



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

January 30, 2012

Mr. Thomas Joyce
President and Chief Nuclear Officer
PSEG Nuclear LLC
P.O. Box 236, N09
Hancocks Bridge, NJ 08038

SUBJECT HOPE CREEK GENERATING STATION AND SALEM NUCLEAR
GENERATING STATION, UNIT NOS. 1 AND 2 - AUDIT OF THE LICENSEE'S
MANAGEMENT OF REGULATORY COMMITMENTS (TAC NOS. ME7134,
ME7135, AND ME7136)

Dear Mr. Joyce:

The U.S. Nuclear Regulatory Commission (NRC) informed licensees in Regulatory Issue Summary 2000-17, "Managing Regulatory Commitments Made by Power Reactor Licensees to the NRC Staff," dated September 21, 2000, that the Nuclear Energy Institute (NEI) document NEI 99-04, "Guidelines for Managing NRC Commitment Changes," contains acceptable guidance for controlling regulatory commitments and encouraged licensees to use the NEI guidance or similar administrative controls to ensure that regulatory commitments are implemented and that changes to the regulatory commitments are evaluated and, when appropriate, reported to the NRC.

The NRC Office of Nuclear Reactor Regulation (NRR) has instructed its staff to perform a periodic audit of licensees' commitment management programs to determine whether the licensees' programs are consistent with the industry guidance in NEI 99-04, and that regulatory commitments are being effectively implemented. An audit of the commitment management program for Hope Creek and Salem was performed during the period September 19, 2011, through January 13, 2012. The audit was performed at NRC Headquarters using documentation provided by PSEG Nuclear LLC (PSEG, the licensee) as requested by the NRC staff. The previous audit of the licensee's commitment management program was documented in an NRC letter dated October 14, 2008.

As discussed in the enclosed audit report, the NRC staff concludes that the licensee's procedures used to manage commitments provide the necessary attributes for an effective commitment management program. However, although the commitment management procedures are adequate, there were a number of problems found with adherence to the procedures. Specifically, the licensee's commitment management program has not been effective with respect to: tracking regulatory commitments; annotating documents to provide traceability of commitments; and managing changes to commitments. Similar findings were identified during the last NRC audit of the PSEG commitment management program in 2008. As such, and given that the licensee missed several opportunities to correct some of the discrepancies identified during this audit, the NRC staff also concludes that there has been ineffective corrective action for issues associated with the commitment management program.

T. Joyce

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The NRR staff has discussed the results of this audit with NRC Region I staff. Further follow-up on the issues discussed in the audit report may be considered as part of the reactor oversight process baseline inspections.

If you have any questions, please contact me at (301) 415-1420.

Sincerely,

A handwritten signature in black ink, appearing to read "R B Ennis". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

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

Docket Nos. 50-354, 50-272, and 50-311

Enclosure:
Audit Report

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UNITED STATES
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AUDIT REPORT BY THE OFFICE OF NUCLEAR REACTOR REGULATION

LICENSEE MANAGEMENT OF REGULATORY COMMITMENTS

HOPE CREEK GENERATING STATION

AND SALEM NUCLEAR GENERATING STATION, UNIT NOS. 1 AND 2

DOCKET NOS. 50-354, 50-272, AND 50-311

1.0 INTRODUCTION AND BACKGROUND

The U.S. Nuclear Regulatory Commission (NRC) informed licensees in Regulatory Issue Summary 2000-17, "Managing Regulatory Commitments Made by Power Reactor Licensees to the NRC Staff," dated September 21, 2000 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML003741774), that the Nuclear Energy Institute (NEI) document NEI 99-04, "Guidelines for Managing NRC Commitment Changes" (ADAMS Accession No. ML003680088), contains acceptable guidance for controlling regulatory commitments and encouraged licensees to use the NEI guidance or similar administrative controls to ensure that regulatory commitments are implemented and that changes to the regulatory commitments are evaluated and, when appropriate, reported to the NRC.

The NRC Office of Nuclear Reactor Regulation (NRR) has instructed its staff to perform a periodic audit of licensees' commitment management programs to determine whether the licensees' programs are consistent with the industry guidance in NEI 99-04, and that regulatory commitments are being effectively implemented. NEI-99-04 defines a "regulatory commitment" as an explicit statement to take a specific action agreed to, or volunteered by, a licensee and submitted in writing on the docket to the NRC. NRR guidelines direct the NRR Project Manager to audit the licensee's commitment management program by assessing the adequacy of the licensee's implementation of a sample of commitments made to the NRC in past licensing actions (amendments, reliefs, exemptions, etc.) and activities (bulletins, generic letters, etc.).

An audit of the commitment management program for Hope Creek Generating Station (Hope Creek) and Salem Nuclear Generating Stations, Unit Nos. 1 and 2 (Salem) was performed during the period of September 19, through January 13, 2012. The audit was performed at NRC Headquarters using documentation provided by PSEG Nuclear LLC (PSEG or the licensee) as requested by the NRC staff. The previous audit of the Hope Creek and Salem commitment management program was documented in an NRC letter dated October 14, 2008 (ADAMS Accession No. ML082760758).

Enclosure

2.0 AUDIT PROCEDURE AND RESULTS

The NRC staff reviewed commitments made during the period of approximately 3 years prior to the audit (i.e., since the last audit). The audit consisted of two major parts: (1) verification of the licensee's implementation of NRC commitments that have been completed and (2) verification of the licensee's program for managing changes to NRC commitments.

2.1 Verification of Licensee's Implementation of NRC Commitments

The primary focus of this part of the audit is to confirm that the licensee has implemented commitments made to the NRC as part of past licensing actions/activities. For commitments not yet implemented, the NRC staff determines whether they have been captured in an effective program for future implementation.

2.1.1 Audit Scope

The audit addressed a sample of commitments made during the review period. The audit focused on regulatory commitments (as defined above) made in writing to the NRC as a result of past licensing actions (amendments, exemptions, etc.) or licensing activities (bulletins, generic letters, etc.). Before the audit, the NRC staff searched ADAMS for licensee submittals since the last audit and selected a representative sample for verification. The commitments included in the review are shown in Table 1.

The audit excluded the following types of commitments that are internal to licensee processes:

- (1) Commitments made on the licensee's own initiative among internal organizational components.
- (2) Commitments that pertain to milestones of licensing actions/activities (e.g., respond to an NRC request for additional information by a certain date). Fulfillment of these commitments was indicated by the fact that the subject licensing action/activity was completed.
- (3) Commitments made as an internal reminder to take actions to comply with existing regulatory requirements such as regulations, Technical Specifications (TSs), and Updated Final Safety Analysis Reports. Fulfillment of these commitments was indicated by the licensee having taken timely action in accordance with the subject requirements.

2.1.2 Audit Results

Table 1 provides the specific details and results of the audit for verification of the licensee's implementation of commitments. There was one finding identified as a result of this part of the audit. Specifically, for several programmatic (i.e., on-going) commitments made by PSEG for Hope Creek License Amendment No. 188 (Table 1, Item No. 7), although the licensee properly revised the associated implementing document (procedure OP-HC-108-115-1001) to incorporate these commitments, the licensee did not properly annotate the document text or references section to list the commitment numbers as required by PSEG's commitment management program procedures. Annotation of programmatic commitments is necessary to

help preclude deletion or changes to commitments without the necessary review and reporting of changes. In addition, the licensee missed several opportunities to correct these discrepancies in several revisions of the implementing document as detailed in Table 1. The licensee has entered these discrepancies into its corrective action program.

2.2 Verification of the Licensee's Program for Managing NRC Commitment Changes

The primary focus of this part of the audit is to verify that the licensee has established administrative controls for modifying or deleting commitments made to the NRC. The NRC staff compared the licensee's process for controlling regulatory commitments to the guidelines in NEI 99-04, which the NRC has found to be an acceptable guide for licensees to follow for managing and changing commitments. The process used at Hope Creek and Salem is contained in the following licensee procedures: (1) LS-AA-110, Revision 7, "Regulatory Commitment Management;" (2) LS-AA-110-1001, Revision 0, "Regulatory Commitment Management Guidance;" (3) EP-AA-120-1006, Revision 0, "Emergency Preparedness Commitment Tracking;" and (4) AD-AA-101-1002, Revision 12, "Writer's Guide and Process Guide for Programs and T&RMs" [Training and Reference Material].

This part of the audit also verifies if the licensee's commitment management system includes a mechanism to ensure traceability of commitments following initial implementation. This ensures that licensee personnel are able to recognize that future proposed changes to the affected design features or operating practices require evaluation in accordance with the commitment change control process.

The audit reviewed a sample of commitment changes for Hope Creek and Salem as shown in Table 2.

2.2.1 Audit Results

The NRC staff reviewed the licensee's procedures associated with the commitment management program (listed in Section 2.2 above) against NEI 99-04. The NRC staff found that the process described in the procedures generally follows the guidance of NEI 99-04 and provides detailed instructions for: (1) identifying commitments; (2) tracking commitments; (3) annotating implementing documents to provide traceability of commitments; (4) changing commitments; and (5) periodic reporting of commitment status. The NRC staff concludes that the procedures used by the licensee to manage commitments provide the necessary attributes for an effective commitment management program.

An important feature of the licensee's program is a requirement that the Commitment Tracking Coordinator perform an annual review of the station/corporate commitment list to ensure the accuracy of the list and to verify that ongoing commitments are properly annotated in implementing documents (reference Step 4.5.3 of procedure LS-AA-110-1001). The NRC staff requested the licensee to provide the annual reviews performed in the last 3 years. Reviews were performed by PSEG for Salem Units 1 and 2 in 2009, 2010, and 2011, as documented in Work Orders 70095976, 70108047, 70123614, respectively. However, the licensee was unable to find any annual reviews performed for Hope Creek during this 3-year period. PSEG entered this discrepancy (i.e., failure to follow procedure) into its corrective action program (reference Notification 20542283, dated January 12, 2012). The reviews performed for Salem Units 1

and 2 documented several minor issues and concluded that the overall assessments met expectations for managing commitments.

Table 2 provides the specific details and results of the audit of commitment changes for Salem and Hope Creek. There were 4 findings identified as a result of this part of the audit:

- (1) Table 2, Item 2: Following identification of this commitment as part of the audit sample by the NRC Project Manager, the licensee was requested to provide documentation associated with the commitment change. The licensee was initially unable to find the information in the commitment tracking database and created a new commitment tracking item in the database. The new commitment tracking item identified the wrong reason for the commitment change (i.e., cited a license amendment that was issued after the commitment change was already made). The licensee has entered this discrepancy into its corrective action program.
- (2) Table 2, Item 2: The procedure affected by this commitment change (NO-AA-101-1004) did not correctly annotate the change (referenced a license condition that no longer existed). The licensee has entered this discrepancy into its corrective action program.
- (3) Table 2, Item 2: For this commitment change, the licensee was unable to find the Commitment Change Evaluation Form (CCEF) which is required per PSEG procedure LS-AA-110-1001. These forms are required to be retained for the life of the plant. The licensee has entered this discrepancy into its corrective action program.
- (4) Table 2, Item 3: Although the licensee revised the affected documents (Maintenance Plans S1101097, S2101100, and S2101101) to show the revised test frequency per the commitment change, the licensee did not properly annotate the documents with the associated commitment number in accordance with PSEG's commitment management program procedures. The licensee has entered this discrepancy into its corrective action program.

3.0 CONCLUSION

As discussed above, the licensee's procedures used to manage commitments provide the necessary attributes for an effective commitment management program. However, although the commitment management procedures are adequate, there were a number of problems found with adherence to the procedures. Specifically, the licensee's commitment management program has not been effective with respect to: tracking regulatory commitments; annotating documents to provide traceability of commitments; and managing changes to commitments. Similar findings were identified during the last NRC audit of the PSEG commitment management program in 2008. As such, and given that the licensee missed several opportunities to correct some of the discrepancies identified during this audit, the NRC staff also concludes that there has been ineffective corrective action for issues associated with the commitment management program.

4.0 LICENSEE PERSONNEL CONTACTED FOR THIS AUDIT

Paul Duke, Licensing Manager
Lee Marabella, Licensing Engineer

Principal Contributor: R. Ennis

Date: January 30, 2012

Attachments:

- 1) Table 1 - NRC Audit of Commitments Related to Salem and Hope Creek Licensing Actions and Licensing Activities
- 2) Table 2 - NRC Audit of Commitment Changes for Salem and Hope Creek

TABLE 1
NRC Audit of Commitments Related to Salem and Hope Creek Licensing Actions and Licensing Activities

Item No.	PSEG Submittal (ADAMS Acc. No.) ----- NRC Issuance (ADAMS Acc. No.)	Commitment as stated in PSEG Submittal (PSEG Tracking No.)	Audit Results - Verification of Licensee's Implementation of Commitment
1	Letter LR-N08-0073 for Hope Creek dated 4/10/08 (ML081130672) ----- Generic Letter 2008-01 dated 1/11/08 (ML072910759)	The submittal made 2 commitments as follows: 1. Complete the detailed walkdowns of inaccessible sections of GL 2008-01 subject systems prior to startup from the next refueling outage. (CM-HC-2008-94) 2. Evaluations of GL 2008-01 subject systems complete within 90 days following the completion of the next refueling outage. (CM-HC-2008-95) The submittal stated that the first commitment would be completed by the end of refueling outage RF15 and that the second commitment would be completed within 90 days after the completion of refueling outage RF15.	No findings identified by audit. Hope Creek completed refueling outage RF15 on 5/4/09. For first commitment, PSEG's commitment database states that the walkdowns of inaccessible piping were completed in refueling outage RF15. For second commitment, PSEG's commitment database states that evaluations of the GL 2008-01 subject systems were completed. PSEG letter LR N09-0170, dated 7/30/09, documents completion of both commitments (letter is within 90 days of completion of RF15).
2	Letter LR-N08-0074 for Salem 1 and 2 dated 4/10/08 (ML081130785) ----- Generic Letter 2008-01 dated 1/11/08 (ML072910759)	The submittal made 4 commitments as follows: 1. (Salem Unit 1) Complete the detailed walkdowns of inaccessible sections of GL 2008-01 subject systems prior to startup from the next refueling outage. (CM-U1-2008-31) 2. (Salem Unit 1) Evaluations of GL 2008-01 subject systems complete within 90 days following the completion of the next refueling outage. (CM-U1-2008-32) 3. (Salem Unit 2) Complete the detailed walkdowns of inaccessible sections of GL 2008-01 subject systems prior to startup from the next refueling outage. (CM-U2-2008-33) 4. (Salem Unit 2) Evaluations of GL 2008-01 subject	No findings identified by audit. Salem Unit 1 completed refueling outage 1R19 on 11/13/08. Salem Unit 2 completed refueling outage 2R17 on 11/11/09. For first commitment, PSEG's commitment database states that the walkdowns of the Salem Unit 1 inaccessible piping were completed 10/19/08 (i.e., before startup from 1R19). For second commitment, PSEG's commitment database states that the item was completed on 2/2/09 (i.e., within 90 days of 1R19). PSEG letter LR N09-0028, dated 2/10/09,

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		<p>systems complete within 90 days following the completion of the next refueling outage. (CM-U2-2008-34)</p> <p>The submittal stated that the first commitment would be completed by the end of refueling outage 1RF19; the second commitment would be completed within 90 days after the completion of refueling outage 1RF19; the third commitment would be completed by the end of refueling outage 2R17; and the fourth commitment would be completed within 90 days after the completion of refueling outage 2R17.</p>	<p>documents completion of first and second commitments.</p> <p>For the third commitment, PSEG's commitment database states that the walkdowns of the Salem Unit 2 inaccessible piping were completed 11/11/09 (i.e., before startup from 2R17).</p> <p>For the fourth commitment, PSEG's commitment database states that the item was completed.</p> <p>PSEG letter LR N10-0014, dated 2/8/10, documents completion of third and fourth commitments (letter is within 90 days of completion of 2R17).</p>
3	<p>Letter LR-N08-0127 for Hope Creek dated 6/11/08 (ML081700233)</p> <p>-----</p> <p>Approval of Relief Request dated 10/16/08 (ML082470063)</p>	<p>The submittal made 1 commitment as follows:</p> <p>PSEG will submit a license amendment request correcting the typographical error in Surveillance Requirement 4.7.5.c. (CM-HC-2008-40)</p> <p>The submittal stated that the commitment would be completed by 12/31/08.</p>	<p>No findings identified by audit.</p> <p>PSEG's letter which documented this commitment (LR-N08-0127, dated 6/11/08) stated that Technical Specification (TS) surveillance requirement (SR) 4.7.5.c incorrectly referenced "Specification 4.7.4.f." The correct reference should have been "Specification 4.7.5.f." Although the letter committed to submit a license amendment request to correct the typographical error, the license's amendment request (letter LR-N08-0150, dated 7/30/08, ML082200316) proposed to relocate TS 3/4.7.5 to the Technical Requirements Manual (TRM). The amendment request was approved by the NRC via Amendment No. 179 on 7/15/09 (ML091600683).</p> <p>PSEG's commitment database states that the incorrect reference was corrected following relocation of TS 3/4.7.5. to the TRM. Due to an associated relief request (submitted with the 7/30/08 amendment request), to change snubber testing requirements, the relocated information in the TRM (TR 3/4.7.5) no longer contains the detailed snubber</p>

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			testing information that was included in the TSs. The current SR (TR 4.7.5) no longer includes the typographical error that was to be corrected per this commitment.
4	Letter LR-N08-0238 for Salem 1 and 2 dated 10/22/08 (ML083050465) ----- NRC Inspection Report dated 12/11/08 (ML083460017)	The submittal made 1 commitment as follows: PSEG Nuclear will implement physical improvements to the facility that will result in an improvement in EAC [emergency alternating current] system margin by December 31, 2009. (CM-SC-2008-105) NRC Inspection Report dated 12/11/08 provides further details regarding the issues associated with this commitment (ML083050465).	No findings identified by audit. PSEG's commitment database states that the commitment was completed via completion of a design change. The NRC Project Manager (PM) reviewed the licensee's engineering analysis for the design change which determined that portable diesel generators with receptacles to facilitate electrical connections to 125 VDC and 28 VDC battery chargers and switch yard distribution panels would provide the necessary EAC system margin. The PM also reviewed several new Salem operating procedures that provide instructions to connect the portable diesels. All of the procedures had an effective date of 12/15/09 (i.e., modification was completed by 12/31/09 per the commitment).
5	Letter LR-N09-0029 for Hope Creek dated 2/6/09 (ML090560538) ----- Hope Creek Amendment No. 179 dated 7/15/09 (ML091600683)	The submittal made 4 commitments as follows: 1. PSEG will establish the Technical Specification Bases for LCO 3.0.8 as adopted with the applicable license amendment. (CM-HC-2009-131) 2. PSEG will ensure appropriate plant procedures and administrative controls are revised to implement the following Tier 2 Restrictions: 1. For BWR plants, one of the following two means of heat removal must be available when LCO 3.0.8a is used: • At least one high pressure makeup path (e.g.,	No findings identified by audit. For the first commitment, PSEG's commitment database states that the commitment was completed 10/8/09 via issuance of TS Bases Change HC-09-123. The PM reviewed the TS Bases changes (ML11139A129) and confirmed the Bases were revised accordingly (pages B 3/4 0-1, 0-4, 0-5, 0-6). The commitment was implemented within the amendment implementation period. For the second and third commitments, PSEG's commitment database states the commitment was completed on 10/8/09 via revision of the TS Bases Change discussed in Commitment 1 and a change to procedure OP-HC-108-115-1001 with an effective

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		<p>using high pressure coolant injection (HPCI) or reactor core isolation cooling (RCIC) or equivalent) and heat removal capability (e.g., suppression pool cooling), including a minimum set of supporting equipment required for success, not associated with the inoperable snubber(s), or</p> <ul style="list-style-type: none"> • At least one low pressure makeup path (e.g., low pressure coolant injection (LPCI) or containment spray (CS)) and heat removal capability (e.g., suppression pool cooling or shutdown cooling), including a minimum set of supporting equipment required for success, not associated with the inoperable snubber(s). <p>2. When LCO 3.0.8b is used at BWR plants, it must be verified that at least one success path exists, using equipment not associated with the inoperable snubber(s), to provide makeup and core cooling needed to mitigate LOOP [loss of offsite power] accident sequences. (CM-HC-2009-132)</p> <p>3. PSEG will ensure appropriate plant procedures and administrative controls are revised to implement the following Tier 2 Restriction:</p> <ul style="list-style-type: none"> • Every time the provisions of LCO 3.0.8 are used licensees will be required to confirm that at least one train (or subsystem) of systems supported by the inoperable snubbers would remain capable of performing their required safety or support functions for postulated design loads other than seismic loads, LCO 3.0.8 does not apply to non-seismic snubbers. In addition, a record of the design function of the inoperable snubber (i.e., seismic vs. non-seismic), implementation of any applicable Tier 2 restrictions, and the associated plant configuration shall be 	<p>date of 10/8/09. The PM reviewed the TS Bases as described in commitment 1 above. The PM reviewed procedure OP-HC-108-115-1001. Step 5.3.5 addresses snubber operability and references the TS Bases which provide the Tier 2 restrictions. The commitments were implemented within the amendment implementation period.</p> <p>For the fourth commitment, PSEG's commitment database states the commitment was completed 10/7/09 via UFSAR Change Notice HCN-09-018 and will be incorporated in UFSAR Rev. 18. The PM reviewed UFSAR revision 18 (ML11139A129) and confirmed the UFSAR was revised accordingly (Section 3.9.3.4.6.1). The commitment was implemented within the amendment implementation period.</p>

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		<p>available on a recoverable basis for staff inspection. (CM-HC-2009-133)</p> <p>4. PSEG will revise the UFSAR to describe the restrictions [listed in Commitments 2 and 3] above. (CM-HC-2009-134)</p> <p>The submittal stated that the above commitments would be implemented with the license amendment. The amendment was issued on July 15, 2009, with a 90 day implementation period.</p>	
6	<p>Letter LR-N09-0232 for Salem 1 dated 10/8/09 (ML092960581) ----- Salem 1 Amendment No. 294 dated 3/29/10 (ML100570452)</p>	<p>The submittal made 3 commitments as follows:</p> <p>1. PSEG commits to monitor for tube slippage as part of the steam generator tube inspection program (Salem Unit 1). (CM-U1-2009-617)</p> <p>2. PSEG commits to perform a one-time verification of the tube expansion to locate any significant deviations in the distance from the top of the tubesheet to the bottom of the expansion transition (BET). If any deviations are found, the condition will be entered into the corrective action program and dispositioned. Additionally, PSEG commits to notify the NRC of significant deviations (Salem Unit 1). (CM-U1-2009-618)</p> <p>3. For the condition monitoring (CM) assessment, the component of operational leakage from the prior cycle from below the H* distance will be multiplied by a factor of 2.16 and added to the total accident leakage from any other source and compared to the allowable accident induced leakage limit. For the operational assessment (OA), the difference in the leakage between the allowable accident induced leakage and the accident induced leakage from sources other than the tubesheet expansion region will be divided by 2.16</p>	<p>No findings identified by audit.</p> <p>For the first commitment, PSEG's commitment database states that the commitment was completed via revision of procedure S1.SG.ST.RCE 0001(Q). The PM reviewed the procedure (Revision 8 which has an effective date of 4/7/10). Step 5.2.5 of the procedure specifically states to perform the Amendment 294 commitments in accordance with Attachment 10. Attachment 10, step 1.0, requires verification that tube slippage is not occurring. The commitment was implemented prior to completion of outage 1R20.</p> <p>For the second commitment, PSEG's commitment database states that the commitment was completed via an AREVA document. The details regarding the AREVA document are summarized in PSEG Order 70100455 dated 4/7/10. The PM reviewed this information and no issues were identified. The commitment was implemented prior to completion of outage 1R20.</p> <p>For the third commitment, PSEG's commitment database states that the commitment was completed via revision of procedure S1.SG.ST.RCE 0001(Q). The PM reviewed the procedure (Revision 8 which</p>

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		<p>and compared to the observed operational leakage. An administrative limit will be established to not exceed the calculated value (Salem Unit 1). (CM-U1-2009-619)</p> <p>The submittal stated that Commitments 1 and 2 would be completed prior to entering Mode 4 during startup following refueling outage 20 in the spring of 2010. Salem Unit 1 completed refueling outage 20 on May 2, 2010.</p> <p>The submittal stated that Commitment 3 would be done at each scheduled inspection required by TS 6.8.4.i, "Steam Generator (SG) Program," beginning with Refuel Outage 1R20.</p>	<p>has an effective date of 4/7/10). Step 5.2.5 of the procedure specifically states to perform the Amendment 294 commitments in accordance with Attachment 10. Attachment 10, steps 3.0 and 4.0 implement the commitment.</p>
7	<p>Letter LR-N11-0045 for Hope Creek dated 2/14/11 (ML110460135)</p> <p>-----</p> <p>Hope Creek Amendment No. 188 dated 3/25/11 (ML110610501)</p>	<p>The submittal made 4 commitments as follows:</p> <ol style="list-style-type: none"> 1. When either the A or B EDG is removed from service for an extended 14 day AOT, both HPCI and RCIC shall be operable. (CM-HC-2011-815) 2. Any component testing or maintenance that increases the likelihood of a plant transient shall be avoided during the extended 14 day AOT. This encompasses work activities categorized as Production Risk. (CM-HC-2011-816) 3. Voluntary entry into this extended 14 day AOT should not be scheduled if adverse weather conditions are expected. (CM-HC-2011-817) 4. Operating crews will be briefed on the EDG work plan and procedural actions regarding LOOP and SBO, prior to entering the 	<p>Finding:</p> <p>Although the licensee revised procedure OP-HC-108-115-1001 to incorporate commitments made in PSEG letter LR-N11-0045 dated February 14, 2011, the licensee did not properly annotate the affected procedure text (Exhibit 2) or the References section (Section 7) with the associated commitment numbers in accordance with PSEG's commitment management program procedures. Annotation of programmatic commitments is necessary to help preclude deletion or changes to commitments without the necessary review and reporting of changes.</p> <p>It is noted that the licensee missed several opportunities to correct these discrepancies (see discussion below).</p> <p>Discussion:</p> <p>For all 4 of these commitments, PSEG's commitment</p>

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		<p>extended 14 day EDG AOT. (CM-HC-2011-818)</p> <p>The submittal stated these are programmatic commitments (i.e., not one-time actions).</p>	<p>database states that the commitments were completed via revision of procedure OP-HC-108-115-1001, Revision 12, which became effective on 5/5/11 and TS Bases Change HC-11-050. The PM reviewed the procedure and confirmed that the commitments were incorporated (procedure Exhibit 2). The PM also reviewed the TS Bases change as shown on Bases page B 3/4 8-1a (ML11139A129) and confirmed that the commitments were incorporated. Although both of these documents were revised to incorporate the commitments, the document revisions did not explicitly identify these items as commitments.</p> <p>PSEG procedure LS-AA-110, Rev. 7, "Regulatory Commitment Management," Section 4.3, requires that programmatic commitments (e.g., on-going commitments versus one-time commitments) be annotated in the associated implementing documents in accordance with PSEG procedure AD-AA-101-1002, Rev. 12, "Writer's Guide and Process Guide for Procedures and T&RMS [Training and Reference Materials]." Step 31 of Section 4.9.6 of procedure AD-AA-101-1002 requires that commitments be annotated in bold in brackets at the end of the applicable procedure step. The commitments are also to be listed in the procedure References section per Step 31 of Section 4.9.6 and Section 4.9.9.</p> <p>Since these commitments were programmatic commitments, procedure OP-HC-108-115-1001 Exhibit 2 should have been annotated to indicate the commitment numbers in accordance with PSEG's commitment management program procedures. In addition, the References section of procedure OP-HC-108-115-1001 (Section 7) should have been annotated to add the commitment numbers with a</p>

Item No.	PSEG Submittal (ADAMS Acc. No.) ----- NRC Issuance (ADAMS Acc. No.)	Commitment as stated in PSEG Submittal (PSEG Tracking No.)	Audit Results - Verification of Licensee's Implementation of Commitment
			<p>cross-reference to Exhibit 2.</p> <p>As noted above, the licensee missed several opportunities to correct the discrepancies in properly annotating procedure OP-HC-108-115-1001 to list the commitments. The following is a history of this issue:</p> <p>5/5/11 - Procedure OP-HC-108-115-1001, Revision 12 issued to incorporate commitments made per Hope Creek Amendment No. 188.</p> <p>10/6/11 - NRC PM informs PSEG of specific commitments to be included in audit and requests information (e.g., copy of revised procedures showing how commitments were implemented).</p> <p>10/14/11 - PSEG initiates Notification 20529575 documenting that procedure OP-HC-108-115-1001 was revised (Exhibit 2) but the affected text did not add the commitment numbers.</p> <p>11/18/11 - PSEG issues NUCR Order 70129803 to revise the procedure per issue identified in Notification 20529575. Procedure Exhibit 2 is revised. However, the procedure is revised to list the PSEG letter number (LRN110045) rather than the commitment numbers. (Note, no change was made to the procedure References section).</p> <p>12/20/11 - PSEG issues Notification 20534648 documenting that procedure OP-HC-108-115-1001 needs to be revised again to list the PSEG commitment numbers rather than the PSEG letter number. (Note, the Notification does not specify that the References section also needs to be revised).</p> <p>1/3/12 - NRC PM informs PSEG that References</p>

Item No.	PSEG Submittal (ADAMS Acc. No.)	Commitment as stated in PSEG Submittal (PSEG Tracking No.)	Audit Results - Verification of Licensee's Implementation of Commitment
	NRC Issuance (ADAMS Acc. No.)		
			<p>section of procedure OP-HC-108-115-1001 (Section 7) also needs to be revised to add the commitment numbers with a cross reference to Exhibit 2.</p> <p>1/4/12 - PSEG informs PM that the References section of procedure OP-HC-108-115-1001 will also be revised to add the commitment numbers with a cross reference to Exhibit 2. The next procedure revision is being tracked under NUCR Order 70131203 with a due date of 4/15/12.</p> <p>Note, the PM questioned the licensee whether the TS Bases should also have been annotated with the applicable commitment numbers. The licensee indicated that the TS Bases are not typically annotated in this manner since changes are controlled via the TS Bases Control Program.</p>

**TABLE 2
NRC Audit of Commitment Changes for Salem and Hope Creek**

Item No.	PSEG Tracking No.	Description of Commitment Change	Audit Results - Verification of Licensee's Program for Managing Commitment Changes
1	CM-SC-2007-10	<p>In Attachment 3 of PSEG letter LR-N06-0035 dated 5/1/06 (ML061300620), the licensee made the following commitment in support of Salem 1 and 2 amendments 278/261 dated 3/19/07 (ML070530283):</p> <p>"PSEG will use the NRC approved methodology in WCAP-11394-P-A for each fuel cycle to ensure the minimum DNBR [departure from nucleate boiling ratio] is maintained above the DNBR safety limit."</p> <p>As described in PSEG letter LR-N09-0103 dated 5/5/09 (ML091340091), PSEG deleted the explicit commitment to use WCAP-11394.</p>	<p>No findings identified by audit.</p> <p>PSEG's 10 CFR 50.59 screening for this change stated, in part, that: "There is no need to explicitly document this as a commitment in the Salem reload design procedures. WCAP-11394 is not a Salem specific report, but a generic Westinghouse topical report that is an inherent part of the Westinghouse reload safety analysis process. Per Westinghouse, this WCAP is referenced in their dropped rod protection analysis guidance which is utilized for Salem. The WCAP is also referenced in Salem UFSAR 15.2.3..."</p> <p>Based on review of the information in the 10 CFR 50.59 screening, there currently is no change in the methodology being used. The change involves removal of the commitment from PSEG reload design procedures. Since the WCAP is already referenced in the UFSAR, any change in methodology in the future will be adequately controlled under 10 CFR 50.59.</p>

Item No.	PSEG Tracking No.	Description of Commitment Change	Audit Results - Verification of Licensee's Program for Managing Commitment Changes
2	CM-SC-1981-28	<p>As shown in Section 8.3.4 of NUREG-0517, Supplement 5, dated January 1981 (Salem Unit 2 Safety Evaluation Report (SER)), as part of the original operating licensing for Salem Unit 2, the NRC required that "a complete formal training program be implemented for all the mechanical and electrical maintenance, quality control, and operating personnel, including supervisors, who will be responsible for the maintenance and availability of the diesel generators. The depth and quality of this training program shall be at least equivalent to that of training programs normally conducted by major diesel engine manufacturers."</p> <p>As described in PSEG letter LR-N09-0103 dated 5/5/09 (ML091340091), PSEG stated that:</p> <p>"PSEG provided an "initial" complete formal training and a qualification program for Emergency Diesel Generator (EDG) maintenance for applicable personnel who work on and supervise EDG maintenance activities.</p> <p>Continuing (future) training will be decided using the systems approach to training IAW [in accordance with] 10 CFR 50.120 and the training process description."</p>	<p>Findings:</p> <p>Following identification of this commitment as part of the audit sample by the NRC PM, the licensee was requested to provide documentation associated with the commitment change. The licensee was initially unable to find the information in the commitment tracking database and created a new commitment tracking item in the database. The new commitment tracking item identified the wrong reason for the commitment change (i.e., cited a license amendment that was issued after the commitment change was already made). On 1/5/12, the licensee generated Notification 20541304 to document this error. In addition, the procedure affected by this commitment change (NO-AA-101-1004) did not correctly annotate the change (referenced a license condition that no longer existed). On 1/5/12, the licensee generated Notification 20541704 to document this error.</p> <p>For this commitment change, the licensee was unable to find the Commitment Change Evaluation Form (CCEF) which is required per PSEG procedure LS-AA-110-1001. These forms are required to be retained for the life of the plant. On 12/29/11, the licensee entered this discrepancy into the corrective action program (reference PSEG Notification 20541021).</p>

Item No.	PSEG Tracking No.	Description of Commitment Change	Audit Results - Verification of Licensee's Program for Managing Commitment Changes
3	CM-SC-1990-591	<p>As described in PSEG letter LR-N10-0037 dated 4/30/10 (ML101310229), the licensee initially committed to thermal performance testing of the component cooling heat exchangers (CCHX) at least once every 5 years in response to Generic Letter 89-13.</p> <p>The revised commitment states that the 11 (Salem 1), 21 (Salem 2), and 22 (Salem 2) CCHXs will be tested every 4 refueling outages (i.e., every 6 years).</p>	<p>Finding:</p> <p>Although the licensee revised the affected documents (Maintenance Plans S1101097, S2101100, and S2101101) to show the revised test frequency per the commitment change, the licensee did not properly annotate the documents with the associated commitment number in accordance with PSEG's commitment management program procedures. On 10/14/11, the licensee entered this discrepancy into the corrective action program (reference PSEG Notification 20529509). On 1/5/12, the licensee informed the PM that the corrective actions for Notification 20529509 have been completed.</p> <p>The PM reviewed PSEG's Commitment Change Evaluation Form (CCEF) for this change. The CCEF used for this change was from an older revision of the commitment management procedures. PSEG confirmed that the form used was the current one at the time the evaluation was done.</p>

T. Joyce

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The NRR staff has discussed the results of this audit with NRC Region I staff. Further follow-up on the issues discussed in the audit report may be considered as part of the reactor oversight process baseline inspections.

If you have any questions, please contact me at (301) 415-1420.

Sincerely,

/ra/

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

Docket Nos. 50-354, 50-272, and 50-311

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