



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**

REGION III  
2443 WARRENVILLE ROAD, SUITE 210  
LISLE, IL 60532-4352

July 21, 2009

Mr. Barry Allen  
Site Vice President  
FirstEnergy Nuclear Operating Company  
Davis-Besse Nuclear Power Station  
5501 North State Route 2, Mail Stop A-DB-3080  
Oak Harbor, OH 43449-9760

**SUBJECT: DAVIS-BESSE NUCLEAR POWER STATION - REQUEST FOR INFORMATION  
FOR AN NRC TRIENNIAL BASELINE COMPONENT DESIGN BASES  
INSPECTION (CDBI) INSPECTION REPORT 05000346/2009007(DRS)**

Dear Mr. Allen:

On October 19, 2009, the NRC will begin a triennial baseline Component Design Bases Inspection (CDBI) at the Davis-Besse Nuclear Power Station. A team of six inspectors will perform this 3-week inspection. This inspection will be performed in accordance with NRC Baseline Inspection Procedure (IP) 71111.21.

The CDBI focuses on components that have high risk and low design margins. The components to be reviewed during this baseline inspection will be identified during an in-office preparation week prior to the first week of the on-site inspection. In addition, a number of risk significant operator actions and operating experience issues, associated with the component samples, will also be selected for review.

The inspection will include three weeks on-site. The inspection team will consist of six NRC inspectors, of which five will focus on engineering and one on operations. The current inspection schedule is as follows:

- On-site weeks: October 19–23, 2009;  
November 2–6, 2009; and  
November 16–20, 2009.

The team will be preparing for the inspection, mainly during the week of October 13, 2009, as discussed in the attached enclosure. A Region III Senior Reactor Analyst may accompany the inspection team during the week of October 19, 2009, to review probabilistic risk assessment data, and assist in identifying risk significant components, which will be reviewed during the inspection.

Experience with previous baseline design inspections of similar depth and length has shown that this type of inspection is extremely resource intensive, both for the NRC inspectors and the licensee staff. In order to minimize the inspection impact on the site and to ensure a productive inspection for both parties, we have enclosed a request for information needed for the inspection.

It is important that all of these documents are up to date and complete in order to minimize the number of additional documents requested during the preparation and/or the on-site portions of the inspection. Insofar as possible, this information should be provided electronically to the lead inspector. The information request has been divided into three groups:

- The first group lists information necessary for our initial inspection scoping activities. This information should be provided to the lead inspector no later than September 8, 2009. By September 25, 2009, the lead inspector will communicate the initial selected set of approximately 30 high risk components.
- The second group of documents requested is those items needed to support our in-office preparation activities. This set of documents, including the calculations associated with the initial selected components, should be provided to the lead inspector at the Regional Office no later than October 9, 2009. During the in-office preparation activities, the team may identify additional information needed to support the inspection.
- The last group includes the additional information above as well as plant specific reference material. This information should be available to the team onsite on October 19, 2009. It is also requested that corrective action documents and/or questions developed during the inspection be provided to the lead inspector as the documents are generated.

The lead inspector for this inspection is Mr. R. Langstaff. We understand that our licensing contact for this inspection is Mr. T. Chowdhary of your organization. If there are any questions about the inspection or the material requested in the enclosure, please contact the lead inspector at (630) 829-9747 or via e-mail at [ronald.langstaff@nrc.gov](mailto:ronald.langstaff@nrc.gov).

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), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA/

Ann Marie Stone, Chief  
Engineering Branch 2  
Division of Reactor Safety

Docket No. 50-346  
License No. NPF-3

Enclosure: Information Request for Component Design Bases Inspection (CDBI)

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Sincerely,  
/RA/  
Ann Marie Stone, Chief  
Engineering Branch 2  
Division of Reactor Safety

Docket No. 50-346  
License No. NPF-3

Enclosure: Information Request for Component Design Bases Inspection (CDBI)

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OFFICE:	RIII		RIII		RIII		RIII	
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DATE:	07/17/09		07/21/09					

**OFFICIAL RECORD COPY**

Letter to Mr. Barry Allen from Ms. Ann Marie Stone dated July 21, 2009.

SUBJECT: DAVIS-BESSE NUCLEAR POWER STATION - REQUEST FOR  
INFORMATION FOR AN NRC TRIENNIAL BASELINE COMPONENT  
DESIGN BASES INSPECTION (CDBI) INSPECTION REPORT  
05000346/2009007(DRS)

cc w/encl: The Honorable Dennis Kucinich  
J. Hagan, President and Chief  
Nuclear Officer - FENOC  
J. Lash, Senior Vice President of  
Operations and Chief Operating Officer - FENOC  
Manager - Site Regulatory Compliance - FENOC  
D. Pace, Senior Vice President of  
Fleet Engineering - FENOC  
K. Fili, Vice President, Fleet Oversight - FENOC  
P. Harden, Vice President, Nuclear Support  
D. Jenkins, Attorney, FirstEnergy Corp.  
Director, Fleet Regulatory Affairs - FENOC  
Manager - Fleet Licensing - FENOC  
C. O'Claire, State Liaison Officer, Ohio Emergency Management Agency  
R. Owen, Administrator, Ohio Department of Health  
Public Utilities Commission of Ohio  
President, Lucas County Board of Commissioners  
President, Ottawa County Board of Commissioners

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**INFORMATION REQUEST FOR  
COMPONENT DESIGN BASES INSPECTION (CDBI)**

**Inspection Report:** Inspection Report 05000346/2009007(DRS)

**Inspection Dates:** October 19 - 23, 2009;  
November 2 - 6, 2009; and  
November 16 - 20

**Inspection Procedure:** IP 71111.21 "Component Design Bases Inspection"

**Lead Inspector:** Ronald Langstaff, Lead Inspector  
(630) 829-9747  
ronald.langstaff@nrc.gov

***I. Information Requested Prior to the On-site Information Gathering/Inspection Week***

The following information is requested by September 8, 2009, or sooner, to facilitate inspection preparation. If you have any questions regarding this information, please call the team leader as soon as possible. (Please provide the information electronically in "pdf" files, Excel, or other searchable formats, preferably on some portable electronic media (e.g., CDROM, DVD, etc.). The portable electronic media should contain descriptive names, and be indexed and hyperlinked to facilitate ease of use. Information in "lists" should contain enough information to be easily understood by someone who has knowledge of light water reactor technology).

1. Risk ranking of top 150 components from your site specific probabilistic safety analysis (PSA) sorted by Risk Achievement Worth (RAW). Include values for Birnbaum Importance, Risk Reduction Worth (RRW), and Fussell-Veseley (FV) (as applicable).
2. Provide a list of the top 200 cut-sets from your PSA.
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. List of time critical operator actions. Identify those actions that do not have job performance measures (JPMs).
5. If you have an External Events or Fire PSA Model, provide the information requested in Items 1 and 2 for external events and fire. Provide narrative description of each coded event (including fire, flood zone description).

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COMPONENT DESIGN BASES INSPECTION (CDBI)**

6. Any pre-existing evaluation or list of components and associated 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 etc.).
7. List of available design (setup) margins in both the open and closed direction (identify safety-related direction) for valves in the motor-operated valve (MOV) and air-operated valve (AOV) programs. Identify the basis for how the margin was determined.
8. List of high risk Maintenance Rule systems/components based on engineering or expert panel judgment (i.e., those systems/components not identified in the PRA).
9. Structures, systems, and components (SSCs) in the Maintenance Rule (a)(1) category for the last 3 years.
10. Site top ten issues list (if applicable).
11. A list of operating experience evaluations for the last 3 years.
12. Information of any common cause failure of components experienced in the last 5 years at your facility.
13. List of Root Cause Evaluations associated with component failures or design issues initiated/completed in the last 5 years.
14. List of open operability evaluations.
15. Current management and engineering organizational chart.
16. Electronic copies of Updated Safety Analysis Report, Technical Specifications, Technical Specifications Bases, and Technical Requirements Manual.
17. Major one line electrical drawings (ac and dc) and key diagrams (paper copies).
18. Electronic copy of P&IDs (if available).

**II. Information requested (for the approx. 30 selected components) to be available by October 9, 2009, (will be reviewed by the team in the Regional office during the week of October 13, 2009).**

This information should be separated for each selected component, especially if provided electronically (e.g., folder with component name that includes calculations, condition reports, maintenance history, etc.).

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COMPONENT DESIGN BASES INSPECTION (CDBI)**

1. List of condition reports (corrective action documents) associated with each of the selected components for the last 4 years.
2. The corrective maintenance history associated with each of the selected components for the last 4 years.
3. Copies of calculations associated with each of the selected components (if not previously provided), excluding data files. Please review the calculations and also provide copies of important referenced material (such as drawings, engineering requests, and vendor letters).
4. System Health Reports, System Descriptions, Design Basis Documents, and/or Training Lesson Plans which are associated with each of the selected components.
5. A list of modifications, including equivalency evaluations and setpoint changes, associated with each of the selected components. This list should include a descriptive paragraph on the purpose of the modification. Please ensure this list only includes design completed (not canceled) modifications.
6. Copies of operability evaluations (open/closed for last 3 years) associated with each of the selected components and plans for restoring operability, if applicable.
7. Copies of selected operator work-around evaluations associated with each of the selected components and plans for resolution, if applicable.
8. Copies of any open temporary modifications associated with each of the selected components, if applicable.
9. Trend data on the selected electrical/mechanical components' performance for last 3 years (For example, pumps' performance including in-service testing, other vibration monitoring, oil sample results, etc., as applicable).
10. A copy of any internal/external self-assessments and associated corrective action documents generated in preparation for the inspection.
11. A copy of engineering/operations related audits completed in the last 2 years.
12. Provide list of PRA assumptions regarding operator actions and the associated procedures.
13. Provide copies of any simulator scenarios, lesson plans, or job performance measures for the selected operator actions.



**INFORMATION REQUEST FOR  
COMPONENT DESIGN BASES INSPECTION (CDBI)**

14. Provide copies of the results of any time-dependent simulator scenarios or job performance measures for operator crews/individuals for the selected operator actions.
15. Provide copies of the emergency operating procedures, normal and abnormal operating procedures and any alarm response procedures for the selected operator actions. Also provide copies of the conduct for operations and operability determination procedures.

**III. *Additional Information to be provided on October 19, 2009, on-site (for final 15–20 selected components)***

During the in-office preparation activities, the team will be making final selections and may identify additional information needed to support the inspection. The lead inspector will provide a list of the additional information needed during the week of October 13, 2009.

**IV. *Information Requested to be provided throughout the inspection***

1. Copies of any corrective action documents generated as a result of the team's questions or queries during this inspection.
2. Copies of the list of questions submitted by the team members and the status/resolution of the information requested (provide daily during the inspection to each team member).
3. One complete set of P&IDs (paper copies).
4. Reference materials. (make available if needed during all on-site weeks):
  - IPE/PRA report;
  - Procurement documents for components selected (verify retrievable);
  - Plant procedures (normal, abnormal, emergency, surveillance, etc.); and
  - Vendor manuals.

If you have questions regarding the information requested, please contact the lead inspector.