



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 60 TO FACILITY OPERATING LICENSE NO. NPF-58
THE CLEVELAND ELECTRIC ILLUMINATING COMPANY, ET AL.

PERRY NUCLEAR POWER PLANT, UNIT NO. 1

DOCKET NO. 50-440

1.0 INTRODUCTION

By letter dated March 1, 1993, the Cleveland Electric Illuminating Company, et al. (licensees), proposed changes to the Technical Specifications (TSs) for the Perry Nuclear Power Plant, Unit No. 1. This request included two changes involving some of the same TS sections. TS changes to include the as-found integrated primary containment leakage rate acceptance criterion and an exemption to 10 CFR 50 Appendix J are being considered separate from this safety evaluation. This amendment addresses the following changes to TS 3.6.1.2 on primary containment leakage rates: removing the Special Test Exception allowed by 3.10.1; relocating the requirement that the reactor coolant system temperature be greater than 200 °F; changing the action statement to specify the actions to be taken if TS 3.6.1.2 Limiting Conditions for Operation (LCO) cannot be restored within one hour; clarifying 3.6.1.2a by adding the definition of L_a ; and clarifying 3.6.1.2e by adding that the test pressure is greater than or equal to 1.10 P_a . This amendment also removes the reference to TS 3.6.1.2 from TS 3.10.1. These changes are requested to assure TS 3.6.1.2 will directly address excessive containment leakage with reactor coolant system temperature above 200 °F. As a result, TS 3.0.3 will not be relied on for appropriate actions if excessive leakage occurs. These changes and the LCO clarifications will reduce the possibility of TS misinterpretations.

2.0 EVALUATION

The following changes to TS 3.6.1.2 are evaluated: removing the reference to a special test exception; relocating the requirement for RCS temperature to be greater than 200 °F; revising TS 3.6.1.2's actions to take if primary leakage rates cannot be restored; clarifying the definition of L_a ; and clarifying that testing is performed at greater than or equal to 1.10 P_a for containment isolation valves in hydrostatically tested lines. Additionally, TS 3.10.1 is changed to eliminate the reference to TS 3.6.1.2. The evaluation addresses each change.

The first change, TS 3.6.1.2 Applicability, deletes the asterisk associated with Mode 2. This allows removal of the special test exception during Mode 2 granted by TS 3.10.1 which permits the reactor pressure vessel closure head and the drywell head to be removed and the drywell air lock door to be open

when the reactor mode switch is in the Startup position during low power physics testing with thermal power less than 1% of rated thermal power and reactor coolant temperature less than 200 °F. The need for this test exception was required during initial plant start up only and is no longer applicable. Therefore, the change requested is administrative.

The second change relocates the provision to restore the primary containment leakage if the reactor coolant temperature is greater than 200 °F from the ACTION statement to the APPLICABILITY statement. This change does not lessen the current requirements of the specification and is consistent with current plant interpretations of the specifications as written. However, the licensee's submittal (PY-CEI/NRR-1732 L) for Improved Technical Specifications Conversion Package is more restrictive in that the APPLICABILITY statement is for MODES 1, 2 and 3 independent of reactor coolant temperature. Since the proposed revision provides additional clarity and is not less restrictive than the current specification, the change is acceptable. However, this does not imply that this change will be allowed to meet the intent of the requirements of the Improved Standard Technical Specifications.

The third change provides the licensee with clear guidance on what actions to take if primary containment leakage limits are not maintained in Modes 1, 2 and 3 when reactor coolant temperature is greater than 200 °F. At the time of the change request, the action statement required leakage to be restored within limits but did not specify a time frame to reduce the leakage or actions to take if the limits could not be restored. The proposed action statement allows 1 hour to restore primary containment leakage limits or requires placing the unit in HOT SHUTDOWN within 12 hours and in COLD SHUTDOWN within the following 24 hours. This change is consistent with TS 3.6.1.1.1 on primary containment integrity and TS 3.0.3 which allow time for an orderly shutdown if the unit is not maintained within regulatory requirements.

The fourth change clarifies LCO 3.6.1.2a to ensure that "0.20 percent by weight of the primary containment air per 24 hours at P_a " is specified for L_a and not for 0.75 L_a .

The fifth change clarifies LCO 3.6.1.2e by adding that testing to determine leakage rates for containment isolation valves in hydrostatically tested lines shall be at greater than or equal to 1.10 Pa. This change is consistent with 10 CFR 50 Appendix J, III.C.2(b) which states, "Valves, which are sealed with fluid from a seal system shall be pressurized with that fluid to a pressure not less than 1.10 P_a ."

The sixth change deletes the reference to TS 3.6.1.2 from TS 3.10.1. The change is an administrative change only, made because the two specifications no longer overlap and the reference is therefore unnecessary.

The NRC staff has reviewed the proposed changes to the TS regarding primary containment leakage. Based on the above, the NRC staff finds the proposed changes to be acceptable.

3.0 STATE CONSULTATION

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

4.0 ENVIRONMENTAL CONSIDERATION

This amendment changes a requirement with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 or changes a surveillance requirement. The 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 this amendment involves no significant hazards consideration and there has been no public comment on such finding (59 FR 14896). 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.

5.0 CONCLUSION

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

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