



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 174 TO FACILITY OPERATING LICENSE NO. DPR-26
CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
INDIAN POINT NUCLEAR GENERATING UNIT NO. 2
DOCKET NO. 50-247

1.0 INTRODUCTION

By letter dated January 28, 1994, the Consolidated Edison Company of New York (the licensee) submitted a request for changes to the Indian Point Nuclear Generating Unit No. 2 Technical Specifications (TSs). The requested changes would extend the surveillance intervals for leak testing the containment isolation valves to accommodate a 24-month fuel cycle. The proposed changes follow the guidance provided in Generic Letter (GL) 91-04, "Changes in Technical Specification Surveillance Intervals to Accommodate a 24-Month Fuel Cycle."

The licensee's submittal of January 28, 1994, also requested an exemption from Appendix J to 10 CFR Part 50, in accordance with the guidance provided in Enclosure 3 to GL 91-04. The NRC staff issued an environmental assessment in support of the requested exemption by letter dated May 6, 1994, and the exemption was issued by letter dated June 20, 1994. These actions were noticed in the Federal Register on May 13, 1994 (59 FR 25130) and June 29, 1994 (59 FR 33555), respectively.

2.0 EVALUATION

The limitations on containment leakage rates ensure that the total containment leakage value will not exceed the value assumed in the accident analysis at the peak accident pressure. As an added conservatism, the measured overall integrated leakage rate is further limited during the performance of periodic tests to account for possible degradation of the leakage barriers between leakage tests. Containment Isolation Valve (CIV) leak rate testing, containment penetration leak rate testing, and periodic inspection of accessible portions of the containment wall, combined with leakage monitoring afforded by the weld channel and penetration pressurization system and the isolation valve seal water system provide assurance that containment leakage remains within the design limits.

Surveillance testing for measuring leakage rates is delineated by 10 CFR Part 50, Appendix J, which requires, in part, CIV local leak rate tests (LLRTs) to be performed during each reactor shutdown for refueling but in no case at

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intervals greater than 2 years. CIV LLRTs are referred to as Type C LLRTs. The licensee's TSs were consistent with the requirements of 10 CFR Part 50, Appendix J. By letter dated June 20, 1994, the NRC issued an exemption from the requirements of 10 CFR Part 50, Appendix J, which would allow the licensee to amend the TS to perform Type C LLRTs at intervals up to 30 months. The 30-month interval (24 months + 25% extension) is needed to accommodate operation on a 24-month fuel cycle. The following addresses the TS change required to conduct Type C LLRTs at intervals up to 30 months.

GL 91-04 indicated that two issues should be addressed to justify extending the 2-year LLRT interval: (1) a possible reduction in the combined leakage limit and (2) the basis for concluding that the containment leakage rate would be maintained within the acceptable limits with an LLRT interval increase of up to 30 months. The licensee addressed both of these issues.

The first issue is a reduction in the combined containment penetration and isolation valve leakage rate limit for Types B and C tests which increases the margin to the maximum allowable leakage rate. The maximum allowable leakage rate, which is referred to as L_a , is specified in the facility's TSs. The acceptance criterion for Types B and C leak rate tests is that the combined leakage rate shall be less than $0.60 L_a$. This constitutes a margin of $0.40 L_a$ (40% of L_a). Enclosure 3 to GL 91-04 states, in part, that in order to justify an exemption to the Appendix J requirements and extend Type C test intervals up to 30 months, licensees should either: (1) use leak rate test data to demonstrate that the margin of $0.40 L_a$ will not be reduced as a result of the test interval increase or (2) propose an acceptance criterion limit of less than $0.60 L_a$ as a TS change. The licensee has proposed an acceptance criterion limit of $0.50 L_a$ for IP2. This constitutes a 25 percent increase in margin (40 percent to 50 percent). The NRC staff has reviewed the proposed reduction in the combined leakage rate limit to $0.50 L_a$ and finds that it is consistent with the recommendations of Enclosure 3 to GL 91-04 and is, therefore, acceptable.

The second issue is the basis for concluding that containment leakage would be maintained within acceptable limits with a Type C test interval of up to 30 months. Eleven leak rate tests have been performed at IP2 since the beginning of commercial operation. The first three tests (1976, 1978, and 1979) did not meet the allowable leakage limit due to excessive leakage from several valves which were subsequently repaired and retested. The as-found results of the next eight tests were below the allowable leakage limit. The licensee has concluded that there has been a noticeable downward trend in the as-found valve leakage over the last 7 years. The as-found value for testing during the 1993 refueling outage was $0.093 L_a$. The staff has considered the test result information provided by the licensee and concluded that there is reasonable assurance that containment leakage rate would be maintained within acceptable limits with a Type C test interval of up to 30 months.

The staff has reviewed the information presented by the licensee regarding the containment isolation valve leakage testing and concludes that the requested change is acceptable.

3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the New York State official was notified of the proposed issuance of the amendment. The State official had no comments.

4.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC staff has 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 the amendment involves no significant hazards consideration, and there has been no public comment on such finding (59 FR 17596). Accordingly, the 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 the amendment.

5.0 CONCLUSION

The Commission has 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, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

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Date: July 29, 1994