

November 12, 1992

Docket No. 50-331

DISTRIBUTION:

Mr. Lee Liu
Chairman of the Board and
Chief Executive Officer
Iowa Electric Light and Power Company
Post Office Box 351
Cedar Rapids, Iowa 52406

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Dear Mr. Liu:

SUBJECT: AMENDMENT NO. 188 TO FACILITY OPERATING LICENSE NO. DPR-49
(TAC NO. M83345)

The Commission has issued the enclosed Amendment No. 188 to Facility Operating License No. DPR-49 for the Duane Arnold Energy Center. This amendment consists of changes to the Technical Specifications in response to your application dated April 22, 1992 and supplemented in another letter dated April 23, 1992.

The amendment revises the Technical Specifications by incorporating additional reactor water cleanup (RWCU) system leak detection instrumentation requirements.

A copy of the related Safety Evaluation is also enclosed. Notice of issuance will be included in the Commission's next biweekly Federal Register notice.

Sincerely,

ORIGINAL SIGNED BY ROBERT M. PULSIFER FOR:

Clyde Y. Shiraki, Sr. Project Manager
Project Directorate III-3
Division of Reactor Projects III/IV/V
Office of Nuclear Reactor Regulation

Enclosures:

- 1. Amendment No. 188 to License No. DPR-49
- 2. Safety Evaluation

190037

cc w/enclosures: See next page

LA:PD3-3:DRPW
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Mr. Lee Liu
Iowa Electric Light and Power Company

Duane Arnold Energy Center

cc:

Jack Newman, Esquire
Kathleen H. Shea, Esquire
Newman and Holtzinger
1615 L Street, N.W.
Washington, D.C. 20036

Chairman, Linn County
Board of Supervisors
Cedar Rapids, Iowa 52406

Iowa Electric Light and Power Company
ATTN: David L. Wilson
Plant Superintendent, Nuclear
3277 DAEC Road
Palo, Iowa 52324

Mr. John F. Franz, Jr.
Vice President, Nuclear
Duane Arnold Energy Center
3277 DAEC Road
Palo, Iowa 52324

Mr. Keith Young
Manager, Nuclear Licensing
Duane Arnold Energy Center
3277 DAEC Road
Palo, Iowa 52324

U.S. Nuclear Regulatory Commission
Resident Inspector's Office
Rural Route #1
Palo, Iowa 52324

Regional Administrator, Region III
U.S. Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, Illinois 60137

Mr. Stephen N. Brown
Utilities Division
Iowa Department of Commerce
Lucas Office Building, 5th Floor
Des Moines, Iowa 50319



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

IOWA ELECTRIC LIGHT AND POWER COMPANY
CENTRAL IOWA POWER COOPERATIVE
CORN BELT POWER COOPERATIVE

DOCKET NO. 50-331

DUANE ARNOLD ENERGY CENTER

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 188
License No. DPR-49

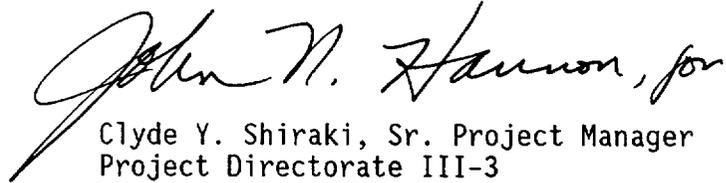
1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Iowa Electric Light and Power Company, et al., dated April 22, 1992 and supplemented by another letter dated April 23, 1992, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 2.C.(2) of Facility Operating License No. DPR-49 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 188, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. The license amendment is effective as of the date of issuance and shall be implemented within 30 days of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Clyde Y. Shiraki, Sr. Project Manager
Project Directorate III-3
Division of Reactor Projects III/IV/V
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of issuance: November 12, 1992

ATTACHMENT TO LICENSE AMENDMENT NO. 188

FACILITY OPERATING LICENSE NO. DPR-49

DOCKET NO. 50-331

Replace the following page of the Appendix A Technical Specifications with the enclosed page. The revised areas are indicated by marginal lines.

LIST OF AFFECTED PAGES

REMOVE

3.2-5a

INSERT

3.2-5a

TABLE 3.2-A

INSTRUMENTATION THAT INITIATES PRIMARY CONTAINMENT ISOLATION (continued)

Minimum No. of Operable Instrument Channels Per Trip System(1)	Instrument	Trip Level Setting	Number of Instrument Channels Provided by Design	Valve Groups Operated by Signal	Action(2)
1	Reactor Cleanup Area Ambient High Temperature	130°F	3	5	D
1	Reactor Cleanup Area Differential High Temperature	Δ14°F*	3	5	D
1	Reactor Cleanup Area Near TIP Room Ambient High Temperature	≤111.5°F	2	5	D
2	Loss of Main Condensor Vacuum	≤10 in Hg Vacuum	4	1	B
2	Reactor Low-Low Water Level	≥+119.5" indicated level (3)	4	8	A

*Note: The actual setpoint shall be 14°F above the 100% operation ambient temperature conditions as determined by DAEC Plant Test Procedure.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 188 TO FACILITY OPERATING LICENSE NO. DPR-49

IOWA ELECTRIC LIGHT AND POWER COMPANY
CENTRAL IOWA POWER COOPERATIVE
CORN BELT POWER COOPERATIVE

DUANE ARNOLD ENERGY CENTER

DOCKET NO. 50-331

1.0 INTRODUCTION

By letter dated April 22, 1992 and supplemented by another letter dated April 23, 1992, the licensee requested an amendment to its operating license to incorporate reactor water cleanup (RWCU) system leak detection instrumentation requirements into the Technical Specifications. An internal review had indicated that additional leak detection instrumentation was necessary for a 50-foot section of the 4-inch RWCU return line which is routed through the first floor of the reactor building. During the last refueling outage, the licensee installed the instrumentation, and administrative controls are currently in effect which require it to be maintained in an operable status consistent with the content of this amendment request.

2.0 EVALUATION

The Duane Arnold Energy Center (DAEC) currently has steam leak detection for the RWCU equipment rooms that includes high ambient temperature, high differential temperature and high differential flow detection. This instrumentation is reflected in Technical Specifications Table 3.2-A, "Instrumentation That Initiates Primary Containment Isolation."

The licensee has installed four dual element thermocouples to detect leaks along the entire run of the RWCU return piping which operate identically to those of the existing ambient temperature monitoring equipment for the RWCU system. The associated temperature switches provide redundant signals to Division I and Division II of the Primary Containment Isolation System (PCIS) logic and initiate automatic closure of the RWCU system isolation valves. Operational safety has been enhanced by the installation of the thermocouples and adding them to the TS will ensure their availability to provide leak detection and isolation capabilities for the RWCU system.

The trip setting for the new instrumentation provides maximum sensitivity to a postulated leak in RWCU piping while avoiding spurious isolations of the system and the " \leq " notation ensures conservative adjustment of the setpoint. Surveillance requirements for the new instrumentation are already addressed by the requirements of Table 4.2-A, Item 9, for reactor cleanup area high temperature.

The supplemental information in the letter dated April 23, 1992 was editorial in nature and did not contain substantive changes to the original submittal.

The staff has reviewed the licensee's submittal which requests changes to its technical specifications to incorporate the reactor water cleanup (RWCU) system leak detection instrumentation requirements. Based on its review, the staff concludes that the requested change is acceptable.

3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Iowa State official was notified of the proposed issuance of the amendment. The State official had no comments.

4.0 ENVIRONMENTAL CONSIDERATIONS

This amendment involves a change to a requirement with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 or a change to a surveillance requirement. The staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that this amendment involves no significant hazards consideration and there has been no public comment on such finding (57 FR 24673). Accordingly, this amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of this amendment.

5.0 CONCLUSION

The staff has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: C. Y. Shiraki

Date: November 12, 1992