



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION II  
245 PEACHTREE CENTER AVENUE N.E., SUITE 1200  
ATLANTA, GEORGIA 30303-1200

August 26, 2021

John A. Krakuszeski  
Site Vice President  
Brunswick Steam Electric Plant  
Duke Energy Progress, LLC  
8470 River Rd. SE (M/C BNP001)  
Southport, NC 28461

SUBJECT: BRUNSWICK STEAM ELECTRIC PLANT — OPERATION OF AN INDEPENDENT  
SPENT FUEL STORAGE INSTALLATION REPORT 07200006/2021001

Dear Mr. Krakuszeski:

On July 20, 2021, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at the Brunswick Steam Electric Plant and discussed the results of this inspection with you and members of your staff. The results of this inspection are documented in the enclosed report.

No findings or violations of more than minor significance were identified during this inspection.

This letter, its enclosure, and your response (if any) will be made available for public inspection and copying at <http://www.nrc.gov/reading-rm/adams.html> and at the NRC Public Document Room in accordance with Title 10 of the *Code of Federal Regulations* 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

/RA/

Binoy B. Desai, Chief  
Engineering Branch 3  
Division of Reactor Safety

Docket No. 07200006

Enclosure:  
As stated

cc w/ encl: Distribution via LISTSERV

SUBJECT: BRUNSWICK STEAM ELECTRIC PLANT — OPERATION OF AN  
 INDEPENDENT SPENT FUEL STORAGE INSTALLATION REPORT  
 07200006/2021001 - Dated August 26, 2021

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OFFICE	RII/DRS	NMSS/IOB	RII/DRS		
NAME	P. Cooper	J. Tapp	B. Desai		
DATE	8/20/2021	8/20/2021	8/26/2021		

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**U.S. NUCLEAR REGULATORY COMMISSION  
Inspection Report**

Docket Number: 07200006

License Number: DPR-62 and DPR-71

Report Number: 07200006/2021001

Enterprise Identifier: I-2021-001-0009

Licensee: Duke Energy Progress, LLC

Facility: Brunswick Steam Electric Plant

Location: Southport, NC

Inspection Dates: July 12, 2021 to July 20, 2021

Inspectors: P. Cooper, Senior Reactor Inspector  
J. Tapp, Transportation and Storage Inspector

Approved By: Binoy B. Desai, Chief  
Engineering Branch 3  
Division of Reactor Safety

Enclosure

## **SUMMARY**

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee's performance by conducting inspections of activities related to Brunswick Steam Electric Plant operational activities of dry cask storage of spent fuel from July 12, 2021 to July 20, 2021. The NRC's program for overseeing the safe operation of dry storage of spent fuel at an Independent Spent Fuel Storage Installations (ISFSI) is described in Inspection Manual Chapter 2690, "Inspection Program for Dry Storage of Spent Reactor Fuel at Independent Spent Fuel Storage Installations and for 10 CFR Part 71 Transportation Packagings."

### **List of Findings and Violations**

No findings or violations of more than minor significance were identified.

### **Additional Tracking Items**

None.

## **INSPECTION SCOPES**

Inspections were conducted using the appropriate portions of the inspection procedures (IPs) in effect at the beginning of the inspection unless otherwise noted. Currently approved IPs with their attached revision histories are located on the public website at <http://www.nrc.gov/reading-rm/doc-collections/insp-manual/inspection-procedure/index.html>. Samples were declared complete when the IP requirements most appropriate to the inspection activity were met consistent with Inspection Manual Chapter (IMC) 2690, "Inspection Program for Storage of Spent Reactor Fuel and Reactor-Related Greater-than-Class C Waste at Independent Spent Fuel Storage Installations (ISFSI) and for 10 CFR Part 71 Transportation Packaging's."

### **60855 – OPERATION OF AN INDEPENDENT SPENT FUEL STORAGE INSTALLATION**

#### Operation of an Independent Spent Fuel Storage Installation

From July 12 through 20, 2021, the inspectors performed a review of the licensee's ISFSI activities to verify compliance with regulatory requirements. During the on-site inspection, the inspectors observed and reviewed licensee activities in each of the five safety focus areas including occupational exposure, public exposure, fuel damage, confinement, and impact to plant operations.

The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel to assess licensee performance and compliance with Commission rules and regulations, license conditions, site procedures, and standards. Additionally, the inspectors performed independent walkdowns of the heavy load lifting equipment and the ISFSI haul path. The inspector also performed an independent radiation survey of the ISFSI pad.

## **INSPECTION RESULTS**

No findings were identified.

## **EXIT MEETINGS AND DEBRIEFS**

The inspectors verified no proprietary information was retained or documented in this report.

On July 20, 2021, the inspectors presented the results to John A. Krakuszeski, Site Vice President and other members of the licensee staff.