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U. S. Nuclear Regulatory Commission
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Washington, DC 20555-001

Salem Generating Station, Units 1 and 2
Facility Operating License Nos. DRP-70 and DRP-75
NRC Docket Nos. 50-272 and 50-311

Subject: 2009 Summary of Revised Regulatory Commitment - Salem

In accordance with the Nuclear Energy Institute (NEI) process for managing Nuclear Regulatory Commission (NRC) commitments and associated NRC notifications, PSEG Nuclear LLC (PSEG) submits this correspondence to discuss commitments that were changed and not reported by other means during 2009.

The attached commitments were evaluated in accordance with the requirements of the PSEG Regulatory Commitment Change Process, which is consistent with the guidance in NEI 99-04, "Guideline for Managing NRC Commitments."

There are no new commitments in this letter.

If there are any questions, please contact Howard Berrick at 856-339-1862.

Sincerely,

Carl J. Fricker
Site Vice President - Salem

Attachments (1)

A001
NRR

C S. Collins, Administrator – Region 1
R. Ennis, Project Manager – USNRC
D. Schroeder - USNRC Senior Resident Inspector - Salem
P. Mulligan, Manager, IV, Bureau of Nuclear Engineering
H. Berrick, Salem Commitment Coordinator – X25
L. Marabella, Corporate Commitment Coordinator – N21

	Revised Commitment Description	Justification For Change
Original Commitment: "... After about three (3) tests, a licensee or applicant should determine the best frequency for testing to provide assurance that the equipment will perform the intended safety functions during the intervals between the tests and meet the requirements of GDC 44, 45, and 46. **The minimum final testing frequency should be once every 5 years."** **Source Document:** NRC Generic Letter 89-13, *Service Water System Problems Affecting Safety-Related Equipment*, Enclosure 2, Program for Testing Heat Transfer Capability **Reference:** CM-SC-1990-591 70095726 0020 **Date of Change:** 08/20/2009	The thermal performance testing frequency of the tube and shell type 11, 21 and 22 Component Cooling Heat Exchangers (CCHX) is **every 4 refueling outages (4R, or 6 years).**	Enclosure 2 of NRC Generic Letter states that a licensee or applicants periodic retest program should determine, after **three** tests, the best frequency for testing to provide assurance that the equipment will perform the intended safety functions during the intervals between tests. Testing of the CCHX's has verified that the cleaning methods utilized have allowed for increased margin to the fouling limit on the heat exchanger tubes. The commitment is being revised to extend the thermal performance testing frequency on the CCHX's listed in Part 1 from 3R (4.5 years) to 4R (6 years). The 4R (6 years) performance testing frequency will allow alignment of the test with the service water nuclear underground header outage (2R) and cleaning of the heat exchanger, which is a six-year (6) PM to open, inspect, clean and eddy current tubes. The performance testing results since 1R13 for Unit 1 and 2R10 for Unit 2 for the above heat exchangers were reviewed. Results are well below the maximum fouling factor limit. Additionally, Salem also performs biofouling trending every 60 days, recording and trending the important system parameters (i.e. flow, temperature and pressure).

	Revised Commitment Description	Justification For Change
Original Commitment: "1. Maintain procedures to monitor fluid conditions within the AFW system each shift during times when the system is required to be operable. This monitoring should ensure that fluid temperature at the AFW pump discharge is maintained at about ambient levels; and 2. Maintain procedures for recognizing steam binding and for restoring the AFW system to operable status, should steam binding occur." **Source Document:** NRC IE Bulletin 85-01 NRC GL 88-03 PSEG NLR-N88078 dated 05/27/88 (C0270) **Reference:** CM-SC-1988-592 70093395 0050 70095726 0030 **Date of Change:** 09/11/08	The commitment to maintain procedures has not changed. Salem Unit 1 and Unit 2 have a periodic inspection procedure S1/2.OP-PT.AF -0002, *Auxiliary Feedwater Backleakage*, which identifies conditions that could lead to steam binding by monitoring the Auxiliary Feedwater (AFW) pump discharge piping temperature. However, the criterion that requires Engineering notification has changed. Previously, this criterion was if the AFW discharge piping reaches 120°F "or the temperature difference (Delta T) between any two discharge lines was greater than 10°F." The new criterion is if the discharge piping reaches 120°F "or the temperature difference (Delta T) between <u>the highest temperature line and the average line temperature</u> is greater than 10°F."	IE Bulletin 85-01, *Steam Binding Of Auxiliary Feedwater Pumps*, recommended that procedural controls remain in effect until the completion of hardware modifications to 'substantially reduce' the likelihood of steam binding, **<u>or</u>** until it was superseded by action implemented as a result of resolution of Generic Safety Issue 93, *Steam Binding of Auxiliary Feedwater Pumps* (Generic Letter (GL) 88-03). This issue was resolved (for Salem) by requesting confirmation that Salem would: 1. Maintain procedures to monitor fluid conditions within the AFW system each shift during times when the system is required to be operable. This monitoring should ensure that fluid temperature at the AFW pump discharge is maintained at about ambient levels; **<u>and</u>** 2. Maintain procedures for recognizing steam binding and for restoring the AFW system to operable status, should steam binding occur. Salem Unit 1 and Unit 2 have in place a periodic inspection procedure S1/2.OP-PT.AF-0002, *Auxiliary Feedwater Backleakage*, which identifies conditions that could lead to steam binding by monitoring the AFW pump discharge piping temperature. This procedure, performed once per shift in modes 1, 2 and 3, prevents steam binding conditions from occurring. The procedures verify that none of the AFW line temperatures are significantly higher than the others. The procedure originally required Engineering notification if the discharge piping reaches 120°F or the temperature difference (Delta T) between any two discharge lines is greater than 10°F. The method for steam leakage detection often caused "false positives" when a single line temperature became lower than the other three lines. The new criterion for notifying Engineering is if the discharge piping reaches 120°F "or the temperature difference (Delta T) between <u>the highest temperature line and the average line temperature</u> is greater than 10°F." Although this criterion does cause a slight loss of sensitivity to temperature changes, it is sufficiently sensitive to identify inconsistencies early on to eliminate false positives. Not changed is that should the discharge piping temperature reach 160°F, specific guidance is provided to restore the AFW system to an operable status.

	Revised Commitment Description	Justification For Change
Original Commitment: "**1.** The existing lines connecting the [Boron Injection Tanks] BITs to the [Boric Acid Tanks] BATs will be cut and capped prior to implementation of the remainder of the proposed modifications. [NOTE: This commitment is not impacted by this change] **2**. The BITs **will be sampled for boron concentration on a quarterly basis."** **Source Document:** Salem 1/2 Amendments 78/52 SER, dated 04/07/87 (C0451) **Reference:** CM-SC-1987-593 70095726 0040 **Date of Change:** 10/05/09	All reference to sampling the BIT and maximum concentrations is removed.	TS Amendment 78 SER, dated 04/07/1987, approved reducing the Boron Injection Tank (BIT) boron concentration from 20,000 – 22,000 ppm boron to 2,200 ppm or less. The SER stated that in a conference call on 10/3/1986, Salem committed to cutting and capping the existing lines connecting the BITs to the BATs prior to implementation of the remainder of the proposed modifications and the BITs would be sampled for boron concentration on a quarterly basis. This was because of the NRC staff's "...concern about the possibility of introducing concentrated boric acid into the BIT in the event of emergency boration..." There is no longer a connection between the BATs and the BITs so the concerns that concentrated boric acid would accumulate in the BITs are no longer valid. BIT boron concentrations are no longer a concern because there is no minimal boron, and the maximum boron is the concentration from the RWST. Additionally, samples since 1986 demonstrate that there is no concern for concentrated boric acid. BIT sampling cost chemistry technician dose and entry into a contamination area, and is considered a safety hazard by the chemistry technicians due to the potential for bumps, trips and falls. The BIT has become a large "pipe" for the injection of boric acid from the RWST. There are no minimum boron concentrations, and the BIT connections to the BATs are gone; therefore, the concerns for concentrated boric acid injection are removed. Additionally, the current safety analysis does not depend on boron from the BIT. From UFSAR, Section 6.3.2.2 Equipment and Component Description of Boron Injection Tank... "The BIT contains between 0 to 2500 ppm boric acid solution and is connected to the discharge of the centrifugal charging pumps. Upon actuation of the safety injection signal, the flow from the centrifugal charging pumps is routed through the BIT into the RCS. Although the BIT is part of the safety injection pressure boundary, the diluted form of boric acid in the BIT is not credited for accident mitigation.

	Revised Commitment Description	Justification For Change
		The BIT is maintained in a 100-percent full condition. The BIT is kept 100% full administratively by filling and venting periodically using procedural controls. The parallel motor-operated gate valves at the inlet and outlet of the BIT are kept normally closed. The BIT pressure also can be monitored from the Control Room console. Chapter 15, Accident Analysis, conservatively assumes that the BIT is filled with unborated water (0-ppm boric acid) when analyzing core response, containment integrity, and equipment environmental qualification. The normal temperature of the BIT and its associated lines is at ambient temperature. Heaters in the BIT and associated line heat tracing are not required because of the low concentration of boric acid."