

John F. Franz, Jr. /ice President, Nuclear

November 1, 1994 NG-94-3658

Mr. William T. Russell, Director Office of Nuclear Reactor Regulation U. S. Nuclear Regulatory Commission Attn: Document Control Desk Mail Station P1-137 Washington, DC 20555

> Subject: Duane Arnold Energy Center Docket No: 50-331
> Op. License No: DPR-49
> Semiannual Report for the "Plan for the Integrated Scheduling of Plant Modifications for the Duane Arnold Energy Center"
> Reference: 1) J. Franz letter to W. Russell dated May 6, 1994, NG-94-1438, Semiannual Report for the "Plan for the Integrated Scheduling of Plant Modifications for the Duane Arnold Energy Center"
> File: A-278

Dear Mr. Russell:

This letter and attachments provide the semiannual report required by Section V.A. of the "Plan for the Integrated Scheduling of Plant Modifications for the Duane Arnold Energy Center" (the Integrated Plan). This report summarizes our progress in implementing Schedule A and B items, identifies the changes since the last report, and provides updated schedules.

None of the items which were listed on Schedules A and B transmitted with the last update (Reference 1), have been completed during this reporting period.

Attachment 1 identifies a change which involves an extension to a schedule B item.

Updated Schedules A and B are included as Attachment 2. For each item listed, the specific implementation date is stated and, if applicable, reference is made to the NRC correspondence supporting this date. Also, brief descriptions of those Schedule B items which are not specifically described in other correspondence are included as Attachment 3.

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General Office • P.O. Box 351 • Cedar Rapids, Iowa 52406 • 319/398-4411 An IES INDUSTRIES Company Mr. William T. Russell November 1, 1994 NG-94-3658 Page 2

Please inform us if you have any questions or comments concerning this submittal.

Very truly yours,

John F. Franz Vice President, Nuclear

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- Attachments: 1. Revisions to the Integrated Plan Schedule
 - 2. Updated Schedules A and B
 - 3. Description of Selected Schedule B Items
- D. Barta CC:
 - L. Liu

L. Root A. Hsia (NRC-NRR) J. Martin (Region III)

NRC Resident Office

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REVISIONS TO THE INTEGRATED PLAN SCHEDULE

Reference:

 J. Franz letter to W. Russell dated May 20, 1994, NG-94-1445, Request for Schedule Extension to Complete Letter (GL) 89-10 Activities

Item No.

Description of Item

B10

Safety-Related MOV Operability/Testing (GL 89-10)

Phase 2: Completion of Static/Dynamic Testing

Explanation of Revision

Reference 1 requested a schedule extension to complete Generic Letter (GL) 89-10 activities for the Motor-Operated Valves (MOVs) in the IES Utilities Inc. GL 89-10 Program. An extension beyond the original completion date is required in order for the new program plan to be implemented properly. The proposed schedule would extend the original completion date of June 28, 1994, to 120 days after completion of the next refueling outage (RFO 13), scheduled to begin in February 1995. Completion within 120 days after the refueling outage will allow a sufficient period of time for finalization of GL 89-10 supporting documents. This extension request is currently under consideration for approval by the NRC.

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INTEGRATED PLAN SCHEDULE

| | 19 | 994 | 1995 | 1996 | 1997 | 1998 | 1999 |
|----------------|--|--------|-----------|----------------|-----------------------------------|------------------|----------|
| Item Number | Schedule A | -Cvcle | 13 | Cvcle 14 | Cycle 1 | 5 | Cycle 16 |
| Number | | | R | | R | R | |
| A2 | •Revision to DAEC Maintenance Program to reflect new Maintenance Rule (10 CFR 50.65) | | E- | | •07/10/96 | E | |
| | | | F | | F | F | |
| | Schedule B NRC Items | | υ | | U | υ | |
| | NAC LEGINS | - | E | | E | E | |
| | •Safety-Related MOV Operability/Testing (GL 89-10) | | L | | L | L | |
| B10 | Phase 2: Completion of Static/Dynamic Testing | •0 | 6/28/94 (| (Note 1) | | | |
| B11 | •Verification of Seismic Adequacy of Mechanical and Electrical Equipment (USI A-46, GL 87-02) | | 0 | • 11/21/ | 95 (NG-92-3961 0 | .) 0 | |
| B14 | Individual Plant Examination of External Events (IPEEE)(GL 88-20) | | | • 11/21/ | 95 (NG-92-5238 | 1) U T | |
| | •Reg. Guide 1.97 Modifications | | T | | T | 1 | |
| B50 | Instrumentation Upgrades | | A G | Prior to Cycle | A 14 Startup (N G | IG-92-2629) G | |
| B51 | Neutron Monitoring System Upgrades | | | | G - • Prior to C (NG-93-207 | Cycle 15 Sta | irtup |
| | • Thermo-lag Fire Barriers (GL 92-08) | | E | | (10 55 20) | | |
| B52 | Replace Identified Miscellaneous Applications of Thermo-lag | | | - •07/01/95 (| NG-94-0563) | | |
| B53 | Resolve Thermo-lag issues at DAEC | | | | 12/31/9 | 6 (NG-94-05 | 563) |

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INTEGRATED PLAN SCHEDULE

| | | 1994 1 | 995 | 1996 | 1997 19 | 998 1999 |
|--------|--|------------|-------------|--------------|------------------|-----------|
| | | | 1 | | | 1 1 |
| Item | Schedule B | | | | | |
| Number | IESUI Initiative Items | -Cycle 13- | R | Cycle 14 | Cycle 15 R | RCycle 16 |
| | ·Long-Term Electrical Enhancements | | E | | E | Е |
| B21 | Electrical Distribution System Model Enhancements | | | 12/31/9 | | F |
| | | | U | | U | U |
| B22 | Electrical System Configuration Management Enhancements | | | | E | Е |
| | •Ultrasonic Examination of Reactor Vessel Beltling Region Welds | 9 | L | | L | L |
| 828 | Phase 3: Vessel Weld Examination | | • Prio | r to Cycle 1 | 14 Startup (Note | 2) |
| | • Scram Frequency Reduction | | | | | |
| | | | U | | U | U |
| B33 | Turbine Electro-Hydraulic Control (EHC) System Improvements | | • Prio T | r to Cycle 1 | I4 Startup T | т |
| | *Long-term Instrument & Control Strategy | | A | | A | A |
| B34 | Instrument Setpoint Program | | • 0 | 6/01/95 | G | G |
| | ·Long-Term Commitment Tracking Program | | E | | E | E |
| B41 | Phase 2: Implementation of Plan | | | 12/31/9 | 95 | |

NOTE 1: A schedule extension request is currently under consideration for approval by the NRC. Once approved, the due date will be changed to RFO 13 + 120 days.
NOTE 2: Once RTS-261 has been approved, the due date will be changed to prior to Cycle 15 Startup.

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DESCRIPTION OF SELECTED SCHEDULE B ITEMS

Schedule B

I. NRC Items

Safety-Related MOV Operability/Testing (GL 89-10)

This program provides for the testing, inspection and maintenance of MOVs as defined in GL 89-10 (and supplements thereto) to ensure they will function when subjected to conditions that are to be considered during both normal operation and abnormal events within the design basis of the plant.

Phase 2: Completion of Static/Dynamic Testing (B10)

This project involves the static and dynamic testing portion of the GL 89-10 program. Documentation and descriptions of actual test methods and justifications for the applicable methodology will be included in this phase.

A request for extension to the schedule for this item is currently under consideration for approval by the NRC.

II. IES Utilities Inc. (IESUI) INITIATIVE ITEMS

The following descriptions of IESUI Initiative Items are based on preliminary evaluations of project scope and content. As these projects progress in their planning and implementation, it is expected that actual project scope for some IESUI Initiative items will deviate from the project scope described herein. Minor deviations from the following project descriptions will not be considered as deviations or changes to the Integrated Plan. We will, however, continue to advise the staff of significant changes to project scope or changes in scheduled completion dates.

Long-Term Electrical Enhancements

Electrical Distribution System Model Enhancements (B21)

This project involves expanding the computer model to include the remaining lower-voltage AC circuits, motor overloads, and breaker and fuse coordination schemes.

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Electrical System Configuration Management Enhancements (B22)

This project involves developing a new data base which combines the existing data with the electrical equipment data base developed in items 1 and 2 of the "Power Systems Analysis - Basic Model Development" project into a long-term configuration management program.

Ultrasonic Examination of Reactor Vessel Beltline Region Welds

Phase 3: Performance of Vessel Examination (B28)

This 10 year ISI exam of the Reactor Pressure Vessel welds will be conducted in accordance with the governing requirements and regulations required by ASME Section XI and 10 CFR 50.55a.

The 10 CFR 50.55a ruling in Federal Register 57 FR 34666, dated August 6, 1992, imposes an augmented examination of reactor vessel shell welds. According to this ruling "Licensees with fewer than 40 months remaining in the inservice inspection interval in effect on September 8, 1992 may extend that interval in accordance with the provisions of Section XI (1989 Edition) IWA-2430(d) for the purpose of implementing the augmented examination during that interval." IWA-2430(d) allows inspection intervals to be extended by as much as 1 year.

As noted in DAEC's Technical Specification (TS) Bases 3.6-36 the second 10-year interval for inservice inspections commenced on November 1, 1985 and is scheduled to end on October 31, 1995. TS Revision RTS-261, which was submitted on May 6, 1994, will allow our current ISI interval to be extended by one year, until November 1, 1996, in accordance with the ruling in Federal Register 57 FR 34666 and the requirements of ASME Section XI (1989 Edition) IWA-2430(d). This ISI interval extension will allow the due date for this item to be changed to prior to Cycle 15 Startup. This will allow for additional time which is necessary to develop a strategy for implementing the required examinations.

Scram Frequency Reduction

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The purpose of this project is to examine and implement improvements to lower the scram rate of our plant. In 1989, we formed a Scram Frequency Reduction group to review plant operating experience and industry reports and identify improvements in equipment, communications, procedures, and personnel training that can be made to reduce our scram rate in order to be consistent with industry goals. Examples of improvements that have been implemented are the conversion of some turbine trip logic from single incidence to coincident logic (i.e. two-out-

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of-three logic) and installation of solenoid failure detection for MSIVs and turbine master trip solenoids. Additionally, the following modifications are planned:

Turbine Electro-Hydraulic Control (EHC) System Improvements (B33)

A review of DAEC scram history (1979 - 1990) shows that over 30% of the reactor scrams have been initiated by the turbine/generator systems. The purpose of these modifications is to reduce reactor scrams due to single failure within the EHC system electronics.

Long-Term Instrument and Control Strategy

Instrument Setpoint Program (B34)

The purpose of this program is to reconstitute the design bases for the instrument setpoints contained in Technical Specifications, and upgrade to the extent practical to new methodology using the ISA 67.04 setpoint methodology. This effort will provide calculations that conform to the new ISA 67.04 methodology and provide the setpoint margins for applicable Technical Specification instruments. Tasks will include the formulation of detailed calculations and development of a topical design basis document detailing the setpoint methodology used at the DAEC.

Long-Term Commitment Tracking Program

Phase 2: Implementation of Plan (B41)

This phase of the Long-Term Commitment Tracking Program has involved activities such as researching industry good-practices, determining hardware and software needs, procuring hardware and software, and refinement of the program plan.

Included in this phase of the Long-Term Commitment Tracking Program will be data compilation and entry. This involves the assembly and input of historical and ongoing commitments and endorsements.

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