



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

March 4, 2011

Carolina Power and Light Company
Mr. Michael J. Annacone
Vice President
Brunswick Steam Electric Plant
P. O. Box 10429
Southport, NC 28461

**SUBJECT: ANNUAL ASSESSMENT LETTER - BRUNSWICK STEAM ELECTRIC PLANT
UNIT 1 AND UNIT 2 (REPORT 05000325/2011001 AND 05000324/2011001)**

Dear Mr. Annacone:

On February 9, 2011, the NRC staff completed its end-of-cycle performance review of the 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, 2010 through December 31, 2010. 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. A separate letter will include NRC's assessment of your performance in the Security Cornerstone and its security-related inspection plan.

The NRC determined the performance at Brunswick Units 1 and 2 during the most recent quarter was within the Regulatory Response Column of the NRC's Reactor Oversight Process (ROP) Action Matrix based on one inspection finding classified as low to moderate safety significance (White) in the Emergency Preparedness Cornerstone related to untimely augmentation of on-shift staffing during a declaration of an Alert emergency classification. This finding was identified on September 29, 2010. At the beginning of 2010, the performance of Brunswick Units 1 and 2 was assessed to be in the Regulatory Response Column due to a White inspection finding identified in 2009. This finding involved a performance deficiency related to the alternate safe shutdown function of the emergency diesel generators. A 95001 inspection to review this issue was completed on March 19, 2010, and Brunswick was transitioned back to the licensee response column in the second quarter of 2010, where you remained until September 29, 2010.

On January 5, 2011, your staff notified the NRC of your readiness for us to conduct a supplemental inspection to review the actions taken to address the White Emergency Preparedness inspection finding. Therefore, in addition to ROP baseline inspections, the NRC plans to conduct a supplemental inspection in accordance with Inspection Procedure 95001, "Inspection for One or Two White Inputs in a Strategic Performance Area," beginning on May 2, 2011 for the review of the white inspection finding.

The enclosed inspection plan details the inspections scheduled through June 30, 2012. Routine inspections performed by resident inspectors are not included in the inspection plan. The inspections listed in 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.

We also plan on conducting Temporary Instruction (TI) 2515/179, "Verification of Licensee Responses to NRC Requirements for Inventories for Materials Tracked in National Source Tracking System (NSTS)."

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be made 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 Randy Musser at (404) 997-4603 with any questions you may have regarding this letter.

Sincerely,

/RA/

Richard P. Croteau, Director
Division of Reactor Projects

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

Enclosure: Brunswick Inspection/Activity Plan

cc w/encl.: (See page 3)

cc w/encl:
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cc w/encl. (continued next page)

cc w/encl. (continued)

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Brunswick
Inspection / Activity Plan
03/01/2011 - 06/30/2012

Unit Number	Planned Dates Start	Planned Dates End	Inspection Activity	Title	No. of Staff on Site
1, 2	03/07/2011	03/11/2011	PSB1-RP	- RP OCCUPATIONAL WEEK 1	4
			IP 2515/179	Verification of Licensee Responses to NRC Requirement for Inventories of Materials Tracked in NSTS	
1, 2	03/07/2011	03/11/2011	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1, 2	03/07/2011	03/11/2011	IP 71124.02	Occupational ALARA Planning and Controls	
1, 2	03/07/2011	03/11/2011	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1, 2	03/07/2011	03/11/2011	IP 71124.04	Occupational Dose Assessment	
1, 2	03/07/2011	03/11/2011	IP 71124.08	Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation	
1, 2	03/07/2011	03/11/2011	IP 71151	Performance Indicator Verification	
			EB3 ISI	- UNIT 2 INSERVICE INSPECTION	1
			IP 7111108G	Inservice Inspection Activities - BWR	
2	03/14/2011	03/18/2011	PSB1-RP	- RP OCCUPATIONAL WEEK 2	4
			IP 2515/179	Verification of Licensee Responses to NRC Requirement for Inventories of Materials Tracked in NSTS	
1, 2	03/21/2011	03/25/2011	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1, 2	03/21/2011	03/25/2011	IP 71124.02	Occupational ALARA Planning and Controls	
1, 2	03/21/2011	03/25/2011	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1, 2	03/21/2011	03/25/2011	IP 71124.04	Occupational Dose Assessment	
1, 2	03/21/2011	03/25/2011	IP 71124.08	Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation	
1, 2	03/21/2011	03/25/2011	IP 71151	Performance Indicator Verification	
			95001	- 95001 SUPPLEMENTAL INSPECTION	2
			IP 95001	Supplemental Inspection for One or Two White Inputs in a Strategic Performance Area	
			PI&R	- PROBLEM IDENTIFICATION AND RESOLUTION	5
1, 2	05/09/2011	05/13/2011	IP 71152B	Identification and Resolution of Problems	
1, 2	05/23/2011	05/27/2011	IP 71152B	Identification and Resolution of Problems	
			PSB1EP	- EMERGENCY PREPAREDNESS INSPECTION	1
1, 2	06/27/2011	07/01/2011	IP 7111402	Alert and Notification System Testing	
1, 2	06/27/2011	07/01/2011	IP 7111403	Emergency Preparedness Organization Staffing and Augmentation System	
1, 2	06/27/2011	07/01/2011	IP 7111404	Emergency Action Level and Emergency Plan Changes	
1, 2	06/27/2011	07/01/2011	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies	
1, 2	06/27/2011	07/01/2011	IP 71151	Performance Indicator Verification	
			MODS	- MODS/50.59 INSPECTION	5
1, 2	07/18/2011	07/22/2011	IP 7111117T	Evaluations of Changes, Tests, or Experiments and Permanent Plant Modifications	
1, 2	08/01/2011	08/05/2011	IP 7111117T	Evaluations of Changes, Tests, or Experiments and Permanent Plant Modifications	
			TFPI	- 805 TFPI	7
1, 2	10/31/2011	11/04/2011	IP 7111105P	Fire Protection-NFPA 805 Transition Period [Triennial]	
1, 2	11/14/2011	11/18/2011	IP 7111105P	Fire Protection-NFPA 805 Transition Period [Triennial]	

This report does not include INPO and OUTAGE activities.
 This report shows only on-site and announced inspection procedures.

Unit Number	Planned Dates Start	Planned Dates End	Inspection Activity	Title	No. of Staff on Site
			PSB1-RP - PUBLIC RADIATION PROTECTION BASELINE		3
1, 2	02/13/2012	02/17/2012	IP 71124.04	Occupational Dose Assessment	
1, 2	02/13/2012	02/17/2012	IP 71124.05	Radiation Monitoring Instrumentation	
1, 2	02/13/2012	02/17/2012	IP 71124.06	Radioactive Gaseous and Liquid Effluent Treatment	
1, 2	02/13/2012	02/17/2012	IP 71124.07	Radiological Environmental Monitoring Program	
1, 2	02/13/2012	02/17/2012	IP 71151	Performance Indicator Verification	
			PSB1-RP - RADIOLOGICAL HAZARDS ASSESSMENT		1
1, 2	02/27/2012	03/02/2012	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
			EB3 ISI - UNIT 1 INSERVICE INSPECTION		1
1	03/05/2012	03/09/2012	IP 7111108G	Inservice Inspection Activities - BWR	
			EB3 HS - TRIENNIAL HEAT SINK INSPECTION		1
1, 2	06/25/2012	06/29/2012	IP 7111107T	Heat Sink Performance	

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