



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 22 TO FACILITY OPERATING LICENSE NO. NPF-43

DETROIT EDISON COMPANY

WOLVERINE POWER SUPPLY COOPERATIVE, INCORPORATED

FERMI-2

DOCKET NO. 50-341

1.0 INTRODUCTION AND BACKGROUND

By letter dated November 19, 1987, the Detroit Edison Company (DECo or the licensee) requested amendment to the Technical Specifications (TSs) appended to Facility Operating License No. NPF-43 for Fermi-2. The proposed amendment would correct errors in the TSs by deleting from Section 3/4.8.4.5, "Standby Liquid Control System Associated Isolation Devices," Table 3.8.4.5-1, the specification of Motor Control Center (MCC) 72B-4C, Position 1A circuit breaker, and MCC 72E-5B, Position 1C circuit breaker, for required periodic testing. The circuit breakers have been found not to exist in the plant, and as such, the proposed amendment would correct the TSs to be consistent with the as-built plant design. The breakers that perform the isolation function are still in the Table.

The Fermi-2 Standby Liquid Control System (SLCS) is a special capability backup system provided by the licensee to satisfy the requirements of General Design Criterion 26 of Appendix A to 10 CFR Part 50. The system is independent of, and diverse to, the control rods for shutting down the reactor in the event that multiple failures prevent the insertion of the control rods. Portions of the system are redundant. Accordingly, this manually operated system is subject to a single failure. Although the SLCS is not fully redundant, power buses, pumps, and explosive operated injection valves are redundant so that a single component may be removed for maintenance during plant operations.

The NRC staff's initial acceptance of the Fermi-2 SLCS design was documented in the Fermi-2 Safety Evaluation Report (SER) (NUREG-0798), issued in July 1981. However, subsequent to the staff's initial review findings, concerns were raised that the Fermi-2 SLCS design did not conform with NRC standards for safety-related systems and that the Fermi-2 SLCS components were not covered by the licensee's Quality Assurance Program. These concerns were documented in Supplement Number 5 to the Fermi-2 SER and were discussed with the licensee, resulting in the licensee's agreement to implement a program to confirm the quality of the Fermi-2 SLCS design and construction as a licensing basis commitment.

The licensee, in keeping with its commitments, subsequently implemented TS 3/4.8.4.5 to ensure the continued reliability and availability of the SLCS. This TS specifies the periodic surveillance testing of the non-Class IE circuit breakers associated with the SLCS. These non-Class IE circuit

breakers, actuated by fault currents, are used as the isolation devices for protecting equipment associated with the SLCS. The operability requirements for these circuit breakers, listed in TS Table 3.8.4.5-1, ensures that the SLCS equipment is protected in the event of faults in the loads powered by the MCCs in which those circuit breakers are connected.

## 2.0 EVALUATION

As a result of the licensee's TS improvement program, the licensee discovered that TS 3/4.3.4.5, Table 3.8.4.5-1, lists two circuit breaker positions, MCC 72B-4C, Position 1A, and MCC 72E-5B, Position 1C, which do not exist. This has been verified by a review of the system design documents and by a system walkdown. Accordingly, the licensee's letter dated November 19, 1987 (NRC-87-0201), requested deletion of these two items from the TSs.

The NRC staff has reviewed the licensee's request as well as the licensee's response to the staff identified concerns as discussed above. The staff's review considered electrical drawings and the schematics reflecting the SLCS design and the system's associated isolation devices and has confirmed that the two circuit breaker positions do not exist. The breakers that perform the isolation function are still in the table. Therefore, the staff concludes that the proposed change is acceptable.

## 3.0 ENVIRONMENTAL CONSIDERATION

This amendment involves a change in the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. We have determined that this amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents which 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. 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.

## 4.0 CONCLUSION

We have 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, and (2) 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.

Principal Contributor: T. Quay

Dated: July 27, 1988