

October 29, 2007

MEMORANDUM TO: Harold K. Chernoff, Chief
Plant Licensing Branch I-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

FROM: Richard B. Ennis, Senior Project Manager */ra/*
Plant Licensing Branch I-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

SUBJECT: SALEM NUCLEAR GENERATING STATION, UNIT NOS. 1 AND 2,
DRAFT REQUEST FOR ADDITIONAL INFORMATION
(TAC NOS. MD4843 AND MD4844)

The attached draft request for information (RAI) was transmitted on October 10, 2007, to Mr. Jeff Keenan of PSEG Nuclear LLC (the licensee). This information was transmitted to facilitate an upcoming conference call in order to clarify the licensee's amendment request for Salem Nuclear Generating Station (Salem), Unit Nos. 1 and 2, dated March 16, 2007, as supplemented on August 30, and September 14, 2007. The proposed amendment would add new Technical Specification (TS) requirements for the response times associated with a steam generator feedwater pump (SGFP) trip and feedwater isolation valve (FIV) closure. The amendment would also revise the TS requirements for the containment fan cooler unit (CFCU) cooling water flow rate. These changes are associated with a revised containment response analysis that credits a SGFP trip and FIV closure (on a feedwater regulator valve failure) to reduce the mass/energy release to the containment during a main steam line break (MSLB). The containment analysis also credits a reduced heat removal capability for the CFCUs, allowing a reduction in the required service water (SW) flow to the CFCUs.

This memorandum and the attachment do not convey or represent an NRC staff position regarding the licensee's request.

Docket Nos. 50-272 and 50-311

Attachment: Draft RAI

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DRAFT REQUEST FOR ADDITIONAL INFORMATION
REGARDING PROPOSED LICENSE AMENDMENT
STEAM GENERATOR FEEDWATER PUMP TRIP,
FEEDWATER ISOLATION VALVE CLOSURE RESPONSE TIMES,
AND CONTAINMENT FAN COIL UNIT COOLING WATER FLOW RATE
SALEM NUCLEAR GENERATING STATION, UNIT NOS. 1 AND 2
DOCKET NOS. 50-272 AND 50-311

By letter dated March 16, 2007, as supplemented on August 30, and September 14, 2007, PSEG Nuclear LLC (PSEG or the licensee) submitted an amendment request for Salem Nuclear Generating Station (Salem), Unit Nos. 1 and 2. The proposed amendment would add new Technical Specification (TS) requirements for the response times associated with a steam generator feedwater pump (SGFP) trip and feedwater isolation valve (FIV) closure. The amendment would also revise the TS requirements for the containment fan cooler unit (CFCU) cooling water flow rate. These changes are associated with a revised containment response analysis that credits a SGFP trip and FIV closure (on a feedwater regulator valve failure) to reduce the mass/energy release to the containment during a main steam line break (MSLB). The containment analysis also credits a reduced heat removal capability for the CFCUs, allowing a reduction in the required service water (SW) flow to the CFCUs.

The Nuclear Regulatory Commission (NRC) staff has reviewed the information the licensee provided that supports the proposed amendment and would like to discuss the following issues to clarify the submittal.

- 1) Enclosure 2 (S-C-CBV-MEE-1982, Revision 0) (Page 15 of 54) of the application dated March 16, 2007, provides a discussion of the acceptance in crediting of non-safety related equipment as a backup to a single active failure of a safety grade component. It was indicated in the discussion that the FIV is a non-safety grade component, where as the referenced Standard Review Plan and NUREGs refer to the FIV as a safety grade component. The licensee's discussion in Enclosure 2 implies that the Feedwater Regulating Valve (FRV) and FRV bypass valve are safety grade components. The NRC staff review of Updated Final Safety Analysis Report (UFSAR) page 10.4-12 shows that "all feedwater piping downstream from, and including, the isolating motor operated stop check valve is designed to meet Class I seismic requirements." The FRVs are located upstream of the check valve (per UFSAR figure 10.4-5B, Sheet 3) . Please confirm that the FRVs at Salem Units 1 and 2 are safety grade components and the FIVs are non-safety grade.
- 2) The licensee has stated that FIV closure times are now being included in the TSs, because credit is taken for these valves to close in the revised containment analysis (WCAP-16303). However, UFSAR Section 15.4.8.2.2 (page 15.4-114) indicates that credit was already taken for these valves to close in the current analysis. Please explain why the closure time for these valves is not in the existing TSs and what is the basis for its inclusion in the TS now.