



Bentley K. Jones  
Director, Organizational Effectiveness  
Harris Nuclear Plant  
5413 Shearon Harris Road  
New Hill, NC 27562-9300

10 CFR 50.4

January 4, 2018

Serial: HNP-18-006

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

Shearon Harris Nuclear Power Plant, Unit 1  
Docket No. 50-400/Renewed License No. NPF-63

Subject: 14-Day Special Report for Accident Radiation Monitors

Ladies and Gentlemen:

In accordance with the Shearon Harris Nuclear Power Plant, Unit 1 (HNP), Technical Specifications 3.3.3.6 and 6.9.2, Duke Energy Progress, LLC, is submitting the enclosed Special Report. This Special Report concerns the operability of two radiation monitors.

This submittal contains no regulatory commitments. Should you have any questions regarding this submittal, please contact Jeff Robertson, Regulatory Affairs Manager, at (919) 362-3137.

Sincerely,

A handwritten signature in blue ink, appearing to read "Bentley K. Jones", written over a horizontal line.

Bentley K. Jones

Enclosure: Accident Radiation Monitor Special Report

cc: J. Zeiler, NRC Sr. Resident Inspector, HNP  
M. Barillas, NRC Project Manager, HNP  
C. Haney, NRC Regional Administrator, Region II



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Shearon Harris Nuclear Power Plant, Unit 1  
Docket No. 50-400

Accident Radiation Monitor Special Report

Description of Event:

On December 15, 2017, at 00:15 Eastern Standard Time (EST), the Radwaste Control Room radiation monitoring console, RM-11-3, was declared nonfunctional due to a loss of indication. An attempted reboot of the system was unsuccessful. The Radiation Control Office radiation monitoring console, RM-11-4, was nonfunctional at this time. The result of both RM-11-3 and RM-11-4 being nonfunctional was that the Waste Processing Building Vent Stack High Range Noble Gas Radiation Monitors RM-\*1WV-3546-1 (Vent Stack 5) and RM-\*1WV-3547-1 (Vent Stack 5A) were inoperable. These monitors are identified in the Shearon Harris Nuclear Power Plant, Unit 1 (HNP), Technical Specification Table 3.3-10 as Items 24.a and 24.b, respectively. During the period of time these monitors were inoperable, the effluent releases continued to be monitored through the affected pathways periodically per procedure. Since the monitors were out of service for greater than 7 days, a Special Report is required to be submitted per Technical Specifications 3.3.3.6 and 6.9.2.

Cause / Corrective Action:

The Waste Processing Building Vent Stack High Range Noble Gas Radiation Monitors RM-\*1WV-3546-1 (Vent Stack 5) and RM-\*1WV-3547-1 (Vent Stack 5A) were declared inoperable on December 15, 2017, with the loss of indication to RM-11-3. These effluent monitors are on loops between the RM-11-3 and RM-11-4 monitoring consoles. With this pair of RM-11 monitoring consoles out of service due to failed hard drives, communication was lost with the aforementioned effluent monitors, rendering them inoperable due to the inability to monitor them in the Main Control Room during accident conditions. In order to restore operability of the effluent monitors, functionality was restored to one of the two RM-11 monitoring consoles. While a spare hard drive was available on site, the ability to image it required vendor support. The failed RM-11-3 hard drive and the spare were sent to the vendor to load the spare hard drive with the pertinent programs and database. Upon installation, the spare hard drive booted properly, but would not communicate with the effluent monitors due to a suspected issue with the files copied from the failed hard drive. As a result, arrangements to build a replacement hard drive utilizing disaster recovery disks were made. This method required updating the hard drive's database following reinstallation, which occurred on January 3, 2018. Functionality was restored to RM-11-3 followed by the immediate restoration of operability to RM-\*1WV-3546-1 and RM-\*1WV-3547-1 on January 3, 2018, at 13:31 EST and 13:42 EST, respectively. In addition, spare hard drives are being procured and will be loaded by the vendor to support restoration of RM-11-4 and stock ready spares.