



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 100 TO 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

The staff position letter dated November 28, 1978, requested licensees to cease purging (or venting) of containment or limit purging (or venting) to an absolute minimum. Licensees who elected to purge (or vent) the containment were requested to demonstrate that the containment purge (or vent) system design met the criteria outlined in the Standard Review Plan (SRP) Section 6.2.4, Revision 1, and the associated staff Technical Position (BTP) CSB 6-4, Revision 1. The licensee, by letter dated March 15, 1982, responded to our request by providing information related to purge/vent system design and operation. Subsequently, by letter dated June 10, 1982, the licensee submitted a request for Technical Specification changes arising out of the resolution of issues related to staff Technical Position CSB 6-4.

2.0 Evaluation

The purging and venting operation at the Duane Arnold Energy Center (DAEC) is performed through redundant 18-inch butterfly-type isolation valves in both supply and exhaust headers of the drywell and suppression pool. The 18-inch valves are bypassed by 2-inch globe valves which are used to inert and deinert the containment with nitrogen.

By letter dated June 10, 1982, the licensee proposed the following changes to the DAEC Technical Specifications dealing with operation of the purge/vent system:

1. The operation of purge/vent systems will be restricted to 90 hours per year not including a 24-hour period prior to shutdown and a 24-hour period after placing the reactor in run mode;
2. Purge/vent system leakage integrity tests are to be conducted at intervals not to exceed once every three months; and
3. Purge/vent isolation valve seal is to be replaced at intervals not to exceed four years.

On March 29, 1984, we issued a Safety Evaluation for the containment purge/vent system design and operation practices for DAEC. In that Safety Evaluation we found the purge/vent system operating frequency (item 1) and leakage integrity testing frequency (item 2) to be acceptable. We have reviewed the frequency of purge valve seal replacement (item 3) and found that the frequency of replacement of the purge isolation valve seal is acceptable, since it meets our guidance provided in the sample Technical Specifications included in our letter dated November 24, 1981.

3.0 Environmental Considerations

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) 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 this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: R. Hall

Dated: May 22, 1984