

Charles R. Pierce
Regulatory Affairs Director

**Southern Nuclear
Operating Company, Inc.**
40 Inverness Center Parkway
Post Office Box 1295
Birmingham, Alabama 35201

Tel 205.992.7872
Fax 205.992.7601

May 30, 2014



Docket Nos.: 50-424
50-425

NL-14-0869

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

Vogtle Electric Generating Plant
Response to Request for Additional Information Regarding Revision to Technical
Specification 3.7.14 Completion Time

Ladies and Gentlemen:

By letter dated September 26, 2012, (Agencywide Documents Access and Management System Accession No. ML12271A229), and as supplemented by letters dated August 7, 2013 (ML13220A946) and December 5, 2013 (ML13340A381), Southern Nuclear Operating Company (SNC) submitted a license amendment request (LAR) to revise the Completion Time (CT) for Technical Specification (TS) 3.7.14, "Engineered Safety Features (ESF) Room Cooler and Safety Related Chiller System." The LAR proposes to revise the CT for Condition A, "One ESF room cooler and safety-related chiller train inoperable," from 72 hours to 7 days.

By letter dated April 30, 2014, the Nuclear Regulatory Commission (NRC) sent SNC a request for additional information (RAI). The Enclosure provides the SNC response to the NRC RAI.

This letter contains no NRC commitments. If you have any questions, please contact Ken McElroy at (205) 992-7369.

Mr. C. R. 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.

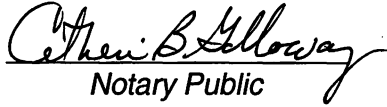
Respectfully submitted,



C. R. Pierce
Regulatory Affairs Director

CRP/RMJ

Sworn to and subscribed before me this 30th day of May, 2014.



Notary Public

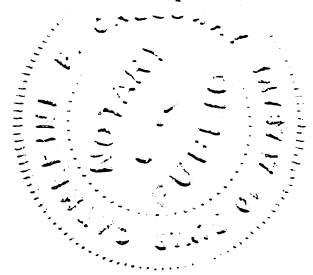
My commission expires: 1-2-2018

Enclosure: SNC Response to NRC RAI

cc: Southern Nuclear Operating Company
Mr. S. E. Kuczynski, Chairman, President & CEO
Mr. D. G. Bost, Executive Vice President & Chief Nuclear Officer
Mr. T. E. Tynan, Vice President – Vogtle 1 & 2
Mr. B. L. Ivey, Vice President – Regulatory Affairs
Mr. D. R. Madison, Vice President – Fleet Operations
Mr. B. J. Adams, Vice President – Engineering
Mr. S. C. Waldrup, Regulatory Affairs Manager - Vogtle
RType: CVC7000

U. S. Nuclear Regulatory Commission
Mr. V. M. McCree, Regional Administrator
Mr. R. E. Martin, NRR Senior Project Manager – Vogtle 1 & 2
Mr. L. M. Cain, Senior Resident Inspector – Vogtle 1 & 2

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



**Vogtle Electric Generating Plant
Response to Request for Additional Information Regarding Revision to Technical
Specification 3.7.14 Completion Time**

Enclosure

SNC Response to NRC RAI

NRC RAI

The NRC staff requests that SNC provide a summary of the VEGP analysis and assumptions, which calculate the ambient air temperatures of each room identified in the table of the December 5, 2013 letter, when its associated safety-related chiller system is out of service (inoperable) during operation under design basis accident/event conditions and the time it takes to reach the maximum design ambient air temperature of 104°F after accident/event initiation. Also, clarify your actions, such as entry into supported systems TS LCOs and action statements when the support system (safety-related chiller) is inoperable.

SNC Response to NRC RAI

The August 7, 2013 (ML13220A946) and December 5, 2013 (ML13340A381) letters list various rooms which are served by room coolers with chilled water from the associated safety related chiller. The tables list the rooms and associated coolers, and the expected abnormal temperature in the rooms based on loss of the normal cooling. The abnormal temperature was established by using Bechtel Power Company's computer program ME204 (of early 1980 vintage). The computer program assumes that the room is an area of enclosed walls of uniform thickness and acts as a heat source to adjacent spaces. Limitations of the computer program include consideration of uniform homogeneous wall material and the surrounding temperature being constant. The input parameters include room surface area, volume, average wall thickness and heat generated by equipment in the room. The boundary conditions consider the initial room temperature, the adjacent space temperature and the time step interval for the computations. The output shows the calculated room temperatures at various time increments. To simplify the calculation method and not perform several computer runs, a simple linear graph was established based on the relationship between the room temperature rise (DT) and the generated room heat load (Q) divided by the room surface area (A) (DT versus Q/A). This approximation was used to determine the temperatures in the various rooms. If the room temperature calculated by the linear relationship was between 112°F-124°F, the room temperature was recalculated using the computer program. The time for the room temperature to reach 104°F was not established in the calculation, but instead the final room temperature in the 24 hour period upon loss of cooling in the room.

Consistent with Limiting Condition of Operation (LCO) 3.0.6, the supported systems will be considered inoperable, but the Conditions and Required Actions associated with the supported systems will not be entered. Additional evaluations may be required in accordance with the Safety Function Determination Program (SFDP). If a loss of safety function is determined to exist by this program, the appropriate Conditions and Required Actions of the LCO in which the loss of safety function exists are required to be entered.

Please note, however, that LCO 3.0.6 will only apply in the situation where the supported system is inoperable solely due to the chillers being inoperable. If, during the time that the supported systems are considered inoperable due to the chiller being out of service, the supported system is determined to be inoperable for a reason other than the inoperable support system, the Conditions and Required Actions of the supported systems would be required to be entered.