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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 75 TO FACILITY OPERATING LICENSE NO. NPF-3

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 July 10, 1981, and modified by letter dated May 2, 1983, the Toledo Edison Company (TED) proposed several amendments to the Appendix A Technical Specifications (TSs). One of the proposed amendments related to correcting errors in TS Sections 4.8.1.1.2 and 4.8.1.2 concerning surveillance requirements to be performed on the A.C. electrical power sources. The proposed changes both relate to certain tests on the onsite diesel generators to be conducted while the facility is in a shutdown mode.

The licensee also identified certain typographical errors in the TSs in letters dated February 22, 1983 (Item 3) and August 18, 1983 (Item 4).

EVALUATION

Section 4.8.1.1.2.c of the current Davis-Besse TSs requires that at least once per 18 months, among other surveillance requirements, that each diesel generator be demonstrated operable by verifying the generator capability to reject a load of 480KW or less without tripping. The Standard Technical Specifications for Babcock and Wilcox PWRs, NUREG-0103, Rev. 4, indicates that one of the surveillance tests to be performed to demonstrate diesel generator operability is to verify the generator capability to reject a load greater than or equal to the largest single emergency load without exceeding voltage, frequency, or unit overspeed limits.

The largest single emergency load connected to each diesel generator is a 600 HP Service Water Pump Motor which during normal operation would have a normal expected load of about 548 HP and requiring about 450 KW. As currently written, the TSs would allow the test with a load less than 450 KW. Such a test would not demonstrate adequately the load rejection capability for the single largest operational load.

The licensee proposes to modify TS Surveillance Requirement 4.8.1.1.2.c.2 to specify verifying the diesel generator capability to reject a load equal to the largest single emergency load supplied by the generator without tripping. The licensee's proposed change would eliminate the ambiguity of the current surveillance requirement and would make it consistent with the intent of the Standard Technical Specifications. Therefore, we find the proposed change acceptable.

Section 4.8.1.2 of the current Davis-Besse TSs requires, among other surveillance requirements, that each diesel generator be demonstrated operable by conducting certain surveillance requirements listed in Section 4.8.1.1.1 and 4.8.1.1.2 except for 4.8.1.1.2.a.5. The licensee proposes to modify Section 4.8.1.2 to except surveillance requirements 4.8.1.1.2.a.7 in addition to 4.8.1.1.2.a.5. The modification, therefore, would eliminate the requirement to perform surveillance each 31 days for each diesel generator to verify that the automatic load sequence timer is operable.

Section 4.8.1.2 applies only when the facility is in the cold shutdown or refueling mode. The licensee's basis for the proposed modification is that the load sequencer is required to be operable only when the facility is in an operational mode other than cold shutdown or refueling per TS Section 3.3.2.1, Table 3.3-3, and that in cold shutdown or refueling the Safety Features Actuation System (SFAS) automatic load sequencer is not required because the reactor coolant system is sufficiently cooled down and depressurized and, therefore, automatic sequence loading of emergency loads on the diesel generators is not needed.

The automatic load sequence timer controls the loading of emergency electrical loads onto the diesel-generators in the event SFAS is actuated when normal or reserve power is unavailable. This loading sequence provides for the rapid energizing of emergency loads without overloading the diesel-generators by application of excessive starting loads.

The only SFAS functions required to be operable in either cold shutdown or refueling are containment isolation on high radiation in containment (refueling mode), manual SFAS actuation to initiate containment isolation, and interlocks on the decay heat isolation valves and pressurizer heaters. None of these functions are dependent upon the rapid availability of power from the diesel-generators. Therefore, in the event of unavailability of normal or reserve power when in the cold shutdown or refueling mode, automatic loading of the diesel generators is not required. We, therefore, agree with the licensee that since the automatic load sequence timer is not required to be operable during cold shutdown or refueling, surveillance of the load sequence timer when in cold shutdown or refueling is not required. We therefore find the proposed change acceptable.

Typographical errors have been identified and corrected. One appeared in TS Section 6.9.1.5.b (misspelling of "generator") and the other in Table 3.6-2 (misidentification of valve CV 5010D in penetration 74 B).

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 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. 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.

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.

Dated: August 27, 1984

Principal Contributor: A. DeAgazio