

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

REGION III

Report No. 50-331/81-09

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, IA

Inspection Conducted: May 1-31, 1981

Inspectors: *W. F. Christianson*

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

Inspection Summary

Inspection on May 1-31, 1981 (Report No. 50-331/81-09)

Areas Inspected: Routine inspection, review and observations of plant operations and maintenance, procedures, documentation and work performed. The inspection involved 206 inspector-hours onsite by two NRC inspectors, including 16 inspector-hours onsite during offshifts.

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

DETAILS

1. Persons Contacted

- *R. McGaughy, Director, Nuclear Generation
- *D. Mineck, Chief Engineer
- *D. Wilson, Assistant Chief Engineer Operations, Acting
- *J. Vinquist, 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
- *G. Van Middlesworth, Reactor and Plant Performance Engineer

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

*Denotes those present at the exit interview.

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 May. 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. 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 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.

Core Spray Sparger Inspections.
Steam Relief Valve Repairs.
Control Rod Drive 14-39 Replacement.
Control Rod Drive Friction Testing.

No items of noncompliance were identified.

4. Startup Testing - Refueling

The inspector observed the determination of Reactor Shutdown Margin Test and verified that the refueling outage startup testing was conducted in accordance with technically adequate procedures and that the facility was being operated within license limits.

No items of noncompliance were identified.

5. For the IE Bulletins listed below the inspector verified that the written response was within the time period stated in the bulletin, that the written response included the information required to be reported, that the written response included adequate corrective action commitments based on information presentation in the bulletin and the licensee's response, that licensee management forwarded copies of the written response to the appropriate onsite management representatives, that information discussed in the licensee's written response was accurate and that corrective action taken by the licensee was as described in the written response.

IEB 80-13: Cracking in Core Spray Spargers (Closed)

The inspector observed portions of the resolution testing and examinations of the core spray spargers and piping. The entire video tapes of the inspection were reviewed. No discrepancies were noted.

IEB 81-02: Failure of Gate Valves to Close (Closed)

The affected type valves are not used at DAEC.

IEB 81-03: Flow Blockage of Cooling Water to Safety Systems (Closed)

The inspector verified the licensee has taken appropriate action to determine if Corbicula or Mytilus were present in the vicinity of the station. A sampling program and record review indicated none have been or are present. The licensee will continue to sample on a semi-annual basis for these organisms.

6. Review of Plant Operations

The inspector verified by direct observation and record review that the HPCI and the Control Rod Drive systems were returned to an operating status prior to plant startup. The inspector also verified that plant startup, heatup and approach to criticality following the refueling outage were conducted in accordance with plant technical specifications and approved procedures.

No items of noncompliance were identified.

7. Startup Testing

The inspector verified that the licensee's startup test procedures for the modified steam relief and suppression pool systems are in conformance with regulatory requirements and licensee approved procedures and administrative controls.

No items of noncompliance were identified.

8. TMI Action Plan, IE Post Implementation Review

The inspector reviewed and evaluated the licensee's action on NUREG 0737 Items I.A.1.3, I.C.5, II.K.3.22a, and I.C.6. The actions were in accordance with guidelines established by NUREG 0737.

No discrepancies were noted.

In Item I.C.6, Verifying Correct Performance of Operating Activities, "Systems Important to Safety" is defined in Administrative Control Procedure 1404.5, Section 3.14 as "Plant Safety Systems and Fire Protection Systems in Safety Related Areas as Specified in the DAEC Technical Specifications."

Based on the licensee's interpretation and lack of a suitable definition of "Systems Important to Safety," the licensee meets the intent of I.C.6.

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.