



PSE&G

Public Service Electric and Gas Company P.O. Box 236 Hancocks Bridge, New Jersey 08038-0236

Nuclear Business Unit

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ARTICLE NUMBER: Z 217 970 372

JUL 21 1995

LR-E95108

U. S. Nuclear Regulatory Commission
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Washington, DC 20555

Gentlemen:

**REPORT OF IMPINGEMENT OF SEA TURTLE
SALEM GENERATING STATION, UNIT NOS. 1 AND 2
DOCKET NO. 50-272 AND 50-311**

In accordance with Section 5.4.2 of Appendix B, Environmental Protection Plan, to the Operating License for the Salem Generating Station, Public Service Electric and Gas Company (PSE&G) hereby transmits notification of a nonroutine event discovery, and documents the occurrence and removal of a loggerhead sea turtle from the Salem Generating Station circulating water intake structure.

Enclosed please find two (2) attachments. Attachment 1 gives a narrative description of the events, as requested by the NRC. Attachment 2, requested by the National Marine Fisheries Service (NMFS), provides more specific information regarding the observance and retrieval of the sea turtle.

Should you have a questions regarding this transmittal, please feel free to contact us.

Sincerely,

J. A. Benjamin
Director -
QA/Nuclear Safety Review

Attachments (2)

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The power is in your hands.

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JUL 21 1995

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Ms. Laurie Silva
National Marine Fisheries Service
Habitat Conservation Branch
One Blackburn Drive
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Mr. Dave Jenkins
New Jersey Department of Environmental Protection
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Mr. Lawrence J. Niles, Chief
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Trenton, NJ 08625-0400

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ATTACHMENT 1

INCIDENTAL TAKE OF LOGGERHEAD SEA TURTLE
OCCURRENCE DATE: July 2, 1995

FACILITY: Salem Generating Station, Units 1 and 2
Public Service Electric and Gas Company
Hancocks Bridge, NJ 08038

IDENTIFICATION OF OCCURRENCE:

One dead loggerhead sea turtle (Caretta caretta) was recovered from trash rack 22A of the Circulating Water System (CWS) intake trash racks at the Salem Generating Station. The sea turtle was retrieved on July 2, at approximately 0730 hours. Loggerhead sea turtles are federally listed as "threatened" species under the Endangered Species Act of 1973, as amended.

CONDITIONS PRIOR TO OCCURRENCE:

July 2, 1995	Unit 1	0 percent power
	Unit 2	0 percent power

DESCRIPTION OF OCCURRENCE:

The dead loggerhead sea turtle was recovered from trash rack 22A of the CWS intake on July 2, 1995 at 0730 hours. The 22A circulator pump was in service at the time of recovering the turtle. The turtle was recovered by Site Services personnel during the cleaning of the trash racks. The turtle was badly decomposed, with only the top quarter of the carapace remaining. All internal organs and muscles appeared to be intact. The carapace had a straight cut, which severed the carapace in half. It also had a gash on the top portion of the carapace, approximately 1/2 inch wide by 4 inches long.

The following agencies have been notified regarding this occurrence:

U.S. Nuclear Regulatory Commission
U.S. National Marine Fisheries Service
New Jersey Department of Environmental Protection
Marine Mammal Stranding Center (MMSC) of Brigantine

The sea turtle was examined by Dr. Burt Paluch, and determined that a necropsy of the turtle would not be feasible due to the severe decomposition. This decision was agreed to by Laurie Silva of NMFS. Ms. Silva then requested the turtle be landfilled because an adequate necropsy could not be performed.

APPARENT CAUSE OF OCCURRENCE:

Sea turtles are summer migrants, common to the Delaware Bay. Small numbers typically occur in the lower Delaware River near the Salem Generating Station from June through September. Healthy sea turtles are strong swimmers and are usually able to avoid the approach velocity of the CWS intake. Turtles which are in a weakened condition due to injury by boats or commercial fishing operations are subject to impingement.

The cause of death appeared to be a severe propeller cut due to the markings on the remaining portion of the carapace and the straight cut which severed the carapace.

ANALYSIS OF OCCURRENCE:

The CWS intake is monitored for accumulation of debris throughout the year. This accumulated debris is periodically removed. Any sea turtles which are observed in the area of the trash racks are recovered immediately. Between 1979 and present, a total of 92 sea turtles (plus three recaptures) have been collected at or in the vicinity of the plant. Of the 88 turtles collected at the intake, sixty-two (70.5%) have been loggerhead sea turtles, twenty-four (27.3%) were Kemp's ridley sea turtles, and two (2.2%) green sea turtles.

CORRECTIVE ACTION:

Between June 1 and October 15, the trash racks at Salem are observed every two hours, twenty-four (24) hours a day. The specified time period represents the peak migratory movement of sea turtles into and out of the Delaware River. Observations are made specifically for sea turtles and sturgeon during this time. During the remaining months the trash rack is inspected daily for debris load and cleaned as necessary. Any sea turtle occurrence is observed at this time. Resuscitation procedures will be attempted on all unconscious turtles. In accordance with standard procedure, all dead turtles will be necropsied by a qualified individual and injured specimens will be held under appropriate conditions and may be turned over to the MMSC.

Due to the poor condition of the turtle, a necropsy of the turtle was not feasible. At the request of NMFS, the turtle was disposed of in a landfill.

REPORTING REQUIREMENTS

Appendix II to Section 7 Consultation

Photographs should be taken and the information requested below should be collected in association with all protected species (sea turtles and shortnose sturgeon) impingements. This documentation should be sent to the:

National Marine Fisheries Service
Habitat Conservation Branch
One Blackburn Drive
Gloucester, MA 01930-2298

**Protected Species Impingements
Salem and Hope Creek Generating Stations**

Observers full name: Site Services Personnel

Reporters full name: Robert Boot - Environmental Licensing

Species Identification: Loggerhead Sea Turtle (Caretta caretta)

Site of Impingement: SGS CWIS 22A Trash Rack

Date and time impingement was observed: 07/02/95 0730 hrs

Date and time animal was collected: 07/02/95 0730 hrs

Tidal stage at time of observation: Ebb Tide

Date and time of last observation of screen: 07/02/95 0600 hrs

Water temperature at site and time of impingement: 64.2 (F)

Average percent of power generating capacity achieved per unit over the 48 hours previous to impingement: Unit 1 - 0 percent
Unit 2 - 0 percent

Condition of animal: Dead, Badly decomposed. Bottom portion of carapace severed off.

Sea Turtle Measurements:

Carapace Length:	Curved:	Straight: 51.1 cm (20.12 in)
Carapace Width:	Curved:	Straight: N/A
Weight:	N/A	

Remarks: The sea turtle was badly decomposed. It was examined by Dr. Burt Paluch, DVM, who determined a necropsy would not be feasible. The turtle was then disposed of in a landfill. Photographs of the sea turtle have been taken and are on file.