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John F. Franz, Jr.
Vice President, Nuclear

November 17, 1995
NG-95-3234

Mr. William T. Russell, Director
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Attn.: Document Control Desk
Mail Station P1-37
Washington, DC 20555-0001

Subject: Duane Arnold Energy Center
Docket No: 50-331
Op. License No: DPR-49
Response to NRC Generic Letter (GL) 92-01, Revision 1, Supplement 1:
Reactor Vessel Structural Integrity

Reference: 1) Letter from J. Franz (IES) to W. Russell (NRC),
NG-95-2603, dated August 17, 1995
2) Letter from J. Beckham (BWR Vessel & Internals Project) to
U.S. NRC, dated November 15, 1995; Subject: Response to
Information Requests in NRC GL 92-01, Revision 1, Supplement 1

File: A-101b, B-11

Dear Mr. Russell:

Generic Letter (GL) 92-01, Revision 1, Supplement 1, "Reactor Vessel Structural Integrity" was issued on May 19, 1995. This GL requested that licensees review available data pertinent to the analysis of reactor pressure vessel (RPV) structural integrity and assess the impact on their RPV integrity analyses.

Licensees were requested to provide the NRC with certain information within 90 days. IES Utilities provided this information in Reference 1. In that letter, we committed to review the Reactor Vessel Integrity Database (RVID) for discrepancies with the Duane Arnold Energy Center (DAEC) data. We have reviewed the RVID; no discrepancies were identified. Additional information which was requested within six months of the Generic Letter is included in the attachment.

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An IES Industries Company

Mr. William T. Russell

NG-95-3234

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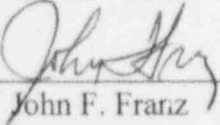
The BWR Vessel & Internals Project (VIP) has provided a generic response (Reference 2) to the requests in the GL. We have reviewed this report to ensure it accurately reflects DAEC data. We will continue to work closely with the BWR VIP in their efforts to resolve RPV integrity concerns.

Should you have any questions regarding this matter, please contact this office.

This letter is true and accurate to the best of my knowledge and belief.

IES UTILITIES INC.

By



John F. Franz

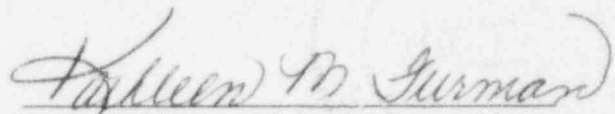
Vice President, Nuclear

State of Iowa

(County) of Linn

Signed and sworn to before me on this 20 day of November, 1995,

by John F. Franz



Notary Public in and for the State of Iowa

September 28, 1998
Commission Expires

Attachment

JFF/CJR/cjr

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cc: C. Rushworth
L. Liu
B. Fisher
D. Mineck
G. Kelly (NRC-NRR)
H. Miller (Region III)
NRC Resident Office
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**IES UTILITIES INC. RESPONSE TO
GL 92-01, REVISION 1, SUPPLEMENT 1**

NRC Request 2:

An assessment of any change in best-estimate chemistry based on consideration of all relevant data.

IES Utilities Response:

We have worked closely with the BWR Vessel and Internals Project (BWR VIP) in their efforts to address the NRC concerns identified in the Generic Letter. Based on the additional data collected by the VIP, there is no change in the chemistry of the beltline plates and/or the weld metal used and reported in our earlier transmittals for the beltline welds for the Duane Arnold Energy Center (DAEC). Therefore, the DAEC Pressure-Temperature (P-T) curves have not changed.

NRC Request 3:

A determination of the need for use of the ratio procedure in accordance with the established Position 2.1 of Regulatory Guide 1.99, Revision 2, for those licensees that use surveillance data to provide a basis for the RPV integrity evaluation.

IES Utilities Response:

The DAEC has only one set of surveillance data; therefore this is not a near-term issue for the DAEC. We plan to remove our second set of surveillance samples during Refueling Outage 14 which is currently scheduled to begin in October, 1996. At that time, we will make a determination on whether use of the ratio procedure is appropriate. We will continue to support the BWR VIP in their participation in the industry effort to address this long term methodology issue.

NRC Request 4:

A written report providing any newly acquired data as specified above and (1) the results of any necessary revisions to the evaluation of RPV integrity in accordance with the requirements of 10 CFR 50.60, 10 CFR 50.61, Appendices G and H to 10 CFR Part 50, and any potential impact on the LTOP or P-T limits in the technical specifications or (2) a certification that previously submitted evaluations remain valid. Revised evaluations and certifications should include consideration of Position 2.1 of Regulatory Guide 1.99, Revision 2, as applicable, and any new data.

IES Utilities Response:

The BWR Owners' Group Equivalent Margin Analysis (EMA) uses a bounding analysis to demonstrate adequacy of Upper Shelf Energy. To assure that the analysis remains bounding, the BWR VIP report (Reference 2) reviewed the bounding values of Cu for each plant, looking at all beltline welds. Updated values of fluence were also reviewed, since power uprate evaluations or surveillance capsule results might have increased the fluence for a plant. The BWR VIP report demonstrates that for the currently known variations in weld Cu content, the EMA is still bounding for all US BWR/2-6 plants.

The BWR VIP report also evaluated the impact of weld chemistry variability on P-T curves. The DAEC was identified as having chemistry variability covered by the Margin term in RG 1.99, Revision 2, and therefore not affected.

No new data has been identified which would invalidate previously submitted evaluations for the DAEC. Should new data be found, we will evaluate the impact on RPV integrity, as appropriate, and report those findings to you.