



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**  
REGION II  
245 PEACHTREE CENTER AVENUE NE, SUITE 1200  
ATLANTA, GEORGIA 30303-1257

March 04, 2014

Mr. George Hamrick  
Site Vice President  
Duke Energy Progress, Inc.  
Brunswick Steam Electric Plant  
P.O. Box 10429  
Southport, NC 28461

**SUBJECT: ANNUAL ASSESSMENT LETTER FOR BRUNSWICK STEAM ELECTRIC PLANT,  
UNITS 1 AND 2 – NRC INSPECTION REPORT 05000325/2013001 AND  
05000324/2013001**

Dear Mr. Hamrick:

On February 18, 2014, the Nuclear Regulatory Commission (NRC) completed its end-of-cycle performance review of Brunswick Steam Electric Plant, Units 1 and 2. The NRC reviewed the most recent quarterly performance indicators (PIs) in addition to inspection results and enforcement actions from January 1 through December 31, 2013. This letter informs you of the NRC's assessment of your facility during this period and its plans for future inspections at your facility. This performance review and enclosed inspection plan do not include security information.

The NRC determined that overall, Brunswick Steam Electric Plant, Units 1 and 2, operated in a manner that preserved public health and safety and met all cornerstone objectives. 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 of the NRC's Reactor Oversight Process (ROP) Action Matrix because all inspection findings had very low (i.e., green) safety significance, and all PIs indicated that your performance was within the nominal, expected range (i.e., green). Therefore, the NRC plans to conduct ROP baseline inspections at your facility.

Although plant performance was within the Licensee Response Column, the NRC has not yet finalized the significance of an apparent violation which will be documented in Inspection Report 05000324/325 2013010. The final safety significance determination may affect the NRC's assessment of plant performance and the enclosed inspection plan.

The enclosed inspection plan lists the inspections scheduled through June 30, 2015. Routine inspections performed by resident inspectors are not included in the inspection plan. The inspections listed during the last nine months of the inspection plan are tentative and may be revised at the mid-cycle performance review. The NRC provides the inspection plan to allow for the resolution of any scheduling conflicts and personnel availability issues. The NRC will contact you as soon as possible to discuss changes to the inspection plan, should circumstances warrant any changes. This inspection plan does not include security related inspections, which will be sent via separate, non-publicly available correspondence.

We also plan on conducting the following infrequently performed inspections and audits: License Renewal Phase 1 and Phase 2. Additionally, an NRC audit of licensee efforts towards compliance with Order EA-12-049, "Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events" is ongoing. This audit includes an onsite component in order for the NRC to evaluate mitigating strategies as described in licensee submittals, and to receive and review information relative to associated open items. This onsite activity will occur in the months prior to a declaration of compliance for the first unit at each site, and will aid staff in development of an ultimate Safety Evaluation for the site. The date for the onsite component at your site is being coordinated with your staff. A site-specific audit plan for the visit will be provided in advance to allow sufficient time for preparations.

As a result of the Safety Culture Common Language Initiative, the terminology and coding of cross-cutting aspects were revised. All cross-cutting aspects identified during inspections conducted in calendar year 2014 will reflect this revision to Inspection Manual Chapter (IMC) 0310. The CY 2013 end-of-cycle assessments were conducted using the IMC 0310 guidance in effect in CY 2013 (dated October 28, 2011). Cross-cutting aspects identified in 2013 using the 2013 terminology will be converted to the latest revision in accordance with the cross-reference in IMC 0310 during the mid-cycle assessment review and evaluated for cross-cutting themes and potential substantive cross-cutting issues in accordance with IMC 0305.

In accordance with 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 Agencywide Document Access and Management 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 George Hopper at 404-997-4645 with any questions you may have regarding this letter.

Sincerely,

*/RA/*

George T. Hopper, Chief  
Reactor Projects Branch 4  
Division of Reactor Projects

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

Enclosure: Brunswick Inspection/Activity Plan  
(03/01/2014 – 06/30/2015)

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PUBLICLY AVAILABLE       NON-PUBLICLY AVAILABLE       SENSITIVE       NON-SENSITIVE  
 ADAMS:  Yes      ACCESSION NUMBER: \_\_\_\_\_       SUNSI REVIEW COMPLETE       FORM 665 ATTACHED

OFFICE	RII:DRP	RII:DRP	RII:DRP				
SIGNATURE	JSD /RA/	GTH /RA/	RPC /RA/				
NAME	JDodson	GHopper	RCroteau				
DATE	02/27/2014	02/28/2014	02/27/2014				
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

G. Hamrick

3

Letter to George Hamrick from George T. Hopper dated March 4, 2014

SUBJECT: ANNUAL ASSESSMENT LETTER FOR BRUNSWICK STEAM ELECTRIC PLANT,  
UNITS 1 AND 2 – NRC INSPECTION REPORT 05000325/2013001 AND  
05000324/2013001

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Institute of Nuclear Power Operations (INPO)

ROP Assessment

## Brunswick

## Inspection / Activity Plan

03/01/2014 - 06/30/2015

Unit Number	Planned Dates Start	Planned Dates End	Inspection Activity	Title	No. of Staff on Site
1	03/10/2014	03/14/2014	ISI - UNIT 1 IN-SERVICE INSPECTION		1
			IP 711108G	Inservice Inspection Activities - BWR	
1	03/10/2014	03/14/2014	LR - UNIT 1 POST APPROVAL LR PHASE 1		2
			IP 71003	Post-Approval Site Inspection for License Renewal	
1, 2	03/10/2014	03/14/2014	RP - RAD HAZARDS ANALYSIS AND TRANSPORTATION		2
			IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1, 2	03/10/2014	03/14/2014	IP 71124.08	Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation	
1, 2	03/10/2014	03/14/2014	IP 71151	Performance Indicator Verification	
1, 2	06/15/2014	07/25/2014	EP - EP EXERCISE INSPECTION		3
			IP 7111408	Exercise Evaluation – Scenario Review	
1, 2	07/21/2014	07/25/2014	IP 7111404	Emergency Action Level and Emergency Plan Changes	
1, 2	07/21/2014	07/25/2014	IP 7111407	Exercise Evaluation - Hostile Action (HA) Event	
1, 2	07/21/2014	07/25/2014	IP 71151	Performance Indicator Verification	
1, 2	08/04/2014	08/08/2014	LR - POST APPROVAL LR PHASE 2		6
			IP 71003	Post-Approval Site Inspection for License Renewal	
1, 2	08/18/2014	08/22/2014	IP 71003	Post-Approval Site Inspection for License Renewal	
1, 2	09/08/2014	09/12/2014	TFPI - TRIENNIAL FIRE PROTECTION INSP		8
			IP 711105T	Fire Protection [Triennial]	
1, 2	09/22/2014	09/26/2014	IP 711105T	Fire Protection [Triennial]	
1, 2	10/27/2014	10/31/2014	MODS - PLANT MODIFICATIONS INSPECTION		3
			IP 711117T	Evaluations of Changes, Tests, and Experiments and Permanent Plant Modifications	
1, 2	11/17/2014	11/21/2014	IP 711117T	Evaluations of Changes, Tests, and Experiments and Permanent Plant Modifications	
1, 2	03/02/2015	03/06/2015	RP - RP OCCUPATIONAL BASELINE WEEK 1		3
			IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1, 2	03/02/2015	03/06/2015	IP 71124.02	Occupational ALARA Planning and Controls	
1, 2	03/02/2015	03/06/2015	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1, 2	03/02/2015	03/06/2015	IP 71124.04	Occupational Dose Assessment	
1, 2	03/02/2015	03/06/2015	IP 71124.05	Radiation Monitoring Instrumentation	
1, 2	03/02/2015	03/06/2015	IP 71151	Performance Indicator Verification	
2	03/09/2015	03/13/2015	ISI - UNIT 2 IN-SERVICE INSPECTION		1
			IP 711108G	Inservice Inspection Activities - BWR	
1, 2	03/16/2015	03/20/2015	RP - RP OCCUPATIONAL BASELINE WEEK 2		3
			IP 71124.01	Radiological Hazard Assessment and Exposure Controls	

This report does not include INPO and OUTAGE activities.

This report shows only on-site and announced inspection procedures.

Enclosure

**Brunswick**

**Inspection / Activity Plan**

**03/01/2014 - 06/30/2015**

Unit Number	Planned Dates Start End	Inspection Activity	Title	No. of Staff on Site
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		<b>RP</b>	<b>- RP OCCUPATIONAL BASELINE WEEK 2</b>	<b>3</b>
1, 2	03/16/2015 03/20/2015	IP 71124.02	Occupational ALARA Planning and Controls	
1, 2	03/16/2015 03/20/2015	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1, 2	03/16/2015 03/20/2015	IP 71124.04	Occupational Dose Assessment	
1, 2	03/16/2015 03/20/2015	IP 71124.05	Radiation Monitoring Instrumentation	
1, 2	03/16/2015 03/20/2015	IP 71151	Performance Indicator Verification	
		<b>PI&amp;R</b>	<b>- PROBLEM IDENTIFICATION AND RESOLUTION</b>	<b>4</b>
1, 2	05/04/2015 05/08/2015	IP 71152B	Problem Identification and Resolution	
1, 2	05/18/2015 05/22/2015	IP 71152B	Problem Identification and Resolution	
		<b>EP</b>	<b>- EP PROGRAM INSPECTION</b>	<b>1</b>
1, 2	06/15/2015 06/19/2015	IP 7111402	Alert and Notification System Testing	
1, 2	06/15/2015 06/19/2015	IP 7111403	Emergency Preparedness Organization Staffing and Augmentation System	
1, 2	06/15/2015 06/19/2015	IP 7111404	Emergency Action Level and Emergency Plan Changes	
1, 2	06/15/2015 06/19/2015	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies	
1, 2	06/15/2015 06/19/2015	IP 71151	Performance Indicator Verification	

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This report shows only on-site and announced inspection procedures.