



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

May 16, 2017

Mr. James J. Hutto
Regulatory Affairs Director
Southern Nuclear Operating Co., Inc.
P.O. Box 1295, Bin 038
Birmingham, AL 35201-1295

SUBJECT: VOGTLE ELECTRIC GENERATING PLANT, UNITS 1 AND 2 – REQUEST FOR
ADDITIONAL INFORMATION (CAC NOS. MF9495 AND MF9496)

Dear Mr. Hutto:

By application dated March 24, 2017, Southern Nuclear Operating Company, Inc. submitted a license amendment request to revise the Vogtle Electric Generating Plant, Units 1 and 2, Technical Specifications Limiting Condition for Operation 3.7.9, "Ultimate Heat Sink (UHS)," to extend the Completion Time to restore one inoperable nuclear service cooling water (NSCW) basin transfer pump from 31 days to 46 days. In addition, a new Condition is proposed to address two inoperable NSCW basin transfer pumps.

The U.S. Nuclear Regulatory Commission staff has reviewed the submittal and has determined that additional information is needed to complete its review. On May 3, 2017, Mr. Lowery of your staff agreed that the response to these questions within 30 days of the date of this letter.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael Orenak".

Michael Orenak, Project Manager
Plant Licensing Branch, II-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-424 and 50-425

Enclosure:
Request for Additional Information

SUBJECT: VOGTLE ELECTRIC GENERATING PLANT, UNITS 1 AND 2 – REQUEST FOR
ADDITIONAL INFORMATION (CAC NOS. MF9495 AND MF9496)
DATED MAY 16, 2017

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ADAMS Accession No. ML17121A441

*via email

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REQUEST FOR ADDITIONAL INFORMATION
REGARDING CHANGES TO TECHNICAL SPECIFICATION 3.7.9,
"ULTIMATE HEAT SINK (UHS)"
SOUTHERN NUCLEAR OPERATING COMPANY, INC.
VOGTLE ELECTRIC GENERATING PLANT, UNITS 1 AND 2
SOUTHERN NUCLEAR OPERATING COMPANY
DOCKET NOS. 50-424 AND 50-425

By application dated March 24, 2017 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML17083B097), Southern Nuclear Operating Company, Inc. (SNC, the licensee) submitted a license amendment request to revise Vogtle Electric Generating Plant (VEGP), Units 1 and 2, Technical Specifications (TS) 3.7.9, "Ultimate Heat Sink (UHS)," to extend the Completion Time (CT) to restore one inoperable nuclear service cooling water basin transfer pump from 31 days to 46 days. In addition, a new Condition is proposed to address two inoperable nuclear service cooling water (NSCW) basin transfer pumps.

The U.S. Nuclear Regulatory Commission staff reviewed the submittal and determined that the enclosed additional information is needed to complete its review.

Request for Additional Information (RAI) 1

The alternate method in proposed TS 3.7.9 Conditions D and E utilize an NSCW pump from the opposite train, and the NSCW cross-tie connection, and a 6-inch fire hose staged for routing along the ground to the affected NSCW cooling tower. If required, the alternate method will be used to perform a safety function of transferring water to a cooling tower basin.

- a) The alternate method hookup will add a static load to the existing seismic qualified connection. Please discuss any need for an evaluation of the hookup of the alternate method on the seismic qualification of the NSCW cross-tie connection and piping.
- b) The licensee stated that a procedure for the alternate method would be provided before the amendment is implemented. Please describe the type of procedure to be used for the alternate method and whether the procedure would be issued in accordance with Title 10 of the *Code of Federal Regulations*, Part 50, Appendix B, "Quality Assurance Criteria for nuclear power Plants and Fuel Reprocessing Plants."
- c) The 6-inch hose of the alternate method will be supplied by an NSCW pump. According to Table 9.2.1-3 of the VEGP Final Safety Analysis Report (ADAMS Accession No. ML16330A429), a NSCW pump has a rated differential head of 230 feet and a rated flow capacity of 8600 gallons per minute. The licensee stated that the normal NSCW header

pressure is 120 pounds per square inch gauge (psig) and the hose working pressure is 150 psig. However, if the actual flow from that NSCW pump during accident mitigation conditions is significantly less than normal NSCW flow, then the normal NSCW header pressure may be greater than 120 psig and possibly exceed the hose operating pressure limit. Please provide additional information on whether the hose working pressure could be exceeded, and if exceeded, any corrective actions.

RAI-2

Proposed Condition E specifies two NSCW basin transfer pumps are inoperable. When in proposed Condition E, the affected unit will also be in Condition D because a NSCW basin transfer pump is inoperable. If, while in Condition E, the first basin transfer pump restored in proposed Required Action E.2 and the alternate method of basin transfer in proposed Required Action E.1 both transfer water into the same basin, there would be no apparent method of transfer into the other basin. Because an alternate method of basin transfer per Required Action E.1 is met, it appears possible that proposed Required Action D.1 for the remaining inoperable NSCW basin transfer pump could be erroneously concluded to have been met.

Please clarify how the alternate method of basin transfer specified in Required Action D.1 will perform the function of the inoperable basin transfer pump in Condition D. If appropriate, please revise the proposed TS to explicitly associate the alternate method with the function of the inoperable basin transfer pump.