



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

March 3, 2021

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

SUBJECT: ANNUAL ASSESSMENT LETTER FOR BRUNSWICK STEAM ELECTRIC
PLANT, UNITS 1 AND 2 – NRC INSPECTION REPORTS 05000325/2020006
AND 05000324/2020006

Dear Mr. 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, 2020 through December 31, 2020. 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, 2022. 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 is adjusting inspection plans and schedules in order to safeguard the health and safety of both NRC and licensee staff while still effectively implementing the ROP. Each planned inspection is being carefully reviewed in order to determine if any portions of the inspection can be performed remotely, how best to perform on-site portions to minimize personnel health risks, and adjust inspection schedules if needed. This is done in accordance with guidance contained in the February 1, 2021, "Calendar Year 2021 Inspection Guidance During COVID-19 Telework Restrictions" (ML21027A274).

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.

The NRC plans to conduct an inspection using Temporary Instruction (TI) 2515/193, "Inspection of the Implementation of EA-13-109: Order Modifying Licenses with Regard to Reliable Hardened Containment Vents Capable of Operation under Severe Accident Conditions." This is currently scheduled for September 2021. Additionally, during the week of February 22, 2021 the NRC conducted an inspection per a revised version Temporary Instruction (TI) 2515/194, "Inspection of the Licensee's Implementation of Industry Initiative Associated with the Open Phase Condition Design Vulnerability in Electrical Power Systems (NRC Bulletin 2012-01)" for any sites who elect to implement the guidance of the Industry Initiative on Open Phase Condition, Revision 3 (ML19163A176), which included an option for relying on annunciation and operator manual actions instead of automatic protective features to isolate a power supply affected by an open phase condition.

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).

Please contact me at 404-997-4580 with any questions you have regarding this letter.

Sincerely,

/RA/

Stewart N. Bailey, Chief
Reactor Projects Branch 4
Division of Reactor Projects

Docket Nos.: 50-325, 50-324
License Nos.: DPR-71, DPR-62

Enclosure: Inspection Plan

cc Distribution via ListServ

SUBJECT: ANNUAL ASSESSMENT LETTER FOR BRUNSWICK STEAM ELECTRIC PLANT,
UNITS 1 AND 2 – NRC INSPECTION REPORTS 05000325/2020006 AND
05000324/2020006 DATED: March 3, 2021

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IP 22 Inspection Activity Plan Report

Brunswick

03/01/2021 - 12/31/2022

Unit	Start	End	Activity	CAC	Title	Staff Count
RP OCCUPATIONAL RAD SAFETY BASELINE INSPECTION						3
1, 2	03/01/2021	03/05/2021	IP 71124.01	000725	Radiological Hazard Assessment and Exposure Controls	
1, 2	03/01/2021	03/05/2021	IP 71124.02	000726	Occupational ALARA Planning and Controls	
1, 2	03/01/2021	03/05/2021	IP 71124.03	000727	In-Plant Airborne Radioactivity Control and Mitigation	
1, 2	03/01/2021	03/05/2021	IP 71124.04	000728	Occupational Dose Assessment	
1, 2	03/01/2021	03/05/2021	IP 71124.05	000729	Radiation Monitoring Instrumentation	
1, 2	03/01/2021	03/05/2021	IP 71151	000746	Performance Indicator Verification	
1, 2	03/29/2021	04/02/2021	IP 71124.01	000725	Radiological Hazard Assessment and Exposure Controls	
1, 2	03/29/2021	04/02/2021	IP 71124.02	000726	Occupational ALARA Planning and Controls	
1, 2	03/29/2021	04/02/2021	IP 71124.03	000727	In-Plant Airborne Radioactivity Control and Mitigation	
1, 2	03/29/2021	04/02/2021	IP 71124.04	000728	Occupational Dose Assessment	
1, 2	03/29/2021	04/02/2021	IP 71124.05	000729	Radiation Monitoring Instrumentation	
1, 2	03/29/2021	04/02/2021	IP 71151	000746	Performance Indicator Verification	
UNIT 2 IN-SERVICE INSPECTION						1
2	03/22/2021	03/26/2021	IP 71111.08G	000701	Inservice Inspection Activities (BWR)	
DESIGN BASES ASSURANCE INSPECTION (PROGRAMS)						3
1, 2	04/12/2021	04/16/2021	IP 71111.21N.02	001645	Design-Basis Capability of Power-Operated Valves Under 10 CFR 50.55a Requirements	
1, 2	04/26/2021	04/30/2021	IP 71111.21N.02	001645	Design-Basis Capability of Power-Operated Valves Under 10 CFR 50.55a Requirements	
FORCE-ON-FORCE PLANNING AND EXERCISE WEEKS						6
1, 2	05/10/2021	05/14/2021	IP 71130.03	000735	Contingency Response - Force-On-Force Testing	
1, 2	06/14/2021	06/18/2021	IP 71130.03	000735	Contingency Response - Force-On-Force Testing	
MATERIAL CONTROL & ACCOUNTING						1
1, 2	05/31/2021	06/04/2021	IP 71130.11	000742	Material Control and Accounting (MC&A)	
PROBLEM IDENTIFICATION & RESOLUTION						4
1, 2	07/12/2021	07/16/2021	IP 71152B	000747	Problem Identification and Resolution	
1, 2	07/26/2021	07/30/2021	IP 71152B	000747	Problem Identification and Resolution	
TRIENNIAL HEAT SINK PERFORMANCE						1
1, 2	08/02/2021	08/06/2021	IP 71111.07T	000700	Heat Sink Performance	

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Brunswick

03/01/2021 - 12/31/2022

Unit	Start	End	Activity	CAC	Title	Staff Count
SECURITY BASELINE INSPECTION						1
1, 2	09/13/2021	09/17/2021	IP 71130.02	000734	Access Control	
1, 2	09/13/2021	09/17/2021	IP 71130.04	000736	Equipment Performance, Testing, and Maintenance	
1, 2	09/13/2021	09/17/2021	IP 71130.07	000739	Security Training	
1, 2	09/13/2021	09/17/2021	IP 71130.09	001656	Security Plan Changes	
1, 2	09/13/2021	09/17/2021	IP 71151	001338	Performance Indicator Verification	
RELIABLE HARDENED CONTAINMENT VENT TI-193						2
1, 2	09/20/2021	09/24/2021	TI 2515/193	000511	Inspection of the Implementation of EA-13-109: Order Modifying Licenses with Regard to Reliable Hardened Containment Vents Capable of Operation under Severe Accident Conditions	
EMERGENCY PREPAREDNESS PROGRAM INSPECTION						2
1, 2	11/15/2021	11/19/2021	IP 71114.02	000717	Alert and Notification System Testing	
1, 2	11/15/2021	11/19/2021	IP 71114.03	000718	Emergency Response Organization Staffing and Augmentation System	
1, 2	11/15/2021	11/19/2021	IP 71114.04	000719	Emergency Action Level and Emergency Plan Changes	
1, 2	11/15/2021	11/19/2021	IP 71114.05	000720	Maintenance of Emergency Preparedness	
1, 2	11/15/2021	11/19/2021	IP 71151	001397	Performance Indicator Verification	
DUKE CORPORATE AA/FFD BASELINE SECURITY INSPECTION						2
1, 2	01/10/2022	01/14/2022	IP 71130.01	000733	Access Authorization	
1, 2	01/10/2022	01/14/2022	IP 71130.08	000740	Fitness For Duty Program	
SECURITY BASELINE INSPECTION						1
1, 2	02/07/2022	02/11/2022	IP 71130.01	000733	Access Authorization	
1, 2	02/07/2022	02/11/2022	IP 71130.08	000740	Fitness For Duty Program	
RP OCCUPATIONAL RAD SAFETY AND TRANSPORTATION BASELINE INSPECTION						2
1, 2	02/28/2022	03/04/2022	IP 71124.01	000725	Radiological Hazard Assessment and Exposure Controls	
1, 2	02/28/2022	03/04/2022	IP 71124.08	000732	Radioactive Solid Waste Processing & Radioactive Material Handling, Storage, & Transportation	
1, 2	02/28/2022	03/04/2022	IP 71151	000746	Performance Indicator Verification	
UNIT 1 IN-SERVICE INSPECTION						1
1	03/07/2022	03/11/2022	IP 71111.08G	000701	Inservice Inspection Activities (BWR)	

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Brunswick

03/01/2021 - 12/31/2022

Unit	Start	End	Activity	CAC	Title	Staff Count
DESIGN BASES ASSURANCE INSPECTION (TEAMS)						6
1, 2	04/25/2022	04/29/2022	IP 71111.21M	000713	Design Bases Assurance Inspection (Teams)	
1, 2	05/16/2022	05/20/2022	IP 71111.21M	000713	Design Bases Assurance Inspection (Teams)	
EMERGENCY PREPAREDNESS EXERCISE INSPECTION						5
1, 2	07/25/2022	07/29/2022	IP 71114.01	000716	Exercise Evaluation	
1, 2	07/25/2022	07/29/2022	IP 71114.04	000719	Emergency Action Level and Emergency Plan Changes	
1, 2	07/25/2022	07/29/2022	IP 71151	001397	Performance Indicator Verification	
BRUNSWICK REQUAL INSPECTION						2
1, 2	09/12/2022	09/16/2022	IP 71111.11B	000704	Licensed Operator Requalification Program and Licensed Operator Performance	
SECURITY BASELINE INSPECTION						1
1, 2	10/17/2022	10/21/2022	IP 71130.02	000734	Access Control	
1, 2	10/17/2022	10/21/2022	IP 71130.09	001656	Security Plan Changes	
1, 2	10/17/2022	10/21/2022	IP 71151	001338	Performance Indicator Verification	
BRUNSWICK INITIAL LICENSE EXAM						4
1, 2	10/31/2022	11/04/2022	OV	000956	VALIDATION OF INITIAL LICENSE EXAMINATION (OV)	
1, 2	12/05/2022	12/16/2022	EXAD	000500	LICENSE EXAM ADMINISTRATION (EXAD)	