

U.S. NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT

REGION III

Report No. 50-331/81-07

Docket No. 50-331

License No. DPR-49

Licensee: Iowa Electric Light and Power Company
Post Office Box 351
Cedar Rapids, IA 52406

Facility Name: Duane Arnold Energy Center

Inspection At: Duane Arnold Energy Center
Palo, Iowa

Inspection Conducted: April 1 thru 30, 1981

Inspectors: *W. S. Little*
W. F. Christianson

W. S. Little
for L. S. Clardy

Approved By: *W. S. Little*
W. S. Little, Chief
Reactor Projects Section 2C

5/27/81

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Inspection Summary

Inspection on April 1 thru 31, 1981 (Report No. 50-331/81-07)

Areas Inspected: Routine inspection, review and observations of plant operations and maintenance, procedures, documentation and work performed. The inspection involved a total of 206 inspector-hours onsite by two NRC inspectors including 15 inspector-hours onsite during off-shifts.

Results: Of the areas inspected, no items of noncompliance were identified.

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DETAILS

1. Persons Contacted

Iowa Electric Light and Power Company (IE)

R. McGaughy, Director Nuclear Generation
*D. Mineck, Chief Engineer
*D. Wilson, Assistant Chief Engineer Operations, Acting
J. Vinqvist, Assistant Chief Engineer Technical, Acting
*B. York, Outage Manager
*D. Teply, Operations Supervisor
C. Mick, Assistant Operations Supervisor
*J. VanSickel, Technical Engineer
*K. Young, Radiation Protection Engineer
*L. Voss, Assistant Electrical Maintenance Supervisor, Acting
*R. McCracken, Quality Control Supervisor
*G. VanMiddlesworth, Reactor and Plant Performance Engineer

In addition, the inspectors interviewed several other licensee personnel including shift supervising engineers, control room operators, engineering personnel, administrative personnel, and contractor personnel (representing the licensee).

*Denotes those contacted at the exit interviews.

2. Inspection During Long Term Shutdown

The inspector observed control room operations, reviewed applicable logs and conducted discussions with control room operators during the month of April. The inspector verified surveillance tests required during the shutdown were accomplished, reviewed tagout records, and verified applicability of containment integrity. Tours of the accessible areas, including exterior areas were made to make independent assessments of equipment conditions, plant conditions, radiological controls, safety, and adherence to regulatory requirements and to verify that maintenance requests had been initiated for equipment in need of maintenance. The inspector observed plant housekeeping/cleanliness conditions, including potential fire hazards, and verified implementation of radiation protection controls. The inspector by observation and direct interview verified that the physical security plan was being implemented in accordance with the station security plan. The inspector reviewed the licensee's jumper/bypass controls to verify there were no conflicts with technical specifications and verified the implementation of radioactive waste system controls. The inspector witnessed portions of the radioactive waste systems controls associated with radwaste shipments and barreling.

No items of noncompliance were identified.

3. Surveillance - Refueling

The inspector observed the diesel generator inspection surveillance testing to verify that the tests were covered by properly approved procedures; that the procedures used were consistent with regulatory requirements, licensee commitments, and administrative controls; that minimum crew requirements were met, test prerequisites were completed, special test equipment was calibrated and in service, and required data was recorded for final review and analysis; that the qualifications of personnel conducting the test were adequate; and that the test results were adequate.

No items of noncompliance were identified.

4. IE Circular Followup

For the IE Circulars listed below, the inspector verified that the Circular was received by the licensee management, that a review for applicability was performed, and that if the circular was applicable to the facility, appropriate corrective actions were taken or were scheduled to be taken.

IEC 80-04	Closed
IEC 80-05	Closed
IEC 80-18	Closed
IEC 81-01	Closed
IEC 81-02	Closed

No items of noncompliance were identified.

5. Maintenance - Refueling

The inspector verified maintenance procedures include administrative approvals for removing and return of systems to service; hold points for inspection/audit and signoff by QA or other licensee personnel; provisions for operational testing following maintenance; provisions for special authorization and fire watch responsibilities for activities involving welding, open flame, and other ignition sources; reviews of material certifications; provisions for assuring LCO requirements were met during repair; provisions for housekeeping during and following maintenance; and responsibilities for reporting defects to management.

The inspector observed the maintenance activities listed below and verified work was accomplished in accordance with approved procedures and by qualified personnel.

HPCI System Inspection
RCIC System Inspection
Special Test Procedures 88 and 89
Core Spray Sparger Inspection

No items of noncompliance were identified.

6. Refueling Activities

The inspector verified that prior to the handling of fuel in the core, all surveillance testing required by the technical specifications and licensee's procedures had been completed; verified that during the outage the periodic testing of refueling related equipment was performed as required by technical specifications; observed all shifts of the fuel handling operations (removal, inspection and insertion) and verified the activities were performed in accordance with the technical specifications and approved procedures; verified that containment integrity was maintained as required by technical specifications; verified that good housekeeping was maintained on the refueling area; and, verified that staffing during refueling was in accordance with technical specifications and approved procedures.

No items of noncompliance were identified.

7. Licensee Event Reports Followup

Through direct observations, discussions with licensee personnel, and review of records, the following event reports were reviewed to determine that reportability requirements were fulfilled, immediate corrective action was accomplished, and corrective action to prevent recurrence had been accomplished in accordance with technical specifications.

LER 50-331/80-11 (Closed)

LER 50-331/80-12 (Closed)

LER 50-331/80-36 (Closed)

LER 50-331/80-44 (Closed)

LER 50-331/80-54 (Closed) - Examination of the relief valve revealed a bent second stage valve stem as the cause for the relief valve sticking open.

LER 50-331/81-02 (Closed)

LER 50-331/81-06 (Closed)

LER 50-331/81-08; 50-331/81-09; 50-331/81-10 (Closed) Each of these LER's occurred as a result of operator error. The inspectors have reviewed each with operators, technicians, and the plant management. LER 81-10 reported both standby fan units being mistakenly taken out of service for 10.5 hours. It was not clearly stated in LER 81-10 that both fan units were out of service. The inspectors verified that the LCO on the fan units was not violated. The problem with the lack of clarity in LER 81-10 was discussed with the licensee. In addition the inspectors interviewed and talked with

licensee operators, technicians, and management concerning operator error type problems.

LER 50-331/81-11 (Closed)

LER 50-331/81-05 (Closed)

8. TMI Related Items (NUREG 0737)

The inspector reviewed the TMI related items due for April, 1981 per TI 2515/42 for development and implementation per NUREG 0737, and licensee commitments.

- a. I.A.1.1.3. - STA Training
Verified that STA's have received training as described in the licensee's response to the NRC, dated October 30, 1979 and NUREG 0737, Item 3.
- b. I.A.2.1.4. - Upgrading of SRO and RO Training
Verified that training programs have been revised as discussed in paragraph A.2.C. and in accordance with the licensee commitments of August 1, 1980.
- c. I.C.5. - Feedback of Operating Experience
Verified implementation of procedures per ACP 1401.11 to meet the requirements of NUREG 0737.
- d. I.C.6. - Verification of Operating Activities
Verified implementation of procedures per ACP 1404.5 and 1404.6 to meet the requirements of NUREG 0737.
- e. II.B.4.2a. - Training for Mitigating Core Damage
Verified implementation of a training program, in accordance with references and licensee commitments, that meets the requirements of NUREG 0737.
- f. II.K.3.22a. - B&O Task Force
Verified that Operating Instruction 50 was developed (and in place) of RCIC suction from CST to suppression pool.

No items of noncompliance were identified.

9. Exit Interview

Due to the length of the inspection and the diversity of areas inspected, the exit interviews were conducted on a weekly basis between the NRC inspectors and the appropriate licensee personnel.

In each case the scope and findings of the individual inspection areas were summarized.