

April 16, 2010

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

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION REGARDING THE REVIEW
OF THE LICENSE RENEWAL APPLICATION FOR SALEM NUCLEAR
GENERATING STATION, UNITS 1 AND 2, and HOPE CREEK
GENERATING STATION

Dear Mr. Joyce:

The U.S. Nuclear Regulatory Commission (NRC) staff has reviewed the application submitted by Public Service Enterprise Group Nuclear, LLC (PSEG) for the license renewal application for the Salem Nuclear Generating Station, Units 1 and 2, and Hope Creek Generating Station. The NRC staff has identified areas where additional information is needed to complete its review. Enclosed is the staff's request for additional information (RAI). In order to maintain the environmental review schedule, we request that you provide your RAI responses to these questions no later than April 22, 2010. This date has been discussed with Ms. Nancy Ranek of your staff. If you have any questions, please contact me at 301-415-8537 or at charles.eccleston@nrc.gov.

Sincerely,

/RA/

Charles Eccleston, Environmental Project Manager
Project Branch 1
Division of License Renewal
Office of Nuclear Reactor Regulation

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

Enclosure:
As stated

cc w/encl:

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Charles Eccleston, Environmental Project Manager
Projects Branch 1
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OFFICE	LA:DLR	PM:DLR:RPB1	BC:DLR:RPB1
NAME	SFiguroa	CEccleston	BPham with edits
DATE	04/07/10	04/16/10	04/16/10

OFFICIAL RECORD COPY

Letter to T. Joyce from C. Eccleston dated April 16, 2010

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION REGARDING THE REVIEW OF
THE LICENSE RENEWAL APPLICATION FOR SALEM NUCLEAR
GENERATING STATION, UNITS 1 AND 2, and HOPE CREEK GENERATING
STATION

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REnnis

CSanders

BHarris, OGC

ABurritt, RI

RConte, RI

MModes, RI

DTift, RI

Hope Creek Generating Station and
Salem Nuclear Generating Station,
Unit Nos. 1 and 2

cc:

Mr. Robert Braun
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Mr. John Perry
Station Vice President - Hope Creek
PSEG Nuclear
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Mr. Michael Gaffney
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Township Clerk
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Mr. Paul Bauldauf, P.E., Asst. Director
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Mr. Brian Beam
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Regional Administrator, Region I
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Senior Resident Inspector
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Plant Manager – Salem
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Mr. Larry Wagner
Plant Manager – Hope Creek
PSEG Nuclear LLC
One Alloway Creek Neck Road
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Hope Creek Generating Station and
Salem Nuclear Generating Station,
Unit Nos. 1 and 2

cc:

Mr. Paul Davison
Director – Nuclear Oversight
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One Alloway Creek Neck Road
Hancocks Bridge, NJ 08038

Ms. Christine Neely
Director – Regulator Affairs
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Mr. Ali Fakhar
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Mr. James Stavely
Manager, License Renewal Hope Creek
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Mr. Earl R. Gage
Salem County Administrator
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Salem, NJ 08079

Mr. Edward J. Keating
Environmental Manager
PSEG Nuclear LLC
One Alloway Creek Neck Road
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Hancocks Bridge, NJ 08038

Ms. Nancy L. Ranek
License Renewal Environmental Lead
Exelon Nuclear LLC
200 Exelon Way, KSA/2-E
Kennett Square, PA 19348

Salem/Hope Creek Environmental Audit Needs List

This attachment provides a request for additional information (RAI) that is required for the Nuclear Regulatory Commission's (NRC) staff to complete the license renewal application for the Salem Generating Station, Units 1 and 2, and Hope Creek Generating Station. The RAIs are grouped according to the specific environmental disciplines. Please provide this information to the NRC by the date indicated in the accompanying cover letter.

Document Source/ Database Reference	Requested Information
General	
GEN-4	<p>Provide the following documents associated with Attachment 5 of the Audit Reference Notebook titled GEN-4:</p> <ul style="list-style-type: none"> - Response from Herbert Lord (Salem and Hope Creek Generating Stations – License Renewal, dated 6/25/08 - NJPDES response to Environmental Report submittal, dated 1/14/10 (Salem and Hope Creek Nuclear Generating Stations License Renewal, Lower Alloways Creek Salem County, Environmental Report)
GEN-5	<p>Provide the following document associated with Attachment 1 of the Audit Reference Notebook titled GEN-5:</p> <ul style="list-style-type: none"> - Title V Permit Application, dated 10/28/08 <p>Provide the following documents associated with Attachment 3 (a – c) of the Audit Reference Notebook titled GEN-5:</p> <ul style="list-style-type: none"> - New Jersey Waterfront Development Permit - USACOE Nationwide Permit NWP 3 - USACOE Permit CENAP-OP-R-2006-6232 (dredging for the Hope Creek barge slip) <p>Provide the following document associated with Attachment 4 of the Audit Reference Notebook titled GEN-5:</p> <ul style="list-style-type: none"> - New Jersey Permit 2216P Renewal Application <p>Provide the following documents associated with Attachment 5 of the Audit Reference Notebook titled GEN-5:</p> <ul style="list-style-type: none"> - Hope Creek 2003 NJPDES Permit (with 2005 modification included), dated 4/1/03 - Groundwater renewal SCH09124, PSEG submittal for renewal of groundwater permit (no date)
GEN-6	<p>Provide documents associated with the Audit Reference Notebook titled GEN-6:</p> <ul style="list-style-type: none"> - The following NJPDES factsheets were cited in an ER reference. Please provide the following: 1996 NJ0025411 (Draft NJPDES Permit Renewal), 2002 NJ0025411 (Surface Water Permit Renewal Action), 1993 NJ0005622 (Draft NJPDES Permit Renewal Including Section 316(a) Variance Determination and Section 316(b) "BTA" Decision), and NJ0005622 (Draft NJPDES Permit Including Section 316(a) Variance Determination and Section 316(b) Decision. - Salem 1993 NJPDES Publication Notice, dated 6/24/93 - Hope Creek 1996 Preliminary Draft Copy of the NJPDES/DSW Permit Dated 10/96
GEN-9	<p>Provide the following documents associated with the Audit Reference Notebook</p>

	<p>titled GEN-9:</p> <ul style="list-style-type: none"> - Discharge Prevention and Response Program (1/29/08) <ul style="list-style-type: none"> • Part I: Introduction/Certification • Part II: Spill/Discharge Prevention Plan • Part III: Spills/Discharge Response Plan • Part IV: Environmentally Sensitive Areas protection Plan - Stormwater Pollution Prevention Plan (1/29/08) - Pollution Minimization Plan for PCBs (1/08)
MISC and ENV-90	<p>Provide a copy of maps shown to Mr. Rich Bulavinetz during the Salem/Hope Creek Site Audit. The specific maps being requested were labeled as follows:</p> <ul style="list-style-type: none"> - License Renewal Environmental Report – Site Flood Data Map - License Renewal Environmental Report – Vicinity Flood Data Map - Please provide the figure titled "1-mile vicinity map" for the site with the 100 year flood plain added to the map.
Socioeconomics	
LUS-1 (GEN-2)	Provide the Salem County Tax Maps that were included in the GEN-2 Audit Reference Notebook (Lower Alloways Creek Township Zone 8 and 14, both Dated 6/8/62).
LUS-2	Provide a schematic drawing of the site boundary, including the relative distance to the reactor building from such boundaries.
LUS-4	Provide updates of 2003 to 2007 property tax data.
LUS-6	Provide an updated Table 2.6-2 from both ERs (residential distribution of employees for Salem and HCGS).
LUS-9	Provide a copy of the LUS-9 response sheet found in the LUS-9 Audit Reference Notebook.
LUS-10	Provide FAA permit evaluations, with data on height of structures (this currently does not include item #2 that is listed as business confidential).
LUS-11	Provide report on local subsistence consumption behavior patterns included in the LUS-11 Audit Reference Notebook.
LUS-12	Provide information on current or past wildlife sampling and testing of game animals such as deer, squirrel, turkey, etc as included in the LUS-12 Audit Reference Notebook. In addition, include excerpted pages of REMP reports.
No LUS #	Provide number and residence information for corporate and matrix employees (identified separately).
Cultural Resources	
PSEG-1	<p>Provide Draft Report for Submerged Cultural Resources Survey of a Proposed Barge Facility and Water Intake PSEG Early Site Permit Environmental Review Delaware River, Salem County, New Jersey (Panamerican Consultants, Inc.) dated 12/09.</p> <p>Provide report of Phase I Archaeological Survey for Selected Portions of Two Access Road Alternatives PSEG Early Site Permit Application, Salem County, New Jersey Sargent & Lundy, LLC, dated 12/24/09.</p>
	Provide information on the extent of the PSEG Property into the Delaware River (low tide property line).
	Provide any available information regarding the "sunken ship cove" with respect to any cultural/historical significance to the area (When the ships were placed

	there, what kind of ships they are, etc).
Health Physics	
HP-4/ENV-86	Provide 2009 Radiological Environmental Operating Report and Annual Radiological Effluent Release Report directly to the NRC PM in parallel with submission to the NRC through normal channels to avoid time delays in waiting for the document to be posted in ADAMS.
ENV-84	Provide response sheet to ENV-84 (Health Physics question) that was developed during the site audit.
ENV-88	Have the sites had any noticeable increase of tritium in the overall effluent stream as a result of the groundwater recovery system and is the tritium measurable within the overall effluent?
	Provide information (referenced sources) on plant-related gamma emitting radionuclides in the subsurface soils associated with the Salem spent fuel pool leak or other systems at Salem and HCGS that are not designed for such releases. Information should include sample locations, depths, and concentrations if known.
Ecology	
ECO-1	Provide copies the following documents that were included in the ECO-1 Audit Reference Notebook: <ul style="list-style-type: none"> - Attachment 1 (c) – Representative Important Species for 1999 Appendix F - Attachment 1 (e) – Description of aquatic community from Section 3 of 2006 Application - Attachments 2 (a) and (b) – NRC/NMFS letters regarding EFH dated 6-14-07 and 7-13-07
ECO-2	Provide a copy of the following document that was included in the ECO-2 Audit Reference Notebook: <ul style="list-style-type: none"> - Attachment 2 – Biological Inventory and Habitat Characterization Report for the Alloway Creek Site, dated 1/96
ECO-3	Provide copies of the following documents that were included in the ECO-3 Audit Reference Notebook: <ul style="list-style-type: none"> - Attachments 1 (b), (c), and (d) – ACW Management Plan, 2008 ACW Site Status Report, and ACW Color Figures - Attachments 2 (a), (b), and (c) – Map of Land Cover at Salem and Hope Creek, Map of Land Cover with transmission lane ROWs superimposed, and Metadata for maps
ECO-4	Provide copies of the 2008 and 2009 Biological Monitoring Reports that were included in the ECO-4 Audit Reference Notebook.
ECO-6	Provide copies of the following documents that were included in the ECO-6 Audit Reference Notebook: <ul style="list-style-type: none"> - 1994 Biological Monitoring Work Plan, dated 10/94 - 2006 Improved Biological Monitoring Work Plan, dated 3/1/06
ECO-7	Provide a copy of the USFWS letter dated 9/9/09 that was included in the ECO-7 Audit Reference Notebook.
ECO-8	Provide a CD containing GIS shape files that was included in the ECO-8 Audit Reference Notebook.

ECO-13	<p>Provide the following documents that were included in the ECO-3 Audit Reference Notebook:</p> <ul style="list-style-type: none"> - Attachments 2, 3, 4, 5, and 6 – Bird Impact Procedure, Bird Impact Reports (1984, 1985, and 1986), and Bird Impact Study Termination
	Provide the March 2009 Letter regarding Geiger Screens.
	Provide PSEG comments on 2000 Draft NJPDES permit.
	Provide the 1999 NPDES Permit Application Vol. 10-13, Appendix E and Vol. 14-15, Appendix F.
	Provide a copy of Ecosystem Restoration Program Presentation that was provided during the site audit (3/10/10).
ENV-94 Transmission Lines	<p>Provide NRC with Environmental Compliance Matrix [front page for references purposes and 1 page provided at the site audit. Note: may black out any sensitive locations if necessary].</p> <p>Provide map identifying habitat regions along all three transmission rows from SHC to New Freedom switchyard. Additionally, provide text description of each habitat type.</p> <p>In reference to pages 3-13/14 of the ER, clarify description of HC New Freedom North and Salem New Freedom North descriptions (first two bullet items).</p>
Transmission Lines	In the ERs Sec 4-13, for Salem and Hope Creek, owner/operators of the transmission lines conduct aerial and ground surveillance and maintenance to ensure design ground clearances do not change. How often are ground and/or aerial surveillance and maintenance undertaken?
Transmission Lines	During the site audit, there were some conversations that did not match information provided in the ER. Please review the ER text regarding the transmission lines in Section 3.1.6 of the ER (Transmission System), and Table 3.1-4 to verify the accuracy of the ER text with regards to length of lines. Provide a conclusion regarding this review.
	Provide a copy of the NJDEP “Utility right-of-way No-Harm Best Management Practices” (2009), as referenced in NJDEP 10/28/2009. (Note: from the binder titled, “Environmental Backup Documents” provided at the environmental site audit).
Threatened and Endangered Species	
PSEG-3	<p>Provide the following documents that were included in the PSEG-3 Audit Reference Notebook:</p> <ul style="list-style-type: none"> - Attachments numbered 1, 2, 3, 4, 5, 7, 8, 9, and 10 – NMFS BO May 1993, NMFS Incident Take Statement 1999, Sea Turtle Summary List, Shortnose Sturgeon Summary List, Atlantic Sturgeon summary list, Procedure EN-AA-601-001, Procedure EN-AA-603, Procedure EN-AA-603-0001, and Baywide Abundance Monitoring Program
PSEG-4	<p>Provide the following documents that were included in the PSEG-4 Audit Reference Notebook:</p> <ul style="list-style-type: none"> - Attachments numbered 2 (b), (c), (d), (e), (f), and I – Letter to NJDEP and USFWS (10/28/09 and 10/23/09 [Note: wrong letter was previously included; this letter was previously requested as “ECO-7”, but a letter dated 09/09/2009 was instead provided under ECO-7], Letter from USFWS on 11/04/09, Pinelands Management Plan, Management Matrix for Salem-New Freedom Line, and letter to NJDEP on 2/7/10

	<ul style="list-style-type: none"> - Attachments numbered 4 (b) and (d) – Environmental Permitting Manual and Transmission Vegetation Management Program
Water/Groundwater	
WTR-5	Provide Private Water Diversion Reports for 1 st , 2 nd , 3 rd , and 4 th Qtr 2009 that were included in the WTR-5 Audit Reference Notebook.
WTR-9	Provide a copy of the NPDES non-compliance reports.
WTR-10	Provided corrected REMP Pages as discussed during the audit.
Salem NJPDES Permit Application Shelf	Provide the following sections from the Salem NJPDES Permit Renewal Application, dated 2/1/06: <ul style="list-style-type: none"> - Section 6, AIT, Vol 7 of 14 - Attachment 6-9, Vol 10 of 14 - Attachment 6-10, Vol 11 of 14
ENV-91	Provide a copy of the NEI RGGP inspection (TI) Report.
ENV-92	Provide a copy of the most recently available Diesel Fuel Oil remediation report. Provide a copy of Diesel Fuel Oil remediation action work plan.
Waste	
WST-1	Submit 2009, 2008, and 2007 Nuclear Non Hazardous Waste volume tables as presented in the WST-1 Audit Reference Notebook. These tables need to be converted to an internal document memo or document so that they can be referenced, if necessary, in the SEIS.
WST-2	Submit the 2009 and 2007 biennial Hazardous Waste Reports and memoranda (HCH-2010-019 and HCH-2009-062) describing 2008 and 2009 Waste Generator Status.
Air	
ENV-79	Provide information, in a tabular format, showing the site's (Salem and HC) annual Total Air Emissions (5 to 10 year period). Also provide a graph showing CO2 air emission rate in tons per megawatt hour.
Alternatives	
	Provide information on distance to natural gas pipeline to support analysis of natural gas alternative.