



**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  
ATTN: Mr. Robert J. Duncan, II  
Vice President  
H.B. Robinson Steam Electric Plant Unit 2  
3581 West Entrance Road  
Hartsville, SC 29550

**SUBJECT: ANNUAL ASSESSMENT LETTER - H. B. ROBINSON STEAM ELECTRIC  
PLANT, UNIT 2 (REPORT 05000261/2011001)**

Dear Mr. Duncan:

On February 9, 2011, the NRC staff completed its end-of-cycle performance review of the H. B. Robinson Steam Electric Plant, Unit 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 Robinson Unit 2 during the most recent quarter was within the Degraded Cornerstone column of the NRC's Reactor Oversight Process (ROP) Action Matrix because the Unplanned Scrams per 7000 Critical Hours performance indicator crossed the threshold from Green to White in the third quarter of 2010, and three findings classified as having low to moderate safety significance (White) were active in the Mitigating Systems cornerstone. Two of the three White inspection findings were identified in the third quarter of 2010 and the third finding was identified in the fourth quarter of 2010. The first White finding was identified for your failure to correct a condition adverse to quality in "B" Emergency Diesel Generator output breaker 52/27B. The second White finding was identified for your failure to adequately design and implement operator training based on learning objectives as required by 10 CFR 55.59(c), in that training lesson material failed to identify the basis of a procedural action involving reactor coolant pump seal cooling in licensee procedure PATH-1, as required by the definition of systems approach to training, Element 3 in 10 CFR 55.4. The third White inspection finding was identified for your failure to adequately implement requirements of multiple procedures required by Technical Specification 5.4.1, during a cooldown of the Reactor Coolant System and subsequent safety injection after a reactor trip on March 28, 2010.

The performance of Robinson Unit 2 during the first and second quarter of 2010 was within the Licensee Response Column of the NRC's ROP Action matrix because all inspection findings were classified as having very low safety significance (Green) and all PIs indicated performance at a level requiring no additional NRC oversight (Green). On November 12, 2010, the NRC issued an assessment follow-up letter due to the Unplanned Scrams per 7000 Critical Hours

performance indicator crossing the green-to-white threshold. As a result of our assessment review, Robinson Unit 2 performance was assessed to be in the Regulatory Response Column of the NRC's ROP Action Matrix. An additional assessment follow-up letter was issued on January 31, 2011. The NRC updated its assessment of Robinson Unit 2 to be in the Degraded Cornerstone Column of the NRC's Action Matrix, effective the third quarter of calendar year 2010 due to the three white findings in the Mitigating System Cornerstone.

On February 1, 2011 your staff notified the NRC of your readiness, as of March 11, 2011, for us to conduct a supplemental inspection to review the actions taken to address the White performance indicator. 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 March 21 for the review of the Unplanned Scrams per 7000 critical hours White performance indicator. Also, on February 1, 2011, your staff notified the NRC of your readiness, as of May 9, 2011, for us to conduct a supplemental inspection to review the actions taken to address three White inspection findings. Therefore, the NRC plans to conduct a supplemental inspection in accordance with Inspection Procedure 95002, "Inspection for One Degraded Cornerstone or Any Three White Inputs in a Strategic Performance Area," beginning on May 31 for the review of these inspection findings.

The NRC identifies substantive cross-cutting issues (SCCIs) to communicate a concern with the licensee's performance in a cross-cutting area and to encourage the licensee to take appropriate actions before more significant performance issues emerge. The NRC identified a cross-cutting theme in the Resources component of the Human Performance cross-cutting area. Specifically, four Green inspection findings were identified as having the cross-cutting aspect of complete, accurate and up-to-date design documentation, procedures, and work packages, and correct labeling of components, H.2(c). The NRC determined that an SCCI exists because the NRC has a concern with your staff's progress in addressing the cross-cutting theme. Specifically, your staff's actions have not yet proven effective in substantially mitigating the cross-cutting theme as it relates to procedure quality. The SCCI will remain open until the NRC has confidence that your corrective actions are sufficient, based in part on a reduction in the number of findings below the SCCI threshold. The NRC will monitor your staff's progress in addressing the SCCI during the 95002 supplemental inspection and we will perform focused annual problem identification and resolution reviews of the actions to address this cross-cutting theme.

The enclosed inspection plan lists the inspections scheduled through June 30, 2012. 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.

Based on plant performance over the cycle, we plan to conduct the inspections as described above in addition to the reactor oversight process (ROP) baseline inspections at your facility. We also plan on conducting Temporary Instruction (TI) 2515/179, Verification of Licensee Responses to NRC Requirements for Inventories for Materials Tracked in the 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 Randall A. Musser at 404-997-4603 with any questions you may have regarding this letter.

Sincerely,

*/RA/*

Victor M. McCree  
Regional Administrator

Docket No.: 50-261  
License No.: DPR-23

Enclosure: Robinson Inspection/Activity Plan  
(03/01/2011 – 06/30/2012)

cc w/encl.: (See page 4)

cc w/encl.:

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Robinson

## 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
2	05/31/2011	06/10/2011	<b>95002</b> IP 95002	<b>- 95002 SUPPLEMENTAL INSPECTION</b> Supplemental Inspection for One Degraded Cornerstone or Any Three White Inputs in a Strategic Perform	8
2	03/21/2011	03/25/2011	<b>95001</b> IP 95001	<b>- 95001 SUPPLEMENTAL INSPECTION</b> Supplemental Inspection for One or Two White Inputs in a Strategic Performance Area	2
2	05/23/2011	05/27/2011	<b>PSB1-RP</b> IP 2515/179	<b>- RP PUBLIC RADIATION SAFETY INSP</b> Verification of Licensee Responses to NRC Requirement for Inventories of Materials Tracked in NSTS	5
2	05/23/2011	05/27/2011	IP 71124.04	Occupational Dose Assessment	
2	05/23/2011	05/27/2011	IP 71124.05	Radiation Monitoring Instrumentation	
2	05/23/2011	05/27/2011	IP 71124.06	Radioactive Gaseous and Liquid Effluent Treatment	
2	05/23/2011	05/27/2011	IP 71151	Performance Indicator Verification	
2	05/23/2011	05/27/2011	<b>PSB1EP</b>	<b>- EMERGENCY PREPAREDNESS EXERCISE</b>	3
2	05/23/2011	05/27/2011	IP 7111401	Exercise Evaluation	
2	05/23/2011	05/27/2011	IP 7111404	Emergency Action Level and Emergency Plan Changes	
2	05/23/2011	05/27/2011	IP 71151	Performance Indicator Verification	
2	11/07/2011	11/11/2011	<b>OL EXAM</b> V23363	<b>- INITIAL EXAM PREP</b> ROBINSON / NOVEMBER 2011 EXAM AT POWER FACILITIES	4
2	11/28/2011	12/02/2011	<b>OL EXAM</b> V23363	<b>- INITIAL EXAM - WEEK 1</b> ROBINSON / NOVEMBER 2011 EXAM AT POWER FACILITIES	4
2	12/05/2011	12/09/2011	<b>OL EXAM</b> V23363	<b>- INITIAL EXAM - WEEK 2</b> ROBINSON / NOVEMBER 2011 EXAM AT POWER FACILITIES	4
2	01/23/2012	01/27/2012	<b>PSB1-RP</b> IP 71124.01	<b>- OCCUPATIONAL RP BASELINE WK1</b> Radiological Hazard Assessment and Exposure Controls	3
2	01/23/2012	01/27/2012	IP 71124.02	Occupational ALARA Planning and Controls	
2	01/23/2012	01/27/2012	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
2	01/23/2012	01/27/2012	IP 71124.08	Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation	
2	01/23/2012	01/27/2012	IP 71151	Performance Indicator Verification	
2	01/30/2012	02/03/2012	<b>EB3 ISI</b> IP 7111108P	<b>- UNIT 2 IN-SERVICE INSPECTION</b> Inservice Inspection Activities - PWR	1
2	02/06/2012	02/10/2012	<b>PSB1-RP</b> IP 71124.01	<b>- OCCUPATIONAL RP BASELINE WK2</b> Radiological Hazard Assessment and Exposure Controls	4
2	02/06/2012	02/10/2012	IP 71124.02	Occupational ALARA Planning and Controls	
2	02/06/2012	02/10/2012	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
2	02/06/2012	02/10/2012	IP 71124.08	Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation	
2	02/06/2012	02/10/2012	IP 71151	Performance Indicator Verification	

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
			<b>PI&amp;R</b>	<b>- PROBLEM IDENTIFICATION AND RESOLUTION</b>	
2	05/07/2012	05/11/2012	IP 71152B	Identification and Resolution of Problems	5
2	05/21/2012	05/25/2012	IP 71152B	Identification and Resolution of Problems	
			<b>PSB1EP</b>	<b>- EMERGENCY PREPAREDNESS INSPECTION</b>	
2	05/21/2012	05/25/2012	IP 7111402	Alert and Notification System Testing	1
2	05/21/2012	05/25/2012	IP 7111403	Emergency Preparedness Organization Staffing and Augmentation System	
2	05/21/2012	05/25/2012	IP 7111404	Emergency Action Level and Emergency Plan Changes	
2	05/21/2012	05/25/2012	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies	
2	05/21/2012	05/25/2012	IP 71151	Performance Indicator Verification	
			<b>EB3 HS</b>	<b>- TRIENNIAL HEAT SINK INSPECTION</b>	
2	06/04/2012	06/08/2012	IP 7111107T	Heat Sink Performance	1