



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

April 16, 2015

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

**SUBJECT: NOTIFICATION OF NORTH ANNA POWER STATION - COMPONENT DESIGN  
BASES INSPECTION – U.S. NUCLEAR REGULATORY COMMISSION  
INSPECTION REPORT 05000338/2015007 AND 05000339/2015007**

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 North Anna Power Station during the weeks of July 20 - 24, August 3 - 7, and August 17 - 21, 2015. Geoffrey Ottenberg, a Senior Reactor Inspector from the NRC's Region II Office, will lead the inspection team. This inspection will be conducted in accordance with Inspection 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 7, 2015, the staff confirmed with Mr. J. Leberstien 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 June 29 – July 3, 2015
- Onsite weeks: July 20 – 24, August 3 – 7, and August 17 – 21, 2015

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. Geoffrey Ottenberg, a Senior Reactor Inspector, will be conducting all preparation activities associated with the inspection. In addition, Mr. George MacDonald, a Region II Senior Reactor Analyst, will support Mr. Ottenberg 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 June 15, 2015.

Additional documents may 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 July 13, 2015. During the information-gathering trip, Mr. Ottenberg 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 Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC website 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. Ottenberg at 404-997-4658 or contact me at 404-997-4607.

Sincerely,

*/RA/*

Jonathan Bartley, Chief  
Engineering Branch 1  
Division of Reactor Safety

Docket Nos: 50-338, 50-339  
License Nos: NPF-4, NPF-7

Enclosure:  
Information Request for North Anna Power  
Station, Component Design Bases Inspection

cc: Distribution via Listserv

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PUBLICLY AVAILABLE      NON-PUBLICLY AVAILABLE/SENSITIVE       NON-SENSITIVE  
ADAMS:  Yes      ACCESSION NUMBER: **ML15107A022**       SUNSI REVIEW COMPLETE      FORM 665 ATTACHED

OFFICE	RII:DRS	RII:DRS					
SIGNATURE	<b>GKO</b>	<b>JHB1</b>					
NAME	<b>G. Ottenberg</b>	<b>J. Bartley</b>					
DATE	<b>4/16/2015</b>	<b>4/16/2015</b>					
E-MAIL COPY?	YES    NO	YES    NO					

## INFORMATION REQUEST FOR NORTH ANNA POWER STATION 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 July 1, 2012, 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.).
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, 2012.
8. List and brief description of safety-related structures, systems, or components (SSCs) design modifications implemented since July 1, 2012.
9. List and brief description of common-cause component failures that have occurred since July 1, 2012.
10. 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).

Enclosure

11. List and brief description of equipment currently in degraded or nonconforming status as described in NRC Inspection Manual Chapter 0326, Operability Determinations and Functionality Assessments for Conditions Adverse to Quality or Safety, issued January 31, 2014.
12. List and reason for equipment classified in maintenance rule (a)(1) status from July 1, 2012, to present.
13. Copy of Updated Final Safety Analysis Report.
14. Copy of Technical Specification(s).
15. Copy of Technical Specifications Bases.
16. Copy of Technical Requirements Manual(s).
17. List and brief description of Root Cause Evaluations performed since July 1, 2012.
18. Corrective Action Program Procedure(s).
19. Copy of Operability Determination procedure(s).
20. One-line diagram of electrical plant. (Electronic and full size – hard copy week of June 29 – July 3, 2015)
21. Index and legend for electrical plant one-line diagrams.
22. Piping and instrumentation diagrams (P&IDs) for safety-related systems. (Electronic and 1/2 size – hard copy week of June 29 – July 3, 2015)
23. Index and Legend for P&IDs.
24. Copies of corrective action documents (i.e. CRs) associated with findings from previous CDBI. (If applicable)
25. Index (procedure number, title, and current revision) of station Emergency Operating Procedures, Abnormal Operating Procedures, and Annunciator Response Procedures.
26. Copy of any self-assessments performed in preparation for this inspection.
27. List of any condition reports generated in preparation for this inspection.
28. Copies of condition reports generated from previous CDBI (2012).
29. Contact information for a person to discuss PSA information prior to and during the information-gathering trip. (Name, title, phone number, and e-mail address)