

July 8, 2005

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

SUBJECT: DUANE ARNOLD ENERGY CENTER - ANNOUNCEMENT OF BASELINE
INSPECTION AND INFORMATION REQUEST FOR AN NRC HEAT SINK
PERFORMANCE BASELINE INSPECTION

Dear Mr. Peifer:

On October 3, 2005, the U.S. Nuclear Regulatory Commission (NRC) will begin the required biennial inspection of heat sink performance at your Duane Arnold Energy Center. The date for the start of this inspection was changed from the original schedule as stated in the annual assessment letter. This change was discussed with your staff to ensure there were no conflicts with the plant's schedule. This inspection will be performed in accordance with the NRC baseline inspection procedure 71111.07. The heat exchangers to be reviewed during the inspection are the High Pressure Coolant Injection and Reactor Core Isolation Cooling Room Coolers.

In order to minimize the impact that the inspection has on the site and to ensure a productive inspection for both sides, we have enclosed a request for documents needed for the inspection. The documents have been divided into two groups. The first group lists information necessary in order to ensure the inspector is adequately prepared for the inspection. This information should be available to the Regional Office by no later than September 26, 2005. Insofar as possible, this information should be provided electronically to the lead inspector.

The second group of documents requested are those items which the inspector will review or need access to during the inspection. It is important that these documents be as complete as possible, in order to minimize the number of documents requested during the preparation week or during the onsite inspection.

The lead inspector for this inspection is Ms. Caroline Acosta Acevedo. We understand that our regulatory contact for this inspection is Mr. Bob Murrell of your organization. If there are any questions about the material requested, or the inspection, please call the lead inspector at (630) 829-9718 or e-mail her at cea4@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. DPR-49

Enclosure: Initial 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

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. DPR-49

Enclosure: Initial 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

DOCUMENT NAME: G:DRS\ML051890386.wpd

To receive a copy of this document, indicate in the box: "C" = Copy without attachment/enclosure "E" = Copy with attachment/enclosure "N" = No copy

OFFICE	RIII	RIII	RIII		
NAME	CAcostaAcevedo:tr	BBurgess	AMStone		
DATE	07/08/05	07/08/05	07/08/05		

OFFICIAL RECORD COPY

ADAMS Distribution:

WDR

DWS

RidsNrrDipmlipb

GEG

KGO

GAW1

DRPIII

DRSIII

PLB1

JRK1

Initial Document Request

I. Information Requested Expeditiously

The following information is requested to be provided as soon as possible, but no later than September 26, 2005, to support the biennial "Heat Sink Performance" inspection procedure 71111.07. Information should be provided for the selected heat exchangers: **High Pressure Coolant Injection (HPCI) and Reactor Core Isolation Cooling (RCIC) Room Coolers**. Insofar as possible, information should be provided electronically.

1. Copies of the procedures used to monitor or inspect heat exchanger performance;
2. A list of issues, with a short description, associated with heat exchangers, heat sinks, silting, corrosion, fouling, or heat exchanger testing that are documented in your corrective action system (last 5 years);
3. Copy of system description and/or design basis document for the heat exchangers under review (as applicable);
4. A system health report or other information showing the maintenance rule categorization of the safety-related service water system; and
5. A piping and instrumentation diagram (or other similar flow diagram) showing the layout and components serviced by the safety-related service water system.

II. Information Requested to be Available on First Day of Inspection

We request that the following information be available to the inspector once she arrives on-site October 3, 2005:

1. Copy of the evaluations of data for the two most recent completed tests or as-found inspection results confirming the thermal performance for the HPCI and RCIC pump room coolers;
2. Copy of the calculation which establishes the limiting (maximum) design basis heat load which is required to be removed by each of these heat exchangers;
3. Copy of the calculation which correlates surveillance testing results from these heat exchangers with design basis heat removal capability (e.g., basis for surveillance test acceptance criteria);
4. The clean and inspection maintenance schedule for each heat exchanger, including justifications for the schedule if it has been increased since the GL 89-13 program was implemented;
5. Copy of the document describing the inspection results for the last two clean and inspection activities completed on each heat exchanger;

Initial Document Request

6. Copy of the document which identifies the current number of tubes in service for each heat exchanger and the supporting calculation which establishes the maximum number of tubes which can be plugged in each heat exchanger;
7. Copy of the document establishing the repair criteria (plugging limit) for degraded tubes which are identified in each heat exchanger;
8. Copy of the design specification and heat exchanger data sheets for each heat exchanger;
9. Copy of the vendor/component drawing for each heat exchanger;
10. Information regarding any alarms which monitor on-line performance of these room coolers (such as high room temperatures) and associated response procedures;
11. Copy of the calculations which evaluate the potential for water hammer or excessive tube vibration in the heat exchanger or associated piping;
12. Copy of heat exchanger performance trending data tracked for each heat exchanger;
13. Copies of those documents that describe the methods taken to control water chemistry in the service water system, including any provisions for controlling biotic fouling;
14. Copy of the calculation which establishes the design reservoir capacity of the ultimate heat sink;
15. Copy of the last completed surveillance procedure which verifies the design reservoir capacity of the ultimate heat sink and which ensures that the ultimate heat sink and service water system are free from clogging due to macrofouling (silt, dead mussel shells, debris, etc.);
16. Copy of the procedure and last test results which show that the overall functionality of the ultimate heat sink and service water system in relation to minimum wall thickness corrosion or erosion, especially in low flow areas; and
17. Copies of procedures which address ultimate heat sink functionality during adverse weather conditions, such as extreme cold or hot temperatures, or during incursion of seasonal aquatic material, such as lake grass or fish runs.

If the information requested above will not be available, please contact Caroline Acosta Acevedo as soon as possible at (630) 829-9718 or e-mail - cea4@NRC.gov.