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

LR-E13-0009

Dated: JAN 30 2013

PSEG Nuclear LLC

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
ARTICLE NUMBER: 7012 1640 0000 4257 4210
U. S. Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

REPORT OF IMPINGEMENT OF SHORTNOSE STURGEON
SALEM GENERATING STATION UNIT NO. 1
DOCKET NO. 50-272

In accordance with Section 5.4.2 of Appendix B, Environmental Protection Plan, to the Operating License for the Salem Generating Station, PSEG Nuclear LLC (PSEG) hereby transmits notification of a nonroutine event, and documents the occurrence and removal of a shortnose sturgeon (*Acipenser brevirostrum*) from the Salem Generating Station circulating water intake structure trash bars.

Consultation pursuant to Section 7 of the Endangered Species Act of 1973 (ESA) between NRC and the National Marine Fisheries Service (NMFS) on the effects of the operation of Salem Station on threatened and endangered species has been ongoing since 1979. The most recent revision to the Biological Opinion and Incidental Take Statement issued in January 1999 exempts the specified annual take of shortnose sturgeon and sea turtles. In advance of relicensing for Salem Station, consultation pursuant to Section 7 of the ESA between NRC and NMFS was reinitiated in 2009. On April 6, 2012, the NMFS listed five Distinct Population Segments of Atlantic sturgeon as threatened or endangered under the ESA. In May 2012, NRC requested consultation on the effects of the continued operation of Salem Station on Atlantic sturgeon. The NMFS issued a draft Biological Opinion and Incidental Take Statement (ITS) in July 2012 that, when finalized, will authorize a specified incidental take of both Atlantic sturgeon and shortnose sturgeon associated with operation of the Salem Station circulating water intake system.

Pursuant to Section 5.4.2 of the Environmental Protection Plan for Salem Station, nonroutine events which require reporting to other federal agencies shall be reported in accordance with the other agencies' reporting requirements. Accordingly, enclosed please find two (2) attachments. Attachment 1 provides the information requested by the NMFS in Appendix II to the current ITS and in Appendix B, Part 2, to the revised draft ITS. Attachment 2 is a copy of a Sturgeon Salvage Form verbally requested by the NMFS.

There are no commitments contained in this letter.

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NRR

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If you have any questions or require additional information, please do not hesitate to contact Jeffrey Pantazes, Manager – Nuclear Environmental Affairs at (856) 339-7900.

Sincerely,

Lawrence M. Wagner
Plant Manager - Salem
PSEG Nuclear LLC

Attachments (2)

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cc: Mr. William Dean, Administrator - Region I
U. S. Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406

Mr. J. Hughey, Licensing Project Manager - Salem
U. S. Nuclear Regulatory Commission
One White Flint North
11555 Rockville Pike
Mail Stop 0-4D-3
Rockville, MD 20852

USNRC Senior Resident Inspector - Salem
Mail Code X24

Mr. P. Mulligan, Manager
Bureau of Nuclear Engineering
New Jersey Department of Environmental Protection
PO Box 420
Mail Code: 33-01
Trenton, NJ 08625-0420

Ms. Lynn Lankshear
National Marine Fisheries Service
Protected Resources Division
55 Great Republic Drive, Suite 04-400
Gloucester, MA 01930

Mr. Michael Ludwig
National Marine Fisheries Service
212 Rogers Avenue
Milford, CT 06460

Mr. Dave Jenkins
Endangered and Nongame Species Program
New Jersey Department of Environmental Protection
1 Van Syckels Road
Clinton, NJ 08809

Salem Commitment Coordinator
Mail Code X25

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bc: Salem Site Vice President
Salem Plant Manager
Director – Regulatory Affairs
Manager – Nuclear Environmental Affairs
Regulatory Assurance Manager – Salem
Records Management

STURGEON SALVAGE FORM

For use in documenting dead sturgeon in the wild under ESA permit no. 1614 (version 07-20-2009)

INVESTIGATORS'S CONTACT INFORMATION
Name: First **Matthew** Last **Parris**
Agency Affiliation **Environmental Consulting Services, Inc. (ECSI)**
Email **Matthew.Parris@pseg.com**
Address **P.O. Box 236 M/C H18 Hancocks Bridge NJ, 08038**
Area code/Phone number **(302) 378-9881 ext. 205**

UNIQUE IDENTIFIER (Assigned by NMFS)
Abr090012011NJ

DATE REPORTED:
Month: **01** Day: **14** Year: **2013**
DATE EXAMINED:
Month: **01** Day: **14** Year: **2013**

SPECIES: (check one)
☒ shortnose sturgeon
☐ Atlantic sturgeon
☐ Unidentified *Acipenser* species
Check "Unidentified" if uncertain .
See reverse side of this form for aid in identification.

LOCATION FOUND: ☐Offshore (Atlantic or Gulf beach) ☒Inshore (bay, river, sound, inlet, etc)
River/Body of Water **Delaware River** City **Hancocks Bridge** State **NJ**
Descriptive location (be specific): **Removed from Circulating Water Intake System (CWIS) Intake trash racks during routine rack cleaning at the Salem Generating Station, PSEG Nuclear LLC.**
Latitude **39°27'38.17** N (Dec. Degrees) Longitude **75°32'10.08** W (Dec. Degrees)

CARCASS CONDITION at time examined: (check one)
☐ 1 = Fresh dead
☒ 2 = Moderately decomposed
☐ 3 = Severely decomposed
☐ 4 = Dried carcass
☐ 5 = Skeletal, scutes & cartilage

SEX:
☒ Undetermined
☐ Female ☐ Male
How was sex determined?
☐ Necropsy
☐ Eggs/milt present when pressed
☐ Borescope

MEASUREMENTS: Circle unit
Fork length **776** cm / (mm)
Total length **686** cm / (mm)
Length ☒ actual ☐ estimate
Mouth width (inside lips, see reverse side) _____ cm / in
Interorbital width (see reverse side) _____ cm / in
Weight ☐ actual ☐ estimate **1.2** (kg) lb

TAGS PRESENT? Examined for external tags including fin clips? ☒ Yes ☐ No Scanned for PIT tags? ☒ Yes ☐ No

Tag #	Tag Type	Location of tag on carcass

CARCASS DISPOSITION: (check one or more)
☐1 = Left where found
☐2 = Buried
☐3 = Collected for necropsy/salvage
☒4 = Frozen for later examination
☐5 = Other (describe) _____
*NMFS contacted for disposition instructions

Carcass Necropsied?
☐Yes ☒No
Date Necropsied: _____
Necropsy Lead: _____

PHOTODOCUMENTATION:
Photos/vide taken? ☒ Yes ☐ No
Disposition of Photos/Video: **Attached**

SAMPLES COLLECTED? ☐ Yes ☒ No

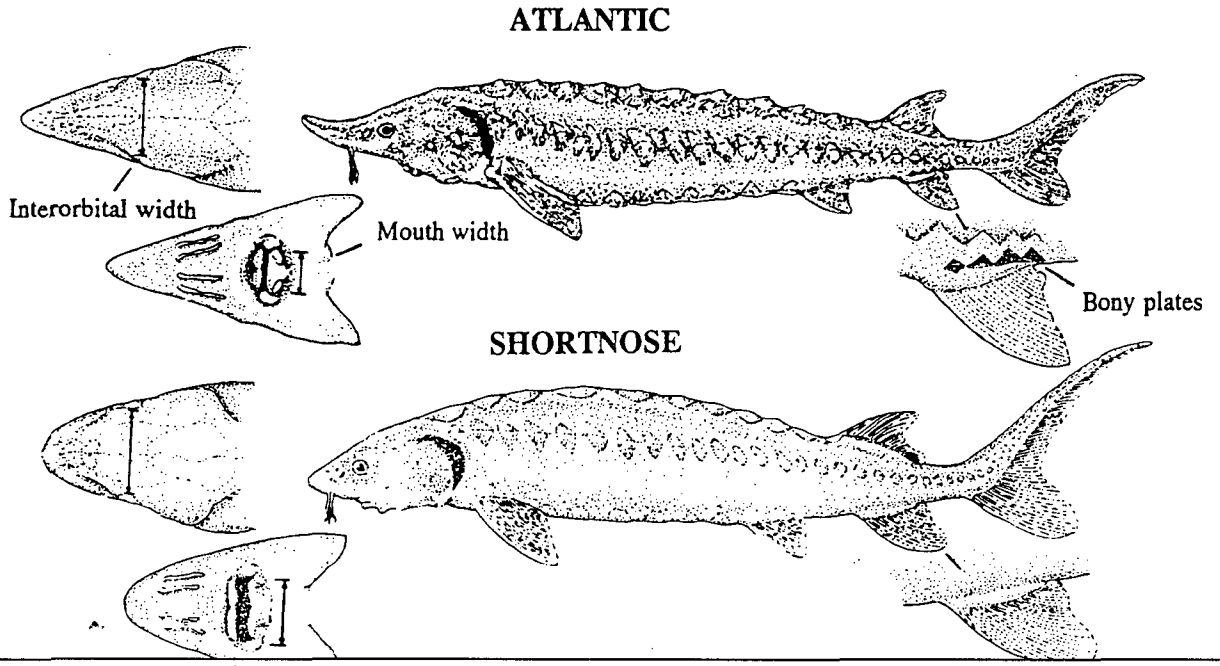
Sample	How preserved	Disposition (person, affiliation, use)

Comments: Inspection of the sturgeon does not indicate that the wounds or that death was related to raking. Damage observed to the fish occurs on the left side of the body, in the form of a large abrasion to the surface layers of skin. Similar, but smaller sized abrasions occur on the right side of the body.

Distinguishing Characteristics of Atlantic and Shortnose Sturgeon (version 07-20-2009)

Characteristic	Atlantic Sturgeon, *Acipenser oxyrinchus*	Shortnose Sturgeon, *Acipenser brevirostrum*
Maximum length	> 9 feet/ 274 cm	4 feet/ 122 cm
Mouth	Football shaped and small. Width inside lips < 55% of bony interorbital width	Wide and oval in shape. Width inside lips > 62% of bony interorbital width
*Pre-anal plates	Paired plates posterior to the rectum & anterior to the anal fin.	1-3 pre-anal plates almost always occurring as median structures (occurring singly)
Plates along the anal fin	Rhombic, bony plates found along the lateral base of the anal fin (see diagram below)	No plates along the base of anal fin
Habitat/Range	Anadromous; spawn in freshwater but primarily lead a marine existence	Freshwater amphidromous; found primarily in fresh water but does make some coastal migrations

* From Vecsei and Peterson, 2004



Describe any wounds / abnormalities (note tar or oil, gear or debris entanglement, propeller damage, etc.). **Please note if no wounds / abnormalities are found.**

Damage observed to the fish occurs on the left side of the body, in the form of a large abrasion to the surface layers of skin. Similar, but smaller sized abrasions occur on the right side of the body. A lack of fresh blood and the decayed appearance of flesh surrounding the wounds would indicate the damage was received at an earlier time. Another indication that suggests the specimen died at an earlier time includes gill color. The gills on this specimen are black in color, while the gills of a live or freshly dead specimen would be pink in color.

Data Access Policy: Upon written request, information submitted to National Marine Fisheries Service (NOAA Fisheries) on this form will be released to the requestor provided that the requestor credit the collector of the information and NOAA Fisheries. NOAA Fisheries will notify the collector that these data have been requested and the intent of their use.

Submit completed forms (within 30 days of date of investigation) to: Jessica Pruden, Shortnose Sturgeon Recovery Coordinator, NOAA Fisheries Northeast Region, 55 Great Republic Drive, Gloucester, MA 01930
Phone: 978-282-8482; Fax: 978-281-9394; E-Mail Jessica.Pruden@noaa.gov

ATTACHMENT 1 (Sturgeon)

Observer's full name: Matthew Parris
Reporter's full name: Matthew Parris

Species Identification (Key attached): Shortnose Sturgeon (Acipenser brevirostrum)

Site of Impingement (Unit 1 or 2, CWS or DWS, Bay #, etc.): CWIS Bay 11A

Date animal observed: 1/14/13 Time animal observed: 0930
Date animal collected: 1/14/13 Time animal collected: 0930
Date rehab facility contacted: N/A Time rehab facility contacted: N/A
Date animal picked up: N/A Time animal picked up: N/A

Environmental conditions at time of observation (i.e., tidal stage, weather):
Flood Stage 1 (91.0 ft)

Date and time of last inspection of screen: 1/14/13 @ 0343
Water temperature (°C) at site and time of observation: 6.5
Number of pumps operating at time of observation: Unit 1 5 Unit 2 6
Average percent of power generating capacity achieved per unit at time of observation:
Unit 1 100 Unit 2 100
Average percent of power generating capacity achieved per unit over the 48 hours previous to observation: Unit 1 100 Unit 2 100

Sturgeon Information:
Species Shortnose Sturgeon (Acipenser brevirostrum)

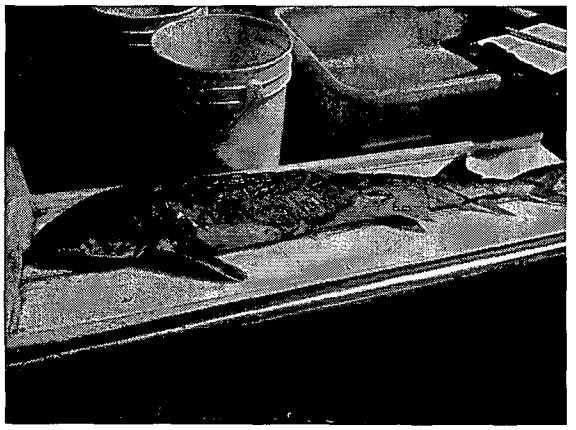
Fork length (or total length) 776 mm (total length) Weight 1.2 kg

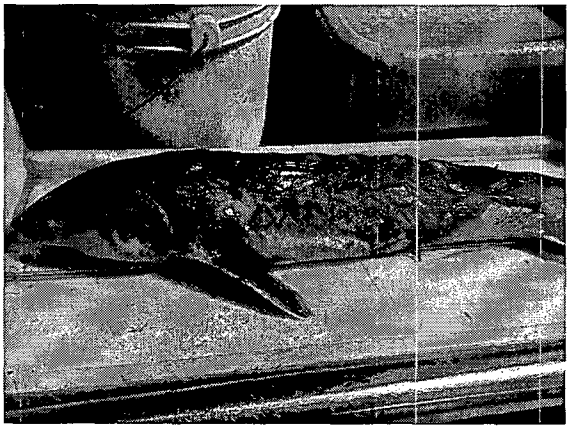
Condition of specimen/description of animal
The specimen was dead when found. Obvious external injuries were observed and included a large skin abrasion on the left side of the body and smaller abrasions on the right side of the body. A lack of fresh blood and the decayed appearance of the flesh surrounding the wounds would indicate the damage was received at an earlier time.
Fish Decomposed: NO (SLIGHTLY) MODERATELY SEVERELY
Fish tagged: YES (NO) *Please record all tag numbers.* Tag # _____

Photograph attached: (YES) / NO
(please label *species, date, geographic site* and *vessel name* on back of photograph)

ATTACHMENT 1 (Sturgeon) continued

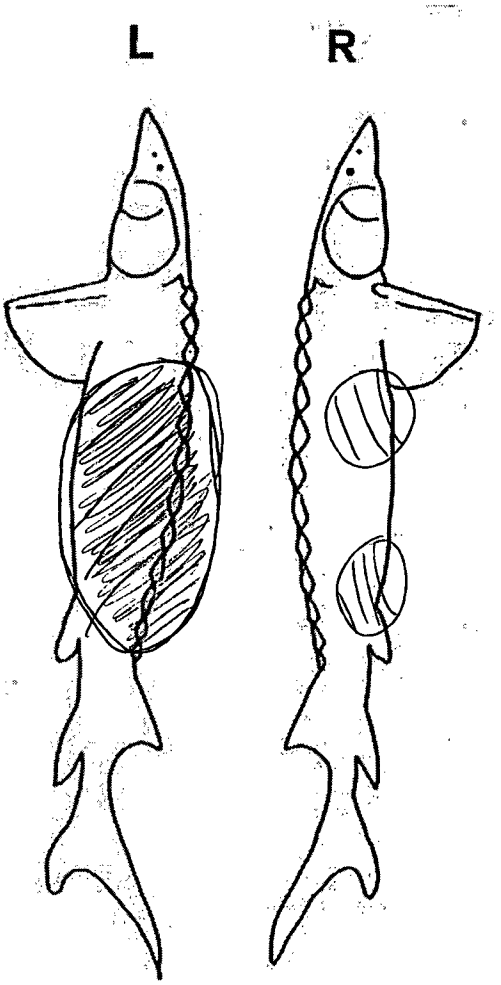
Photographs (*if available*)





ATTACHMENT 1 (Sturgeon) continued

Draw wounds, abnormalities, tag locations on diagram and briefly describe below



Description of fish condition:

Damage on the left side of the body in the form of a large abrasion to the surface layers of the skin. Similar, smaller sized abrasions can also be seen on the right side of the body.