



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

April 23, 2014

Mr. David A. Heacock
President and Chief Nuclear Officer
Virginia Electric and Power Company
Dominion Nuclear
Innsbrook Technical Center
5000 Dominion Boulevard
Glen Allen, VA 23060-6711

SUBJECT: NOTIFICATION OF SURRY POWER STATION, UNITS 1 AND 2 COMPONENT
DESIGN BASES INSPECTION - NRC INSPECTION REPORT
05000280/2014007, 05000281/2014007

Dear Mr. Heacock:

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 (CDBI) at your Surry Power Station, Units 1 and 2, during the weeks of August 18 – 22, September 8 – 12, and September 22 – 26, 2014. Eric Stamm, a Senior Reactor Inspector from the NRC's Region II Office, will lead the inspection team. This inspection will be conducted in accordance with the baseline inspection procedure, Procedure 71111.21, "Component Design Bases Inspection," issued November 29, 2013.

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 April 21, 2014, Mr. Stamm confirmed with Mr. Barry Garber 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 July 28 – August 1, 2014
- Onsite weeks: August 18 – 22, September 8 – 12, and September 22 – 26, 2014

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. George MacDonald, a Region II Senior Reactor Analyst, will support Mr. Stamm 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 July 14, 2014.

Additional documents will be requested during the information-gathering visit. The inspectors will try to minimize your administrative burden by specifically identifying only those documents required for inspection preparation. The additional information will need to be available to the team in the Region II Office prior to the inspection team's preparation week of August 11, 2014. Mr. Stamm 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 Title 10 of the *Code of Federal Regulations* 2.390, "Public Inspections, Exemptions, Requests for Withholding," 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's Public Document Room or from the Publicly Available Records (PARS) component of the NRC's Agencywide Documents Access and Management 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. Stamm at 404-997-4575 or contact me at 404-997-4530.

Sincerely,

RA

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

Docket Nos.: 50-280, 50-281
License Nos.: DPR-32, DPR-37

Enclosure:
Information Request for Surry Power
Station, Units 1 and 2 Component
Design Bases Inspection

cc: Distribution via Listserv

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Rebecca L. Nease, Chief
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x PUBLICLY AVAILABLE NON-PUBLICLY AVAILABLE SENSITIVE x NON-SENSITIVE
ADAMS: x Yes ACCESSION NUMBER: _____ x SUNSI REVIEW COMPLETE FORM 665 ATTACHED

OFFICE	RII:DRS	RII:DRS					
SIGNATURE	RA	RA					
NAME	E. STAMM	R. NEASE					
DATE	4/22/2014	4/22/2014					
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\BRANCH INSPECTION
FILES\2014-2015-2016 CYCLE INSPECTION FOLDER FOR ALL SITES\SURRY\2014 CDBI\SURRY CDBI
2014007 NOTIFICATION LETTER.DOCX

INFORMATION REQUEST FOR SURRY POWER STATION, UNITS 1 AND 2 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 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 PSA including external events and fires:
 - a. Two risk rankings of components from your site-specific PSA: one sorted by 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 December 1, 2011, 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, and motor-operated valve 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 December 1, 2011.
8. List and brief description of safety-related structures, systems, or components (SSCs) design modifications implemented since December 1, 2011.
9. List and brief description of common-cause component failures that have occurred since December 1, 2011.
10. List and brief description of operability evaluations completed since December 1, 2011.

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 Regulatory Issue Summary 05-020.
13. List and reason for equipment classified in maintenance rule (a)(1) status from December 1, 2011, to present.
14. Copies of system descriptions (or the design basis documents) for safety-related systems.
15. Copy of Updated Final Safety Analysis Report.
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 performed since December 1, 2011.
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 July 28, 2014)
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. Piping and instrumentation diagrams (P&IDs) for safety-related systems. (Electronic and 1/2 size – hard copy week of July 28, 2014)
27. Index and Legend for P&IDs.
28. Copy of Operability Determination procedure(s).
29. Copies of corrective action documents (i.e. condition reports) associated with findings from previous CDBI. (If applicable)
30. Index (procedure number, title, and current revision) of station Emergency Operating Procedures, Abnormal Operating Procedures, and Annunciator Response Procedures.
31. Copy of any self-assessments performed in preparation for this inspection.

- 32. List of any condition reports generated in preparation for this inspection.
- 33. Copies of condition reports generated from previous CDBI (2011).
- 34. Contact information for a person to discuss PSA information prior to the information-gathering trip. (Name, title, phone number, and e-mail address)