



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
SUPPORTING AMENDMENT NO. 40 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

Amendment No. 36 to the Davis-Besse Unit No. 1 operating license dated January 24, 1981, allows the plant to use a manual switchover of the Emergency Core Cooling System pumps from the Borated Water Storage Tank (BWST) to the emergency sump during a loss of coolant accident after the BWST reaches a low level. The plant was originally licensed to require an automatic switchover feature. During the course of our review of that amendment, we identified additional Technical Specification (TS) changes which were necessary to provide consistency in terminology between the TSs and plant design and to ensure adequate surveillance requirements. In a letter dated February 24, 1981, the Toledo Edison Company (TECo) forwarded proposed TS changes in regard to these items.

Discussion

The original BWST and sump valve control circuitry was equipped with interlocks that were designed for operational (and non-safety) considerations to prevent draining of the BWST into the sump by inadvertent use of the manual control switches. As discussed in our Safety Evaluation for Amendment No. 36, the interlock circuitry was to be used in the revised design to close the BWST valves when the sump valves were manually opened. This means that the interlock, which previously was installed for operational considerations, was now being relied upon to perform a safety function. We verified with TECo that this circuitry had been installed to meet safety grade requirements in spite of its non-safety function. On this basis, we found this aspect of the redesign to be acceptable. However, we requested that TECo commit to revise the Davis-Besse TSs to explicitly require periodic surveillance of this interlock function.

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In addition to the required TS change discussed above, we also noted in our review of Amendment No. 36 that there were certain terminology differences between the existing TSs and the circuitry redesign. TECo's proposal has addressed these changes as well as the interlock circuitry.

#### Evaluation

TECo's proposed TSs would impose an 18-month surveillance requirement to verify that each BWST outlet valve moves to its closed position when the operator opens the respective sump valve. All valves are required to complete their movements in less than 75 seconds. As a result of the inclusion of the response time in this new requirement, TECo has proposed that the current response time requirements of Table 3.3-5 be deleted. Also, TECo has proposed that Tables 3.3-3 and 4.3-2 be changed so that instrument string 1.f reads "BWST Level - Low-Low" and that Output Logic 2.e indicates that the circuitry provides an operator permissive rather than an automatic action.

We find that the licensee's proposed TS changes resolve our concerns and are therefore 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 the amendment.

#### Conclusion

We have concluded, based on the considerations discussed above, that: (1) because that 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.

Date: June 1, 1981