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request withholding of such material, you must specifically identify the portions of your response that you seek to have withheld and provide in detail the bases for your claim of withholding (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.390(b) to support a request for withholding confidential commercial or financial information). If safeguards information is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR 73.21.

In accordance with 10 CFR 19.11, you may be required to post this Notice within two working days of receipt.

Dated this 24TH day of April 2017