

September 13, 2022

Serial: RA-22-0271

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

Subject: Brunswick Steam Electric Plant, Unit No. 2  
Renewed Facility Operating License No. DPR-62  
Docket No. 50-324  
Accident Monitoring Instrumentation Special Report

Ladies and Gentlemen:

Duke Energy Progress, LLC (Duke Energy), is providing this Accident Monitoring Instrumentation Special Report in accordance with Brunswick Steam Electric Plant, Unit No. 2, Technical Requirements Manual Specification (TRMS) 3.4, "Accident Monitoring Instrumentation." As required by TRMS 3.4, this report is being submitted within 14 days following entry into Condition C.

At 08:39 on August 4, 2022, TRMS 3.4, Condition A, was entered as a result of the 2-CAC-AQH-1262, Drywell Radiation Monitor, being declared nonfunctional due to a failed source check and erratic behavior. TRMS 3.4, Condition A, requires the Drywell Radiation Monitor be restored to functional status within 31 days. The radiation monitor was replaced on September 8, 2022. However, following replacement, a source check was unable to be successfully completed and an outage will be required to correct the condition. As a result, functionality was not restored within 31 days per TRMS 3.4, Condition A, and Condition C was entered requiring this report.

Duke Energy plans to complete repair activities to restore the 2-CAC-AQH-1262 to functional status during the next Unit 2 refueling outage, scheduled for April 2023. Until functionality is restored, the alternate channel (i.e., 2-CAC-AQH-1260) remains functional and will be used for drywell radiation monitoring. In addition, the gaseous radioactivity monitor function of the 2-CAC-AQH-1262 remains operable; only the particulate monitor function is impacted by the failed source check.

This document contains no regulatory commitments.

Please refer any questions regarding this submittal to Mr. Stephen Yodersmith, Brunswick  
Regulatory Affairs, at (910) 832-2568.

Sincerely,

A handwritten signature in black ink, appearing to read 'Mark R. DeWire', with a stylized flourish at the end.

Mark R. DeWire  
Manager – Nuclear Support Services  
Brunswick Steam Electric Plant

SBY/sby

cc:

Ms. Laura Dudes, NRC Regional Administrator, Region II  
Mr. Luke Haeg, NRC Project Manager  
Mr. Gale Smith, NRC Senior Resident Inspector  
Chair - North Carolina Utilities Commission