



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

50-331

March 31, 1999

Mr. Eliot Protsch
President
IES Utilities Inc.
200 First Street, SE
P.O. Box 351
Cedar Rapids, IA 52406-0351

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION ON GENERIC LETTER 95-07,
"PRESSURE-LOCKING AND THERMAL-BINDING OF SAFETY-RELATED
POWER-OPERATED GATE VALVES," DUANE ARNOLD ENERGY CENTER
(TAC NO. M93460)

Dear Mr. Protsch:

On August 17, 1995, the NRC issued Generic Letter (GL) 95-07, "Pressure Locking and Thermal Binding of Safety-Related Power-Operated Gate Valves," to request that licensees take actions to ensure those safety-related power-operated gate valves that are susceptible to pressure locking or thermal binding are capable of performing their safety functions.

In a letter dated February 13, 1996, IES Utilities (the licensee) submitted its 180-day response to GL 95-07 for Duane Arnold Energy Center (DAEC). The NRC staff reviewed the licensee's submittal and requested additional information in a letter dated May 31, 1996. By letter dated July 3, 1996, the licensee provided the additional information.

The NRC staff has reviewed the licensee's submittals regarding GL 95-07 for DAEC, and has determined that additional information is necessary to complete our review. We request that you provide the additional information as identified in the enclosure within 30 days of the date of this letter.

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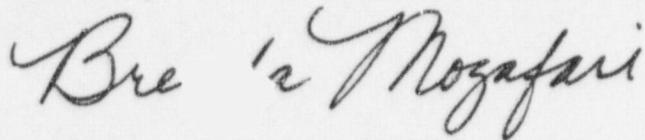
NRC FILE CENTER COPY

Mr. Eliot Protsch

- 2 -

Your timely response to the request for additional information (RAI) will assist us in meeting our schedule. This RAI and the schedule have been discussed with Robert Murrell of your staff. If you have any questions regarding this issue, please contact me at 301-415-2020.

Sincerely,

A handwritten signature in cursive script that reads "Brenda L. Mozafari".

Brenda L. Mozafari, Project Manager
Project Directorate III-1
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-331

Enclosure: As stated

cc w/encl.: See next page

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Sincerely,

Original signed by:

Brenda L. Mozafari, Project Manager
Project Directorate III-1
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-331

Enclosure: As stated

cc w/encl.: See next page

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OFFICE	PM:PD31	E	LA:PD31	E
NAME	B.Mozafari	<i>BM</i>	E.Barnhill	<i>EB</i>
DATE	3/31/99		3/20/99	

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Sincerely,

Original signed by:

Brenda L. Mozafari, Project Manager
Project Directorate III-1
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

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OFFICE	PM:PD31	E	LA:PD31	E
NAME	B.Mozafari <i>BRM</i>		E.Barnhill <i>EB</i>	
DATE	3/31/99		3/20/99	

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Mr. Eliot Protsch
IES Utilities Inc.

Duane Arnold Energy Center

cc:

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REQUEST FOR ADDITIONAL INFORMATION
REGARDING GENERIC LETTER 96-05 RESPONSE
FOR THE DUANE ARNOLD ENERGY CENTER

DOCKET NO. 50-331

1. In NRC Inspection Report No. 50-331/95011, the NRC staff closed its review of the motor-operated valve (MOV) program implemented at the Duane Arnold Energy Center (DAEC) in response to Generic Letter (GL) 89-10, "Safety-Related Motor-Operated Valve Testing and Surveillance." In the inspection report, the NRC staff noted certain aspects of the licensee's MOV program that would be addressed over the long term. For example, the NRC staff noted that (1) the licensee would be expected to review applicable information following completion of the NRC staff's evaluation of the Electric Power Research Institute (EPRI) MOV Performance Prediction Methodology and to take appropriate action, as necessary; and (2) the licensee would need to supplement its test data regarding its assumptions for stem lubricant degradation and load sensitive behavior as part of its long-term MOV program. Since then, the NRC staff has completed its review of the EPRI MOV program as described in a safety evaluation (SE) dated March 15, 1996, and an SE supplement dated February 20, 1997.

Describe the actions taken to address the specific long-term aspects of the MOV program at DAEC that were noted in the NRC inspection report.

2. In a letter dated June 25, 1996, to the licensee, the NRC staff provided its SE related to the licensee's removal of 17 MOVs from the GL 89-10 program at DAEC. Those 17 MOVs have safety-related functions but are normally in their safety position. In the SE, the NRC staff concluded that the 17 MOVs are subject to the requirement that they be capable of returning to their safety position (if they are out of their safety position for surveillance or testing) or the provisions of the appropriate Technical Specifications (TS) for the systems (or trains) out of service must be followed. The NRC staff also noted that the licensee needed to address any applicable containment isolation or pipe break isolation requirements for these MOVs. In the SE, the NRC staff concluded that the commitments made by the licensee as discussed in NRC Inspection Report 95011 and subsequent licensee letters provided adequate confidence that the licensee had demonstrated and would maintain capability of the 17 MOVs to return to their safety position under accident conditions. The NRC staff noted that the licensee would be expected to take appropriate action according to its TS if plant or industry information revealed that these MOVs were not capable of returning to their safety position. Finally, the NRC staff stated that the licensee would be expected to periodically evaluate the capability of these MOVs to return to their safety position as part of its long-term MOV program. In its letter dated March 17, 1997, in response to GL 96-05, the licensee reported that the periodic verification criteria for the 17 MOVs would be as follows:
(1) torque switch settings shall be maintained not less than previously tested values,
(2) industry operating experience and data feedback will be evaluated to determine if

Enclosure

any adjustments to control switch settings are required, and (3) if torque switch setting adjustments are required, adjustments will be performed during the next appropriate scheduled maintenance activity, but periodic verification dynamic or static diagnostic testing will not be performed on these MOVs. Although the NRC staff recognizes the low risk significance of these MOVs, it is not apparent that the licensee's stated periodic verification criteria will provide confidence that these MOVs will be capable of returning to their safety position without (1) plans for performing required switch setting adjustments promptly, (2) any specified MOV operation under dynamic conditions, or (3) any future diagnostic testing.

Describe the bases for its confidence that (1) these MOVs will continue to be capable of returning to their safety position, (2) any degradation in MOV performance will be identified prior to causing the MOVs to be incapable of returning to their safety position, and (3) any action necessary to ensure MOV capability will be taken in a timely manner.

3. The JOG program focuses on the potential age-related increase in the thrust or torque required to operate valves under their design-basis conditions. In the NRC SE dated October 30, 1997, on the JOG program, the NRC staff specified that licensees are responsible for addressing the thrust or torque delivered by the MOV motor actuator and its potential degradation.

Describe the plan at Duane Arnold for ensuring adequate MOV motor actuator output capability, including consideration of recent guidance in Limitorque Technical Update 98-01 and its Supplement 1.