

Docket No. 50-331

April 1, 1983

Mr. Duane Arnold
Chairman of the Board and Chief
Executive Officer
Iowa Electric Light and Power Company
P. O. Box 351
Cedar Rapids, Iowa 52406

Dear Mr. Arnold:

The Commission has issued the enclosed Amendment No. 85 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 November 18, 1982.

This amendment revises the Technical Specifications to allow the licensee to change the trip level setting requirements for the residual heat removal and core spray pump discharge pressure interlock.

Copies of the Safety Evaluation and Notice of Issuance are also enclosed.

Sincerely,

Frank L. Apicella, Project Manager
Operating Reactors Branch #2
Division of Licensing

Enclosures:

1. Amendment No. 85 to DPR-49
2. Safety Evaluation
3. Notice

cc w/enclosures:
See next page

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SURNAME	S. Norris	F. Apicella	D. Vassallo	G. Linnas	W. Paton		
DATE	3/17/83	3/17/83	3/18/83	3/18/83	3/21/83		

Mr. Duane Arnold
Iowa Electric Light & Power Company

cc:

Mr. Jack Newman, Esquire
Harold F. Reis, Esquire
Lowenstein, Newman, Reis and Axelrad
1025 Connecticut Avenue, N.W.
Washington, D. C. 20036

Office for Planning and Programming
523 East 12th Street
Des Moines, Iowa 50319

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

Iowa Electric Light & Power Company
ATTN: D. L. Mineck
P. O. Box 351
Cedar Rapids, Iowa 52406

U.S. Environmental Protection Agency
Region VII Office
Regional Radiation Representative
324 East 11th Street
Kansas City, Missouri 64106

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

James G. Keppler
Regional Administrator, Region III
U.S. Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, IL 60137



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. 85
License No. DPR-49

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Iowa Electric Light & Power Company, et al, dated November 18, 1982, 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 Appendices A and B, as revised through Amendment No. 85, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Domenic B. Vassallo, Chief
Operating Reactors Branch #2
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: April 1, 1983

ATTACHMENT TO LICENSE AMENDMENT NO. 85

FACILITY OPERATING LICENSE NO. DPR-49

DOCKET NO. 50-331

• Revise the Appendix A Technical Specifications by removing page 3.2-11 and inserting revised page 3.2-11. The revised areas are identified by vertical lines.

TABLE 3.2-B (Continued)

INSTRUMENTATION THAT INITIATES OR CONTROLS THE CORE AND CONTAINMENT COOLING SYSTEMS

Minimum No. of Operable Instrument Channels Per Trip System (1)	Trip Function	Trip Level Setting	Number of Instrument Channels Provided by Design	Remarks
1	Auto Blowdown Timer	120 sec <u>+</u> sec	2 timers	In conjunction with Low Reactor Water Level, High Drywell Pressure and LPCI or Core Spray Pump running interlock, initiates Auto Blowdown
2	RHR (LPCI) Pump Discharge Pressure Interlock	125 ⁺²⁵ psig	4 channels	Defers ADS actuation pending confirmation of Low Pressure core cooling system operation (LPCI or Core Spray Pump running interlock)
2	Core Spray Pump Discharge Pressure Interlock	145 ⁺²⁰ psig	4 channels	" "
1	RHR (LPCI) Trip System bus power monitor	Not applicable (6)	2 Inst. Channels	Relay which continuously monitors availability of power to logic systems and annunciates upon loss of power
1	Core Spray Trip System bus power monitor	Not applicable (6)		" "

The RHR system operates in several different modes and the RHR suction relief valves set pressure is higher than the design head of the RHR pump. Accordingly, the ADS/RHR discharge pressure setpoint was based on reasonable margin below vessel pressure at the low pressure coolant injection (LPCI) pump shut-off condition, as recommended by General Electric and verified by the licensee. The licensee, also, states that the specified ADS/RHR discharge pressure setpoint is consistent with other BWRs which have a LPCI subsystem associated with the RHR system.

We also find the proposed setting for the RHR pressure switch satisfies the existing Technical Specification.

Based on the above, we conclude that the licensee's proposal to change the trip level setting requirements for the RHR and core spray pump discharge pressure interlock is acceptable.

3.0 Environmental Consideration

We have determined that the amendment does not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendment involves an action which is insignificant from the standpoint of environmental impact and, pursuant to 10 CFR 51.5(d)(4), that an environmental impact statement, or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of this amendment.

4.0 Conclusion

We have concluded, based on the considerations discussed above, that: (1) because the amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated, does not create the possibility of an accident of a type different from any evaluated previously, and does not involve a significant reduction in a safety margin, the amendment does not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) such activities will be conducted in compliance with the Commission's regulations and the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Dated: April 1, 1983 .

Principal Contributor: T. Collins

UNITED STATES NUCLEAR REGULATORY COMMISSIONDOCKET NO. 50-331IOWA ELECTRIC LIGHT AND POWER COMPANY, ET ALNOTICE OF ISSUANCE OF AMENDMENT TO FACILITY
OPERATING LICENSE

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 85 to Facility Operating License No. DPR-49 issued to Iowa Electric Light and Power Company, Central Iowa Power Cooperative, and Corn Belt Power Cooperative, which revises the Technical Specifications for operation of the Duane Arnold Energy Center, located in Linn County Iowa. The amendment is effective as of the date of issuance.

This change to the Technical Specifications allows the licensee to change the trip level setting requirements for the residual heat removal and core spray pump discharge pressure interlock.

The application for the amendment complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendment. Prior public notice of this amendment was not required since the amendment does not involve a significant hazards consideration.

The Commission has determined that the issuance of this amendment will not result in any significant environmental impact and that pursuant to 10 CFR 51.5(d)(4) and environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with issuance of this amendment.

For further details with respect to this action, see (1) the application for amendment dated November 18, 1982, (2) Amendment No. 85 to License No. DPR-49, and (3) the Commission's related Safety Evaluation. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W., Washington, D.C. and at the Cedar Rapids Public Library, 426 Third Avenue, S.E., Cedar Rapids, Iowa 52401. A copy of items (2) and (3) may be obtained upon request addressed to the U.S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of Licensing.

Dated at Bethesda, Maryland, this 1st day of April 1983.

FOR THE NUCLEAR REGULATORY COMMISSION



Domenic B. Vassallo, Chief
Operating Reactors Branch #2
Division of Licensing



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 85 TO LICENSE NO. DPR-49

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

DOCKET NO. 50-331

DUANE ARNOLD ENERGY CENTER

1.0 Introduction

By letter dated November 18, 1982, the Iowa Electric Light and Power Company, (the licensee), submitted a request to amend Facility Operating License DPR-49 for the Duane Arnold Energy Center. The proposed amendment will permit the licensee to change the trip level setting requirements for the residual heat removal (RHR) and core spray pump discharge pressure interlock switches.

The justification for this change is to incorporate changes recommended by General Electric to provide consistency in the inputs to all emergency core cooling system (ECCS) analyses.

2.0 Evaluation

In a letter dated November 18, 1982, the licensee proposed to modify Table 3.2-B of the Technical Specifications by changing the trip level setting requirements for the RHR pump discharge pressure switch from ≥ 100 psig to 125 ± 25 psig and core spray pump discharge pressure interlock switch from 100 ± 5 to 145 ± 20 . The discharge pressure interlock switches defer actuation of the automatic depressurization system (ADS) until confirmation that a low pressure ECCS pump is running. In this way the availability of an ECCS water supply is verified prior to automatic blowdown.

The licensee states that the selected setpoint for the core spray discharge pressure switch was based on the criteria that the setpoint must be higher than 110% of the relief valve setpoint in the core spray suction line to preclude a false indication of a running pump and lower than the core spray pump heat at maximum run-out flow conditions to indicate a running pump for all core spray system flow conditions.

We find that the proposed core spray pressure switch setpoint (maximum) of 165 psig is below the head developed by the core spray pump at run-out (233 psig) and will therefore provide indication for all core spray pump operating conditions.