



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.

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