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NL-11-0626

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

Vogtle Electric Generating Plant, Unit 1
Special Report 2011-001-00, Inoperable Radiation Monitor 1RE-006

Ladies and Gentlemen:

In accordance with the requirements of Technical Specification 5.6.8, the enclosed Special Report No. 2011-001-00 (Unit 1) is submitted.

This letter contains no NRC commitments. If you have any questions, please contact Doug McKinney at (205) 992-5982.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "T. E. Tynan". The signature is written in a cursive, flowing style.

T. E. Tynan
Vice President – Vogtle

TET/TMH/mbd

Enclosures: Special Report 2011-001-00

cc: **Southern Nuclear Operating Company**
Mr. J. T. Gasser, Executive Vice President
Ms. P. M. Marino, Vice President – Engineering
RType: CVC7000
U. S. Nuclear Regulatory Commission
Mr. V.M. McCree, Regional Administrator
Mr. P. G. Boyle, NRR Project Manager - Vogtle
Mr. M. Cain, Senior Resident Inspector – Vogtle

**Vogle Electric Generating Plant, Unit 1
Special Report 2011-001-00, Inoperable Radiation Monitor 1RE-006**

Enclosure

Special Report 2011-001-00

Vogtle Electric Generating Plant, Unit 1
Special Report 2011-001-00, Inoperable Radiation Monitor 1RE-006

Enclosure

Special Report 2011-001-00

On August 18, 2010 Vogtle Electric Generating Plant submitted a Special Report (2010-001-00) in accordance with Technical Specification 5.6.8 due to the containment high range radiation monitor 1RE-006 not being restored to operable status. Due to ALARA considerations, planned repairs on the radiation monitor were delayed until the subsequent refueling outage 1R16 which was scheduled for the spring of 2011.

During refueling outage 1R16, repairs were attempted on 1RE006. The circuit for 1RE006, inside containment basically consists of three components. These components are the detector, a cable that runs from the detector to a junction box located behind the pressurizer cubicle and a second cable that runs from the junction box to the containment penetration. Both of these cables are specialized cables that are ordered to a specified length with specialized environmentally qualified connectors. Although the original repair plan consisted of replacing the detector only, a spare cable for each location was available in warehouse stores. Following replacement of the detector in 1R16 and prior to returning the loop to service, it was identified that both cables located inside containment required replacement. Therefore, work immediately began during 1R16 to replace these cables. However, when the cables were checked out of warehouse stores and tested, one of these spare cables was also identified as being unsuitable for use. Consequently only the cable that runs from the detector to the junction box located behind the pressurizer cubicle was replaced. A replacement cable has been ordered for the cable that runs from the junction box to the containment penetration, but there is a long lead time associated with it. As a result, the containment radiation high range monitor 1RE-006 will not be returned to service upon exiting the 1R16 refueling outage as originally planned. However, upon delivery, this cable can be installed and terminated with the unit at power and the loop returned to service. There is adequate distance and shielding at both the containment penetration and junction box located behind the pressurizer cubicle, to minimize radiation dose to maintenance personnel. Additionally, both the replacement detector and the newly installed cable that runs from the detector to the junction box have been calibrated and verified to be functioning acceptably.

Containment High Range Radiation Monitor 1RE006 will not be returned to operable status at the conclusion of refueling outage 1R16 as originally planned. Technical Specification LCO 3.3.3 is applicable in Modes 1, 2 and 3. Technical Specification LCO 3.3.3 Condition B requires the monitor to be restored to Operable status within 30 days. If the monitor is not returned to Operable status within 30 days, LCO 3.3.3 Condition G requires a Special Report to be submitted in accordance with Technical Specification 5.6.8 within the following 14 days. Since one of the two required Containment Radiation high range monitors 1RE-006 will not be returned to Operable status during refueling outage 1R16, this Special Report is being submitted in accordance with Technical Specification

5.6.8. While Containment Radiation High Range Monitor 1RE-006 is inoperable, Containment Radiation High Range Monitor 1RE-005 remains operable and would provide an alternate means of determining radiation levels in containment following an accident. Additionally, the containment low range radiation monitors (1RE-002 and 1RE-003) are available and are capable of detecting radiation levels up to 5400 mR/hr. Also, 1RE-006 is currently functional and providing indication but the cabling used does not meet the required environmental qualifications. A follow-up letter will be submitted to convey when 1RE-006 will be returned to Operable status once a firm delivery date has been established for the cable.