

Public Service
Electric and Gas
Company

Steven E. Miltenberger

Public Service Electric and Gas Company P.O. Box 236, Hancocks Bridge, NJ 08038 609-339-4199

Vice President and Chief Nuclear Officer

July 21, 1988

NLR-N88108

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

Gentlemen:

REPORT OF JULY 9 AND 12, 1988 IMPINGEMENT OF SEA TURTLES
SALEM GENERATING STATION, UNIT NO. 2
DOCKET NO. 50-311

This report is being submitted pursuant to the requirements of
Salem Unit No. 2 Environmental Technical Specifications, Sections
4.1.1 and 5.4.2a, b and c. This report is required within thirty
(30) days of discovery.

Sincerely,



Attachment

C Mr. D. C. Fischer
Licensing Project Manager

Mr. R. W. Borchardt
Senior Resident Inspector

Mr. W. T. Russell, Administrator
Region I

Mr. D. M. Scott, Chief
Bureau of Nuclear Engineering
Department of Environmental Protection
380 Scotch Road
Trenton, NJ 08625

Mr. Richard Delgado
New Jersey Department of Environmental Protection

8808010251 880721
PDR ADDCK 05000311
S FDC

IE 23
11

IMPINGEMENT OF SEA TURTLES

REPORT: July 13, 1988

OCCURRENCE DATE: July 9 and 12, 1988

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

IDENTIFICATION OF OCCURRENCE:

One Loggerhead (Caretta caretta) sea turtle was stranded on the Salem Generating Station circulating water system (CWS) intake trash bars on July 9 and four were stranded on July 12. The loggerhead is federally listed as a "threatened" species under the Endangered Species Act of 1973, as amended.

CONDITIONS PRIOR TO OCCURRENCES

July 9, 1988 - Unit 1, 100% power (1,145 MWe)
 - Unit 2, 100% power (1,130 MWe)

July 12, 1988 - Unit 1, 100% power (1,145 MWe)
 - Unit 2, 100% power (1,130 MWe)

DESCRIPTION OF OCCURRENCES

On July 9, 1988, at 0700 hours, one loggerhead sea turtle was reported on the trash bars of the CWS intake. Both units were at full power and twelve circulating pumps were in operation at the time the turtle was found. The turtle was captured during the cleaning of the trash racks and was in good shape when recovered. The loggerhead had an approximate carapace length (SL) and carapace width (SW) of 35 and 32 centimeters, respectively. Weight was estimated to be 16 kilograms.

On July 12, 1988, at 1015 hours, two Loggerhead sea turtles were reported on the trash bars of the CWS intake. Two more loggerhead sea turtles were reported on the intake at 1330 hours. Both units were at full power and twelve circulating pumps were in operation at the time the turtles were found. The turtles were captured during the cleaning of the trash racks and were dead when recovered. Carapace length and width and estimated weights for the turtles are presented below.

	<u>Length</u> (cm)	<u>Width</u> (cm)	<u>Weight</u> (kg)
Turtle #1	48	39	16
Turtle #2	37	32	7
Turtle #3	43	39	14
Turtle #4	43	38	14

In accordance with the usual procedure, the turtles were turned over to R. Schoelkopf of the Marine Mammal Stranding Center (MMSC), of Brigantine, New Jersey. The live turtle stranded on July 9 was held briefly for observation and then released offshore of Brigantine, New Jersey. The dead turtles collected on July 12, were necropsied by MMSC. Two of the specimens had internal injuries/infections which were not plant related and likely contributed to their occurrence on the the intake. All of the necropsied animals were disposed of by MMSC in Brigantine, New Jersey.

The Senior Shift Supervisor was notified of the July 9 event by the circulating water intake operator and by J. M. Eggers of Licensing and Regulation on July 12. The following agencies were notified after the occurrence.

Nuclear Regulatory Commission (Resident Inspector)

U. S. National Marine Fisheries Service

New Jersey Department of Environmental Protection

APPARENT CAUSE OF OCCURRENCES

Sea turtles are a summer migrant, common to Delaware Bay. Small numbers typically occur in the lower Delaware River near Salem during July through September. Past experience indicates that healthy sea turtles are usually able to avoid the approach velocity of the CWS intake, although occasionally one will become impinged on the trash bars.

ANALYSIS OF OCCURRENCE

The CWS intake is monitored for the accumulation of debris, which is periodically removed. Any turtles which are observed impinged against the trash bars are recovered immediately. Between 1979 and present, a total of 33 sea turtles have been collected at or in the immediate vicinity of the plant. Of these, eight (24%) were Kemp's Ridleys and 25 (76%) were loggerheads. Of the total turtles collected, 11 (33%) were alive when recovered.

CORRECTIVE ACTION

The trash bars are observed at least once per 8 hour shift and cleaned at least once per day. As a result of the increased frequency of occurrence during the last week, trash bars are being observed at least once per 2 hours. Any sea turtle observed on the trash bars is removed immediately. Resuscitation will be attempted if the turtle is not unquestionably dead. In accordance with standard procedure, all specimens will be held under appropriate conditions and turned over to the Marine Mammal Stranding Center.