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10 CFR 50.4

June 23, 2021  
Serial: RA-21-0195

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 an Inoperable Post-Accident Radiation Monitor

Ladies and Gentlemen:

In accordance with the Shearon Harris Nuclear Power Plant, Unit 1 (HNP), Technical Specifications (TS) 3.3.3.6 and 6.9.2, Duke Energy Progress, LLC, is submitting the following Special Report concerning the operability of the Plant Vent Stack High Range Noble Gas Radiation Monitor, RM-21AV-3509-1SA.

On June 5, 2021, at 04:47 Eastern Daylight Time, RM-21AV-3509-1SA was declared inoperable after a loss of communications with the radiation monitor. This resulted in entering the associated action statement per HNP TS 3.3.3.6, Accident Monitoring Instrumentation. Troubleshooting efforts identified that degraded firmware cards associated with the central processing unit (CPU) is the most likely cause. Difficulties in obtaining replacement parts resulted in the monitor being inoperable for more than seven days. Per HNP TS Action Statement 3.3.3.6.c, "either restore the inoperable channel(s) to OPERABLE status within 7 days or prepare and submit a Special Report to the Commission... that provides actions taken, cause of the inoperability, and the plans and schedule for restoring the channel(s) to OPERABLE status."

The preplanned alternate method for monitoring the plant vent stack was initiated via installation of the appropriate semi-portable area radiation monitor. Additionally, auxiliary sampling equipment was installed to continuously collect samples from the plant vent stack. Grab samples were periodically taken and analyzed, and periodic channel checks of the Plant Vent Stack Flow Rate Monitor were being performed. RM-21AV-3509-1SA was restored to operable status June 23, 2021, after receiving and installing the replacement cards from the vendor.

This submittal contains no regulatory commitments. Should you have any questions regarding this submittal, please contact Chuck Yarley, Regulatory Affairs, at (984) 229-2477.

Sincerely,

John Dills

cc: J. Zeiler, NRC Sr. Resident Inspector, HNP  
M. Mahoney, NRC Project Manager, HNP  
L. Dudes, NRC Regional Administrator, Region II