



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
REGION II
SAM NUNN ATLANTA FEDERAL CENTER
61 FORSYTH STREET, SW, SUITE 23T85
ATLANTA, GEORGIA 30303-8931

September 1, 2009

Carolina Power and Light Company
ATTN: Mr. Christopher L. Burton
Vice President - Harris Plant
Shearon Harris Nuclear Power Plant
P. O. Box 165, Mail Code: Zone 1
New Hill, North Carolina 27562-0165

**SUBJECT: MID-CYCLE PERFORMANCE REVIEW AND INSPECTION PLAN – SHEARON
HARRIS NUCLEAR POWER PLANT**

Dear Mr. Burton:

On August 13, 2009, the NRC staff completed its performance review of the Shearon Harris Nuclear Power Plant. Our technical staff reviewed performance indicators (PIs) for the most recent quarter and inspection results for the period from July 1, 2008 through June 30, 2009. The purpose of this letter is to inform you of our assessment of your safety performance during this period and our plans for future inspections at your facility.

This performance review and the enclosed inspection plan do not include security information. A separate letter designated and marked as "Official Use Only-Security Related Information" will include the security cornerstone performance review and a resultant inspection plan.

Plant performance for the most recent quarter at Harris Unit 1 was within the Licensee Response column of the NRC's Action Matrix, based on all inspection findings being classified as having very low safety significance (Green) and all PIs indicating performance at a level requiring no additional NRC oversight (Green). Therefore, we plan to conduct reactor oversight process (ROP) baseline inspections at your facility.

The enclosed inspection plan details the inspections, less those related to security, scheduled through December 31, 2010. In addition to ROP baseline inspection activities, we also plan on conducting infrequently performed inspections, which include Temporary Instruction (TI) 2515/173, Review of the Implementation of the Industry Ground Water Protection Voluntary Initiative; and initial operator licensing examinations. The inspection plan is provided to allow for the resolution of any scheduling conflicts and personnel availability issues well in advance of inspector arrival onsite. Routine resident inspections are not listed due to their ongoing and continuous nature. The inspections in the last nine months of the inspection plan are tentative and may be revised at the end-of-cycle review.

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).

As you may know, the NRC is currently evaluating the scope and frequency of all the baseline inspection procedures. If the results of the evaluation, or any other circumstances, cause us to change the inspection plan, we will contact you to discuss the change as soon as possible. Please contact me at 404-562-4603 with any questions you may have regarding this letter or the inspection plan.

Sincerely,

/RA/

Randall A. Musser, Chief
Reactor Projects Branch 4
Division of Reactor Projects

Docket No.: 50-400
License No.: NPF-63

Enclosure: Harris Inspection/Activity Plan

cc w/encl: (See page 3)

cc w/encl:

Brian C. McCabe
Manager, Nuclear Regulatory Affairs
Progress Energy Carolinas, Inc.
Electronic Mail Distribution

R. J. Duncan, II, Vice President
Nuclear Operations
Carolina Power & Light Company
Electronic Mail Distribution

Greg Kilpatrick, Training Manager
Shearon Harris Nuclear Power Plant
Progress Energy Carolinas, Inc.
Electronic Mail Distribution

John C. Warner, Manager
Support Services
Progress Energy Carolinas, Inc.
Electronic Mail Distribution

David H. Corlett, Supervisor
Licensing/Regulatory Programs
Progress Energy
Electronic Mail Distribution

David T. Conley
Associate General Counsel
Legal Dept.
Progress Energy Service Company, LLC
Electronic Mail Distribution

Christos Kamilaris, Director
Fleet Support Services
Carolina Power & Light Company
Electronic Mail Distribution

John H. O'Neill, Jr.
Shaw, Pittman, Potts & Trowbridge
2300 N. Street, NW
Washington, DC 20037-1128

Beverly O. Hall
Chief, Radiation Protection Section
Department of Environmental Health
N.C. Department of Environmental
Commerce & Natural Resources
Electronic Mail Distribution

Public Service Commission
State of South Carolina
P.O. Box 11649
Columbia, SC 29211

Chairman
North Carolina Utilities Commission
Electronic Mail Distribution

Robert P. Gruber, Executive Director
Public Staff - NCUC
4326 Mail Service Center
Raleigh, NC 27699-4326

Herb Council, Chair
Board of County Commissioners of Wake
County
P.O. Box 550
Raleigh, NC 27602

Tommy Emerson, Chair
Board of County Commissioners of
Chatham County
186 Emerson Road
Siler City, NC 27344

Kelvin Henderson
Plant General Manager
Carolina Power and Light Company
Shearon Harris Nuclear Power Plant
Electronic Mail Distribution

Senior Resident Inspector
Carolina Power and Light Company
Shearon Harris Nuclear Power Plant
U.S. NRC
5421 Shearon Harris Rd
New Hill, NC 27562-9998

Harris
Inspection / Activity Plan
09/01/2009 - 12/31/2010

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
			PI&R - PROBLEM IDENTIFICATION AND RESOLUTION		5
1	09/14/2009	09/18/2009	IP 71152B	Identification and Resolution of Problems	
1	09/28/2009	10/02/2009	IP 71152B	Identification and Resolution of Problems	
			OL EXAM - INITIAL EXAM PREP		4
1	11/02/2009	11/06/2009	V23321	HARRIS/NOVEMBER 2009 EXAM AT POWER FACILITIES	
			OL EXAM - INITIAL EXAM - WEEK 1		2
1	11/30/2009	12/04/2009	V23321	HARRIS/NOVEMBER 2009 EXAM AT POWER FACILITIES	
			OL EXAM - INITIAL EXAM - WEEK 2		2
1	12/14/2009	12/18/2009	V23321	HARRIS/NOVEMBER 2009 EXAM AT POWER FACILITIES	
			EB3 HS - HEAT SINK INSPECTION		1
1	02/08/2010	02/12/2010	IP 7111107T	Heat Sink Performance	
			PSB1EP - EMERGENCY PREPAREDNESS INSPECTION		1
1	03/01/2010	03/05/2010	IP 7111402	Alert and Notification System Testing	
1	03/01/2010	03/05/2010	IP 7111403	Emergency Response Organization Augmentation Testing	
1	03/01/2010	03/05/2010	IP 7111404	Emergency Action Level and Emergency Plan Changes	
1	03/01/2010	03/05/2010	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies	
1	03/01/2010	03/05/2010	IP 71151	Performance Indicator Verification	
			PSB1-RP - RP GROUNDWATER PROTECTION		1
1	05/03/2010	05/07/2010	IP 2515/173	Review of the Implementation of the Industry Ground Water Protection Voluntary Initiative	
			PSB1-RP - RP PUBLIC RADIATION PROTECTION		4
1	08/16/2010	08/20/2010	IP 7112101	Access Control to Radiologically Significant Areas	
1	08/16/2010	08/20/2010	IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment	
1	08/16/2010	08/20/2010	IP 7112201	Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems	
1	08/16/2010	08/20/2010	IP 7112203	Radiological Environmental Monitoring Program (REMP) And Radioactive Material Control Program	
1	08/16/2010	08/20/2010	IP 71151	Performance Indicator Verification	
			EB3ISI - INSERVICE INSPECTION		1
1	10/11/2010	10/15/2010	IP 7111108P	Inservice Inspection Activities - PWR	
			EB3TI172 - EB3 RX COOLANT DM BUTT WELDS		1
1	10/11/2010	10/15/2010	IP 2515/172	Reactor Coolant System Dissimilar Metal Butt Welds	
			EB3SGISI - SG INSERVICE INSPECTION		1
1	10/18/2010	10/22/2010	IP 7111108P	Inservice Inspection Activities - PWR	
			EB1-MODS - MODIFICATION - 10 CFR50.59		4
1	11/29/2010	12/03/2010	IP 7111117T	Evaluations of Changes, Tests, or Experiments and Permanent Plant Modifications	
1	12/13/2010	12/17/2010	IP 7111117T	Evaluations of Changes, Tests, or Experiments and Permanent Plant Modifications	

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

Enclosure