

UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20655

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION RELATED TO AMENDMENT NOS. 134 AND 138 TO FACTULITY OPERATING LICENSE NOS. DPR-24 AND DPR-27

POINT BEACH NUCLEAR PLANT, UNIT NOS. 1 AND 2 DOCKET NOS. 50-266 AND 50-301

1.0 INTRODUCTION

By letter dated September 22, 1989, Wisconsin Electric Power Company (WEPCo) proposed revising the Point Beach Nuclear Plant Technical Specifications by adding limiting conditions of operation to prescribe when the 480 volt safeguard buses may be tied together, when the 4160 volt safeguard buses may be tied together, and when these safeguard puses must be powered from their normal supply. The normal line-up of the safety-related buses is with all tie breakers open. Prior to this amendment application the technical specifications did not address the use of the tie breakers. By letter dated August 25, 1992, the licensee submitted, information supplemental to the application. This information further clarified the conditions under which the buses could be tied together, but did not change the scope of the amendment request or have any bearing on the proposed determination of no significant hazards consideration.

2.0 EVALUATION

Each unit of Point Beach has two 480V AC safety buses [1(2) B03 and 1(2) B04] which are supplied through step down transformers, from two 4.16kV safety buses [1(2) A05 and 1(2) A06]. The A05 and A06 safety buses are normally supplied from [1(2) A03 and 1(2) A04], 4.16kV non-Class 1E buses. In the event of a loss of offsite power when Emergency Diesel Generators (EDGs) are required, the A05 safety bus will receive power from EDG G01 and the A06 safety bus will receive power from EDG G02.

The 480V (803 and 804) and 4.16kV (A05 and A06) safety buses have a normally open tie breaker.

Ther are no LCOs in Point Beach TS Section 15.3.7 which limit the time when the bus tie breakers may be closed. The closing of any one of the tie breakers compromises the electrical system independence and redundancy.

WE's proposed TS changes are based on the guidance of Revision 4 of NUREG-0452, Standard Technical Specification for Westinghouse Pressurized Water Reactors (STS). The STS requires an independent lineup of the safety buses with the tie breakers between redundant buses to be open. However, if a tie breaker is closed, LCOs are in effect, i.e., deviation from the normal lineup for up to 8 hours or be in at least Hot Standby within the next 6 hours and in Cold Shutdown within the following 30 hours.

The proposed addition of LCOs concerning the operation of the bus tie breaker and the safety buses will set restrictive administrative constraint on the plant operation. The proposed TS changes will not involve any changes in the physical operation of the unit except to mandate a unit hot standby or cold shutdown as outlined above. There is no increase in the probability or consequences of an acident previously evaluated, or the possibility of creating a new or different kind of accident from any accident previously evaluated. The proposed LCOs will increase the safety margin of the units' operations.

Proposed <u>TS 15.3.7.A.1</u> addresses the conditions to be met prior to making one or both reactors critical under normal conditions. All safety buses will be energized from their normal supply and both units A05/A06 bus tie-breakers are removed from their cubicles and BO3/BO4 bus tie-breakers are open with control power removed to ensure independent and redundant trains.

Proposed TS 15.3.7.A.2 is essentially identical to TS 15.3.7.A.1 except for the abnormal conditions including Black Plant startup where one reactor may be made

Proposed TS 15.3.7.B.l.e addresses the LCOs and the operability of the safety buses during one unit in cold or refueling shutdown. One pair of buses, AC5 and A06 or B03 and B04 for that shutdown unit may be tied together through their critical. common tie breaker for up to 8 hours. The LCOs allow abnormal bus lineups for limited time to allow testing (maintenance of the assential buss) limited time to allow testing/maintenance of the essential buses, breakers, and

Proposed TS 15.3.7.8 1.f addresses the condition when a unit is fully defueled and one pair of buses for the defueled unit AOS and AOS or BO3 and BO4 may be transformers. tied together by their tie-breaker provided either:

- An evaluation is performed to show that the loads remain or can be energized by the buses will not cause a potential overload of the associated diesel generator. The applicable LCO of the quipment removed from service shall be entered for operating unit.
- 2. A single train of spent fuel cooling is adequate to cool the spent fuel

In case of a single failure of a tie-breaker and loss of both buses in the defue:ed unit, the fuel pool water inventory can be maintained with fire suppression water. The fire suppression system is supplied by a diesel powered

The staff finds that the TS imposes a more conservative limiting condition for pump. plant operation and are, therefore, acceptable.

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

The proposed addition of LCOs concerning the operation of the bus tie breaker and the safety buses will set restrictive administrative constraint on the plant operation. The proposed TS changes will not involve any changes in the physical operation of the unit except to mandate a unit hot standby or cold shutdown as outlined above. There is no increase in the probability or consequences of an accident previously evaluated, or the possibility of creating a new or different kind of accident from any accident previously evaluated. The proposed LCO will increase the safety margin of the units' operations.

Proposed <u>TS 15.3.7.A.1</u> addresses the conditions to be met prior to making one both reactors critical under normal conditions. All safety buses will be energized from their normal supply and both units A05/A06 bus tie-breakers are removed from their cubicles and B03/B04 bus tie-breakers are open with control power removed to ensure independent and redundant trains.

Proposed $\overline{\text{IS}}$ 15.3.7.A.2 is essentially identical to TS 15.3.7.A.1 except for the abnormal conditions including Black Plant startup where one reactor may be made critical.

Proposed <u>TS 15.3.7.B.l.e</u> addresses the LCOs and the operability of the safety buses during one unit in cold or refueling shutdown. One pair of buses, AO5 and AO6 or BO3 and BO4 for that shutdown unit may be tied together through their common tie breaker for up to 8 hours. The LCOs allow abnormal bus lineups for limited time to allow testing/maintenance of the essential buses, breakers, and transformers.

Proposed $\overline{15.15.3.7.81.f}$ addresses the condition when a unit is fully defueled and one pair of buses for the defueled unit AO5 and AO6 or BO3 and BO4 may be tied together by their tie-breaker provided either:

- An evaluation is performed to show that the loads remain or can be energized by the buses will not cause a potential overload of the associated diesel generator. The applicable LCO of the equipment removed from service shall be entered for operating unit.
- A single train of spent fuel cooling is adequate to cool the spent fuel pool.

In case of a single failure of a tie-breaker and loss of both buses in the defueled unit, the fuel pool water inventory can be maintained with fire suppression water. The fire suppression system is supplied by a diesel powered pump.

The staff finds that the TS imposes a more conservative limiting condition for plant operation and are, therefore, acceptable.

3.0 STATE CONSULTATION

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

4.0 ENVIRONMENTAL CONSIDERATION

These amendments involve a change in the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 or change an inspection or surveillance requirement. The staff has determined that the amendments involve 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 published a proposed finding that these amendments involve no significant hazards consideration and there has been no public comment on such finding (56 FR 31445). Accordingly, these amendments meet 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 these amendments.

5.0 CONCLUSION

The staff has concluded, based on the considerations discussed above, that (I) 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 the amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: S. Saba

Date: September 18, 1992