



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

July 11, 2016

Mr. B. Keith Taber, VP Nuclear Plant Site  
Southern Nuclear Operating Co., Inc.  
Vogtle Electric Generating Plant  
7821 River Road  
Waynesboro, GA 30830

**SUBJECT: NOTIFICATION OF VOGTLE ELECTRIC GENERATING PLANT, UNITS 1  
AND 2 - NRC COMPONENT DESIGN BASES INSPECTION -  
INSPECTION REPORT 05000424/2016007 AND 05000425/2016007**

Dear Mr. Taber:

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 Vogtle Electric Generating Plant during the weeks of October 03 - 07, October 17 - 21, and October 31 – November 04, 2016. Theodore Fanelli, 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.

On July 7, 2016, Mr. Fanelli notified Mr. Walden, 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 August 29 - September 01, 2016
- Onsite weeks: October 03 - 07, October 17 - 21, and October 31 – November 04, 2016

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 accompany Mr. Fanelli during the information-gathering visit to review probabilistic risk assessment data and identify risk significant components that will be examined during the inspection. In addition, during the onsite weeks, time will be needed on the plant-referenced simulator in order to facilitate the development of operator action-based scenarios.

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 August 25, 2016. Contact Mr. Fanelli 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 available to the team in the Region II office on or before September 22, 2016, to support the inspection teams preparation week. Mr. Fanelli 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. Fanelli at 404-997-4433 or me at 404-997-4607.

Sincerely,

*/RA/*

Jonathan H. Bartley, Chief  
Engineering Branch 1  
Division of Reactor Safety

Docket Nos. 50-424, 50-425  
License Nos. NPF-68, NPF-81

Enclosure:  
Information Request for Vogtle Electric Generating Plant –  
Component Design Bases Inspection

cc: Distribution via Listserv

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PUBLICLY AVAILABLE       NON-PUBLICLY AVAILABLE       SENSITIVE       NON-SENSITIVE  
ADAMS:  Yes      ACCESSION NUMBER \_\_\_\_\_       SUNSI REVIEW COMPLETE       FORM 665 ATTACHED

OFFICE	RII:DRS	RII:DRS						
SIGNATURE	TNF1	JHB1						
NAME	TFANELLI	JBARTLEY						
DATE	7/5/2016	7/11/2016		7/ /2016	7/ /2016	7/ /2016	7/ /2016	7/ /
E-MAIL COPY?	YES NO	YES NO		YES NO	YES NO	YES NO	YES NO	YES

## INFORMATION REQUEST FOR VOGTLE ELECTRIC GENERATING PLANT, UNITS 1 AND 2 COMPONENT DESIGN BASES INSPECTION

Please provide the information electronically in searchable “.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. The requested item below identified with (\*) should have a date range from January 1, 2013 until the present. The morning of the bagman site visit, please make available items 1 through 4 and 27 through 30 below.

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 cut-sets
  - c. A list of the top 500 LERF contributors
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 cut-sets
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 revised (significant) Emergency and Abnormal Operating Procedures 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.)
8. \*List and brief description of safety-related structures, systems, or components (SSCs) design modifications implemented
9. \*List and brief description of Root Cause Evaluations performed
10. \*List and brief description of common-cause component failures that have occurred

Enclosure

11. List and brief description of equipment currently in degraded or nonconforming status as described in NRC Inspection Manual Chapter 0326, issued December 3, 2015
12. \*List and brief description of Operability Determinations and Functionality Assessments
13. \*List and reason for equipment that has been classified in maintenance rule (a)(1) status
14. \*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) along with dates added or removed from the issues list
15. List of current "operator work arounds/burdens"
16. Copy of Updated Final Safety Analysis Report
17. Copy of Technical Specification(s)
18. Copy of Technical Specifications Bases
19. Copy of Technical Requirements Manual(s)
20. Copy of the Quality Assurance Program Manual
21. Copy of systems Design Bases Documents
22. Copy of Corrective Action Program Procedure(s)
23. Copy of Operability Determination Procedure(s)
24. Copy of In-service Testing Program Procedure(s)
25. List of motor operated valves and air operated valves in the valve program, and their associated design margin and risk ranking
26. Primary AC and DC calculations for safety-related buses
27. One-line diagram of electrical plant. (Electronic and full size – hard copy for use on the bagman visit and to take back to the office)
28. Index and legend for electrical plant one-line diagrams
29. Piping and instrumentation diagrams (P&IDs) for safety-related systems. (Electronic and 1/2 size – hard copy for use on the bagman visit and to take back to the office)
30. Index and Legend for P&IDs
31. Index (procedure number, title, and current revision) of station Emergency Operating Procedures, Abnormal Operating Procedures, and Annunciator Response Procedures

32. Copies of corrective action documents generated from previous CDBI
33. Copy of any self-assessments performed in preparation for current and previous CDBI
34. List of corrective action documents generated in preparation for this inspection
35. 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)

## LIST OF ACRONYMS

AC	Alternating Current
AOP	Abnormal Operating Procedure
ARP	Annunciator Response Procedure
CDBI	Component Design Basis Inspection
DC	Direct Current
ECCS	Emergency Core Cooling System
EOP	Emergency Operating Procedure
FTP	File Transfer Protocol
NRC	Nuclear Regulatory Commission
OE	Operating Experience
P&ID	Piping and Instrumentation Diagram
PRA	Probabilistic Risk Assessment
PSA	Probabilistic Safety Assessment
RAW	Risk Achievement Worth
RIS	Regulatory Issue Summary
SSC	Structure, System or Component
UFSAR	Updated Final Safety Analysis Report