

January 23, 2006

Mr. Gary Van Middlesworth
Site Vice-President
Duane Arnold Energy Center
Nuclear Management Company, LLC
3277 DAEC Road
Palo, IA 52324

SUBJECT: DUANE ARNOLD ENERGY CENTER - INFORMATION REQUEST FOR AN
NRC BIENNIAL BASELINE COMPONENT DESIGN BASES INSPECTION
(CDBI) 05000331/2006007(DRS)

Dear Mr. Middlesworth:

On March 20, 2006, the NRC will begin a biennial baseline Component Design Bases Inspection (CDBI) at the Duane Arnold Energy Center. A team of six inspectors 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 CDBI inspection focuses on components which 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 include 4-weeks on-site, including the information gathering site visit and 3-weeks of on-site inspection. 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 Information gathering visit: Week of March 6, 2006
- On-site weeks: March 20, 2006, April 3, 2006, and April 17, 2006

The purpose of the information gathering visits, is to meet with members of your staff to identify potential risk-significant components, and operator actions. Additional information and documentation needed to support the inspection will also be identified. A Region III Senior Reactor Analyst will 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 for both parties, 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 a productive information gathering visit and for general preparation. This information should be available to the Regional Office by no later than February 24, 2006. Insofar as possible, this information should be provided electronically to the lead inspector. Since the inspection will concentrate on high risk/low margin components, 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 which the team will need access to when on-site. 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 complete in order to minimize the number of additional documents requested during the preparation and/or the on-site 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. Zelig Falevits. We understand that our regulatory affairs contact for this inspection is Mr. Robert Murrell 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) 829-9717 or via e-mail at zxf@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). ADAMS is 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. 50-331
License No. NPF-49

Enclosure: Component Design Bases Inspection (CDBI) Document Request

cc w/encl: E. Protsch, Executive Vice President -
Energy Delivery, Alliant;
President, IES Utilities, Inc.
C. Anderson, Senior Vice President, Group Operations
J. Cowan, Executive Vice President and Chief Nuclear Officer
J. Bjorseth, Site Director
D. Curtland, Plant Manager
S. Catron, Manager, Regulatory Affairs
J. Rogoff, Vice President, Counsel, & Secretary
B. Lacy, Nuclear Asset Manager
Chairman, Linn County Board of Supervisors
Chairperson, Iowa Utilities Board
The Honorable Charles W. Larson, Jr.
Iowa State Senator
D. Flater, Chief, Iowa Department of Public Health
D. McGhee, Iowa Department of Public Health

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 Chairman, Linn County Board of Supervisors
 Chairperson, Iowa Utilities Board
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NAME	ZFalevits:	BBurgess	AMStone	
DATE	1/23/06	1/23/06	1/23/06	

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**INFORMATION REQUEST FOR DUANE ARNOLD ENERGY CENTER
COMPONENT DESIGN BASES INSPECTION (CDBI)**

Inspection Report: 05000331/2006007(DRS)

Information Gathering Dates: March 7-10, 2006

Inspection Dates: March 20-24, 2006, April 3-7, 2006, and April 17-21, 2006

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

Lead Inspector: Zelig Falevits, Lead Inspector
(630) 829-9717
(zxf@nrc.gov)

I. Information Requested Prior to the Information Gathering Visit

The following information is requested by February 24, 2006, 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 CDROM. The CDROM 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. Risk ranking of top 50 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 500 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. If you have an External Events or Fire PSA Model, provide the information requested in Items 1 and 2 for external events and fire.
5. 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.).
6. List of high risk Maintenance Rule systems/components based on engineering or expert panel judgement.
7. A list of operating experience evaluations for the last 3 years.

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8. A list of modifications sorted by component identified in item 1.
9. Information of any common cause failure of components experienced in the last 5 years at your facility.
10. 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).
11. List of Root Cause Evaluations associated with component failures or design issues initiated/completed in the last 5 years.
12. Current management and engineering organizational chart.

II. Information Requested to be Available on First Day of Inspection (March 20, 2006)

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 referenced 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 three 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 MOVs in the program, design margin and risk ranking.

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11. List of AOVs in the AOV program, design margin and risk ranking.
12. SSCs in the maintenance rule (a)(1) category.
13. Site Top Ten issues list.
14. Provide list of PRA assumptions regarding operator actions and the associated procedures.

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 (make available if needed during all on-site weeks):
 - General set of plant drawings;
 - IPE/PRA report;
 - Procurement documents for components selected (verify retrievable);
 - Plant procedures (normal, abnormal, emergency, surveillance, etc.);
 - Technical Specifications;
 - Updated Final Safety Analysis Report; and
 - Vendor manuals.

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