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SOUTHERN COMPANY

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

Vogtle Electric Generating Plant, Unit 1
Special Report 2011-001-01, Inoperable Radiation Monitor 1RE-0006

Ladies and Gentlemen:

In a letter dated March 29, 2011, Southern Nuclear Operating Company (SNC) submitted Special Report 2011-001-00 (Unit 1) in accordance with Technical Specification 5.6.8. At the time the Special Report was submitted, the return-to-service date for the containment high range radiation monitor (1RE-0006) was not known, since a firm delivery date was not then available for the damaged cable. A firm delivery date has since been established for the cable, enabling determination of the date the containment high range radiation monitor will be returned to Operable status. The enclosed revised Special Report, 2011-001-01, includes this information. Additionally the Special Report was revised to correct the plant tag numbers for the referenced radiation monitors.

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

Respectfully submitted,

T. E. Tynan
Vice President – Vogtle

TET/TMH/kss

Enclosure: Special Report 2011-001-01 (Unit 1)

cc: Southern Nuclear Operating Company
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Mr. M. Cain, Senior Resident Inspector – Vogtle

Vogtle Electric Generating Plant, Unit 1
Special Report 2011-001-01, Inoperable Radiation Monitor 1RE-0006

Enclosure

Special Report 2011-001-01 (Unit 1)

Vogtle Electric Generating Plant, Unit 1
Special Report 2011-001-01, Inoperable Radiation Monitor 1RE-0006

Enclosure

Special Report 2011-001-01 (Unit 1)

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-0006 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 1RE-0006. The circuit for 1RE-0006 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-0006 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 1RE-0006 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-0006, 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-0006 is inoperable, Containment Radiation High Range Monitor 1RE-0005 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-0002 and 1RE-0003) are available and are capable of detecting radiation levels up to 5400 mR/hr. Also, 1RE-0006 is currently functional and providing indication but the cabling used does not meet the required environmental qualifications.

A replacement cable has been ordered and is being expedited. However, due to the type of cable and the specialty connectors required, the cable is not scheduled to be delivered to the plant site until January 16, 2012. Based upon this delivery date, it is anticipated that containment high range radiation monitor 1RE-0006 will be returned to Operable status by February 16, 2012.