



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
SUPPORTING AMENDMENT NO. 82 TO FACILITY OPERATING LICENSE NO. DPR-29
AMENDMENT NO. 76 TO FACILITY OPERATING LICENSE NO. DPR-30

COMMONWEALTH EDISON COMPANY

AND

IOWA-ILLINOIS GAS AND ELECTRIC COMPANY

QUAD CITIES STATION UNIT NOS. 1 AND 2

DOCKET NOS. 50-254 AND 50-265

I. INTRODUCTION

By letter dated April 13, 1981 and supplement dated December 2, 1981 Commonwealth Edison Company (licensee) proposed changes to the Technical Specifications for Quad Cities Nuclear Power Station, Units 1 and 2 to: revise the primary containment integrated leak rate test requirements and schedules to conform with the requirements of Appendix J to 10 CFR Part 50; modify the associated Limiting Condition for Operation to include the definitions of the nomenclature used and identify specific leakage limitations as required by Appendix J; and modify the surveillance requirements to provide direct references to Appendix J methodology and terminology.

II. BACKGROUND

Beginning in August 1975, the NRC staff requested licensees to review their containment leakage testing programs and the associated Technical Specifications for compliance with the requirements of Appendix J. to 10 CFR Part 50. Recognizing at that time that there were already many operating plants and a number more in advanced stages of design or construction, we requested licensees to propose design modifications and Technical Specifications changes and, as necessary, request exemptions to attain conformance with the regulations. As part of that response, the licensee requested a number of exemptions to the provisions of Appendix J. Those requests are under review and are not addressed in this Safety Evaluation.

III EVALUATION

By letter dated April 13, 1981 and supplement dated December 2, 1981 the licensee proposed amending the Quad Cities Nuclear Power Station, Units 1 and 2 Technical Specifications (TS) to modify the primary containment integrated leakage testing requirements and schedules to conform with 10 CFR Part 50, Appendix J requirements. The proposed changes also provided for direct references and use of Appendix J methodology and terminology.

Specifically the proposed changes better define the Limiting Conditions for Operation (LCO) for primary containment (PC) leakage rates by specifying:

- 1) an overall integrated leakage rate for the PC,
- 2) a combined leakage rate for all penetrations and valves, except main steam isolation valves (MSIV),
- 3) an acceptable leakage rate for any one MSIV, and
- 4) an acceptable leakage rate for any one air lock.

The proposed LCOs also describe actions to be taken when the measured leakage rates are not within specifications. Finally the proposed changes delete the prescriptive surveillance requirements for demonstrating containment leakage rates, and replace these with the criteria specified in Appendix J of 10 CFR 50, using the methods and provisions of ANSI N45.4 (1972).

In reviewing the licensee's proposed changes submitted April 13 and December 2, 1981 we find that they are consistent with the BWR Standard Technical Specifications, NUREG-0123, Revision 3, which served as the basis in assessing the conformance of the licensee's proposed Technical Specification changes to Appendix J requirements. The Standard Technical Specifications, pages 3/4 6-2 through 3/4 6-4, pertaining to primary containment leakage testing requirements (and the associated Bases) are recognized by the staff as an acceptable implementation of the applicable requirements of Appendix J. Therefore, we conclude that the Technical Specification changes pertaining to containment integrated leakage testing meet the requirements of 10 CFR Part 50, Appendix J, and are acceptable.

IV ENVIRONMENTAL CONSIDERATIONS

We have determined that the amendments do 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 amendments involve 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 these amendments.

V CONCLUSION

We have concluded, based on the considerations discussed above, that: (1) because the amendments do not involve a significant increase in the probability or consequences of an accident previously evaluated, do not create the possibility of an accident of a type different from any evaluated previously, and do not involve a significant reduction in a margin of safety, the amendments do 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 amendments will not be inimical to the common defense and security or to the health and safety of the public.

Date: November 2, 1982

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