

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION RELATED TO AMENDMENT NO. 66 TO FACILITY OPERATING LICENSE NO. DPR-38 AND AMENDMENT NO. 63 TO FACILITY OPERATING LICENSE NO. DPR-48 COMMONWEALTH EDISON COMPANY ZION STATION, UNITE 1 AND 2 DOCKET NOS. 50-295 AND 50-304

1.0 Introduction

Through letters dated March 4, and April 4, 1977, and July 12, 1979, Commonwealth Edison (the licensee) proposed amendments to Subsection 4.12.1.B.2 of the Technical Specifications for Zion Station, Unit Nos. 1 and 2 (Zion 1/2). In support of the amendment, the licensee states that it is not technically feasible to meet the currently stated Lower Limits of Detection (LLD) of release rates for gaseous effluents (10 uCi/sec for noble gases and 10^{-5} uCi/sec for particulates) when the "state of the art" LLDs in uCi/cc (the Zion gaseous effluent monitors have outputs calibrated in uCi/cc) are multiplied by the extremely high ventilation flow rates in cc/sec (maximum - 7 x 10^7 cc/sec). For this reason, the licensee requests approval to specify the gaseous effluent LLDs in uCi/cc consistent with the "state of the art" values for noble gases and particulates.

2.0 Evaluation

Based on our review and evaluation of the amendment, we find that the proposed LLDs for the gaseous effluents at Zion 1/2, which is 10⁻⁶ uCi/cc for noble gases and 10-11 uCi/cc for particulates and iodine are consistent with staff positions on LLDs for gaseous effluents as stated in Regulatory Guides 1.97, Rev. 2. and 1.21 for noble gases, and NUREG-0472, Rev. 2, (July 1979) for particulate: and iodine. We have determined that these limits are adequate to ensure the detection of release rates for gaseous effluents well below the limiting conditions for operation, as stated in the Zion Radiological Effluent Technical Specifications (RETS). We have also determined that the proposed change on LLDs for the gaseous effluents does not have any impact on our earlier conclusion that the licensee conforms to General Design Criteria 64 of Appendix A to 10 CFR Part 50 which requires licensees to monitor releases of radioactivity from their facilities. In view of these considerations, we find the proposed amendment acceptable. As a result of our telephone conversation with the licensee, however, it was mutually agreed that the Subsection 4.12.1.B.2 of the Technical Specifications should be reworded for consistency and clarity. These changes have been made in the Technical Specifications.

8107140310 810629 PDR ADDCK 05000295 P PDR We also reviewed Subsection 4.12.1.C.1 of the Technical Specifications for consistency with the text for Subsection 4.12.1.B.2 as revised. Based on this review and telephone conversation with the licensee regarding Subsection 4.12.1.C.1, it was mutually agreed that this subsection should also be reworded for consistency and clarity.

3.0 Summary

In view of the above considerations, we have concluded that the proposed amendment to Section 4.12 of Zion 1/2 Technical Specifications, as modified is acceptable.

4.0 Environmental Consideration

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.

5.0 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 accidents previously considered and do not involve a significant decrease in a safety margin. 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 these amendments will not be inimical to the common defense and security or to the health and safety of the public.

Date: JUN 2 9 1981