DUKE ENERGY®

H. Todd Grant
General Manager, Nuclear Engineering
Oconee Nuclear Station

Duke Energy
ON01VP | 7800 Rochester Hwy
Seneca, SC 29672

o. 864.873.6767
f: 864.873.5791
Todd.Grant@duke-energy.com

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

Duke Energy Carolinas, LLC (Duke Energy)
Oconee Nuclear Station (ONS), Unit 1
Docket No. 50-269; Renewed License No. DPR-38
Special Report per Technical Specification 5.6.6
Condition Report No: 02218964

Subject: Technical Specification 5.6.6 Special Report, Inoperability of Post Accident Monitoring Instrument; Unit 1 Containment Sump Wide Range Water Level (CR 02218964)

Pursuant to ONS Technical Specification 5.6.6, and Technical Specification 3.3.8 Condition B, enclosed is a Post-Accident Monitoring System (PAMS) Report regarding the inoperability of the Unit 1, Channel B Containment Sump Wide Range Water Level instrument at Oconee Nuclear Station for longer than 30 days.

There are no regulatory commitments contained in this report.

If you have any questions regarding this submittal, please contact David Haile of Oconee Regulatory Affairs, at 864-873-4742.

Sincerely,

H. Todd Grant
General Manager, Nuclear Engineering
Oconee Nuclear Station

Enclosure:
1. Oconee Nuclear Station, Unit 1 Special Report per Technical Specification 5.6.6

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NRR

cc:

Ms. Catherine Haney
Administrator Region II
U.S. Nuclear Regulatory Commission
Marquis One Tower
245 Peachtree Center Ave., NE, Suite 1200
Atlanta, Georgia 30303-1257

Ms. Audrey L. Klett, Project Manager
(by electronic mail only)
U.S. Nuclear Regulatory Commission
11555 Rockville Pike
Mail Stop O-08B1A
Rockville, MD 20852-2738

Mr. Eddy Crowe
NRC Senior Resident Inspector
Oconee Nuclear Station

Enclosure:

Oconee Nuclear Station, Unit 1 Special Report per Technical Specification 5.6.6

Inoperability of Post-Accident Monitoring Instrument Containment Sump Level - Wide Range

Description of Condition

Channel A and B Containment Sump Wide Range Water Level Indications are Post Accident Monitoring (PAM) Instruments required by Technical Specification 3.3.8. During the performance of instrument channel checks the Channel B instrument was declared inoperable on July 17, 2018. Channels A and B are required to agree within 0.6 ft of each other, but Channel B was found to read more than1 ft above the Channel A reading (Channel B indicated a sump level of ≈1.4 ft with the sump empty). After troubleshooting Channel B, it was determined that a reactor building entry would be necessary to calibrate or repair the transmitter to return Channel B to operable status. However, access to the transmitter is prohibited when the plant is operating due to its location in the Reactor Building. The Channel A Containment Sump Wide Range Water Level Instrument remains operable and is a redundant PAM instrument to Channel B.

Background

The primary purpose of PAM instrumentation is to provide indication of selected unit parameters to control room operators during accident conditions which provides sufficient information for monitoring and assessing unit status. PAM instruments are identified by a ONS specific Regulatory Guide 1.97 analysis and the associated NRC Safety Evaluation Report, along with Section 7.5 of the Updated Final Safety Analysis Report (UFSAR).

Containment Sump Wide Range Water Level, indication is a Type B, Category 1 variable which provides verification and long-term monitoring of Reactor Coolant System (RCS) integrity. This instrumentation consists of two channels with readout on two indicators and one recorder.

Cause of Sustained Inoperability

Troubleshooting determined that the likely cause of the Channel B divergence from Channel A is associated with the transmitter located inside the Reactor Building and is inaccessible during power operations. Thus, corrective actions could not be performed within 30 days.

Preplanned Alternate Method of Monitoring

Both channels of the Narrow Range Containment Sump Water Level instruments remain operable, and level instruments for the Borated Water Storage Tank remain operable. These Regulatory Guide 1.97 instruments provide redundant and diverse indications of RCS integrity during an accident in addition to the Channel A Containment Sump Level Wide Range instrument.

Plans and Schedule for Restoring Operability

Repairs to the Channel B Wide Range Containment Sump Water Level instrument will be completed as opportunity allows and no later than the next scheduled Unit 1 refueling outage (O1R30).