

February 23, 1988

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:

SUBJECT: AMENDMENT NO. 149 TO FACILITY OPERATING LICENSE NO. DPR-49:
EMERGENCY DIESEL GENERATOR SURVEILLANCE (TAC NO. 66185)

The Commission has issued the enclosed Amendment No. 149 to Facility Operating License No. DPR-49 for the Duane Arnold Energy Center (DAEC). This amendment consists of changes to the Technical Specifications in response to your application dated August 31, 1987.

The amendment revises the DAEC TSS to modify the surveillance requirement for diesel generators from annual inspections to inspections once per operating cycle. Other actions included with your August 31, 1987, application are being handled separately.

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

Sincerely,

15/
James R. Hall, Project Manager
Project Directorate III-3
Division of Reactor Projects - III,
IV, V & Special Projects

Enclosures:

1. Amendment No. 149 to License No. DPR-49
2. Safety Evaluation

cc w/enclosures:
See next page

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Mr. Lee Liu
Iowa Electric Light and Power Company

Duane Arnold Energy Center

cc:

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Mr. Thomas Houvenagle
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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.149
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 August 31, 1987, 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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Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 149, 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



Kenneth E. Perkins, Director
Project Directorate III-3
Division of Reactor Projects - III,
IV, V and Special Projects

Attachment:
Changes to the Technical
Specifications

Date of Issuance: February 23, 1988

ATTACHMENT TO LICENSE AMENDMENT NO. 149

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 area is indicated by a marginal line.

Page
3.8-2

LIMITING CONDITION FOR OPERATION

SURVEILLANCE REQUIREMENT

During the semiannual test the same checks to the air start system and fuel oil pumps performed during monthly testing shall be performed. In addition, the diesel starting time to reach rated frequency and voltage shall be logged.

- b. Once per OPERATING CYCLE the condition under which the diesel-generator is required will be simulated and a test conducted to demonstrate that it will ~~start~~ and accept the emergency load within the specified time sequence. The diesel-generator shall be operated loaded for a minimum of 5 minutes. The results shall be logged.
- c. The quantity of diesel fuel available shall be logged monthly and after each use of the diesels.
- d. Once a month a sample of diesel fuel shall be checked for viscosity, water and sediment. The values for viscosity, water and sediment shall be within the acceptable limits specified in Table 1 of ASTM D975-77 and logged.
- e. ONCE PER OPERATING CYCLE, during shutdown, each diesel-generator shall be given an inspection in accordance with instructions based on the manufacturer's recommendations.
- f. A sample test and record shall be made of each oil delivery before it is placed in the storage tank.
- 2. Unit Batteries
 - a. Every week the specific gravity, the voltage and temperature of the pilot cell and overall battery voltage shall be measured and logged.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
SUPPORTING AMENDMENT NO. 149 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 August 31, 1987, Iowa Electric Light and Power Company (IELP/licensee) requested changes to the Technical Specifications (TSs) of the Duane Arnold Energy Center (DAEC).

The change to TS 4.8.A.1.e is concerned with revising the emergency diesel generator (EDG) surveillance from annual to once per operating cycle. With the issuance of License Amendment 143, the DAEC now operates on an 18-month fuel cycle. To avoid bringing the DAEC to a shutdown condition solely to perform EDG surveillance, the licensee has requested a permanent change to the TS to extend that surveillance. The other changes requested by the licensee's August 31, 1987, application are being handled separately.

2.0 EVALUATION

The present TS requires that surveillances on EDGs be performed annually. This surveillance assures (in addition to other surveillances) that the EDGs will be available to supply power to operate emergency equipment. It is consistent with the manufacturer's recommendations (COH Industries).

By letter dated August 31, 1987, the licensee proposed to extend this surveillance to once per operating cycle (18 months). The licensee has reviewed the reliability data on the EDGs, in accordance with Generic Letter 84-15 and Regulatory Guide 1.108, "Periodic Testing of Diesel Generator Units Used as Onsite Electric Power Systems at Nuclear Power Plants." An engineering review has shown that in three years (January 1984 to June 1987) the "A" EDG (1G-31) has a start reliability of 100% (over 120 successful starts) and a load reliability of 98.6% (1 failure in 75 loading tests). In the same timeframe, the "B" EDG (1G-21) has a start reliability of 100% (over 121 successful starts) and a load reliability of 100% (no failures in 78 loading tests). The licensee's proposed extension is also consistent with Standard Technical Specification Surveillance Requirement 4.8.1.1.2.d, which states that each diesel generator shall be inspected at least once per 18 months, during shutdown, in accordance with procedures prepared in conjunction with its manufacturers recommendations. The manufacturer of the diesel generators used at DAEC has specified an acceptable inspection interval of up to 18 months.

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Based upon the above, we find that extending the surveillance interval from once per year to once per operating cycle will not have a significant effect on the availability of the EDGs to provide emergency power.

3.0 ENVIRONMENTAL CONSIDERATION

This amendment involves a change in a surveillance requirement. We have 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. 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.

4.0 CONCLUSION

We have 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, and (2) 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.

Principal Contributor: A. J. Cappucci, Jr.

Dated: February 23, 1988