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



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Technical Specification Section 5.4.1

LR-N14-0078

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: 2013 ANNUAL ENVIRONMENTAL OPERATING REPORT

The attached 2013 Annual Environmental Operating Report is hereby submitted pursuant to Subsection 5.4.1 of the Environmental Protection Plan (non-radiological) for Salem Generating Station, Units 1 and 2. The Environmental Protection Plan is Appendix B to Facility Operation License DPR-70 and DPR-75 (Docket Nos. 50-272 and 50-311).

There are no commitments contained in this letter.

If you have any questions or require additional information, please do not hesitate to contact Helen Gregory, Environmental Compliance Manager - Nuclear at (856) 339-1341.

Sincerely,

Lawrence M. Wagner Plant Manager - Salem PSEG Nuclear LLC

Attachment: 2013 Annual Environmental Operating Report

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CC:

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USNRC Senior Resident Inspector - Salem Mail Code X24

Salem Commitment Coordinator Mail Code X25 2013 ANNUAL ENVIRONMENTAL-OPERATING REPORT (NON-RADIOLOGICAL) January 1 through December 31, 2013

SALEM GENERATING STATION UNITS 1 AND 2 DOCKET NOS. 50-272 AND 50-311 OPERATING LICENSE NOS. DPR-70 AND DPR-75

PSEG NUCLEAR LLC P.O. BOX 236 HANCOCKS BRIDGE, NEW JERSEY 08038

Dated: MARCH 2014

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1.0 INTRODUCTION

This 2013 Annual Environmental Operating Report (AEOR) is submitted in accordance with Section 5.4.1 of the Salem Generating Station Units 1 and 2, Environmental Protection Plan (EPP), non-radiological (Appendix B to Units 1 and 2, Facility Operating License Nos. DPR-70 and DPR-75, Docket Nos. 50-272 and 50-311, respectively).

2.0 ENVIRONMENTAL PROTECTION ACTIVITIES

2.1 <u>AQUATIC MONITORING – SUMMARY AND ANALYSES</u>

Subsection 4.2.1 of the EPP references the Clean Water Act as a mechanism for protecting aquatic biota through water quality monitoring. The United States Nuclear Regulatory Commission (USNRC) relies on the State of New Jersey, acting under the authority of the Clean Water Act, to ensure applicable requirements for aquatic monitoring are implemented. The New Jersey Department of Environmental Protection (NJDEP) is the State's regulatory agency.

The NJDEP requires as part of the New Jersey Pollutant Discharge Elimination System (NJPDES) permit program that effluent monitoring be performed, with the results summarized and submitted monthly on Discharge Monitoring Report (DMR) forms. The monitoring is intended to determine compliance with the effluent limitations of the station NJPDES permit (No. NJ0005622). PSEG reviewed the DMR's corresponding to the AEOR 2013 reporting period and determined that the station is in compliance with the effluent limitations of the station's NJPDES permit. PSEG has observed no evidence of trends towards damage to the environment. Copies of monthly DMRs are routinely sent to USNRC's Document Control Desk, and additional copies are available upon request.

As required by Section 4.2.1 of the EPP, Salem Generating Station also adhered to the requirements delineated in the "Reasonable and Prudent Measures" and "Terms and Conditions" sections of the current National Marine Fisheries Service Incidental Take Statement, dated January 21, 1999. In 2013, two Kemp's Ridley sea turtles, nineteen Atlantic sturgeon (13 live and six dead) and four shortnose sturgeon (two live and two dead) were recovered at the circulating water intake trash bars. These non-routine events are described in section 5.1 later in this document.

2.2 TERRESTRIAL MONITORING – SUMMARY AND ANALYSES

As addressed in Section 4.2.2 of the EPP, Terrestrial Monitoring is not required.

3.0 EPP NONCOMPLIANCES

Subsection 5.4.1 of the EPP requires a list of EPP noncompliances and the corrective actions taken to remedy them. There were no EPP noncompliances during 2013.

4.0 CHANGES IN STATION DESIGN OR OPERATION

Pursuant to the requirements of Section 3.1 of the EPP, station changes to design or operations, as well as any tests and experiments, made in 2013 were reviewed for potential environmental impact. There were no changes that posed a potential to significantly affect the environment, created an unreviewed environmental question or resulted in a change to the EPP:

5.0 NONROUTINE REPORTS

5.1 <u>2013 NONROUTINE REPORTS</u>

Subsection 5.4.1 of the EPP requires a list of all nonroutine reports (submitted in accordance with Subsection 5.4.2 of the EPP) be included as part of the Annual Environmental Operating Report. Salem Generating Station experienced the following unusual or important events (in accordance with Subsection 4.1 of the EPP) that indicated or could have resulted in a "significant environmental impact" during the 2013 reporting period. The following events were reported to other Federal, State or local agencies in accordance with their reporting requirements, and copies of those reports were provided to the USNRC at the same time:

The table below details the threatened and endangered species removed from the Circulating Water System (CWS) intake trash racks at the Salem Generating Station. During routine cleaning of the trash racks, Maintenance Common personnel recovered the species listed below. Identification was confirmed and Salem Operations were notified. The species were examined, measured, weighed and scanned for Passive Integrated Transponder (PIT) tags. No responses were obtained when the species were scanned for PIT tags. The U.S. Nuclear Regulatory Commission (NRC), the National Marine Fisheries Service (NMFS) and the New Jersey Department of Environmental Protection (NJDEP) were notified regarding these occurrences.

Date	Threatened & Endangered Species	
01/12/13	Shortnose Sturgeon	
01/14/13	Shortnose Sturgeon	
01/16/13	Atlantic Sturgeon	
02/11/13	1-Atlantic & 1-Shortnose Sturgeon	
02/19/13	Atlantic Sturgeon	
03/13/13	Atlantic Sturgeon	
03/14/13	Atlantic Sturgeon	
03/15/13	Atlantic Sturgeon	
03/18/13	Atlantic Sturgeon	
03/20/13	Atlantic Sturgeon	
03/25/13	Atlantic Sturgeon	
04/03/13	Atlantic Sturgeon	
07/10/13	Kemp's Ridley Turtle	
07/28/13	Shortnose Sturgeon	
08/07/13	Atlantic Sturgeon	
08/31/13	Kemp's Ridley Turtle	
10/28/13	2-Atlantic Sturgeons	

12/13/13	Atlantic Sturgeon
12/20/13	Atlantic Sturgeon
12/26/13	3-Atlantic Sturgeons
12/27/13	Atlantic Sturgeon

On April 28, 2013, an injured Bald Eagle was rescued within the owner-controlled area at Salem Generating Station. The U. S. Nuclear Regulatory Commission (NRC) and the New Jersey Department of Environmental Protection (NJDEP) were notified regarding this occurrence. The Bald Eagle was transported to Tri-State Bird Rescue & Research for potential rehabilitation. The adult bird was determined to have an old, open fracture and was in poor physical condition. The Tri-State wildlife veterinarian euthanized the bird.

5.2 ONGOING ISSUES FROM PREVIOUS NONROUTINE REPORTS

Groundwater monitoring and recovery activities to remediate an underground leak of spent fuel pool water containing tritium from the Unit 1 Fuel Handling / Auxiliary Building seismic gap first identified on September 18, 2002 continued through 2013 in accordance with the scope of work proposed in the Remedial Action Work Plan, approved by the NJDEP-Bureau of Nuclear Engineering (BNE) in November 2004. Groundwater recovery activities involved the use of a fixed groundwater extraction system. A drain installed within the Unit 1 seismic gap provides control for residual contamination by removing accumulated water and creating an ingradient toward the seismic gap drain.

Groundwater monitoring and product recovery activities to remediate an underground diesel fuel oil leak first identified on August 2, 2004 continued through 2013 in accordance with the scope of work proposed in the Remedial Investigation Work Plan, dated December 2004 (NJDEP Incident Number 04-08-02-2350-16). Product recovery activities involve the intermittent use of absorbent socks at the monitoring wells. Groundwater sample results continue to remain below the Ground Water Quality Criterion (GWQC) for Class IIA aquifers. By letter dated March 24, 2008, NJDEP has modified the scheduled sampling and reporting periods. A new groundwater monitoring well was installed in 2010 at NJDEP's request to provide additional horizontal delineation data.

Copies of the progress reports for the above remediation activities are available upon request.