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

PSEG
Nuclear LLC

Environmental Protection Plan 5.4.1
Technical Specification 6.9.1.6

APR 15 2010

LR-N10-0138

United States Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

Hope Creek Generating Station
Facility Operating License No. NPF-57
NRC Docket No. 50-354

Subject: 2009 ANNUAL ENVIRONMENTAL OPERATING REPORT

The attached 2009 Annual Environmental Operating Report is hereby submitted pursuant to Technical Specification Section 6.9.1.6 and Subsection 5.4.1 of the Environmental Protection Plan (Non-radiological) for Hope Creek Generating Station. The Environmental Protection Plan is Appendix B to Facility Operating License NPF-57 (Docket No. 50-354).

There are no regulatory commitments in this correspondence.

If you have any questions or require additional information, please do not hesitate to contact Ms. Maryann McLaughlin at (856) 339-1147 or Mr. Christopher White at (856) 339-3301.

Sincerely,

Lawrence M. Wagner
Hope Creek Plant Manager

Attachment: 2009 Annual Environmental Operating Report

IE25
NRR

C

Mr. Samuel J Collins, Administrator - Region I
U. S. Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406

Mr. Rick Ennis, Licensing Project Manager - HC
U. S. Nuclear Regulatory Commission
One White Flint North
11555 Rockville Pike
Mail Stop 8B 1A
Rockville, MD 20852

USNRC Senior Resident Inspector - Hope Creek
Mail Code (X24)

Mr. Patrick Mulligan, Manager IV
Bureau of Nuclear Engineering
P.O. Box 415
Trenton, NJ 08625-0415

Hope Creek Commitment Tracking Coordinator (H02)

LR-N10-0138
Document Control Desk

Attachment

2009 ANNUAL ENVIRONMENTAL OPERATING REPORT
(NON-RADIOLOGICAL)
January 1 through December 31, 2009

HOPE CREEK GENERATING STATION
DOCKET NO. 50-354
OPERATING LICENSE NO. NPF-57

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

APRIL 2010

LR-N10-0138
Document Control Desk

Attachment

TABLE OF CONTENTS

Section	Title	Page
1.0	INTRODUCTION	1
2.0	ENVIRONMENTAL PROTECTION ACTIVITIES	1
2.1	AQUATIC ISSUES	1
2.2	TERRESTRIAL ISSUES	2
3.0	EPP COMPLIANCE STATUS	3
3.1	EPP NONCOMPLIANCES	3
3.2	REVIEW	3
4.0	CHANGES IN STATION DESIGN OR OPERATION	3
5.0	NONROUTINE REPORTS	3

LR-N10-0138
Document Control Desk

Attachment

1.0 INTRODUCTION

This 2009 Annual Environmental Operating Report (AEOR) for the Hope Creek Generating Station was prepared in accordance with Subsection 5.4.1 of Appendix B to Facility Operating License No. NPF-57, Environmental Protection Plan (Non-radiological). The reporting requirements of the Environmental Protection Plan (EPP) became effective April 11, 1986, with the issuance of the initial Hope Creek Operating License (NPF-57).

This is the 25th AEOR submitted for Hope Creek Generating Station. It corresponds to the reporting period January 1, 2009 to December 31, 2009. Hope Creek Generating Station produced 9,735,713 megawatt-hours of net electrical energy during this period.

As required by Subsection 5.4.1 of the EPP, we have included summaries and analyses of all required environmental protection activities. This information is described in Section 2.0. Section 3.0 addresses the issue of EPP compliance. Changes to station design or operation and the review for potentially significant unreviewed environmental questions are addressed in Section 4.0. Administrative review procedures and unusual and/or important environmental events are discussed in Section 5.0.

2.0 ENVIRONMENTAL PROTECTION ACTIVITIES

2.1 AQUATIC ISSUES

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

The state of New Jersey requires as part of their 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 permit (NJPDES No. NJ0025411) effluent limitations. We have reviewed the DMR's corresponding to the 2009 AEOR reporting period and have determined that no significant deviations have occurred. Copies of monthly DMR's are routinely sent to USNRC's Document Control Desk and additional copies are available upon request.

On December 31, 2002, the New Jersey Department of Environmental Protection (NJDEP) issued a Final New Jersey Pollutant Discharge Elimination System (NJPDES) Permit that authorizes the continued discharge of cooling tower blowdown and other effluents from the Hope Creek Generating Station to the Delaware River. The Permit was effective on March 1, 2003 and contains conditions and limitations for continued compliance with the federal and state Clean Water Act (CWA) and the NJDEP's regulations.

On January 31, 2005 the NJDEP issued a major modification to the NJPDES permit to correct technical errors contained in the original Permit. The NJPDES Permit retains substantially similar effluent limitations and conditions, including chemical-specific requirements and system operational requirements.

On August 31, 2007, PSEG Nuclear submitted a comprehensive request for renewal of the NJPDES Permit. The current NJPDES permit is administratively continued pending action by NJDEP relative to the NJPDES permit renewal application.

While the NRC relies on the State of New Jersey for protection of the water quality, the National Marine Fisheries Service (NMFS) maintains regulatory authority with respect to certain migratory threatened and endangered aquatic species. On May 15, 1993 the NMFS issued a revised Section 7 Consultation, Biological Opinion. The revision removed all requirements for marine life monitoring at the Hope Creek Generating Station. This revision was incorporated into the Facility Operating License No. NPF-57 through Amendment No. 60.

2.2 TERRESTRIAL ISSUES

PSEG NUCLEAR LLC has been voluntarily monitoring the osprey population that nest on our transmission towers through a joint effort with the NJDEP since 1989.

3.0 EPP COMPLIANCE STATUS

3.1 EPP NONCOMPLIANCES

Subsection 5.4.1 of the EPP requires a list of EPP noncompliances and the corrective actions taken to remedy them. No previously unreviewed environmental impacts attributable to the operation of the Hope Creek Generating Station were observed during 2009. Likewise, there were no instances of noncompliance with the EPP.

3.2 REVIEW

Subsection 5.1 of the EPP for Hope Creek Generating Station requires that an independent review of compliance with the EPP be maintained and made available for inspection. Compliance with the EPP was reviewed as part of the QA Assessment Program in 2008. No substantive findings were identified and a copy of the review is available for inspection. A triennial compliance review of the EPP is scheduled for 2011.

4.0 CHANGES IN STATION DESIGN OR OPERATION

Pursuant to the requirements of Section 3.1 of the EPP, station design/operational changes during the time period covered by this report were reviewed for potential environmental impact. None of the recommended changes posed a potential to significantly affect the environment, and therefore, none involved an unreviewed environmental question or a change in the EPP.

5.0 NONROUTINE REPORTS

Subsection 5.4.1 of the EPP requires that a list of nonroutine reports (submitted in accordance with Subsection 5.4.2 of the EPP) be included as part of the Annual Operating Environmental Report. No environmentally related nonroutine reports were submitted to the USNRC in 2009.

Hope Creek Generating Station experienced no unusual or important events (in accordance with section 4.1 of the EPP) that indicated or could have resulted in a "significant environmental impact" during the 2009 reporting period.