

April 19, 2001

MEMORANDUM TO: James W. Clifford, Chief, Section 2
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

FROM: Robert J. Fretz, Project Manager, Section 2 **/RA/**
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

SUBJECT: SALEM GENERATING STATION, ELECTRONIC TRANSMISSION,
ISSUES DISCUSSED IN A RECENT CONFERENCE CALL
(TAC NO. MB0521 AND MB0522)

The attached information was received by electronic mail on April 9, 2001, from PSEG Nuclear LLC (PSEG or the licensee). These issues were discussed in a recent telephone conversation with the licensee. This information was transmitted in order to provide clarification to information provided in its application for a license amendment dated November 10, 2000. The attachment does not convey a formal request for information or represent an NRC staff position.

Docket Nos. 50-272 and 50-311

Attachment: Email from PSEG Nuclear dated April 9, 2001

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From: Thomas, Brian J. (Brian.Thomas@pseg.com)
To: rxf@nrc.gov
Date: Mon, Apr 9, 2001 2:12PM
Subject: Follow-Up to April 4, 2001 Telecon

The following provides clarifying information for the Power Uprate as discussed during the telephone conversation on April 3, 2001 concerning RG 1.49, SBO and ATWS.

REGULATORY GUIDE 1.49

As stated in section 3A of the Salem UFSAR, Salem station conforms to only regulatory position C.1 of the regulatory guide concerning maximum power levels. As stated in RG 1.49 position C.1 reactor core power level should be limited to 3800 megawatts thermal or less. Upgrading the Salem Units from 3411 to 3459 MWt will still be in compliance with position C.1.

In regards to positions C.2 and C.3, although Salem station is not committed to these sections of the regulatory guide, Salem station meets the intent of position C.2 by maintaining the accident analysis at 1.006 times the uprated licensed power level and position C.3 is met since the dose analysis have been analyzed at 3600 MWt which is greater than 1.02 times the uprated license power level.

STATION BLACKOUT

The Salem plants have been analyzed to a four-hour coping duration. The only potential impact to the ability to withstand and recover from a station blackout (SBO) is the increased decay heat that must be removed from the RCS to keep the unit in hot standby. This is done by using the turbine driven Auxiliary Feedwater (AFW) pump to supply water to the steam generators and exhausting steam through the main steam PORV's. For the proposed 1.4% power uprate it was confirmed that there is adequate AFW storage tank inventory for the four-hour coping duration. Area and room temperature transients are not expected to change as a result of the uprate since the initial temperatures and heat loads do not change. Therefore the four hour coping duration for SBO is not affected by the proposed 1.4% power uprate.

ATWS

With respect to ATWS, per Westinghouse recommendation, the C-20 permissive setpoint of 40% for arming of the AMSAC system is retained such that the raw power level in MWt increases slightly (increase of 19.2 MWt to 1383.6 MWt [$3459 \text{ MWt} * 0.4$ versus $3411 \text{ MWt} * 0.4$]). The Salem facility currently relies upon the generic ATWS analyses performed by Westinghouse. The 1979 generic ATWS analyses that form the deterministic analysis basis for the final ATWS rule assumed a core power of 3411 MWt (3423 MWt NSSS power) for 4-Loop Westinghouse PWRs. Westinghouse sensitivity analysis results were also provided as required by NUREG-0460 for a change in power of +2%. It can be assumed that this was to address the traditional 2% uncertainty on power. This is the basis for current licensed operation at a core power of 3411 MWt with a 2% uncertainty. Hence, upon a core power uprate to 3459 MWt with a 0.6% uncertainty, the same core power level (3479 MWt) will be covered by the current generic analyses / sensitivities. Thus, no additional analyses are required for ATWS for the core power uprate to 3459 MWt.

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Salem Generating Station

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