

March 8, 1993

Docket No. 50-331

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

Dear Mr. Liu:

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SUBJECT: AMENDMENT NO. 191 TO FACILITY OPERATING LICENSE NO. DPR-49
(TAC NO. M85226)

The Commission has issued the enclosed Amendment No. 191 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 December 11, 1992.

The amendment revises the Technical Specifications by modifying the requirements for performing a channel function test of Electrical Protective Assemblies. It also modifies the calibration frequency to an operating cycle basis.

A copy of the 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, Project Manager
Project Directorate III-3
Division of Reactor Projects III/IV/V
Office of Nuclear Reactor Regulation

Enclosures:

- Amendment No. 191 to License No. DPR-49
- Safety Evaluation

cc w/enclosures:
See next page

OFFICE	PD3-3:LA	PD3-3:PM	OTSB	PD3-3:PD	OGC
NAME	PKreutzer	RPulsifer/rmp/bj	CGrimes	JHannon	RBlackman
DATE	2/13/93	2/18/93	2/11/93	2/10/93	2/19/93

DOCUMENT NAME: g:\duanearn\dua85226.amd

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

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Mr. Lee Liu
Chairman of the Board and
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Sincerely,

A handwritten signature in black ink, appearing to read "Robert M. Pulsifer".

Robert M. Pulsifer, Project Manager
Project Directorate III-3
Division of Reactor Projects III/IV/V
Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 191 to License No. DPR-49
2. Safety Evaluation

cc w/enclosures:
See next page

Mr. Lee Liu
Iowa Electric Light and Power Company

Duane Arnold Energy Center

cc:

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Kathleen H. Shea, Esquire
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Regional Administrator, Region III
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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. 191
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 December 11, 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:

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(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 191, 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



Robert M . Pulsifer, 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: March 8, 1993

ATTACHMENT TO LICENSE AMENDMENT NO. 191

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

3.1-2

INSERT

3.1-2

LIMITING CONDITIONS FOR OPERATION**SURVEILLANCE REQUIREMENTS**

- B. Two RPS electric power monitoring modules (or Electric Protective Assemblies - EPA's) for each in-service RPS MG set or alternate source shall be OPERABLE or
1. With one RPS electric power monitoring module (or EPA) for an in-service RPS MG set or alternate power supply inoperable, restore the inoperable module (EPA) to OPERABLE status within 72 hours or remove the associated RPS MG set or alternate power supply from service.
 2. With both RPS electric power monitoring modules (EPA's) for an in-service MG set or alternate power supply inoperable, restore at least one to OPERABLE status within 30 minutes or remove the associated RPS MG set or alternate power supply from service.

tested immediately before the trip system containing the failure is tripped. The trip system containing the unsafe failure may be placed in the untripped condition during the period in which surveillance testing is being performed on the other RPS channels. The trip system may be in the untripped position for no more than eight hours per functional trip period for this testing.

- B. The RPS power monitoring system (EPA's) instrumentation shall be determined OPERABLE:
1. By performance of a CHANNEL FUNCTIONAL TEST each time the plant is in COLD SHUTDOWN for a period of more than 24 hours, unless performed within the previous 6 months.
 2. At least once per OPERATING CYCLE by demonstrating the OPERABILITY of over-voltage, under-voltage and under-frequency protective instrumentation by performance of a CHANNEL CALIBRATION including simulated automatic actuation of the protective relays, tripping logic and output circuit breakers and verifying the following limits:
 - a. Over voltage \leq 132 VAC
 - b. Under voltage \geq 108 VAC
 - c. Under frequency \geq 57 Hz



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 191 TO FACILITY OPERATING LICENSE NO. DRP-49

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

DUANE ARNOLD ENERGY CENTER

DOCKET NO. 50-331

1. INTRODUCTION

By letter of December 11, 1992, Iowa Electric Light and Power Company (IELP, the licensee) requested an amendment to Facility Operating License No. DPR-49 for Duane Arnold Energy Center (DAEC). The proposed change modifies the requirements for performing a channel functional test of Electrical Protective Assemblies (EPAs) that are currently specified with a 6-month surveillance interval. It also modifies the calibration frequency to an operating cycle basis. Guidance on this proposed change was provided to all boiling-water reactor (BWR) licensees by Generic Letter 91-09, dated June 27, 1991.

2. EVALUATION

The licensee has proposed to modify the 6-month surveillance interval for performing channel functional tests of EPAs as specified in Technical Specification (TS) 4.1.B to state that they are to be performed "when the plant is in COLD SHUTDOWN for a period of more than 24 hours, unless performed within the previous 6 months." This change is consistent with the guidance provided in Generic Letter 91-09.

The Standard Technical Specifications (STS) uses a calibration interval of once every 18 months. The DAEC TS presently requires an annual calibration. To be consistent with the intent of the channel functional test by eliminating the need to perform the calibration at power, the calibration frequency is being revised to every operating cycle or 18 months.

The Niagara Mohawk Power Corporation provided an analysis in a proposal submitted on December 15, 1988, that calculated the safety risks and benefits of this TS change. The U.S. Nuclear Regulatory Commission (NRC) staff reviewed and concurred with the conclusions of this analysis that the change in the surveillance interval for the channel functional test of the EPAs will produce a net safety benefit. The bounding limit for the performance of this test was evaluated on the basis of an 18-month fuel cycle. The calibration interval of the EPAs was likewise on an 18-month interval due to the length of the fuel cycle used for this evaluation. Because the EPAs for all BWRs are primarily the same, the staff finds that this

analysis applies generically to all BWRs. In addition, it is the staff's qualitative judgement that the proposed increase in the surveillance interval is not safety significant because of the diverse protection that exists, the number of failures that have to occur to have an adverse impact on safety, and the potential for detecting a degraded condition of the reactor protection system through on-line testing. Therefore, the staff finds that the licensee's proposed TS change that includes an increase in the channel functional test interval and an increase in the calibration interval of EPAs from 12 to 18 months is acceptable.

3. 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. 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 effluent 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 (58 FR 7000). 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. 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 Contributors: Thomas G. Dunning
Robert M. Pulsifer

Date: March 8, 1993