



**UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
SAM NUNN ATLANTA FEDERAL CENTER
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March 3, 2004

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

SUBJECT: ANNUAL ASSESSMENT LETTER - SHEARON HARRIS NUCLEAR POWER PLANT (NRC INSPECTION REPORT 50-400/04-01)

Dear Mr. Scarola:

On February 4, 2004, the NRC staff completed its end-of-cycle plant performance assessment of the Shearon Harris Nuclear Power Plant. The end-of-cycle review for Harris involved the participation of all technical divisions in evaluating performance indicators (PIs) for the most recent quarter and inspection results for the period from January 1 through December 31, 2003. 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 will allow you an opportunity to prepare for these inspections and to inform us of any planned inspections that may conflict with your plant activities.

Overall, Harris operated in a manner that preserved public health and safety and fully met all cornerstone objectives. Plant performance for the most recent quarter, as well as for the second and third quarters of the assessment cycle, was within the Regulatory Response column of the NRC's Action Matrix, based on a PI that indicated performance at a level requiring additional NRC oversight. The Unplanned Scrams per 7000 Critical Hours PI crossed the White threshold due to three reactor trips that occurred during the second quarter. One additional reactor trip occurred in the third quarter. A Supplemental Inspection using NRC Inspection Procedure 95001 was conducted the week of September 15, 2003. The inspection identified that your problem identification, root cause and extent-of-condition evaluations, and corrective actions for the four reactor trips were adequate.

The nine fire protection unresolved items discussed in our Mid-Cycle Letter, dated August 27, 2003, were evaluated as being very low safety significant (Green). In addition, another unresolved item, also discussed in the Mid-Cycle Letter, involving component cooling water system relief valve lifting events, was also evaluated as being Green. A previously discussed unresolved item involving the adequacy of cable wrap fire barrier qualification tests and installed configurations continues to be reviewed.

The enclosed inspection plan details the inspections scheduled through September 30, 2005. In addition to baseline inspection activities, the plan currently includes inspections of reactor vessel lower head penetrations and reactor containment sump blockage. A plant design pilot inspection is also included in the plan. This inspection will review safety system design and

performance capability, permanent plant modifications, and evaluations of changes, tests and experiments. The inspection plan is provided to minimize the resource impact on your staff and to allow for scheduling conflicts and personnel availability to be resolved in advance of inspector arrival onsite. Routine resident inspections are not listed due to their ongoing and continuous nature. The inspections in the last twelve months of the inspection plan are tentative and may be revised at the mid-cycle review meeting.

As you are aware, the NRC has issued several Orders and threat advisories to enhance security capabilities and improve guard force readiness since the terrorist attacks on September 11, 2001. We have conducted inspections to review your implementation of these requirements and have monitored your actions in response to changing threat conditions. For calendar year 2004, we plan to continue inspections of Order implementation combined with newly developed portions of the security baseline inspection program.

In accordance with 10 CFR 2.790 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).

If circumstances arise which cause us to change the inspection plan, we will contact you to discuss the change as soon as possible. Please contact Mr. Paul Fredrickson at 404-562-4530 with any questions you may have regarding this letter or the inspection plan.

Sincerely,

/RA/

Victor M. McCree, Director
Division of Reactor Projects

Docket No. 50-400
Licensee No. NPF-63

Enclosure: Harris Inspection/Activity Plan

cc w/encl:

cc w/encl:

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Harris
Inspection / Activity Plan
03/01/2004 - 09/30/2005

| Unit Number | Inspection Activity | Title | No. of Staff on Site | Planned Dates Start | End | Inspection Type |
|----------------|---|---|-------------------------|------------------------|------------|----------------------|
| | EB1-DES - PLANT DESIGN-PILOT PRE-INSP. VISIT | | 2 | | | |
| 1 | IP 71111.DS | Safety System Design and Performance Capability | | 03/01/2004 | 03/05/2004 | Baseline Inspections |
| | EB1-DES - PLANT DESIGN-PILOT | | 7 | | | |
| 1 | IP 71111.DS | Safety System Design and Performance Capability | | 03/22/2004 | 03/26/2004 | Baseline Inspections |
| 1 | IP 71111.DS | Safety System Design and Performance Capability | | 04/12/2004 | 04/16/2004 | Baseline Inspections |
| | OL-EP - EMERGENCY PREPAREDNESS | | 1 | | | |
| 1 | IP 7111402 | Alert and Notification System Testing | | 04/19/2004 | 04/23/2004 | Baseline Inspections |
| 1 | IP 7111403 | Emergency Response Organization Augmentation Testing | | 04/19/2004 | 04/23/2004 | Baseline Inspections |
| 1 | IP 7111404 | Emergency Action Level and Emergency Plan Changes | | 04/19/2004 | 04/23/2004 | Baseline Inspections |
| 1 | IP 7111405 | Correction of Emergency Preparedness Weaknesses and Deficiencies | | 04/19/2004 | 04/23/2004 | Baseline Inspections |
| 1 | IP 71151 | Performance Indicator Verification | | 04/19/2004 | 04/23/2004 | Baseline Inspections |
| | PS-SEC - SECURITY | | 2 | | | |
| 1 | IP 7113001 | Access Authorization | | 04/19/2004 | 04/23/2004 | Baseline Inspections |
| 1 | IP 7113002 | Access Control | | 04/19/2004 | 04/23/2004 | Baseline Inspections |
| 1 | IP 71151 | Performance Indicator Verification | | 04/19/2004 | 04/23/2004 | Baseline Inspections |
| | EB2-MR - MAINTENANCE RULE | | 1 | | | |
| 1 | IP 7111112B | Maintenance Effectiveness | | 06/28/2004 | 07/02/2004 | Baseline Inspections |
| | EB2-ISI - INSERVICE INSPECTION | | 1 | | | |
| 1 | IP 7111108P | Inservice Inspection Activities - PWR | | 10/18/2004 | 10/22/2004 | Baseline Inspections |
| | PB4-152 - REACTOR LOWER HEAD PENETRATIONS | | 1 | | | |
| 1 | IP 2515/152 | Reactor Pressure Vessel Lower Head Penetration Nozzles (NRC Bulletin 2003-02) | | 10/18/2004 | 10/22/2004 | Safety Issues |
| | PS-RP - RAD PROTECTION OCCUPATIONAL | | 2 | | | |
| 1 | IP 7112101 | Access Control to Radiologically Significant Areas | | 10/18/2004 | 10/22/2004 | Baseline Inspections |
| 1 | IP 7112102 | ALARA Planning and Controls | | 10/18/2004 | 10/22/2004 | Baseline Inspections |
| 1 | IP 7112202 | Radioactive Material Processing and Transportation | | 10/18/2004 | 10/22/2004 | Baseline Inspections |
| 1 | IP 71151 | Performance Indicator Verification | | 10/18/2004 | 10/22/2004 | Baseline Inspections |
| 1 | IP 7112101 | Access Control to Radiologically Significant Areas | | 10/25/2004 | 10/29/2004 | Baseline Inspections |
| 1 | IP 7112102 | ALARA Planning and Controls | | 10/25/2004 | 10/29/2004 | Baseline Inspections |
| 1 | IP 7112202 | Radioactive Material Processing and Transportation | | 10/25/2004 | 10/29/2004 | Baseline Inspections |
| 1 | IP 71151 | Performance Indicator Verification | | 10/25/2004 | 10/29/2004 | Baseline Inspections |
| | PB4-153 - REACTOR CONTAINMENT SUMP BLOCKAGE | | 2 | | | |
| 1 | IP 2515/153 | Reactor Containment Sump Blockage (NRC Bulletin 2003-01) | | 10/25/2004 | 10/29/2004 | Safety Issues |
| | OL-RQ - LICENSED OPERATOR REQUALIFICATION | | 2 | | | |
| 1 | IP 7111111B | Licensed Operator Requalification Program | | 03/07/2005 | 03/11/2005 | Baseline Inspections |

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

Harris
Inspection / Activity Plan
03/01/2004 - 09/30/2005

| Unit Number | Inspection Activity | Title | No. of Staff on Site | Planned Dates | | Inspection Type |
|----------------|---------------------|--|-------------------------|---------------|------------|----------------------|
| | | | | Start | End | |
| | OL-EP | - EMERGENCY EXERCISE | 2 | | | |
| 1 | IP 7111401 | Exercise Evaluation | | 04/11/2005 | 04/15/2005 | Baseline Inspections |
| 1 | IP 7111404 | Emergency Action Level and Emergency Plan Changes | | 04/11/2005 | 04/15/2005 | Baseline Inspections |
| 1 | IP 71151 | Performance Indicator Verification | | 04/11/2005 | 04/15/2005 | Baseline Inspections |
| | EB2-HS | - HEAT SINK | 1 | | | |
| 1 | IP 7111107B | Heat Sink Performance | | 06/13/2005 | 06/17/2005 | Baseline Inspections |
| | PB4-PI&R | - PROBLEM IDENTIFICATION AND RESOLUTION | 3 | | | |
| 1 | IP 71152B | Identification and Resolution of Problems | | 06/13/2005 | 06/17/2005 | Baseline Inspections |
| 1 | IP 71152B | Identification and Resolution of Problems | | 06/27/2005 | 07/01/2005 | Baseline Inspections |
| | PS-RP | - RAD PROTECTION-PUBLIC | 3 | | | |
| 1 | IP 7112101 | Access Control to Radiologically Significant Areas | | 06/27/2005 | 07/01/2005 | Baseline Inspections |
| 1 | IP 7112103 | Radiation Monitoring Instrumentation and Protective Equipment | | 06/27/2005 | 07/01/2005 | Baseline Inspections |
| 1 | IP 7112201 | Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems | | 06/27/2005 | 07/01/2005 | Baseline Inspections |
| 1 | IP 7112203 | Radiological Environmental Monitoring Program | | 06/27/2005 | 07/01/2005 | Baseline Inspections |
| 1 | IP 71151 | Performance Indicator Verification | | 06/27/2005 | 07/01/2005 | Baseline Inspections |
| | EB1-TFP | - FIRE PROTECTION-TRIENNIAL PRE INSP VISIT | 4 | | | |
| 1 | IP 7111105T | Fire Protection | | 07/25/2005 | 07/29/2005 | Baseline Inspections |
| | EB1-TFP | - FIRE PROTECTION-TRIENNIAL | 4 | | | |
| 1 | IP 7111105T | Fire Protection | | 08/15/2005 | 08/19/2005 | Baseline Inspections |
| 1 | IP 7111105T | Fire Protection | | 08/29/2005 | 09/02/2005 | Baseline Inspections |