



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
SUPPORTING AMENDMENT NO. 25 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

By letter dated October 23, 1978, supplemented by letter dated January 26, 1979, Toledo Edison Company (TECo or the licensee) requested amendment to Facility Operating License No. NPF-3 for the Davis-Besse Nuclear Power Station, Unit No. 1. The amendment would modify the Technical Specifications (TSs) to require that at least once per 18 months or prior to operation after Emergency Core Cooling System (ECCS) piping has been drained, the ECCS piping be verified to be full of water by venting the ECCS pump casings and discharge piping high points.

Discussion and Evaluation

The current TSs require the ECCS piping be verified full of water by venting at the high points once every 31 days. To vent the piping at the high points requires entry into the containment and results in a certain amount of radiation exposure to personnel involved.

For the low pressure safety injection (LPSI) lines, if a leak should develop on the discharge side of the pumps, the pathway from the Borated Water Storage Tank (BWST) is open (through check valves and locked open valves) and available to replace any leakage out of the system. As a result, the LPSI lines will always be full.

For the high pressure safety injection (HPSI) lines the following is provided:

1. The licensee has analyzed the event of air filled HPSI lines down-stream of the closed motor operated valves (MOVS) and has shown that actuating the HPSI pumps would not impose unacceptable forces on the piping and elbows. This part of the HPSI system is designed for 3050 psig, whereas the rest of the system is designed for 2000 psig.

The part of the system upstream from the closed MOVS could never develop air pockets because this part of the system is under at least a 30 foot constant head of water from the BWST.

2. The likelihood of air filled piping in the section downstream from the closed MOVS is remote since experience has shown these lines remain full of water with no air pockets forming for a period of approximately 2 years. The licensee confirms that

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during this approximate 2 year period the high pressure injection system was not drained and was called on and activated twice.

On the basis of the above, we find the proposed change would reduce the amount of radiation exposure to personnel involved, would not decrease the margin of safety and therefore is 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: July 2, 1980