

Charles R. Pierce
Regulatory Affairs Director

Southern Nuclear
Operating Company, Inc.
40 Inverness Center Parkway
Post Office Box 1295
Birmingham, AL 35242

Tel 205.992.7872
Fax 205.992.7601



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Docket No.: 50-425

NL-16-1737

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D. C. 20555-0001

Vogtle Electric Generating Plant – Unit 2
Response to Request for Additional Information
Regarding Request to Revise Technical Specifications LCO 3.7.9
for a One-Time Change to
Support a Unit 2 Nuclear Service Cooling Water Transfer Pump Refurbishment

Ladies and Gentlemen:

References:

1. SNC Letter NL-16-1246, Agency Documents Access and Management System (ADAMS) Accession No. ML16225A619, *Vogtle Electric Generating Plant – Unit 2 Request to Revise Technical Specifications LCO 3.7.9 for a One-Time Change to Support a Unit 2 Nuclear Service Water Transfer Pump Refurbishment*, dated August 12, 2016.
2. NRC Letter, Agency Documents Access and Management System (ADAMS) Accession No. ML16243A037, *Vogtle Electric Generating Plant, Unit 2 – Request for Additional Information (CAC No. MF8274)*, dated September 7, 2016.

On August 12, 2016, in accordance with the provisions of 10 CFR 5.90, Southern Nuclear Operating Company (SNC) submitted a request for an amendment to the Technical Specifications (TS) for Vogtle Electric Generating Plant (VEGP), Unit 2.

The proposed amendment would modify TS Limiting Condition for Operation (LCO) 3.7.9, "Ultimate Heat Sink (UHS)", such that with the 2B Nuclear Service Cooling Water (NSCW) transfer pump inoperable for refurbishment, the Completion Time of Condition 3.7.9.D.2.2 would be 46 days as opposed to 31 days. This TS change would be a one-time change and in effect only for the 2B NSCW transfer pump for the remainder of Cycle 19.

Following the submittal of the VEGP License Amendment Request, SNC received a request for additional information from the NRC on September 7, 2016 (Reference 2). Enclosure 1 provides the requested information.

This letter contains no NRC commitments. If you have any questions, please contact Ken McElroy at 205.992.7369.

Mr. Pierce states he is Regulatory Affairs Director of Southern Nuclear Operating Company, is authorized to execute this oath on behalf of Southern Nuclear Operating Company and, to the best of his knowledge and belief, the facts set forth in this letter are true.

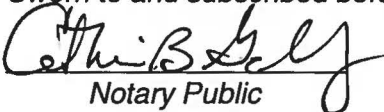
Respectfully submitted,



C. R. Pierce
Regulatory Affairs Director

CRP/kg/cg

Sworn to and subscribed before me this 15th day of September, 2016.


Notary Public

My commission expires: 1-2-2018

Enclosures: Response to Request for Additional Information

cc: Southern Nuclear Operating Company
Mr. S. E. Kuczynski, Chairman, President & CEO
Mr. D. G. Bost, Executive Vice President & Chief Nuclear Officer
Mr. D. R. Madison, Vice President – Fleet Operations
Mr. M. D. Meier, Vice President – Regulatory Affairs
Mr. B. K. Taber, Vice President – Vogtle 1 & 2
Mr. B. J. Adams, Vice President – Engineering
Mr. D. D. Sutton, Regulatory Affairs Manager – Vogtle 1 & 2
RType: CVC7000

U. S. Nuclear Regulatory Commission
Ms. C. Haney, Regional Administrator
Mr. R. E. Martin, NRR Senior Project Manager – Vogtle 1 & 2
Ms. N. R. Childs, Senior Resident Inspector – Vogtle 1 & 2

State of Georgia
Mr. J. H. Turner, Director- Environmental Protection Division

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Enclosure 1

Response to Request for Additional Information

On August 12, 2016, in accordance with the provisions of 10 CFR 5.90, Southern Nuclear Operating Company (SNC) submitted a request for an amendment to the Technical Specifications (TS) for Vogtle Electric Generating Plant (VEGP), Unit 2. The proposed amendment would modify TS Limiting Condition for Operation (LCO) 3.7.9, "Ultimate Heat Sink (UHS)", such that with the 2B Nuclear Service Cooling Water (NSCW) transfer pump inoperable for refurbishment, the Completion Time of Condition 3.7.9.D.2.2 would be 46 days as opposed to 31 days. This TS change would be a one-time change and in effect only for the 2B NSCW transfer pump for the remainder of Cycle 19. Following the submittal of the VEGP License Amendment Request, SNC received a Request for Additional Information (RAI) from the NRC on September 7, 2016 (Reference 2). This enclosure to NL-16-1737 provides the requested information.

RAI No. 1:

Section 3.3, "Compensatory Measures," of Enclosure 1 to the LAR described an alternate means of water transfer between UHS basins during refurbishment of the 2B NSCW transfer pump. The alternate means would use an A-Train NSCW pump, a cross-tie piping connection, and a hose to add water from the A-Train UHS basin to the B-Train basin.

- a. Provide piping and instrumentation drawings or a simplified drawing that includes pipe size, valve types, and fittings, showing the flow path of the alternate means of water transfer.
- b. Describe the extent that existing operator training, procedures, and equipment provide for implementation of the proposed alternate means of water transfer.

SNC Response to RAI No. 1:

A simplified drawing of the NSCW system which shows the requested information is provided at the end of this enclosure.

The alternative means for 2B NSCW water transfer consist of routing a fire hose from the 2A NSCW Tower to the 2B NSCW Tower. The fire hose is connected to the 2A NSCW cross pumping flange and will be routed to the 2B NSCW Tower.

The detailed actions for the alternative transfer source is governed by a Temporary Configuration Change which will instruct maintenance personnel to implement the alternative source transfer in the field and give Operators clear instructional guidance in the event of an occurrence when the transfer system is called upon to perform its function. In addition, standing orders will be issued in the control room to promote awareness and to ensure expectations and guidance is understood by all oncoming shift operators.

In support of the plant's readiness for implementing the alternative means for NSCW transfer, the fire hose will initially be connected to the flange for cross pumping. In the case of an event, doors will be propped open and the fire hose routed to the 2B tower in support of NSCW transfer. No additional maintenance or operating training is required. The actions that will be performed in support of the alternative source for transfer are already governed by system operating training and initial maintenance training. The actions involved for implementing the alternative transfer source is connecting a fire hose to NSCW piping and valve manipulation to allow water flow to the 2B NSCW Tower.

RAI No. 2:

Section 3.5, "Risk," of Enclosure 1 to the LAR described that the proposed extension of the transfer pump maintenance period would have no impact on the core damage frequency or large early release frequency as modeled in the probabilistic risk assessment (PRA model) for VEGP, but also stated that the NSCW transfer pumps have not been included in the PRA model. Existing TS 3.7.9, Condition D, for one NSCW basin transfer pump inoperable allows a 31 day completion time provided that an alternate method of basin water transfer has been implemented within 8 days. The proposed one-time extension in the completion time to 46 days for the 2B NSCW transfer pump refurbishment increases the likelihood of equipment problems due to the longer exposure time. Since the proposed alternate means of water transfer during maintenance on the 2B NSCW transfer pump proposes use of an A-Train NSCW pump, explain whether existing capabilities (e.g., repair capabilities or supplemental equipment) would provide reasonable assurance of successful water transfer by the necessary time, considering potential equipment problems that could broadly affect A-Train equipment (e.g., a fault in the A-Train electrical distribution system).

SNC Response to RAI No. 2:

Repair capabilities and available supplemental equipment to ensure successful water transfer are provided as follows.

Repair Capabilities: NSCW transfer would only be needed in the event of a Design Basis Accident. The additional exposure to failure of A-Train equipment resulting from the requested extension would be mitigated by the fact that the Emergency Response Organization would be activated with engineering and maintenance staff onsite around the clock. Any needed repairs would be completed expeditiously. Additionally A-Train power would be protected per NMP-OS-010 for the duration of the extension and work would be limited to further ensure the reliability of A-Train power.

Supplemental Equipment: If supplemental equipment were needed to transfer water from basin to basin an already identified pump (hydraulically driven submersible pump) with sufficient pump head and comparable flow is available onsite. This pump would be able to pump water from the bottom of either basin to the desired basin utilizing a separate already identified mechanical power source (diesel – hydraulic power skid). The use of supplemental equipment will be described in the operational guidance attached to the Temporary Configuration Change. This represents a defense-in-depth strategy which does not rely on like power sources to facilitate basin transfer.

VEGP Unit 2 Simplified NSCW Drawing

