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John F. Franz, Jr.  
Vice President, Nuclear

November 30, 1995  
NG-95-3121

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  
Request for Technical Specification Change (RTS-287): "Implementation of Option I-D Reactor Stability Solution"

References: Franz (IE) to Russell (NRC), NG-94-3152, "IES Utilities' Response to NRC Generic Letter 94-02, 'Long-Term Solutions and Upgrade of Interim Operating Recommendations for Thermal-hydraulic Instabilities in Boiling Water Reactors'," dated September 9, 1994.

File: A-117

Dear Mr. Russell:

By letter dated September 9, 1994 (Reference) IES Utilities Inc. committed to submit the following by December 31, 1995 to support the Duane Arnold Energy Center's (DAEC's) long-term thermal-hydraulic instability solution: 1) a plant-specific Licensing Topical Report (LTR) in support of the BWR Owner's Group's "Regional Exclusion with Flow-Biased APRM Neutron Flux Scram" (Option I-D) as the long-term solution for the DAEC, 2) proposed Technical Specification changes necessary to implement Option I-D and 3) a technical description of the stability predictor, a software program for assessing the margin from unstable core oscillations, including any related administrative controls.

Enclosed are the DAEC's plant-specific LTR which demonstrates the applicability of Option I-D as an appropriate long term stability solution for the DAEC (attachment 1), a request for Technical Specification changes (below) necessary to implement Option I-D, and a technical description of ODYSY (attachment 3), the analytical model used in the SOLOMON on-line stability predictor software. The DAEC has committed to install and make the stability predictor operational within 90 days following the end of the 1996 refueling outage. The technical description, ODYSY Description and Qualification, GE NE-523-A038-0495, is a General Electric Company proprietary report which contains

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information which the General Electric Company customarily maintains in confidence and withholds from public disclosure. As such, it has been handled and classified as proprietary to General Electric. The confidential information has been identified in the report by vertical bars within the margins. As indicated in the attached affidavit (attachment 2), we hereby request that GE NE-523-A038-0495, be withheld from public disclosure in accordance with the provisions of 10 CFR 2.790(a)(4).

It is our current intent to operate SOLOMON continuously when the reactor is at power and to administratively restrict plant operation in certain areas of the power/flow map when SOLOMON is off-line.

In addition to implementing the Option I-D stability solution, the proposed revision to the Technical Specifications makes changes to specifically require that the reactor be scrammed in the event the reactor operates in natural circulation, a newly defined condition, and to prohibit restarting a recirculation pump while in natural circulation. Also, the proposed change will remove core plate differential pressure noise surveillance requirements for single recirculation pump operation which are not related to thermal hydraulic instability or reactor safety.

This letter and application for revision to the Technical Specifications for the DAEC have been reviewed by the DAEC Operations Committee and the DAEC Safety Committee. A copy of this submittal, including the analysis of no significant hazards consideration for the requested Technical Specification revision, is being forwarded to our appointed state official pursuant to the requirements of 10 CFR 50.91.

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

By John F. Franz  
John F. Franz  
Vice President, Nuclear

State of Iowa  
(County) of Linn

Signed and sworn to before me on this 30 day of November, 1995,

by John Franz.



Debra J. Schwenker  
Notary Public in and for the State of Iowa

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Commission Expires

- Attachments: 1) Licensing Topical Report: Application of the "Regional Exclusion With Flow-Biased APRM Neutron Flux Scram" Stability Solution (Option I-D) to the Duane Arnold Energy Center, GENE-A00-04021-01
- 2) General Electric Affidavit of Proprietary Information
- 3) Technical Description of Stability Predictor: ODYSY Description and Qualification, GE-NE-523-A038-0495
- 4) Evaluation of Change with Respect to 10 CFR 50.92
- 5) Proposed Change (RTS-287) to the Duane Arnold Energy Center Technical Specifications
- 6) Safety Assessment
- 7) Environmental Consideration

JFF/LLS

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cc: L. Sueper  
L. Liu w/Attachments 4-7  
B. Fisher w/Attachments 4-7  
G. Kelly (NRC-NRR)  
H. Miller (Region III)  
S. Brown (State of Iowa)  
NRC Resident Office  
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