



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

March 1, 2023

John A. Krakuszeski
Site Vice President
Duke Energy Progress, LLC
8470 River Rd. SE
(M/C BNP001)
Southport, NC 28461-0429

**SUBJECT: ANNUAL ASSESSMENT LETTER FOR BRUNSWICK STEAM ELECTRIC
PLANT, UNITS 1 AND 2 – NRC INSPECTION REPORTS 05000324/2022006
AND 05000325/2022006**

Dear John Krakuszeski:

The NRC has completed its end-of-cycle performance assessment of Brunswick Steam Electric Plant, Units 1 and 2, reviewing performance indicators (PIs), inspection results, and enforcement actions from January 1, 2022, through December 31, 2022. This letter informs you of the NRC's assessment of your facility during this period and its plans for future inspections at your facility. The NRC concluded that overall performance at your facility preserved public health and safety. The baseline inspection program was completed at your facility as defined in Inspection Manual Chapter 2515, "Light-Water Reactor Inspection Program - Operations Phase."

The NRC determined the performance at Brunswick Steam Electric Plant, Units 1 and 2, during the most recent quarter was within the Licensee Response Column, the highest performance category of the NRC's Reactor Oversight Process (ROP) Action Matrix, because all inspection findings had very low safety significance (i.e., Green), and all PIs were within the expected range (i.e., Green). Therefore, the NRC plans to conduct ROP baseline inspections at your facility.

The enclosed inspection plan lists the inspections scheduled through December 31, 2024. The NRC provides the inspection plan to allow for the resolution of any scheduling conflicts and personnel availability issues. Routine inspections performed by resident inspectors are not included in the inspection plan. The inspections listed during the last twelve months of the inspection plan are tentative and may be revised. The NRC will contact you as soon as possible to discuss changes to the inspection plan should circumstances warrant any changes.

In response to the COVID-19 public health emergency (PHE), the NRC adjusted inspection plans and schedules in order to safeguard the health and safety of both NRC and licensee staff while still effectively implementing the ROP. While the PHE continues, overall conditions throughout the country support performance of our inspection and oversight activities to return to normal onsite presence by our resident and region-based inspectors and completion of nominal baseline inspection samples. We continue to monitor site-specific conditions and as discussed in our November 2, 2021, memo, "Implementation of Inspection Programs Following

Re-Entry from the Public Health Emergency for the Reactor Safety Program" (ML21295A302), it may be necessary to alter how and when we perform our inspection and oversight activities as we balance the importance of protecting the health and safety of our staff with the need to conduct effective oversight that supports the NRC's critical safety mission. For inspections requiring extensive coordination with offsite organizations, such as evaluated emergency preparedness exercises, NRC guidance and frequently asked questions for security and emergency preparedness can be found here: <https://www.nrc.gov/about-nrc/covid-19/security-ep/>. Similarly, the NRC has developed guidance if force-on-force inspections cannot be completed as scheduled due to an emergency, such as the COVID-19 PHE. These changes help ensure the health and safety of both NRC and licensee staff while maintaining the NRC's important safety and security mission during the COVID-19 PHE. The attached inspection plan is accurate on the date of issuance but remains subject to change based on approval of potential exemption requests or other changes needed due to changing conditions in the COVID-19 PHE. NRC staff will contact your appropriate regulatory affairs staff in order to coordinate inspection planning and scheduling.

Additionally, during this inspection period the NRC will conduct an additional inspection using Inspection Procedure 71003, "Post-Approval Site Inspection for License Renewal."

Beginning on January 1, 2023, the engineering inspection frequency will transition from a triennial (3-year) to a quadrennial (4-year) cycle. The new engineering inspection program will consist of a "Comprehensive Engineering Team Inspection (CETI)¹" and three "Focused Engineering Inspections (FEIs)" that will be performed in each quadrennial cycle. For the cycle beginning in 2023, the FEIs will be: "Fire Protection Team Inspection," "Commercial Grade Dedication," and "Age-Related Degradation."²

In accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 2.390 of the NRC's "Rules of Practice," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

¹ Aspects of the Design Basis Assurance Inspection (DBAI), Evaluations of Changes, Tests, & Experiments, and Heat Sink inspections will be included in the new CETI inspection. Previously scheduled Evaluation of Changes, Tests, & Experiments and Heat Sink inspections have been cancelled and removed from attached Report 22.

² The Age-Related Degradation procedure is publicly available, and the NRC plans to implement the first inspection of this type beginning in July 2023.

Please contact me at 404-997-4547 with any questions you have regarding this letter.

Sincerely,



Signed by Fannon, Matthew
on 03/01/23

Matthew S. Fannon, Chief
Reactor Projects Branch 4
Division of Reactor Projects

Docket Nos.: 5000324, 5000325
License Nos.: DPR-62, DPR-71

Enclosure: Brunswick Inspection Plan
(3/1/2023 – 12/31/2024)

cc: Distribution via ListServ

SUBJECT: ANNUAL ASSESSMENT LETTER FOR BRUNSWICK STEAM ELECTRIC PLANT,
UNITS 1 AND 2 – NRC INSPECTION REPORTS 05000324/2022006 AND
05000325/2022006 Dated March 1, 2023

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OFFICE	RII/DRP	RII/DRP	
NAME	A. Wilson	M. Fannon	
DATE	2/27/2023	3/1/2023	

OFFICIAL RECORD COPY

Site Inspection Activity Plan

Brunswick

03/01/2023 - 12/31/2024

Unit	Start	End	Activity	CAC	Title	Staff Count
RP OCCUPATIONAL RADIATION SAFETY BASELINE INSPECTION						2
1,2	4/3/2023	4/7/2023	IP 71124.04	000728	Occupational Dose Assessment	
1,2	4/3/2023	4/7/2023	IP 71124.05	000729	Radiation Monitoring Instrumentation	
1,2	4/3/2023	4/7/2023	IP 71151	000746	Performance Indicator Verification	
PROBLEM IDENTIFICATION & RESOLUTION						4
1,2	8/28/2023	9/1/2023	IP 71152B	000747	Problem Identification and Resolution	
1,2	9/11/2023	9/15/2023	IP 71152B	000747	Problem Identification and Resolution	
EMERGENCY PREPAREDNESS PROGRAM INSPECTION						2
1,2	9/25/2023	9/29/2023	IP 71114.02	000717	Alert and Notification System Testing	
1,2	9/25/2023	9/29/2023	IP 71114.03	000718	Emergency Response Organization Staffing and Augmentation System	
1,2	9/25/2023	9/29/2023	IP 71114.04	000719	Emergency Action Level and Emergency Plan Changes	
1,2	9/25/2023	9/29/2023	IP 71114.05	000720	Maintenance of Emergency Preparedness	
1,2	9/25/2023	9/29/2023	IP 71151	001397	Performance Indicator Verification	
SECURITY BASELINE INSPECTION						3
1,2	10/2/2023	10/6/2023	IP 71130.02	000734	Access Control	
1,2	10/2/2023	10/6/2023	IP 71130.04	000736	Equipment Performance, Testing, and Maintenance	
1,2	10/2/2023	10/6/2023	IP 71130.07	000739	Security Training	
1,2	10/2/2023	10/6/2023	IP 71130.09	001656	Security Plan Changes	
1,2	10/2/2023	10/6/2023	IP 71151	001338	Performance Indicator Verification	
POST-APPROVAL LICENSE RENEWAL PHASE 4						4
1,2	11/13/2023	11/17/2023	IP 71003	000687	Post-Approval Site Inspection for License Renewal	
FOCUSSED ENGINEERING INSPECTION (FPTI)						4
1,2	11/27/2023	12/1/2023	IP 71111.21N.05	001646	Fire Protection Team Inspection (FPTI)	
1,2	12/11/2023	12/15/2023	IP 71111.21N.05	001646	Fire Protection Team Inspection (FPTI)	
BRUNSWICK INITIAL EXAM						4
1,2	1/7/2024	1/12/2024	OV	000956	FB-OR-ONSITE VALIDATION OF INITIAL LICENSE EXAMINATION (OV)	
1,2	2/11/2024	2/24/2024	EXAD	000500	FB-OR-INITIAL LICENSE EXAM ADMINISTRATION (EXAD)	
UNIT 1 IN-SERVICE INSPECTION						1
1	3/4/2024	3/8/2024	IP 71111.08G	000701	Inservice Inspection Activities (BWR)	
RP RAD SAFETY OCCUPATIONAL AND TRANSPORTATION BASELINE INSPECTION						2
1,2	3/4/2024	3/8/2024	IP 71124.01	000725	Radiological Hazard Assessment and Exposure Controls	
1,2	3/4/2024	3/8/2024	IP 71124.08	000732	Radioactive Solid Waste Processing & Radioactive Material Handling, Storage, & Transportation	
1,2	3/4/2024	3/8/2024	IP 71151	000746	Performance Indicator Verification	

Enclosure

Site Inspection Activity Plan

CYBER SECURITY INSPECTION

4

1,2	5/6/2024	5/10/2024	IP 71130.10	000741	Cybersecurity
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FORCE-ON-FORCE PLANNING AND EXERCISE WEEKS - BRU

5

1,2	5/13/2024	5/17/2024	IP 71130.03	000735	Contingency Response - Force-On-Force Testing
1,2	6/3/2024	6/7/2024	IP 71130.03	000735	Contingency Response - Force-On-Force Testing

RP RAD SAFETY PUBLIC BASELINE INSPECTION

2

1,2	5/20/2024	5/24/2024	IP 71124.06	000730	Radioactive Gaseous and Liquid Effluent Treatment
1,2	5/20/2024	5/24/2024	IP 71124.07	000731	Radiological Environmental Monitoring Program
1,2	5/20/2024	5/24/2024	IP 71151	000746	Performance Indicator Verification

MATERIAL CONTROL AND ACCOUNTING

1

1,2	6/3/2024	6/7/2024	IP 71130.11	000742	Material Control and Accounting (MC&A)
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OPERATION ON AN ISFSI

2

1,2	7/8/2024	7/12/2024	IP 60855	001001	Operation Of An ISFSI
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EMERGENCY PREPAREDNESS EXERCISE INSPECTION

5

1,2	7/29/2024	8/2/2024	IP 71114.04	000719	Emergency Action Level and Emergency Plan Changes
1,2	7/29/2024	8/2/2024	IP 71114.07	000722	Exercise Evaluation - Hostile Action (HA) Event
1,2	7/29/2024	8/2/2024	IP 71151	001397	Performance Indicator Verification

BRUNSWICK REQUAL INSPECTION

2

1,2	9/9/2024	9/13/2024	IP 71111.11B	000704	Licensed Operator Requalification Program and Licensed Operator Performance
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FOCUSED ENGINEERING INSPECTIONS (CGD)

3

1,2	9/16/2024	9/20/2024	IP 71111.21N.03	001808	Commercial Grade Dedication
1,2	9/30/2024	10/4/2024	IP 71111.21N.03	001808	Commercial Grade Dedication

SECURITY BASELINE INSPECTION

1

1,2	11/18/2024	11/22/2024	IP 71130.02	000734	Access Control
1,2	11/18/2024	11/22/2024	IP 71130.09	001656	Security Plan Changes
1,2	11/18/2024	11/22/2024	IP 71151	001338	Performance Indicator Verification