

Tom Tynan
Vice President - Vogtle

Southern Nuclear
Operating Company, Inc.
7821 River Road
Waynesboro, Georgia 30830
Tel 706.826.3151
Fax 706.826.3321



February 16, 2012

Docket Nos.: 50-424

NL-12-0324

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

Vogtle Electric Generating Plant, Unit 1
Special Report 2011-001-02, Inoperable Radiation Monitor 1RE-0006

Ladies and Gentlemen:

In letter NL-11-0626 dated March 29, 2011, 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. In a subsequent letter, NL-11-0853, dated May 24, 2011, SNC submitted Special Report 2011-001-01 (Unit 1) notifying the NRC that a firm delivery date of January 16, 2012, had been established for the cable and that the expected return to operable status date for the containment high range radiation monitor was February 16, 2012.

The cable arrived on site on January 12, 2012 and work to replace the cable commenced shortly thereafter. Although the cable has been installed, the containment high range radiation monitor is not providing reliable indication. Extensive troubleshooting requiring multiple containment entries has been performed; but the issue has not been resolved. Therefore, the February 16, 2012, return to service date will not be met. Troubleshooting efforts and repair efforts are continuing and will continue after February 16, 2012. Every reasonable effort will be made to return the containment high range radiation monitor to operable status. However, if the resolution of the problem requires personnel to spend significant time in a high radiation area, or the containment penetration to be breached, the anticipated return to service date would be re-designated to be prior to startup from refueling outage 1R17. Refueling outage 1R17 is scheduled to begin on September 16, 2012. Should a forced outage of sufficient duration occur prior to 1R17, the containment high range radiation monitor would be worked during that forced outage. The enclosed revised Special Report, 2011-001-02, includes this information.

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

Enclosure: Special Report 2011-001-02 (Unit 1)

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
Mr. B. L. Ivey, Vice President – Regulatory Affairs
Mr. B. J. Adams, Vice President – Fleet Operations
RType: CVC7000

U. S. Nuclear Regulatory Commission
Mr. V.M. McCree, Regional Administrator
Mr. P. G. Boyle, NRR Project Manager - Vogtle
Mr. L. M. Cain, Senior Resident Inspector – Vogtle

Vogtle Electric Generating Plant, Unit 1
Special Report 2011-001-02, Inoperable Radiation Monitor 1RE-0006

Enclosure

Special Report 2011-001-02 (Unit 1)

Vogtle Electric Generating Plant, Unit 1
Special Report 2011-001-02, Inoperable Radiation Monitor 1RE-0006

Enclosure

Special Report 2011-001-02 (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. The Special Report specified the expected return to operable status as during refueling outage 1R16.

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. 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.

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 was ordered for the cable that runs from the junction box to the containment penetration, but there was a long lead time associated with it. As a result, the containment radiation high range monitor 1RE-0006 was not returned to service upon exiting the 1R16 refueling outage as originally planned. In letter NL-11-0626 dated March 29, 2011, SNC submitted Special Report 2011-001-00 to state that the planned return to operable status during refueling outage 1R16 would not be met. 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. In a subsequent letter, NL-11-0853, dated May 24, 2011, SNC submitted Special

Report 2011-001-01 notifying the NRC that a firm delivery date of January 16, 2012, had been established for the cable and that the expected return to operable status date for the containment high range radiation monitor was February 16, 2012.

The cable arrived on site on January 12, 2012 and work to replace the cable commenced shortly thereafter. Although the cable has been installed, the containment high range radiation monitor is not providing reliable indication. Extensive troubleshooting requiring multiple containment entries has been performed. The most likely cause of the problem, based upon the troubleshooting performed to date, is the connection between the newly installed cable and the containment penetration. Troubleshooting efforts and repair efforts are continuing and will continue after February 16, 2012. Every reasonable effort will be made to return the containment high range radiation monitor to operable status. However, if resolution of the problem requires personnel to spend significant time in a high radiation area, or requires the containment penetration to be breached, the anticipated return to service date would be re-designated to be prior to startup from refueling outage 1R17. Refueling outage 1R17 is scheduled to begin on September 16, 2012. Should a forced outage of sufficient duration occur prior to 1R17, the containment high range radiation monitor would be worked during that forced outage.