



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
SUPPORTING AMENDMENT NO. 31 TO FACILITY OPERATING LICENSE NO. NPF-3

THE TOLEDO EDISON COMPANY

AND

THE CLEVELAND ELECTRIC ILLUMINATING COMPANY
DAVIS-BESSE NUCLEAR POWER STATION, UNIT NO. 1

DOCKET NO. 50-346

Introduction

In a letter dated August 22, 1980, the Toledo Edison Company (TECo) requested an amendment to Facility Operating License No. NPF-3 for the Davis-Besse Nuclear Power Station, Unit No. 1, which would modify Limiting Conditions for Operation (LCO's) for the Containment Purge and Exhaust Isolation Valves. The amendment would allow the plant, which is in cold shutdown, to heatup and operate at power with these valves inoperable. In telephone conversations with the TECo staff, we have determined that the operators for two valves (both outside containment) are currently inoperable, and new equipment cannot be procured in time for the projected start-up of the plant.

Discussion and Evaluation

The purpose of the Containment Purge System is to provide a source of clean fresh air to the containment whenever personnel access is desired. The Containment Purge and Exhaust Isolation Valves are utilized to assure that any radioactive material in the containment atmosphere is prevented from reaching the environment.

The Technical Specifications (TSs) impose certain operating restrictions on the purge and exhaust isolation valves. TS Section 3.6.1.7 requires that these valves be shut when the plant is in Modes 1 through 4, although the applicable Action statement allows the valves to be open in these modes provided the accumulated open time is less than 90 hours for the previous 365 days. TS Section 3.6.3.1 and its associated Table 3.6-2 require all containment isolation valves to be operable with minimum specified closing times. The Action statement for this section requires that, with any isolation valve inoperable, one of four actions must be accomplished:

- "a. Restore the inoperable valve(s) to OPERABLE status within 4 hours; or
- b. Isolate each affected penetration within 4 hours by use of at least one deactivated automatic valve secured in the isolation position; or
- c. Isolate each affected penetration within 4 hours by use of at least one closed manual valve or blind flange; or
- d. Be in at least HO; STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours."

With action b or c taken while in Mode 1, 2, 3 or 4, unlimited continued operation in that mode is allowable. However, TS Section 3.0.4 applies in this case, which prohibits entry into a higher mode of operation unless the LCO can be met without reliance on the provisions contained in the Action statement.

In its August 22, 1980, submittal, TECo requested that the provisions of TS Section 3.0.4 be made not applicable to the operability of the purge and exhaust isolation valves. This would permit the plant to commence heatup and proceed to Mode 1 (the plant is currently in Mode 5) with inoperable valves so long as the purge penetrations have been rendered passive by completing Action statement b or c of TS Section 3.6.3.1. TECo states that the release of radioactive material to the environment with the valves in this condition will be consistent with the assumptions used in Loss of Coolant Accident (LOCA) analyses, and that the imposition of TS Section 3.0.4 for these valves may be eliminated.

Having reviewed the licensee's submittal, we consider that as long as the Action statement part b or c of TS Section 3.6.3.1 is taken with respect to the purge and exhaust valves, the valves are in the safe position for LOCAs or any other event which would release radioactivity to the containment. Operation in any mode as well as entry into any mode need not be precluded by inoperability of the valves so long as the Action statement is fulfilled. We find TECo's proposal to be acceptable.

Environmental Consideration

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.

Conclusion

We have concluded, based on the considerations discussed above, that: (1) because the amendment does not involve a significant increase in the probability or consequences of accidents previously considered and does not involve a significant decrease in a safety margin, the amendment does 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 this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Dated: September 8, 1980