



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-4005

August 16, 2007

Stewart B. Minahan
President-Nuclear and CNO
Nebraska Public Power District
72676 648A Avenue
Brownville, NE 68321

SUBJECT: COOPER NUCLEAR STATION - INFORMATION REQUEST FOR NRC
BIENNIAL BASELINE COMPONENT DESIGN BASES INSPECTION (NRC
INSPECTION REPORT 05000298/2007011)

Dear Mr. Minahan:

On October 1, 2007, the NRC will begin a biennial baseline Component Design Bases Inspection at the Cooper Nuclear Station. A team of six inspectors plus a team leader, will perform this 3-week inspection. This inspection will be performed in accordance with revised NRC Baseline Inspection Procedure 71111.21 and replaces the biennial Safety System Design and Performance Capability inspection.

The component design bases inspection focuses on components that have high risk and low design margins. The components to be reviewed during this baseline inspection will mainly be identified during an information gathering visit and during the subsequent in-office preparation week. 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 be 4-weeks onsite, including the information gathering site visit and 3-weeks of onsite inspection. The inspection will consist of six NRC inspectors, of which five will focus on engineering and one on operations. The current inspection schedule is as follows:

- Onsite information gathering visit: Week of September 17, 2007
- Onsite weeks: October 1, 22 and 29, 2007

The purpose of the information gathering visit is to meet with members of your staff to identify potential risk-significant components and operator actions. The lead inspector will also request a tour of the plant with a member of your probabilistic risk analyst or operations staff. Additional information and documentation needed to support the inspection will also be identified. A Region IV senior reactor analyst was requested and may accompany the inspection team during the information gathering visit 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 these type of inspections are 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, we have enclosed a request for information needed for the inspection. The request has been divided into three groups. The first group lists information necessary for the information gathering visit and for general preparation. This information should be available to the regional office no later than September 11, 2007. Insofar as possible, this information should be provided electronically to the lead inspector. Since the inspection will be concentrated on high risk/low margin component, calculations associated with your list of high risk components should be available for the inspectors to review during the information gathering visit to assist in our selection of components based on available design margin.

The second group of documents requested are those items that the team will need access when onsite and after components are selected. The third group lists information necessary to aid the inspection team in tracking issues identified as a result of the inspection. It is requested that this information be provided to the lead inspector as the information is generated during the inspection. It is important that all of these documents are up to date and completed in order to minimize the number of additional documents requested during the preparation and/or the onsite portions of the inspection. In order to facilitate the inspection, we request that a contact individual be assigned to each inspector to ensure information requests, questions, and concerns are addressed in a timely manner.

The lead inspector for this inspection is Mr. John Reynoso. We understand that our licensing engineer contact for this inspection is Mr. Jim Flaherty. If there are any questions about the inspection or the requested materials, please contact the lead inspector at (817) 860-8154 or via e-mail at jpr2@nrc.gov.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter will be made 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).

Sincerely,

/RA/

William B. Jones, Chief
Engineering Branch One
Division of Reactor Safety

Docket: 50-298
License: DPR-46

Enclosure:
Component Design Basis Inspection
Document Request

Nebraska Public Power District

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SUNSI Review Completed: ___Y___ ADAMS: ☒ Yes ☐ No Initials: _JPR____
☒ Publicly Available ☐ Non-Publicly Available ☐ Sensitive ☒ Non-Sensitive

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JPreynoso	WBJones			
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**INFORMATION REQUEST FOR COOPER NUCLEAR STATION
COMPONENT DESIGN BASES INSPECTION (CDBI)**

Inspection Report: 05000298/2007011

Information Gathering Dates: September 18-20, 2007

On-site Inspection Dates: October 1-5, 2007, October 22 through November 2, 2007

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

Lead Inspector/Team Leader: John Reynoso
817-860-8154
jpr2@nrc.gov

I. Information Requested Prior to the information Gathering Visit

The following information is requested by September 11, 2007, or sooner, to facilitate inspection preparation. If you have any questions regarding this information, please call the lead inspector as soon as possible. (Please provide the information electronically in "pdf" files, Excel, or other searchable formats. The information 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 a knowledge of boiling water reactor technology).

1. An excel spreadsheet of equipment basic events (with definitions) including importance measures risk achievement worth, Fusselly-Veseley (RAW, FV) from your internal events probabilistic risk assessment (PRA), including risk ranking of top 50 components from your site-specific PRA sorted by (RAW). Include values for Birnbaum Importance, risk reduction worth (RRW), and Fussell-Veseley FV (as applicable).
2. Provide a list of the top 500 cut-sets from your PRA.
3. Copies of PRA system notebooks.
4. An excel spreadsheet of PRA human action basic events or risk ranking of operator actions from your site specific PSA sorted by RAW and FV. Provide copies of your human reliability worksheets for these items.
5. If you have an external events or fire PSA model, provide the information requested in items 1-3 for external events and fire.

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 high risk maintenance rule systems/components and functions; based on engineering or expert panel judgement.
8. A list of operating experience evaluations for the last 2 years.
9. Any pre-existing evaluation or list of components and calculations with low design margins (i.e., pumps closest to the design limit for flow or pressure, diesel generators close to design required output, heat exchangers close to rated design heat removal, etc.).
10. A list of permanent and temporary modifications sorted by component identified in Item 1.
11. List of current "operator work arounds."
12. A list of the design calculations, which provide the design margin information for components included in Item 1. (Calculations should be available during the information gathering visit).
13. List of root cause evaluations associated with component failures or design issues initiated/completed in the last 5 years.
14. Current management and engineering organizational charts.
15. Cooper IPEEE, if available electronically.
16. Mechanical piping drawings for:
 - ▶ Engineered safety features
 - ▶ Emergency core cooling Systems
 - ▶ Emergency diesel generators
17. Electrical one-line drawings for:
 - ▶ Offsite power/switchyard supplies
 - ▶ Normal ac power systems
 - ▶ Emergency ac/dc power systems including 120Vac power, and 125Vdc/24Vdc safety class systems
18. List of any common-cause failures of components in the last 3 years.

II. Information Requested to be Available on First Day of Inspection (October 1, 2007)

1. List of condition reports (corrective action documents) associated with each of the selected components for the last 5 years.
2. The corrective maintenance history associated with each of the selected components for the last 2 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 reference material (such as drawings, engineering requests, vendor letters).
4. Copies of operability evaluations associated with each of the selected components and plans for restoring operability, if applicable.
5. Copies of selected operator work-around evaluations associated with each of the selected components and plans for resolution, if applicable.
6. Copies of any open temporary modifications associated with each of the selected components, if applicable.
7. 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).
8. A copy of any internal/external self-assessments and associated corrective action documents generated in preparation for the inspection.
9. A copy of engineering/operations related audits completed in the last 2 years.
10. List of motor operated valves (MOVs) in the program, design margin and risk ranking.
11. List of air operated valves (AOVs) in the valve program, design and risk ranking.
12. Structure, system and components in the Maintenance Rule (a)(1) category.
13. Site top 10 issues list.
14. Provide list of PRA assumptions regarding operator actions and the associated procedures.
15. List of licensee contacts for the inspection team with pager or phone numbers.

III. 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. Reference materials (available electronically and as needed during all onsite weeks):
 - General set of plant drawings
 - IPE/PRA report
 - Procurement documents for components selected
 - Plant procedures (normal, abnormal, emergency, surveillance, etc.)
 - Technical Specifications
 - Updated Final Safety Analysis Report
 - Vendor manuals