



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20566-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 187 TO FACILITY OPERATING LICENSE NO. NPF-3  
TOLEDO EDISON COMPANY  
CENTERIOR SERVICE COMPANY  
AND  
THE CLEVELAND ELECTRIC ILLUMINATING COMPANY  
DAVIS-BESSE NUCLEAR POWER STATION, UNIT NO. 1  
DOCKET NO. 50-346

1.0 INTRODUCTION

By letter dated December 23, 1992, as supplemented on March 18, 1994, Toledo Edison Company requested a revision to the Technical Specifications (TS) for Davis-Besse Nuclear Power Station. The proposed amendment revises TS 3/4.3.3.5 and its Bases adding testing requirements for transfer switches used to meet 10 CFR Part 50, Appendix R (Fire Protection) requirements, and specifies a new special report requirement for TS 6.9.2. The supplemental letter dated March 18, 1994, clarified information regarding physical operation of components; specified compensatory measures that would be put in place if a transfer switch becomes inoperable for greater than 30 days; and provided vendor recommendations for transfer switch testing.

The March 18, 1994, letter provided supplemental information that did not change the initial proposed no significant hazards consideration determination.

2.0 EVALUATION

Generic Letter 88-12 dated August 2, 1988, provided guidance to all power reactor licensees on the removal of fire protection requirements from TS, and indicated that any specifications related to the capability for safe shutdown following a fire (e.g., Appendix R transfer switches) should not be included in the removal of detailed fire protection requirements from the TS. The NRC staff Safety Evaluation Report dated September 22, 1992, pointed out that the licensee did not have a TS related to safe shutdown following a fire. Following discussions with the NRC staff, the licensee, by letter dated July 28, 1992, committed to include testing of transfer switches used to meet 10 CFR Part 50 Appendix R safe shutdown requirements in the TS. The proposed amendment fulfilled the licensee's commitment of July 28, 1992.



## 2.1 Proposed Revisions

### 2.1.1 Limiting Condition for Operation (LCO) 3.3.3.5.

(1) Proposed change: Change the number of the current LCO "3.3.3.5" to LCO "3.3.3.5.1."

Evaluation: This change is an editorial change and is acceptable to the staff.

(2) Proposed change: Add a new LCO 3.3.3.5.2 that would state:

"The control circuits and transfer switches required for a serious control room or cable spreading room fire shall be OPERABLE."

By letter dated March 18, 1994, the licensee clarified that in some instances physical operation of equipment will not be performed to demonstrate that safe shutdown equipment is capable of operation using the associated transfer switches and control circuits. The licensee provided additional information on this topic during the conference call of May 24, 1994. The licensee conveyed that not physically operating a component in the course of performing the test will minimize wear on the component and will maximize flexibility in scheduling and performing the test. Further, the licensee clarified that, at this time, it does not plan to physically operate the following components: Component Cooling Water Pump P43-1, Containment Air Cooler C1-1, Emergency Diesel Generator 1, and Essential Power Busses C1 and E1. Lastly, the licensee reiterated that regardless of whether the component is physically operated, the surveillance test procedure will include clearly definitive acceptance criteria which will ensure demonstration of the operability of the transfer switch/control circuit.

Evaluation: This addition is consistent with the guidance of Generic Letter 88-12, indicating that any specifications related to the capability for safe shutdown following a fire should not be included in the removal of detailed fire protection requirements from the TS. The addition and the licensee's clarification regarding demonstration of operability of transfer switches and control circuits, as specified in Attachment 1 of the licensee's December 23, 1992 submittal and discussed during the conference call of May 24, 1994, are acceptable to the staff.

(3) Proposed change: Change Action "b" to Action "c."

Evaluation: This change is an editorial change and is acceptable to the staff.

(4) Proposed change: Add a new action statement that would state:

"With one or more control circuits or transfer switches required for a serious control room or cable spreading room fire inoperable, restore

the inoperable circuit(s) or switch(es) to OPERABLE status within 30 days, or prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 30 days outlining the action taken, the cause of the inoperability, and the plans and schedule for restoring the circuit(s) or switch(es) to OPERABLE status."

Evaluation: The licensee's submittal dated March 18, 1994, pointed out that the mild environment in the plant has resulted in good contact reliability for transfer switches. Further, the licensee conveyed that it anticipates that an inoperable transfer switch or circuit would result in compensatory measures similar to those for an inoperable fire barrier. Specifically, a continuous fire watch would probably be established or, assuming fire detection is available, an hourly fire watch would probably be provided. However, the new action statement for LCO 3.3.3.5.2 would require the licensee to submit a special report to the NRC after 30 days including a description of the corrective action taken for the particular case and the schedule to restore any applicable circuit or switch to operable status. On the basis of the above, the inclusion of this TS requirement is acceptable.

#### 2.1.2 Surveillance Requirement 4.3.3.5.

(1) Proposed change: Change the number of the current Surveillance Requirement (SR) "4.3.3.5" to SR "4.3.3.5.1."

Evaluation: This change is an editorial change and is acceptable to the staff.

(2) Proposed change: Add a new SR 4.3.3.5.2 that would state:

"At least once per 18 months, verify each control circuit and transfer switch required for a serious control room or cable spreading room fire is capable of performing the intended function."

Evaluation: The licensee's submittal dated March 18, 1994, indicated that vendor documentation for transfer switches recommends periodic inspection of transfer switches for broken parts and degraded contacts. This addition is consistent with the guidance of Generic Letter 88-12, indicating that any specifications related to the capability for safe shutdown following a fire should not be included in the removal of detailed fire protection requirements from the TS. This addition is acceptable.

#### 2.1.3 Remote Shutdown Instrumentation, TS Bases 3/4.3.3.5

Proposed change: Add the following statement to TS Bases 3/4.3.3.5:

"SR 4.3.3.5.2 verifies that each Remote Shutdown System transfer switch and control circuit required for a serious control room or cable spreading room fire performs its intended function. This verification

is performed from the remote shutdown panel and locally, as appropriate. This will ensure that if the control room becomes inaccessible, the unit can be safely shutdown from the remote shutdown panel and the local control stations."

Evaluation: This addition to the associated bases is just clarifying and is acceptable to the staff.

#### 2.1.4 Technical Specification 6.9.2

Proposed change: Add the following statement to TS 6.9.2:

"Inoperable Remote Shutdown System control circuit(s) or transfer switch(es) required for a serious control room or cable spreading room fire, Specification 3.3.3.5.2."

Evaluation: This addition is an administrative addition and is acceptable to the staff.

On the basis of the above, the NRC staff finds that the proposed amendment to add TS testing requirements for Appendix R transfer switches and to specify a new special report requirement for TS 6.9.2 are acceptable and meet the relevant requirements of Appendix R to 10 CFR Part 50. As requested in the licensee's letter dated December 23, 1992, the staff finds acceptable that this amendment will be implemented prior to restart from the next refueling outage (starting approximately October 1, 1994).

### 3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Ohio State official was notified of the proposed issuance of the amendment. The State official had no comments.

### 4.0 ENVIRONMENTAL CONSIDERATION

This amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 or changes a surveillance requirement. The staff has 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 the amendment involves no significant hazards consideration and there has been no public comment on such finding (59 FR 10016). Accordingly, the 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 the amendment.

5.0 CONCLUSION

The staff has 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, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

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Date: June 14, 1994