



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

December 20, 2010

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

**SUBJECT: NOTIFICATION SHEARON HARRIS NUCLEAR PLANT - COMPONENT
DESIGN BASES INSPECTION - NRC INSPECTION REPORT
05000400/2011008**

Dear Mr. Burton:

The purpose of this letter is to notify you that the U.S. Nuclear Regulatory Commission (NRC) Region II staff will conduct a component design bases inspection at your Shearon Harris Nuclear Power Plant reactor facility during the period of March 21 – April 22, 2011. The inspection team will be led by Mr. Shakur Walker, a Senior Reactor Inspector from the NRC's Region II Office. This inspection will be conducted in accordance with the baseline inspection procedure, Procedure 71111.21, Component Design Bases Inspection, issued December 6, 2010.

The inspection will evaluate the capability of risk significant / low margin components to function as designed and to support proper system operation. The inspection will also include a review of selected operator actions, operating experience, and modifications.

During a discussion on December 2, 2010, Mr. Walker confirmed, with Mr. John Doorhy of your staff, arrangements for an information gathering site visit and the three-week onsite inspection. The schedule is as follows:

- Information gathering visit: February 28 – March 4, 2011
- Week 1 of onsite inspection: March 21 – March 25, 2011
- Week 2 of onsite inspection: April 4 – April 8, 2011
- Week 3 of onsite inspection: April 18 – April 22, 2011

The purpose of the information gathering visit is to meet with members of your staff to identify risk-significant components and operator actions. Information and documentation needed to support the inspection will also be identified and gathered or requested. Mr. George MacDonald or Mr. Walt Rogers, both Region II Senior Reactor Analysts, may accompany Mr. Walker during the information gathering visit to review probabilistic risk assessment data and identify risk significant components which will be examined during the inspection.

The enclosure lists documents that will be needed prior to the information gathering visit. Please contact Mr. Walker with any questions prior to preparing materials listed in the enclosure and provide the referenced information to the Region II office by January 28, 2011, unless otherwise noted. The inspectors will try to minimize your administrative burden by specifically identifying only those documents required for the inspection preparation.

During the information gathering visit, the team leader will also discuss the following inspection support administrative details: office space; site, plant and information system access; required resources; and information exchange protocol.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be 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).

This letter does not contain new or amended information collection requirements subject to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.). Existing information collection requirements were approved by the Office of Management and Budget, control number 3150-0011.

The NRC may not conduct or sponsor, and a person is not required to respond to, a request for information or an information collection requirement unless the requesting document displays a currently valid Office of Management and Budget control number.

Thank you for your cooperation in this matter. If you have any questions regarding the information requested or the inspection, please contact Mr. Walker at (404) 997-4639 or me at (404) 997-4519.

Sincerely,

/RA/

Binoy B. Desai, Chief
Engineering Branch 1
Division of Reactor Safety

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

Enclosure: Information Request for Shearon Harris Nuclear Power Plant Component Design
Bases Inspection

cc w/encl: (See page 3)

cc w/encl:
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Letter to Christopher L. Burton from Binoy Desai dated December 20, 2010.

SUBJECT: NOTIFICATION SHEARON HARRIS NUCLEAR PLANT - COMPONENT
DESIGN BASES INSPECTION - NRC INSPECTION REPORT
05000400/2011008

Distribution w/encl:

RIDSNNRRDIRS

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☒ PUBLICLY AVAILABLE

☐ NON-PUBLICLY AVAILABLE

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ADAMS: X Yes

ACCESSION NUMBER: _____

☒ SUNSI REVIEW COMPLETE

OFFICE	RII:DRS	RII:DRS					
SIGNATURE	RA	RA					
NAME	S. Walker	B. Desai					
DATE	12/20/2010	12/20/10					
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

OFFICIAL RECORD COPY

DOCUMENT NAME: S:\DRS\ENG BRANCH 1\HARRIS CDBI NOTIFICATION 2011 (SAW).DOC

INFORMATION REQUEST FOR SHEARON HARRIS NUCLEAR POWER PLANT COMPONENT DESIGN BASES INSPECTION

Please provide the information electronically in “.pdf” files, Excel, or other searchable format on CD/DVD-ROM. The CD/DVD-ROM should be indexed and possibly hyperlinked to facilitate ease of use. Information in “lists” should contain enough information to be easily understood to someone who has knowledge of pressurized water reactor technology.

1. From your most recent probabilistic safety analysis (PSA) **excluding** external events and fires, please provide:
 - a. Two risk rankings of components from your site-specific probabilistic safety analysis (PSA) – one sorted by Risk Achievement Worth (RAW), and the other sorted by Birnbaum Importance.
 - b. A list of the top 500 cutsets.
2. From your most recent probabilistic safety analysis (PSA) **including** external events and fires, please provide:
 - a. Two risk rankings of components from your site-specific probabilistic safety analysis (PSA) – one sorted by Risk Achievement Worth (RAW), and the other sorted by Birnbaum Importance.
 - b. A list of the top 500 cutsets.
3. Risk ranking of operator actions from your site specific PSA sorted by RAW. Provide copies of your human reliability worksheets for these items.
4. Any pre-existing evaluation or list of components and calculations with low design margins (i.e., pumps closest to the design limit for flow or pressure, diesel generator close to design required output, heat exchangers close to rated design heat removal, MOV risk-margin rankings, etc.).
5. A list of station applicability evaluations/reviews performed and documented in the station corrective action program in the past two years for industry events, critical equipment failures, and safety related equipment vulnerabilities (as communicated by NRC generic communications, industry communications, 10 CFR Part 21 notifications, etc.).
6. A list of operability evaluations completed within the last two years, sorted by associated component or system.
7. A list of **common-cause failures** of components that have occurred at Shearon Harris Nuclear Power Plant and have been identified within the last five years.
8. A list of equipment currently planned for upgrade/improvement by the site (e.g. “ONE” List), including a description of the reason(s) why each **component** (i.e. not a programmatic or system level concern) is on that list and summaries (if available) of your plans to address those reasons.
9. A list of equipment currently in RIS 05-020 (formerly GL 91-18) status, or in MR (a)(1) status.
10. Contact information for a person to discuss PRA information prior to the information gathering trip: name, title, phone number, and e-mail address.

Enclosure

11. Provide two sets of PI&D drawings (11x17) for safety-related systems (for onsite week of February 28 – March 3, 2011)
12. Provide six copies of FSAR (CD/DVD-ROM only) (for onsite week of February 28 – March 3, 2011)
13. Provide six copies of Technical Specifications and Bases (CD/DVD-ROM only) (for onsite week of February 28 – March 3, 2011)