

PSEG Nuclear LLC  
P.O. Box 236, Hancocks Bridge, NJ 08038-0236



Order EA-12-051

LR-N15-0167

**AUG 26 2015**

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555-0001

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

Subject: PSEG Nuclear LLC's Fifth Six-Month Status Report for the Salem Generating Station in Response to March 12, 2012 Commission Order Modifying Licenses with Regard to Requirements for Reliable Spent Fuel Pool Instrumentation (Order Number EA-12-051)

References:

1. NRC Order Number EA-12-051, "Order Modifying Licenses with Regard to Reliable Spent Fuel Pool Instrumentation," dated March 12, 2012
2. PSEG Letter LR-N13-0020, "PSEG Nuclear LLC's Overall Integrated Plan for the Salem Generating Station in Response to March 12, 2012 Commission Order Modifying Licenses with Regard to Requirements for Reliable Spent Fuel Pool Instrumentation (Order Number EA-12-051)," dated February 28, 2013
3. PSEG Letter LR-N15-0025, "PSEG Nuclear LLC's Fourth Six-Month Status Report for the Salem Generating Station in Response to March 12, 2012 Commission Order Modifying Licenses with Regard to Requirements for Reliable Spent Fuel Pool Instrumentation (Order Number EA-12-051)," dated February 18, 2015
4. PSEG Letter LR-N14-0237, "Salem Generating Station Unit 1 Compliance with March 12, 2012 NRC Order to Modify Licenses with Regard to Reliable Spent Fuel Pool Instrumentation (Order Number EA-12-051) and Responses to Requests for Additional Information for Salem Units 1 and 2," dated January 15, 2015

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On March 12, 2012, the Nuclear Regulatory Commission (NRC) issued Order EA-12-051 (Reference 1) to PSEG Nuclear LLC (PSEG). Reference 1 was immediately effective and required submission of an Overall Integrated Plan (OIP) pursuant to Condition IV.C.1.a of the Order. Reference 2 provided the Salem Generating Station (SGS) Units 1 and 2 spent fuel pool level instrumentation OIP. Condition IV.C.2 of NRC Order EA-12-051 requires six-month status reports to delineate progress made in implementing the requirements of the Order. Attachment 1 to this letter provides the fifth six-month status report, which summarizes progress made in implementing the requirements of NRC Order EA-12-051 at SGS since the previous update provided in Reference 3. There are no changes in compliance method or issues requiring relief identified in Attachment 1. PSEG achieved compliance with NRC Order EA-12-051 for SGS Unit 1 prior to startup from the fall 2014 refueling outage, as documented in Reference 4.

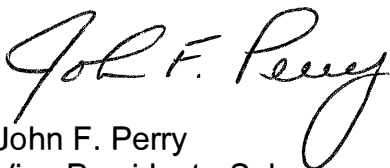
There are no regulatory commitments contained in this letter.

If you have any questions or require additional information, please do not hesitate to contact Mr. Gary Wohler at 856-339-5020.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on August 26, 2015  
(Date)

Sincerely,



John F. Perry  
Vice President - Salem

Attachment 1 – Salem Generating Station Fifth Six-Month Status Report for the  
Implementation of Order EA-12-051, Order Modifying Licenses with  
Regard to Requirements for Reliable Spent Fuel Pool Instrumentation

cc: Mr. William Dean, Director of Office of Nuclear Reactor Regulation  
Mr. Daniel Dorman, Administrator, Region I, NRC  
Ms. Carleen Parker, Project Manager, NRC  
Mr. Patrick Finney, NRC Senior Resident Inspector, Salem  
Mr. Patrick Mulligan, Chief, NJBNE  
Mr. Thomas Cachaza, Salem Commitment Tracking Coordinator  
Mr. Lee Marabella, PSEG Corporate Commitment Coordinator

**Attachment 1**

**Salem Generating Station Fifth Six-Month Status Report for the Implementation of  
Order EA-12-051, Order Modifying Licenses with Regard to Requirements for  
Reliable Spent Fuel Pool Instrumentation**

## **1 Introduction**

PSEG developed an Overall Integrated Plan (OIP) (Reference 1) for Salem Generating Station (SGS) Units 1 and 2 documenting the plan to meet the requirements to install reliable spent fuel pool instrumentation (SFPI) in response to NRC Order EA-12-051 (Reference 2). In References 3 through 6, PSEG provided six-month status reports associated with implementation of the requirements of NRC Order EA-12-051. This report is the fifth six-month status report, which provides implementation status and progress since the previous report (Reference 6). This status report follows the guidance in Appendix A to Nuclear Energy Institute (NEI) Report 12-02, Revision 1 (Reference 7), which states that the six-month status reports should include any changes to the compliance method, schedule, and the need for relief and the basis for relief, if applicable. Sections 2 and 3 of this status report include milestone accomplishments and milestone schedule status, respectively. There are no changes to the compliance method or requests for relief associated with this report.

## **2 Milestone Accomplishments**

The following milestones have been completed since the development of the OIP (Reference 1):

- Submit Overall Integrated Plan
- Issue SFPI Equipment Purchase Order
- Design Change Package – PSEG completed the detailed SFPI design for SGS Units 1 and 2, and completed design change implementation activities for SGS Unit 1 during the fall 2014 refueling outage.
- Procedures - issued for SGS Unit 1
- Training - completed for SGS Unit 1
- Submit Final Completion Report – completed for SGS Unit 1 (Reference 8)

## **3 Milestone Schedule Status**

The following table provides an update of the milestone schedule provided in Section 3 of the OIP (Reference 1) as well as additional milestones (e.g., six-month status reports, procedures, training and a completion report) that have been included for completeness. The table provides the activity status of each item and the expected completion date noting any changes. The dates are planning dates subject to change as implementation details are finalized. Activities apply to both SGS Units 1 and 2 unless indicated otherwise.

| <b>Milestone</b>   | <b>Target Completion Date</b> | <b>Activity Status</b>    | <b>Revised Target Completion Date</b> |
|--|-------------------------------|---------------------------|---------------------------------------|
| <b>Conceptual Design</b>                                       | Dec 2012                      | Complete                  |                                       |
| <b>Submit Overall Integrated Plan</b>                          | Feb 2013                      | Complete                  |                                       |
| <b>Six-Month Status Updates</b>                                | Aug 2013                      | Complete                  |                                       |
|  | Feb 2014                      | Complete                  |                                       |
|  | Aug 2014                      | Complete                  |                                       |
|  | Feb 2015                      | Complete                  |                                       |
|  | Aug 2015                      | Complete With This Report |                                       |
| <b>Issue SFPI Equipment Purchase Order</b>                     | 2Q2013                        | Complete                  |                                       |
| <b>Design Change Package</b>                                   |                               |                           |                                       |
| Complete Detailed Design – Unit 1                              | 1Q2014                        | Complete                  | 4Q2014                                |
| Complete Detailed Design – Unit 2                              | 1Q2015                        | Complete                  | 4Q2014                                |
| Begin Installation – Unit 1                                    | 2Q2014                        | Complete                  |                                       |
| Begin Installation – Unit 2                                    | 2Q2015                        | Complete                  |                                       |
| Installation Complete, SFPI Channels Fully Functional – Unit 1 | 4Q2014                        | Complete                  |                                       |
| Installation Complete, SFPI Channels Fully Functional – Unit 2 | 4Q2015                        | Not Started               |                                       |
| Implementation Outage – Unit 1                                 | 4Q2014                        | Complete                  |                                       |
| Implementation Outage – Unit 2                                 | 4Q2015                        | Not Started               |                                       |
| <b>Procedures</b>  |                               |                           |                                       |
| Issue Procedures – Unit 1                                      | Nov 2014                      | Complete                  |                                       |
| Issue Procedures – Unit 2                                      | Nov 2015                      | Started                   |                                       |
| <b>Training</b>  |                               |                           |                                       |
| Complete Training – Unit 1                                     | Nov 2014                      | Complete                  |                                       |
| Complete Training – Unit 2                                     | Nov 2015                      | Started                   |                                       |
| Submit Final Completion Report – Unit 1                        | Feb 2016                      | Complete                  | Jan 2015                              |
| Submit Final Completion Report – Unit 2                        | Feb 2016                      | Not Started               | Jan 2016                              |

#### **4 Changes to Compliance Method**

There are no changes to the compliance method as documented in the OIP (Reference 1).

#### **5 Need for Relief/Relaxation and Basis for the Relief/Relaxation**

PSEG has achieved compliance with NRC Order EA-12-051 for SGS Unit 1 as documented in Reference 8, and expects to fully comply with the order implementation date for SGS Unit 2. No relief or relaxation is requested at this time.

#### **6 Open Items from Overall Integrated Plan and Draft Safety Evaluation**

Open items from the NRC's Interim Staff Evaluation (Reference 9) are addressed in Attachment 2 to Reference 8, and will be updated in the SGS Unit 2 final completion report if necessary.

#### **7 Potential Draft Safety Evaluation Impacts**

There are no potential draft safety evaluation impacts at this time.

#### **8 References**

1. PSEG Letter LR-N13-0020, "PSEG Nuclear LLC's Overall Integrated Plan for the Salem Generating Station in Response to March 12, 2012 Commission Order Modifying Licenses with Regard to Requirements for Reliable Spent Fuel Pool Instrumentation (Order Number EA-12-051)," dated February 28, 2013
2. NRC Order Number EA-12-051, "Order Modifying Licenses with Regard to Reliable Spent Fuel Pool Instrumentation," dated March 12, 2012
3. PSEG Letter LR-N13-0176, "PSEG Nuclear LLC's First Six-Month Status Report for the Salem Generating Station in Response to March 12, 2012 Commission Order Modifying Licenses with Regard to Requirements for Reliable Spent Fuel Pool Instrumentation (Order Number EA-12-051)," dated August 25, 2013
4. PSEG Letter LR-N14-0033, "PSEG Nuclear LLC's Second Six-Month Status Report for the Salem Generating Station in Response to March 12, 2012 Commission Order Modifying Licenses with Regard to Requirements for Reliable Spent Fuel Pool Instrumentation (Order Number EA-12-051)," dated February 25, 2014
5. PSEG Letter LR-N14-0186, "PSEG Nuclear LLC's Third Six-Month Status Report for the Salem Generating Station in Response to March 12, 2012 Commission Order Modifying Licenses with Regard to Requirements for Reliable Spent Fuel Pool Instrumentation (Order Number EA-12-051)," dated August 26, 2014

6. PSEG Letter LR-N15-0025, "PSEG Nuclear LLC's Fourth Six-Month Status Report for the Salem Generating Station in Response to March 12, 2012 Commission Order Modifying Licenses with Regard to Requirements for Reliable Spent Fuel Pool Instrumentation (Order Number EA-12-051)," dated February 18, 2015
7. NEI 12-02, "Industry Guidance for Compliance with NRC Order EA-12-051, 'To Modify Licenses with Regard to Reliable Spent Fuel Pool Instrumentation,'" Revision 1, August 2012
8. PSEG Letter LR-N14-0237, "Salem Generating Station Unit 1 Compliance with March 12, 2012 NRC Order to Modify Licenses with Regard to Reliable Spent Fuel Pool Instrumentation (Order Number EA-12-051) and Responses to Requests for Additional Information for Salem Units 1 and 2," dated January 15, 2015
9. NRC Letter to PSEG, "Salem Nuclear Generating Station, Units 1 and 2 – Interim Staff Evaluation and Request for Additional Information Regarding the Overall Integrated Plan for Implementation of Order EA-12-051, Reliable Spent Fuel Pool Instrumentation (TAC NOS. MF0913 and MF0914)," dated October 17, 2013