

## NRR-PMDAPEm Resource

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**From:** Pantazes, Jeffrey J. [Jeffrey.Pantazes@pseg.com]  
**Sent:** Wednesday, January 11, 2012 5:36 PM  
**To:** Balsam, Briana  
**Cc:** Strait, Kenneth A.  
**Subject:** FW: Draft Biological Opinion for Salem/Hope Creek  
**Attachments:** EEP11169.doc

Briana: As discussed, attached are the PSEG comments on the draft NMFS BO / ITS. Most are editorial in nature. Also, I recommend that we meet to discuss the comments and potentially to tour / review the intake as a means to provide a better context for finalizing the NMFS document and conditions. We believe many of the physical conditions that existed in the 1980s and 1990s when the prior ITS was developed have been addressed through plant modifications and operational changes. A tour / discussion should provide a clear picture of what is necessary to assure the protection of the resources in the river. Please call with any questions. Thanks.....Jeff

Jeff Pantazes  
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**From:** Perkins, Leslie [<mailto:Leslie.Perkins@nrc.gov>]  
**Sent:** Thursday, December 08, 2011 2:31 PM  
**To:** Pantazes, Jeffrey J.  
**Cc:** Imboden, Andy; Logan, Dennis; Balsam, Briana  
**Subject:** Draft Biological Opinion for Salem/Hope Creek

Good Afternoon Jeff,

Attached is the draft biological opinion for Salem and Hope Creek for PSEG to review. As I mentioned on your voicemail, Briana Balsam from the Environmental Review Branch will be the NRC point of contact for the ongoing consultation with NMFS. Please review the draft BO and provide comments to Briana before or by December 22<sup>nd</sup>. If PSEG cannot provide comments by December 22<sup>nd</sup> please contact Briana to discuss a different due date.

You can contact Briana at 301-415-1042 or at the email address above.

Thanks,

Leslie Perkins  
Project Manager  
Division of License Renewal  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
301-415-2375

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**Sent Date:** 1/11/2012 5:36:21 PM  
**Received Date:** 1/11/2012 5:39:45 PM  
**From:** Pantazes, Jeffrey J.

**Created By:** Jeffrey.Pantazes@pseg.com

**Recipients:**  
"Strait, Kenneth A." <Kenneth.Strait@pseg.com>  
Tracking Status: None  
"Balsam, Briana" <Briana.Balsam@nrc.gov>  
Tracking Status: None

**Post Office:** NJNBUMX06.enterprise.pseg.com

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**NOAA NMFS Draft Biological Opinion 12-08-11  
PSEG Nuclear Comments**

Section	Page No.	Para.	Line(s)	Comment
Cover letter	1	1	4	Delete reference to OCNCS
Cover letter	1	2	3-6	As indicated in the ITS, NMFS recognizes that a number of the shortnose sturgeon and loggerhead sea turtles impinged on the Salem intake were previously dead and may not have been killed by the operation of the facility itself, but has insufficient information to predict the percentage that were previously dead. The calculated “take” specified by the ITS therefore assumes all impinged specimens were killed by the facility. PSEG Nuclear accepts the basis for the calculated take; however, respectfully requests that rotten and/or partial carcasses that were obviously dead before impingement on the facility trash bars be included as an exempted “take”, but excluded from the specified numeric “take”.
Biological Opinion	2	2	16	The current ITS <u>does not</u> include a requirement that impinged live sturgeon are to be tagged prior to release
Biological Opinion	2	3	3	Since 1978, a total of <b>68</b> loggerheads have been captured or impinged at the Salem intake
Biological Opinion	2	3	5	Since monitoring of the intake was initiated in 1978, <b>20</b> shortnose sturgeon have been recovered....
Biological Opinion	4	1	1	Change “NYDEP” to “NJDEP”
Biological Opinion	4	3	8	Correct sentence to read “From the <u>steam generator</u> , the steam is directed to the turbine...”
Biological Opinion	4	3	10	Change “in” to “into”
Biological Opinion	6	4 <sup>th</sup> bullet	3-4	Delete “fish and other organisms caught in the fish bucket slide along a horizontal catch screen. As the traveling screen continues to rotate,”
Biological Opinion	6	4 <sup>th</sup> bullet	5	Replace “and they slide through a flap into” with “and they slide across a flap seal into”
Biological Opinion	6	4 <sup>th</sup> bullet	10	Delete the last sentence of this bullet since it does not accurately reflect current plant conditions
Biological Opinion	6	2	3	Replace “via a pipe” with “via pipes”
Biological Opinion	6	4	1	Replace the word “design” with “permitted”
Biological Opinion	7	4	1	Change “from Salem is discharged” to “from each Salem Unit is discharged”
Biological Opinion	7	4	6-7	Sentence should read “At full power, Salem in permitted to discharge up to 3,024 MGD (11.4 million m3/day)...”
Biological Opinion	11	5	3-4	A renewed NJPDES Permit for Hope Creek was issued by the NJDEP with an effective date of July 1, 2011.
Biological Opinion	15	4	1	The proposed action has potential to affect New Jersey and Delaware state waters.
Biological Opinion	55	2	1-2	A five year research permit issued in December 2004 would have expired in December 2009.
Biological Opinion	60	2	3	Please correct the reference to Barnegat Bay since the action area for this BO is the Delaware Bay.
Biological Opinion	65	1	1	Please delete this reference to the Hudson River as the action area.
Biological Opinion	65	2	All	This paragraph appears to discuss the effect of climate change in the Hudson River. A shift in the salt wedge in the Delaware River would not result in an increase in the number of spawning shortnose sturgeon in the action area, and would in fact have the opposite effect.
Biological Opinion	65	3	16	Change “i.e., through 2041” to “i.e., through 2040” to correctly reference the time period considered in this consultation for the Salem and Hope Creek facilities
Biological Opinion	66	1	8	There little to no sea grass in the Delaware Estuary due to the

Section	Page No.	Para.	Line(s)	Comment
				high water turbidity.
Biological Opinion	66	2	16	Change "i.e., through 2041" to "i.e., through 2040" to correctly reference the time period considered in this consultation for the Salem and Hope Creek facilities
Biological Opinion	72	Table 1		Correct the Total row in this table. The correct totals for Loggerhead should be 68(25) and overall totals should be 94(37). In addition, one of the Kemp's ridley turtles from 1994 was a recapture and could be footnoted as such.
Biological Opinion	74	2	4	Insert "at least" before "three times"
Biological Opinion	75	2	1-2	The data does not support this statement that "nearly all of the sea turtles removed from Salem, including those recovered alive, have had evidence of injury sustained from contact with the trash bars."
Biological Opinion	76	3	7	Change "(1993-July 2011...)" to "(1993-November 2011...)"
Biological Opinion	76	3	20	While it is true that no Kemp's ridley or green sea turtles have been impinged since 1993, it is likely that one or more of these species will be impinged over the remaining life of the facility. PSEG respectfully requests that the ITS exemption include this possibility and allow for the "take" of at least one of each species.
Biological Opinion	77	1	11	Insert "Unit 1" after :Salem"
Biological Opinion	77	1	12	Insert "Unit 2" after :Salem"
Biological Opinion	78	1	All	This discussion on potential sea grasses is not applicable for the Salem and Hope Creek action area. There is no sea grass in this region of the Delaware Estuary due to the high water turbidity.
Biological Opinion	80	4	6	Sentence should read "At full power, Salem in permitted to discharge up to 3,024 MGD (11.4 million m3/day)..."
Biological Opinion	81	2	7-10	Delete the last two sentences of this paragraph since the referenced figures will not be included within this BO
Biological Opinion	89	3	3	Please delete the reference to Barnegat Bay since the action area for this BO is the Delaware Bay.
Biological Opinion	91	4	9	Change "the death of 1 loggerheads" to the "the death of 8 loggerheads"
Biological Opinion	93	4	4	As NMFS has noted elsewhere, shortnose sturgeon impinged at the facility are usually dead prior to their appearance on the facilities trash bars.
Biological Opinion	94	4	10	Please delete the reference to Hudson River since the action area for this BO is the Delaware Bay.
Incidental Take Statement	97	3	All	PSEG Nuclear accepts the basis for the calculated take; however, respectfully requests that rotten and/or partial carcasses that were obviously dead before impingement on the facility trash bars be included as an exempted "take", but excluded from the specified numeric "take".
Terms and Conditions	99	1.d.		This condition is not necessary and PSEG respectfully requests modification or deletion. Salem has two trash rakes which provide back-up capability to ensure frequent cleaning of the trash bars. A mechanical failure of one rake does temporarily preclude cleaning of the one intake bay blocked by the failed rake, but the other 11 intakes bays remain accessible. There is no safe, practical alternative method of cleaning the trash bars and PSEG generally must complete repairs to a failed trash rake within a few days to avoid operational impacts.
Terms and Conditions	101	13.	5	Change "Appendix II" to "Appendix III"
Terms and Conditions	102	2	1	Change "Condition #6-10" to "Condition #7-9"
Terms and Conditions	102	3	1	Change "Condition #11" to "Condition #10"

Section	Page No.	Para.	Line(s)	Comment
Terms and Conditions	102	4	1	Change "Condition #12" to "Condition #11"
Terms and Conditions	102	6	1	Change "Conditions #10-12" to "Conditions #13-14"
Conservation Recommendations	103	#1.	All	This discretionary agency activity is not necessary and could potentially cause other adverse impacts to aquatic organisms. PSEG utilizes portable lighting for night time inspection of the trash bars and increased permanent lighting has the potential to attract sea turtles, fish, and other aquatic organisms to the vicinity of the trash bars.
Conservation Recommendations	103	#2.	All	Tissue analysis of dead sea turtles and shortnose sturgeon may be a useful scientific exercise, but is unrelated to any potential impact of facility operations on these species.
Conservation Recommendations	103	#3	All	This discretionary agency activity is not necessary and is unlikely to provide useful information. PSEG previously conducted radio tagging and satellite tracking of released live sea turtles that had been impinged on the trash bars as requested by the NMFS. Based on its review of PSEG's June 1997 study report and assessment of the causes of loggerhead sea turtle take at the Salem, NMFS revised the ITS to omit the sea turtle study requirement.. None of the tagged turtles returned to the facility, indicating that the Salem region is not preferred habitat for these turtles.
Conservation Recommendations	103	#4	All	In-water assessments, abundance, and distribution surveys for shortnose and Atlantic sturgeon are currently being conducted in the Delaware Estuary by other scientific researchers. As indicated by NMFS in its BO, young-of-year, juvenile and adult shortnose sturgeon in the Delaware Estuary primarily use habitat well upstream of facility, and their occurrence in the vicinity of Salem Station is likely to be rare.
Figure 1	124			Please let us know if you need PSEG to provide this figure.
Figure 2	125			Please let us know if you need PSEG to provide this figure.
Appendix IV	135			The morphometric measurements on this figure are missing or illegible. Please provide an enhanced figure or copy of the reference.