



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

December 09, 2011

Mr. Regis T. Repko  
Vice President  
Duke Energy Carolinas, LLC  
McGuire Nuclear Station  
MG01VP/12700 Hagers Ferry Road  
Huntersville, NC 28078

**SUBJECT: NOTIFICATION OF MCGUIRE NUCLEAR STATION - COMPONENT DESIGN  
BASES INSPECTION - NRC INSPECTION REPORT 05000369, 370/2012007**

Dear Mr. Repko:

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 McGuire Nuclear Station during the weeks of March 5 – 9, March 19 – 23, and April 2 – 6, 2012. The inspection team will be led by 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 telephone conversation on December 6, 2011, Mr. Walker confirmed with Ms. K. Crane of your staff, arrangements for an information-gathering site visit and the three-week onsite inspection. The schedule is as follows:

- Information-gathering visit: Week of February 13 – 17, 2012
- Onsite weeks: March 5 – 9, March 19 – 23, and April 2 – 6, 2012

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. Mr. John Hanna, a Region II Senior Reactor Analyst, will support 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 provide the referenced information to the Region II office by February 6, 2012. Contact Mr. Walker with any questions concerning the requested information. The inspectors will try to

minimize your administrative burden by specifically identifying only those documents required for inspection preparation.

Additional documents will be requested during the information-gathering visit. The additional information will need to be made available to the team in the Region II office prior to the inspection team's preparation week of February 27. Mr. Walker, will also discuss the following inspection support administrative details: (1) availability of knowledgeable plant engineering and licensing personnel to serve as points of contact during the inspection, (2) method of tracking inspector requests during the inspection, (3) licensee computer access, (4) working space, (5) arrangements for site access, and (6) other applicable information.

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).

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) 997-4530.

Sincerely,

**/RA/**

Rebecca L. Nease, Chief  
Engineering Branch 1  
Division of Reactor Safety

Docket Nos.: 50-369, 50-370  
License Nos.: NPF-9, NPF-17

Enclosure: INFORMATION REQUEST FOR MCGUIRE NUCLEAR STATION - COMPONENT  
DESIGN BASES INSPECTION

cc w/encl: (See page 3)

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Sincerely,

/RA/

Rebecca L. Nease, Chief  
Engineering Branch 1  
Division of Reactor Safety

Docket Nos.: 50-369, 50-370  
License Nos.: NPF-9, NPF-17

Enclosure: INFORMATION REQUEST FOR MCGUIRE NUCLEAR STATION - COMPONENT DESIGN BASES INSPECTION

cc w/encl: (See page 3)

Distribution w/encl:

R. Musser, DRP  
J. Worosillo, DRP  
J. Dodson, DRP  
RIDSNRDIRS  
RidsNrrPMMcGuire Resource

PUBLICLY AVAILABLE       NON-PUBLICLY AVAILABLE       SENSITIVE       NON-SENSITIVE

ADAMS:  Yes    ACCESSION NUMBER: ML# 113430076       SUNSI REVIEW COMPLETE       FORM 665 ATTACHED

OFFICE	RII/DRS/EB1	RII/DRS/EB1					
SIGNATURE	/RA/	/RA/					
NAME	S. WALKER	R. NEASE					
DATE	12/ 08 /2011	12/ 09 / 2011	12/ /2011	12/ /2011	12/ /2011	12/ /2011	12/ /2011
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

cc w/encl:

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Senior Resident Inspector  
U.S. Nuclear Regulatory Commission  
William B. McGuire Nuclear Station  
U.S. NRC  
12700 Hagers Ferry Rd  
Huntersville, NC 28078

## **INFORMATION REQUEST FOR MCGUIRE NUCLEARSTATION COMPONENT DESIGN BASES INSPECTION**

Please provide the information electronically in “.pdf” files, Excel, or other searchable format on CDROM (or FTP site, Sharepoint, etc.) The CDROM (or website) should be indexed and hyperlinked to facilitate ease of use.

1. From your most-recent probabilistic safety analysis (PSA) excluding external events and fires:
  - 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:
  - 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 human reliability worksheets for these items
4. List of time critical operator actions with a brief description of each action
5. List of Emergency and Abnormal Operating Procedures revised (significant) since July 1, 2009 with a brief description of each revision
6. List of components 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.) and associated evaluations or calculations
7. List of station operating experience evaluations/reviews performed and documented in the station’s corrective action program for industry events and safety related equipment failures/vulnerabilities [as communicated by NRC generic communications, industry communications, 10 CFR part 21 notifications, etc.] since July 1, 2009
8. List and brief description of safety related SSC design modifications implemented since July 1, 2009
9. List and brief description of common-cause component failures that have occurred since July 1, 2009
10. List and brief description of operability evaluations completed since July 1, 2009

Enclosure

11. List of equipment on the site's Station Equipment Reliability Issues List, including a description of the reason(s) why each component is on that list and summaries (if available) of your plans to address the issue(s)
12. List and brief description of equipment currently in degraded or nonconforming status as described in RIS 05-020
13. List and reason for equipment classified in maintenance rule (a)(1) status since July 1, 2009 to present
14. Copies of System Descriptions (or the like design basis documents) for Safety-Related Systems
15. Copy of UFSAR(s)
16. Copy of Technical Specification(s)
17. Copy of Technical Specifications Bases
18. Copy of Technical Requirements Manual(s)
19. List and brief description of Root Cause Evaluations that have been performed since July 1, 2009
20. In-service Testing Program Procedure(s)
21. Corrective Action Program Procedure(s)
22. One line diagram of electrical plant (electronic and full size – hard copy week of February 13)
23. Index and legend for electrical plant one-line diagrams
24. Primary AC calculation(s) for safety-related buses
25. Primary DC calculation(s) for safety-related buses
26. PI&D's for ECCS systems (electronic and 1/2 size – hard copy week of February 13)
27. Index and Legend for PI&Ds
28. Copy of design bases documents for ECCS systems
29. Copy of Operability determination procedure(s)
30. Copies of condition reports associated with findings from previous CDBI (if applicable)
31. Index (procedure number, titles, and current revision) of station Emergency Operating Procedures (EOPs), Abnormal Operating Procedures (AOPs), and Annunciator Response Procedures (ARPs)

32. Copy of any self-assessments performed in preparation for this inspection
33. List of any condition reports generated in preparation for this inspection
34. Contact information for a person to discuss PRA information prior to the information-gathering trip (name, title, phone number, and e-mail address)