UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO REQUESTED CHANGE TO TS 3/4.7.6

CONTROL ROOM EMERGENCY AIR CONDITIONING SYSTEM

SALEM GENERATING STATION, UNITS 1 AND 2

DOCKET NOS. 50-272 AND 50-311

1.0 Introduction

By letter dated July 30, 1998, as supplemented by letter dated February 22, 1999, the Public Service Electric and Gas Company (the licensee) requested a revision to the Technical Specifications (TSs) for the Salem Generating Station, Unit Nos. 1 and 2. The purpose of the proposed revision was to revise TS 3/4.7.6, "Control Room Emergency Air Conditioning System," and the associated bases to change the acceptance criteria for the Control Room Emergency Air Conditioning System (CREACS).

2.0 Evaluation

2.1 Background

In its July 30, 1998, letter, the licensee proposed that the acceptance criteria for the CREACS be revised, in part, as follows:

> Current TS 3/4.7.6:
>
> "... maintain the control room at positive pressure ≥1/8-inch W.G. [water gauge] relative to the adjacent areas... "
>
> Proposed TS 3/4.7.6:
>
> "...1) maintain the control room at a positive pressure ≥ 1/8-inch W.G. relative to the outside atmosphere, Work Control Center and Control Room Equipment Rooms and 2) maintain the control room at a positive pressure ≥ 1/20-inch W.G. relative to the Relay Rooms and the Auxiliary Building..."

The NRC's Standard Review Plan (SRP) Section 6.4, "Control Room Habitability," states that ventilation systems that will pressurize the control room during a radiation emergency should be verified to maintain the control room pressurization to at least +1/8-inch W.G. relative to all surrounding air spaces. The licensee has determined that a situation may exist that causes the differential pressure between the control room envelope (CRE) and the relay room to decrease below +1/8-inch W.G., thus not meeting the pressurization requirement. This situation occurs when only one train of CREACS is running and the nonsafety-related battery exhaust fan in the

relay room is lost, thereby causing an increase in the static pressure in the relay room. Since the battery exhaust fan assists in maintaining the relay room at a negative pressure relative to the control room, the licensee would need to open a door from the relay room, if the fan is lost, to create a vent path and lower the relay room pressure. The licensee currently has a "maintenance mode" alignment procedure that includes opening doors in the relay room and electrical penetration areas, posting of fire watches, and establishing compensatory security measures. The licensee opens the doors to create a vent path from the relay room so that a +1/8-inch W.G. differential pressure can be maintained between the CRE and the relay room.

Evaluation

The NRC staff notes that the above condition will only exist in the event of the loss of the nonsafety-related battery exhaust fan. Absent that loss, the control room differential pressure is maintained, and there is no need for the TS amendment. In the event the fan is lost, opening the door from the relay room is an acceptable operator action. Again, no TS amendment is necessary. Emergency operating procedures should assure that the operators are directed to open the door in the event of a loss of offsite power, which would cause loss of the battery exhaust fan. The licensee's control room operator dose analysis should take this required action into account. The current licensee practice assures that control room doses meet the acceptance criteria in General Design Criterion 19, "Control Room," of Appendix A to 10 CFR Part 50. Thus, the NRC staff finds the proposal to degrade the CRE requirements is unnecessary. The licensee's proposed TS amendment is also inconsistent with the requirements in the standard TS. Further, approval of the licensee's request would essentially be approval of a precedent setting generic change that is not technically justified.

3.0 Conclusion

On the basis of NRC staff's review of the licensee's July 30, 1998, submittal and February 22, 1999, response to the request for additional information, the NRC staff finds that the licensee has not established a technical basis to support its proposed TS change. Therefore, the NRC staff concludes that the licensee's proposed TS amendment should be denied.

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