



RESPONSE TO FREEDOM OF INFORMATION ACT (FOIA) / PRIVACY ACT (PA) REQUEST

2000-0098

2

RESPONSE TYPE FINAL PARTIAL

REQUESTER

Mr. Paul Gunter

DATE

FEB 18 2000

PART I. -- INFORMATION RELEASED

- No additional agency records subject to the request have been located.
- Requested records are available through another public distribution program. See Comments section.
- APPENDICES Agency records subject to the request that are identified in the listed appendices are already available for public inspection and copying at the NRC Public Document Room.
- APPENDICES **C** Agency records subject to the request that are identified in the listed appendices are being made available for public inspection and copying at the NRC Public Document Room.
- Enclosed is information on how you may obtain access to and the charges for copying records located at the NRC Public Document Room, 2120 L Street, NW, Washington, DC.
- APPENDICES **C** Agency records subject to the request are enclosed.
- Records subject to the request that contain information originated by or of interest to another Federal agency have been referred to that agency (see comments section) for a disclosure determination and direct response to you.
- We are continuing to process your request.
- See Comments.

PART I.A -- FEES

- AMOUNT * You will be billed by NRC for the amount listed. None. Minimum fee threshold not met.
- \$ You will receive a refund for the amount listed. Fees waived.
- * See comments for details

PART I.B -- INFORMATION NOT LOCATED OR WITHHELD FROM DISCLOSURE

- No agency records subject to the request have been located.
- Certain information in the requested records is being withheld from disclosure pursuant to the exemptions described in and for the reasons stated in Part II.
- This determination may be appealed within 30 days by writing to the FOIA/PA Officer, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001. Clearly state on the envelope and in the letter that it is a "FOIA/PA Appeal."

PART I.C COMMENTS (Use attached Comments continuation page if required)

SIGNATURE - FREEDOM OF INFORMATION ACT AND PRIVACY ACT OFFICER

Carol Ann Reed



GPU Nuclear Corporation
Post Office Box 388
Route 9 South
Forked River, New Jersey 08731-0388
609 971-4000
Writer's Direct Dial Number:

C330-93-2034
February 3, 1993

Mr. Michael Masnik
U.S. Nuclear Regulatory Commission
One White Flint North
11555 Rockville Pike
Rockville, Maryland 20832

Dear Mr. Masnik:

Subject: Oyster Creek Nuclear Generating Station (OCNGS)
Docket 50-219
Sea Turtle Agreement

As you are aware, several discussions have taken place among yourself, Ms. Coleen Coogan of the National Marine Fisheries Service (NMFS) and representatives from GPUN regarding the handling of sea turtles incidentally captured at the OCNGS.

These discussions, as well as review of historical biological sampling data of Barnegat Bay and the OCNGS intake water resulted in the agreement that completion of the formal consultation process, including the preparation of a biological assessment, would not be required at this time. As such, GPUN has agreed to the following actions:

- Increase the level of awareness of key station personnel regarding sea turtle identification and notification requirements.
- Report future sea turtle captures to both the NMFS and the USNRC.
- Deliver any captured sea turtles to the Marine Mammal Stranding Center in Brigantine, N.J. to ensure their proper evaluation and release to the environment.

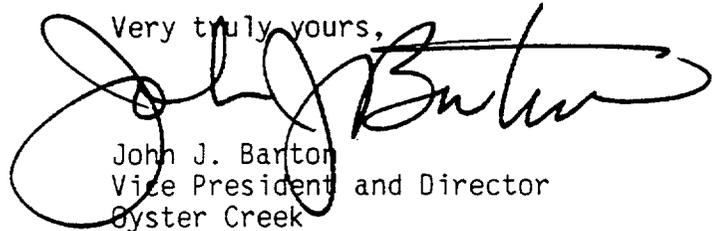
Ms. Coogan communicated that the NMFS could not legally sanction any additional captures of threatened or endangered sea turtles at the OCNGS without the completion of the formal consultation process and biological assessment. However, after discussion with their legal advisors, the NMFS has determined that it will not require the completion of this process nor will it initiate an enforcement action against GPUN in the event that threatened or endangered sea turtles are captured, provided the above actions are implemented.

ITEM # 1

GPUN will continue to update the NMFS and the NRC regarding this matter as necessary to ensure that the above actions remain appropriate.

If you have any questions or require additional information, please do not hesitate to contact Mr. Barry Durham of our Environmental Licensing Department at (609)971-4630.

Very truly yours,

A handwritten signature in black ink, appearing to read "John J. Barton", is written over the typed name and title.

John J. Barton
Vice President and Director
Oyster Creek

JJB/BD:jc

cc: Ms. Coleen C. Coogan
U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Marine Fisheries Service
Habitat Protected Res. Div.
One Blackburn Drive
Gloucester, Massachusetts 01930

Administrator, Region 1
Senior NRC Resident Inspector
Oyster Creek NRC Project Manager
USNRC, Document Control Desk

November 19, 1993

JFB 12/6

Mr. Christopher Mantzaris, Acting Division Chief
Habitat and Protected Resources Division
National Marine Fisheries Service
One Blackburn Drive
Gloucester, Massachusetts 01930

Dear Mr. Mantzaris:

SUBJECT: REQUEST FOR FORMAL CONSULTATION REGARDING KEMPS RIDLEY SEA TURTLE

In your November 2, 1993, letter to Dr. Thomas E. Murley, you stated that in light of the October 17, 1993, take of a dead Kemp's ridley sea turtle at the Oyster Creek Nuclear Generating Station (OCNGS) and previous takes of Kemp's ridley and Loggerhead sea turtles at OCNGS, the National Marine Fisheries Service (NMFS) believes that formal consultation is necessary. The Nuclear Regulatory Commission (NRC) agrees that formal consultation is warranted and hereby requests such consultation in accordance with Section 7 of the Endangered Species Act (ESA) and 50 CFR Part 402 - Interagency Cooperation - Endangered Species Act of 1973, As Amended.

As discussed in a November 4, 1993, conference call between NMFS, OCNGS, and NRC staff, the NRC intends to prepare a biological assessment (BA) to determine the level of impact OCNGS operation may have on sea turtles. As agreed to on November 4, 1993, the BA will encompass four species of sea turtles: (1) Kemp's ridley (*Lepidochelys kempii*), (2) Loggerhead (*Caretta caretta*), (3) Leatherback (*Dermochelys coriacea*), and (4) Atlantic Green (*Chelonia mydas*). The staff desires to conduct an initial meeting at the OCNGS in early December to discuss the schedule of required submittals and any preliminary site mitigation approaches. The staff will make every effort to support NMFS's goal of concluding this consultation prior to late summer.

Michael Masnik of the NRC staff is assigned lead responsibility and will coordinate this effort through the NRC's License Renewal and Environmental Review Project Directorate (PDLR). Please contact Michael Masnik at 504-1191 or John Moulton (PDLR) at 504-1106 for coordination in this regard.

Sincerely,

Original signed by:
Dennis M. Crutchfield, Associate Director
for Advanced Reactors and License Renewal
Office of Nuclear Reactor Regulation

cc: See next page
DISTRIBUTION: See attached

PDLR:LA <i>[Signature]</i>	PDLR:PM <i>[Signature]</i>	PDLR:ASC <i>[Signature]</i>	PDI-4:PM <i>[Signature]</i>	OCDD:BD <i>[Signature]</i>	PDLR:BD <i>[Signature]</i>	ADAR:NRR <i>[Signature]</i>
CNorsworthy	JMoulton	SReynolds	<i>[Signature]</i>	SWeiss	S <i>[Signature]</i> berry	DCrutchfield
11/17/93	11/17/93	11/17/93	11/17/93	11/18/93	11/18/93	11/19/93

DOCUMENT NAME: YT #0930252

ITEM # 2

C/2

Mr. Christopher Mantzaris

cc:

Ernest L. Blake, Jr., Esquire
Shaw, Pittman, Potts & Trowbridge
2300 N Street, NW.
Washington, DC 20037

Regional Administrator, Region I
U.S. Nuclear Regulatory Commission
475 Allendale Road
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BWR Licensing Manager
GPU Nuclear Corporation
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Mayor
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Licensing Manager
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Mail Stop: Site Emergency Bldg.
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Resident Inspector
c/o U.S. Nuclear Regulatory
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Kent Tosch, Chief
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Bureau of Nuclear Engineering
CN 415
Trenton, New Jersey 08625

Mr. John J. Barton
Vice President and Director
GPU Nuclear Corporation
Oyster Creek Nuclear Generating
Station
Post Office Box 388
Forked River, New Jersey 08731

DISTRIBUTION:

Docket File w/incoming 50-219
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DISTRIBUTION VIA E-Mail:

PDLR Staff



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

June 13, 1994

B
file
Sea Turtle Agreement

Docket No. 50-219

LICENSEE: GPU Nuclear Corporation
FACILITY: Oyster Creek Nuclear Generating Station
SUBJECT: SUMMARY OF MAY 16, 1994 MEETING REGARDING BIOLOGICAL ASSESSMENT
OF THE IMPACT OF THE OYSTER CREEK NUCLEAR GENERATING STATION
ON ENDANGERED SEA TURTLES

On May 16, 1994, the staff met with representatives from GPU Nuclear Corporation (GPUN), the National Marine Fisheries Service (NMFS), and the New Jersey Department of Environmental Protection and Energy (NJDEPE) to discuss GPUN's biological assessment of the impact of the Oyster Creek Nuclear Generating Station (OCNGS) on the Federally-protected Kemp's ridley (Lepidochelys kempii) and Loggerhead (Caretta caretta) sea turtles. This meeting is part of the formal consultation process with NMFS, and is the result of several incidental captures of the two species in the past several years at the OCNGS intake structure. A total of four sea turtles have been impinged on the intake racks at OCNGS since 1992: (1) one live loggerhead, (2) one live Kemp's ridley, (3) one loggerhead apparently dead on arrival due to boat propeller wounds, and (4) the latest capture of a dead Kemp's ridley on October 17, 1993. The cause of death of the Kemp's ridley is unknown, pending completion of a necropsy, but may have been the result of drowning. Enclosure 1 is the list of individuals participating in this discussion.

GPUN speculated that the increase in turtle activity seen in the past several years at OCNGS could be explained by (1) an increase in the population of Kemp's ridley and Loggerhead turtles due to the use of turtle exclusion devices (TEDs) by the commercial fishing industry, and (2) the completion of the re-alignment and deepening of the Barnegat inlet by the U.S. Army Corps of Engineers in 1991 which permits a freer interchange of ocean and bay waters. As a preventive measure, GPUN proposed to increase their inspections of the intake racks from once per 8-hour shift during sea turtle season to twice per 8-hour shift after the first sighting or capture of a sea turtle, and to twice per 8-hour shift during the month of October, when both incidental captures of Kemp's ridleys have occurred.

NRC staff and NMFS both expressed concern that the requirement to inspect twice per 8-hour shift could be satisfied by inspections that occur at the beginning of the shift and again at the end of the shift, defeating the purpose for increasing the number of inspections. GPUN agreed to restate the requirement to resolve this concern.

ITEM # 3

C/3

Based on the discussion at this meeting, GPUN will finalize the biological assessment which, if acceptable, will be submitted to NMFS by the NRC. The NRC staff expects to receive a biological opinion from NMFS in the fall of 1994.



Alexander W. Dromerick, Senior Project Manager
Project Directorate I-4
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Enclosure:
List of Attendees

cc w/enclosure:
See next page

Oyster Creek Nuclear
Generating Station

cc:

Ernest L. Blake, Jr., Esquire
Shaw, Pittman, Potts & Trowbridge
2300 N Street, NW.
Washington, DC 20037

Regional Administrator, Region I
U.S. Nuclear Regulatory Commission
475 Allendale Road
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BWR Licensing Manager
GPU Nuclear Corporation
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Mayor
Lacey Township
818 West Lacey Road
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Licensing Manager
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c/o U.S. Nuclear Regulatory Commission
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Kent Tosch, Chief
New Jersey Department of
Environmental Protection
Bureau of Nuclear Engineering
CN 415
Trenton, New Jersey 08625

Mr. John J. Barton
Vice President and Director
GPU Nuclear Corporation
Oyster Creek Nuclear Generating Station
Post Office Box 388
Forked River, New Jersey 08731

**OYSTER CREEK NUCLEAR GENERATING STATION
DOCKET NO. 50-219
MEETING OF MAY 16, 1994 TO DISCUSS THE IMPACT OF
OCNGS ON ENDANGERED SEA TURTLES**

ATTENDANCE LIST

<u>NAME</u>	<u>AFFILIATION</u>
Jay Vouglitois	GPU Nuclear
Malcolm Browne	GPU Nuclear
Barry Durham	GPU Nuclear
Doug Moore	GPU Nuclear
Richard Hyjack	NJDEPE
A. Kapsalopoulou	NJDEPE
Rebecca Nease	USNRC
Mike Masnik	USNRC
Karen Wurst	NMFS/Sandy Hook
Kim Thounhurst	NMFS/Gloucester
Doug Beach	NMFS/Gloucester

B file



GPU Nuclear Corporation
Post Office Box 388
Route 9 South
Forked River, New Jersey 08731-0388
609 971-4000
Writer's Direct Dial Number:

6530-94-2071
June 21, 1994

Mr. Michael Masnik
U.S. Nuclear Regulatory Commission
One White Flint North
11555 Rockville Pike
Rockville, MD 20832

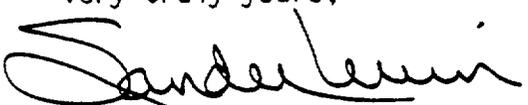
Dear Mr. Masnik:

Subject: Oyster Creek Nuclear Generating Station
Docket 50-219
Sea Turtle Incidental Capture Report 94-1

This report provides detailed information regarding the recent incidental capture of a juvenile loggerhead sea turtle at the Oyster Creek Nuclear Generating Station. The turtle was captured alive during the afternoon of 6-19-94 in front of the condenser intake structure. As indicated on the attached incident report, the turtle has been taken to the Marine Mammal Stranding Center in Brigantine, NJ, where it will be examined, tagged and released offshore as soon as possible.

If you have any questions or require additional information, please do not hesitate to contact Mr. Malcolm Browne of our Environmental Controls Department at (609) 971-4124.

Very truly yours,

for 
John J. Barton
Vice President and Director
Oyster Creek

Enclosure

cc: Mr. Douglas Beach
U.S. Department of Commerce
Nat'l Oceanic & Atmos. Admin.
National Marine Fisheries Ser.
Habitat Protected Res. Div.
One Blackburn Drive
Gloucester, MA 01930

Administrator, Region 1
Senior NRC Resident Inspector
Oyster Creek NRC Project Manager

ITEM # 4

C/H

Oyster Creek Nuclear Generating Station
Sea Turtle Incidental Capture Report 94-1

June 19, 1994

At approximately 1330 hours on Sunday, June 19, 1994, an Oyster Creek Nuclear Generating Station (OCNGS) operator conducting a routine survey of the intake area noticed a sea turtle swimming in the forebay immediately upstream of the condenser intake structure trash racks. The turtle was carefully removed as quickly as possible (at 1345 hours) and found to be active, healthy and with no apparent wounds. OCNGS Environmental Controls personnel who took custody of the turtle confirmed it to be a juvenile loggerhead turtle (Caretta caretta). At the time of the capture OCNGS was in operation at full power with 4 circulating water pumps and 2 dilution pumps operating. The water temperature in the OCNGS intake canal at the time of the capture was approximately 81°F (27.2°C). Although it was impossible to say precisely how long the turtle had been near the intake structure prior to removal, it is believed to have been in the vicinity for a relatively short period of time.

The turtle measured 14.5 in. (36.8 cm) carapace length straight line and weighed 21.6 lbs. (9.8 kg). Sex was not determined. No tags were present on the turtle when captured. No prominent scars or slash-like propeller wounds were apparent on the turtle. USNRC and NMFS personnel were notified of the capture at the earliest opportunity (6-20-94).

Within three to four hours after the time of its capture, the turtle was taken to the Marine Mammal Stranding Center (MMSC) in Brigantine, NJ. Personnel at MMSC will examine, tag and release the turtle offshore at the earliest opportunity.

Oyster Creek Nuclear Generating Station
Sea Turtle Incidental Capture Report 94-4

July 12, 1994

At approximately 2240 hours on Tuesday, July 12, 1994, Oyster Creek Nuclear Generating Station (OCNGS) operators conducting routine cleaning of the dilution intake trash racks removed a sea turtle from the trash racks. The turtle was found to be inactive but had no apparent wounds. OCNGS Environmental Affairs personnel who took custody of the turtle confirmed it to be a juvenile Kemp's ridley turtle (Lepidochelys kemp) and tried unsuccessfully to resuscitate it. At the time of the capture OCNGS was in operation at full power with 4 circulating water pumps and 2 dilution pumps operating. The water temperature in the OCNGS intake canal at the time of the capture was approximately 83°F (28.4°C). Although it was impossible to say precisely how long the turtle had been at the intake structure prior to removal, it may have been there for up to several hours.

The turtle measured 10.5 in. (26.7 cm) carapace length straight line and weighed 7.3 lbs. (3.3 kg). Sex was not determined. No tags were present on the turtle when captured. No prominent scars or slash-like propeller wounds were apparent on the turtle. USNRC and NMFS personnel were notified of the capture at the earliest opportunity (7-13-94).

This turtle has been sent to marine turtle experts at the Center for the Environment, Cornell University, who will perform a thorough necropsy.

ITEM # 5

0/5

Nuclear

GPU Nuclear Corporation
Post Office Box 388
Route 9 South
Forked River, New Jersey 08731-0388
609 971-4000

Writer's Direct Dial Number:

6530-94-2087

July 26, 1994

Mr. Michael Masnik
U.S. Nuclear Regulatory Commission
One White Flint North
11555 Rockville Pike
Rockville, MD 20832

Sea Turtle file

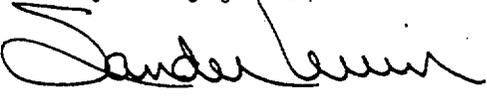
Dear Mr. Masnik:

Subject: Oyster Creek Nuclear Generating Station
Docket 50-219
Sea Turtle Incidental Capture Reports 94-2 through 94-4

These reports provide detailed information regarding the recent impingement of sea turtles at the Oyster Creek Nuclear Generating Station. Dead juvenile Kemp's ridley turtles were captured July 1 and July 12, 1994 at the dilution structure trash racks. A dead subadult loggerhead turtle was also captured July 6 at the dilution structure trash racks. A necropsy was performed on the loggerhead turtle at the Marine Mammal Stranding Center; the results are included as an attachment to this report. The two Kemp's ridley turtles have been sent to experts at Cornell University to perform necropsies.

If you have any questions or require additional information, please do not hesitate to contact Malcolm Browne of our Environmental Affairs Department at (609) 971-4124.

Very truly yours,

for 
John J. Barton
Vice President and Director
Oyster Creek

JJB/MEB/ef

Enclosure

cc: Mr. Douglas Beach
U.S. Department of Commerce
Nat'l Oceanic & Atmos. Admin.
National Marine Fisheries Ser.
Habitat Protected Res. Div.
One Blackburn Drive
Gloucester, MA 01930

Mr. Dave Jenkins
NJDEP
Div. Fish/Game/Wldlf.
PO Box 236
Tuckahoe, NJ 08250

Administrator, Region 1
Senior NRC Resident Inspector
Oyster Creek NRC Project Manager
Document Control Desk

ITEM # 6

Oyster Creek Nuclear Generating Station
Sea Turtle Incidental Capture Report 94-2

July 1, 1994

At approximately 1000 hours on Friday, July 1, 1994, an Oyster Creek Nuclear Generating Station (OCNGS) operator conducting a routine survey of the intake area noticed a sea turtle during a routine cleaning of the dilution intake structure trash racks. The turtle was carefully removed as quickly as possible and found to be inactive and exhibited a strong odor of decomposition. OCNGS Environmental Affairs personnel who took custody of the turtle confirmed it to be a juvenile Kemp's ridley turtle (Lepidochelys kemp) and tried unsuccessfully to resuscitate it. At the time of the capture OCNGS was in operation at full power with 4 circulating water pumps and 2 dilution pumps operating. The water temperature in the OCNGS intake canal at the time of the capture was approximately 78.3°F (25.7°C). Although it was impossible to say precisely how long the turtle had been at the intake structure prior to removal, it is known that the intake bay in which the turtle was found was cleaned during the previous afternoon.

The turtle measured 10.9 in. (27.7 cm) carapace length straight line and weighed 8.0 lbs. (3.6 kg). Sex was not determined. No tags were present on the turtle when captured. No prominent scars or slash-like propeller wounds were apparent on the turtle. USNRC and NMFS personnel were notified of the capture at the earliest opportunity (7-1-94).

This turtle has been sent to marine turtle experts at the Center for the Environment, Cornell University, who will perform a thorough necropsy.

Oyster Creek Nuclear Generating Station
Sea Turtle Incidental Capture Report 94-3

July 6, 1994

At approximately 0615 hours on Wednesday, July 6, 1994, Oyster Creek Nuclear Generating Station (OCNGS) operators conducting routine cleaning of the dilution pump intake area removed a sea turtle from the dilution structure trash racks. OCNGS Environmental Affairs personnel who took custody of the turtle confirmed it to be a subadult loggerhead turtle (Caretta caretta) and tried unsuccessfully to resuscitate it. At the time of the capture OCNGS was in operation at full power with 4 circulating water pumps and 2 dilution pumps operating. The water temperature in the OCNGS intake canal at the time of the capture was approximately 80.5°F (26.9°C). Although it was impossible to say precisely how long the turtle had been at the intake structure prior to removal, the trash racks at the dilution intake had previously been cleaned 6-8 hours earlier.

The turtle measured 24.5 in. (61.4 cm) carapace length straight line and weighed 89.0 lbs. (40.4 kg). Sex was not determined. No tags were present on the turtle when captured. At least three deep scars or slash-like propeller wounds were apparent on the turtle. These scars were not fresh because blue mussels were attached and growing in these scars. USNRC and NMFS personnel were notified of the capture at the earliest opportunity (7-6-94).

Several hours after the time of its capture, the turtle was taken to the Marine Mammal Stranding Center (MMSC) in Brigantine, NJ. Robert Schoelkopf, MMSC Director, performed a necropsy of the carcass (see attached MMSC Stranding Report). Mr. Schoelkopf reported that the turtle did not die at the intake and did not suffocate. The lungs were found to be in good condition. The turtle was believed to have died one to two days prior to arriving at OCNGS, probably due to a longterm illness. A large notch along the left perimeter of the turtle's carapace, as well as deterioration of all four appendages, were attributed by Schoelkopf to bacterial or fungal infections.

SFA TURTLE STRANDING AND SALVAGE NETWORK - STRANDING REPORT

PLEASE PRINT CLEARLY AND FILL IN ALL APPLICABLE BLANKS. Use codes below. Measurements may be straight line (caliper) and/or over the curve (tape measure). Measure length from the center of the nuchal notch to the tip of the most posterior marginal. Measure width at the widest point of carapace. CIRCLE THE UNITS USED. See diagram below. Please give a specific location description. INCLUDE LATITUDE AND LONGITUDE.

Observer's Full Name MARINE MAMMAL STRANDING CENTER Stranding Date 94 - 07 - 06
year month day

Address / Affiliation Brigantine, N.J.

Area Code / Phone Number 609-266-0538

Species CC (Loggerhead) Turtle Number By Day 94-060

Reliability of I.D.: (CIRCLE) Unsure Probable Positive Species Verified by State Coordinator? Yes No

Sex: (CIRCLE) Female Male Undetermined How was sex determined? Necropsy

State NEW JERSEY County Ocean

Location (be specific and include closest town) Oyster Creek Nuclear Power Plant,
Forked River

Latitude 39 48' 52" Longitude 74 12' 05"

Condition of Turtle (use codes) 1 Final Disposition of Turtle (use codes) 3

Tag Number(s) (include tag return address and disposition of tag) NA

Remarks (note if turtle was involved with tar or oil, gear or debris entanglement, wounds or mutilations, propellor damage, papillomas, epizoa, etc.) continue on back if necessary

Carapace deteriorated due to fungal growth, All four appendages deteriorated (possible bacterial infection) Photos taken, Stomach and esophogase Montaine blue crabs, no tag scars, Field # 94-060

MEASUREMENTS: CIRCLE UNITS

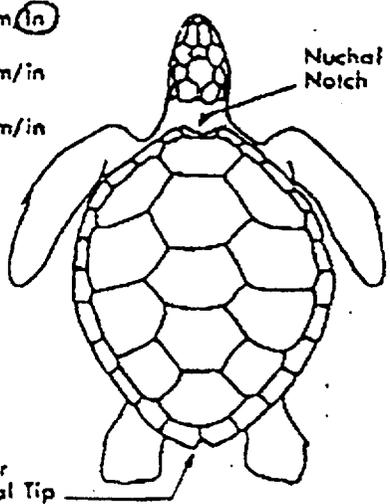
Straight Length 24.5 cm in

Straight Width 19.75 cm in

Curved Length _____ cm/in

Curved Width _____ cm/in

Mark wounds, abnormalities, and tag locations



Posterior Marginal Tip

- CODES:**
- SPECIES:**
 CC = Loggerhead
 CM = Green
 DC = Leatherback
 EI = Hawksbill
 LK = Kemp's ridley
 UN = Unidentified
- CONDITION OF TURTLE:**
 0 = Alive
 1 = Fresh dead
 2 = Moderately decomposed
 3 = Severely decomposed
 4 = Dried carcass
 5 = Skeleton, bones only
- FINAL DISPOSITION OF TURTLE:**
 1 = Painted, left on beach
 2 = Buried: on beach / off beach
 3 = Salvaged specimen: all / part
 4 = Pulled up on beach or dune
 5 = Unpainted, left on beach
 6 = Alive, released
 7 = Alive, taken to a holding facility



B

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

August 2, 1994

Docket No. 50-219

Mr. John J. Barton
Vice President and Director
GPU Nuclear Corporation
Oyster Creek Nuclear Generating Station
Post Office Box 388
Forked River, New Jersey 08731

Dear Mr. Barton:

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION REGARDING BIOLOGICAL ASSESSMENT
ON SEA TURTLES (TAC NO. M88170)

The NRC staff has completed its review of the draft biological assessment (BA) entitled "Assessment of the Impacts of the Oyster Creek Nuclear Generating Station on Kemp's Ridley and Loggerhead Sea Turtles" dated March 1994. The staff requires additional information to complete its review and to complete the ongoing consultation with the National Marine Fisheries Service (NMFS). Enclosed are our requested revisions to the draft biological assessment. These include requests received from NMFS as well. The State of New Jersey had no comments on the draft. Additionally, the BA should be updated to include information on specimens taken during 1994.

The staff requests that you respond within 30 days of receipt of the letter. Should you have questions concerning these comments and requests please contact John Moulton at 301-504-1106 or me at 301-504-3473.

This requirement affects one respondent and, therefore, is not subject to Office of Management and Budget review under P.L. 96-511.

Sincerely,

A handwritten signature in cursive script that reads "Alexander W. Dromerick, Sr.".

Alexander W. Dromerick, Sr. Project Manager
Project Directorate I-4
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Enclosure:
Request for Additional Information

cc w/enclosure:
see next page

ITEM # 7

C/7

Mr. John J. Barton
Vice President and Director

Oyster Creek Nuclear
Generating Station

cc:

Ernest L. Blake, Jr., Esquire
Shaw, Pittman, Potts & Trowbridge
2300 N Street, NW.
Washington, DC 20037

Resident Inspector
c/o U.S. Nuclear Regulatory Commission
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Kent Tosch, Chief
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Mayor
Lacey Township
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Forked River, New Jersey 08731

Licensing Manager
Oyster Creek Nuclear Generating Station
Mail Stop: Site Emergency Bldg.
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Forked River, New Jersey 08731

REQUEST FOR ADDITIONAL INFORMATION

REVISIONS REGARDING BIOLOGICAL ASSESSMENT OF SEA TURTLES

GENERAL COMMENTS

1. Update the assessment to include information on recent sea turtle takes at Oyster Creek and any completed necropsy reports.
2. Revise document such that metric units are followed by English equivalents in parenthesis.
3. Address the capability to adequately observe the intake structures during raking operations and the ability to see below the surface, especially at night. Does someone observe the trash rake while operating so that it can be stopped if a sea turtle is sighted? Also, lighting at the intakes does not appear adequate. Are there any plans to upgrade the lighting? Are portable spot lights utilized?
4. Provide details of the location that turtles have been found in the intake bays as well as their orientation and behavior when found.
5. Explain in more detail the trash raking process. Also, are inspections performed on the trash that is dumped from the trash racks to ensure that turtles are not confused with horseshoe crabs?

DETAILED COMMENTS

1. Page 1-3, third complete paragraph. Delete the word "Mitigating" from the first sentence. The development of reporting/notification procedures do not mitigate.
2. Figure 3-2 is very difficult to understand. A better schematic is needed.
3. Page 4-1, section 4.1.1. Indicate and discuss the maximum permissible ΔT , under the existing NPDES permit.
4. Page 4-2, section 4.1.1.1. Provide a drawing of the trash bars and trash rake apparatus. Describe in more detail the current trash bar inspection program. Who performs the inspections and how are they performed? How does he/she know what to look for, how are results recorded and reported. What is he/she supposed to do with a captured specimen (include specific handling procedures).
5. Page 4-4, section 4.1.2. Expand the dilution pump explanation. This is an unusual system unlike any other nuclear plant. Provide an explanation of the operating schedule and explain when the dilution pumps are used. Provide a better drawing than Figure 4-5, more along the lines of Figure 4-3 and 4-4. Include a better line drawing of the trash bars.

6. Figures 4-6 and 4-7 are not applicable and can be deleted.
7. Page 5-1, section 5-1, third paragraph. It should either be "...and the genus Dermochelys..." or "D. coriacea" or "Dermochelys sp". The genus Dermochelys is monotypic so it would be acceptable to use "D. coriacea".
8. Page 5-5, section 5.2.5, first sentence of the fifth paragraph. Delete the word "Although", and insert the word "and" after "(Frazer, 1986),".
9. Figure 5-1, Is there stranding data for 1993? If so, provide this information (by county, if available).
10. Figure 5-5. Is there nesting information for 1992, and 1993? If so, provide this information, as well as delineating any New Jersey specific nests.
11. Table 6-1. Include time of day and water temperature for each collection date.
12. Page 7-6, section 7.3.2. The dip net mentioned was not observed at the intake structure. Where is it kept and how accessible is it to the individuals inspecting the trash bars? Also it is not clear whether the dip net is only adequate for retrieving turtles from the surface. Explain.
13. Page 7-7, section 7.3.5. Update section to reflect comments made at our meeting. We are concerned about shift surveillances made more or less at the same time. Perhaps it would be best to propose some wording and discuss it with the staff before submitting a revision.

94-18 BP



GPU Nuclear Corporation
Post Office Box 388
Route 9 South
Forked River, New Jersey 08731-0388
609 971-4000
Writer's Direct Dial Number:

August 31, 1994
6530-94-2105

U.S. Nuclear Regulatory Commission
Att: Document Control Desk
Washington, DC 20555

Dear Sir:

Subject: Oyster Creek Nuclear Generating Station
Docket No. 50-219
Sea Turtle Assessment Report

GPU Nuclear (GPUN) submits the attached information in response to the NRC staff request for additional information regarding our draft Biological Assessment entitled "Assessment of the Impact of the Oyster Creek Nuclear Generating Station on Kemp's ridley and Loggerhead Sea Turtles", dated March 1994.

Attachment I provides the information requested in each of the general and detailed comments or describes how the Biological Assessment will be revised to address those comments.

Attachment II is the newly developed Sea Turtle Surveillance, Handling, and Reporting Instructions for Operations Personnel. These instructions were prepared in order to define the responsibilities of operations personnel with regard to sea turtles as well as to provide for the documentation of those activities. GPUN believes that these instructions address many of the questions and concerns raised in the comments from the NRC and the National Marine Fisheries Service. The revised Biological Assessment will include these instructions as an Appendix to the document.

Given the need to gather the requested additional information from a variety of outside sources as well as the need to develop new drawings and photographs, we anticipate that we will be able to complete the revision of the Biological Assessment on or before October 31, 1994.

ITEM # 8

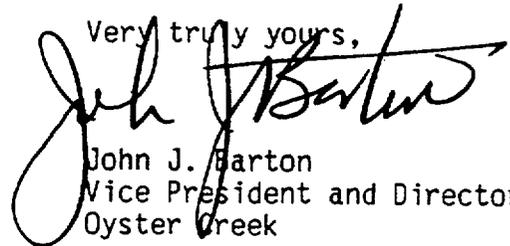
C/8

6530-94-2105

Page 2

If you have any questions concerning this information, please contact Malcolm Browne (609-971-4124) or Jay Vouglitois (609-971-4021) of our Environmental Affairs Department.

Very truly yours,

A handwritten signature in black ink, appearing to read "John J. Barton". The signature is fluid and cursive, with a large initial "J".

John J. Barton
Vice President and Director
Oyster Creek

Attachment

cc: Mr. Douglas Beach
U.S. Department of Commerce
Nat'l Oceanic & Atmos. Admin.
National Marine Fisheries Ser.
Habitat Protected Res. Div.
One Blackburn Drive
Gloucester, MA 01930

Administrator, Region 1
Senior NRC Resident Inspector
Oyster Creek NRC Project Manager

Mr. Michael Masnick, NRC
Mr. John Moulton, NRC

Mr. Richard Hyjack, NJDEPE



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

January 19, 1995

Mr. Christopher Mantzaris, Division Chief
Habitat and Protected Resources Division
National Marine Fisheries Service
One Blackburn Drive
Gloucester, Massachusetts 01930

SUBJECT: BIOLOGICAL ASSESSMENT ON IMPACTS TO SEA TURTLES AT OYSTER CREEK
NUCLEAR GENERATING STATION (TAC NO. M88170)

Dear Mr. Mantzaris:

In accordance with Section 7 of the Endangered Species Act (ESA or the Act) and 50 CFR Part 402 - Interagency Cooperation - Endangered Species Act of 1973, as amended, the enclosed biological assessment (BA) is submitted for your review as part of the formal consultation process initiated in November 1993. This formal consultation process was initiated after the taking of a dead Kemp's ridley sea turtle at the Oyster Creek Nuclear Generating Station (OCNGS) on October 17, 1993. The biological assessment, prepared by GPU Nuclear Corporation (GPUN), assesses the impacts associated with continued operation of OCNGS on sea turtle species protected under the Act. It should be noted that the BA considers all sea turtle takes at OCNGS subsequent to and including the October 1993 take.

As a result of this formal consultation, GPUN has recently implemented a number of measures at OCNGS to minimize the impact of operation on threatened or endangered sea turtles. These measures include 1) development of more comprehensive instructions for identifying, handling, and resuscitating sea turtles, 2) doubling the frequency of inspection of the intake structures during turtle season, 3) implementation of special trashbar cleaning instructions tailored for careful sea turtle removal, and 4) storage of custom-made dip nets and lift nets at the intake structures designed to facilitate the gentle removal of sea turtles. Based on this BA, the additionally implemented measures, and the conservative consideration of the nature and probable causes of sea turtle deaths, GPUN has concluded that the continued operation of OCNGS will not jeopardize the continued existence of endangered or threatened sea turtles.

ITEM # 9

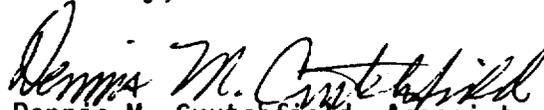
C/9

Mr. Christopher Mantzaris

- 2 -

The NRC staff agrees with GPUN's conclusions and believes the additional measures implemented at OCNGS are sufficient. The NRC anticipates that your office will render its biological opinion within the next several months. If you have any questions, please contact John Moulton at 301-504-1106.

Sincerely,



Dennis M. Crutchfield, Associate Director
for Advanced Reactors and License Renewal
Office of Nuclear Reactor Regulation

Enclosure: Biological Assessment

Docket No. 50-219

cc w/enclosure: See next page

Oyster Creek Nuclear
Generating Station

cc:

Ernest L. Blake, Jr., Esquire
Shaw, Pittman, Potts & Trowbridge
2300 N Street, NW.
Washington, DC 20037

Regional Administrator, Region I
U.S. Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, Pennsylvania
19406

BWR Licensing Manager
GPU Nuclear Corporation
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Parsippany, New Jersey 07054

Mayor
Lacey Township
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Licensing Manager
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Resident Inspector
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Kent Tosch, Chief
New Jersey Department of
Environmental Protection
Bureau of Nuclear Engineering
CN 415
Trenton, New Jersey 08625

Mr. John J. Barton
Vice President and Director
GPU Nuclear Corporation
Oyster Creek Nuclear Generating
Station
Post Office Box 388
Forked River, New Jersey 08731

Nuclear

GPU Nuclear Corporation
Post Office Box 388
Route 9 South
Forked River, New Jersey 08731-0388
609 971-4000
Writer's Direct Dial Number:

6530-94-2145

December 23, 1994

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555

Dear Sir:

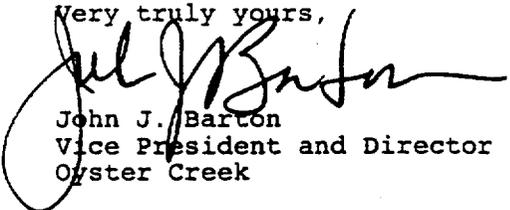
Subject: Oyster Creek Nuclear Generating Station
Docket 50-219
Sea Turtle Assessment Report

GPU Nuclear hereby submits the attached "Assessment of the Impact of the Oyster Creek Nuclear Generating Station on Kemp's Ridley and Loggerhead Sea Turtles" dated December, 1994. This revision incorporates all administrative changes discussed with Mr. John Moulton of the NRC on December 8, 1994.

This report supersedes the report dated October, 1994 and it is requested that all previous copies be marked accordingly or destroyed.

If you have any questions concerning this information, please contact Malcolm Browne (609-971-4124) or Jay Vouglitois (609-971-4021) of our Environmental Affairs Department.

Very truly yours,


John J. Barton
Vice President and Director
Oyster Creek

Attachment:

cc: Mr. Douglas Beach
U.S. Department of Commerce
Nat'l Oceanic & Atmos. Admin.
National Marine Fisheries Service
Habitat Protected Res. Div.
One Blackburn Drive
Gloucester, MA 01930

Administrator, Region 1
Senior NRC Resident Inspector
Oyster Creek NRC Project Manager
Mr. Michael Masnick, NRC
Mr. John Moulton, NRC

Mr. Richard Hyjack, NJDEPE



GPU Nuclear, Inc.
U.S. Route #9 South
Post Office Box 388
Forked River, NJ 08731-0388
Tel 609-971-4000

6530-972-1751

October 2, 1997

Mr. John Moulton
U.S. Nuclear Regulatory Commission
One White Flint North
11555 Rockville Pike
Rockville, MD 20832

Dear Mr. Moulton,

Subject: Oyster Creek Nuclear Generating Station
Docket 50-219
Sea Turtle Incidental Capture Report 97-1

This report provides detailed information regarding the recent incidental capture of a subadult Kemp's ridley sea turtle at the Oyster Creek Nuclear Generating Station. The turtle was captured dead during the early morning of September 4, 1997, at the dilution structure trash racks. As indicated on the attached incident report, the turtle has been kept in a freezer for temporary storage at our on-site biological laboratory. This is the first incidental capture of a sea turtle at Oyster Creek since July of 1994.

If you have any questions or require additional information, please do not hesitate to contact Mr. Malcolm Browne of our Environmental Affairs Department at (609) 971-4124.

Very truly yours,

Michael B. Roche
V. P. & Director
OCNGS

MAB/mmj
Enclosure

cc: Ms. Kim Thounhurst
U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Marine Fisheries Service
Habitat and Protected Resources Division
One Blackburn Drive
Gloucester, MA 01930-2298

ITEM # 11

C/11

C: Administrator, Region I
OCNGS NRC Project Manager
Document Control Desk - NRC
US Nuclear Regulatory Commission
One White Flint North
11555 Rockville Pike
Rockville, MD 20832

Mr. Dave Jenkins
NJ Department of Environmental Protection
Division of Fish, Game, and Wildlife
P.O. Box 236
Tuckahoe, N.J. 08250

OCNGS NRC Resident Inspector, OC SEB

Oyster Creek Nuclear Generating Station

Sea Turtle Incidental Capture Report 97-1

September 4, 1997

At approximately 0318 hours on Thursday, September 4, 1997, an Oyster Creek Nuclear Generating Station (OCNGS) operator removing eelgrass from the dilution trash racks noticed a sea turtle among the debris in front of the trash rack in Bay # 6 of the dilution intake structure. The turtle was carefully removed as quickly as possible using a dip net and found to be limp, immobile and with no apparent breathing. OCNGS Environmental Affairs personnel who took custody of the turtle confirmed it to be a subadult Kemp's ridley (*Lepidochelys kempi*). The water temperature at the time of the incidental capture was approximately 73.2 F (22.9 C) and OCNGS was in operation at full power with four circulating water pumps and two dilution pumps in operation. Although it is impossible to say precisely how long the turtle had been on the intake structure prior to removal, the dilution trash racks had been mechanically cleaned less than five hours earlier (i.e., September 3 at 2230 hours).

The turtle measured 19.0 in (48.8 cm) carapace length straight line and weighed 40 lb (18.1 kg). Sex was not determined. No tags were present on the turtle when captured. The only external damage exhibited was two dorsal scutes that were broken or missing. The damage to the dorsal scutes may have occurred during removal of the turtle from the dilution intake area or it may have occurred prior to capture. USNRC and NMFS personnel were notified of the capture within 24 hours on September 4, 1997.

After the turtle was examined by Environmental Affairs personnel, it was placed in a freezer for temporary storage at our on-site biological laboratory.



GPU Nuclear, Inc.
U.S. Route #9 South
Post Office Box 388
Forked River, NJ 08731-0388
Tel 609-971-4000

6530-982-2135

AUG 25 1998

Ms. Claudia Craig (by cert. mail RRR#Z 051 941 124)
U.S. Nuclear Regulatory Commission
Mailstop O-10-H-5
Washington, DC 20555

Dear Ms. Craig,

Subject: Oyster Creek Nuclear Generating Station
Docket 50-219
Sea Turtle Incidental Capture Report 98-1

This report provides detailed information regarding the recent incidental capture of a subadult loggerhead sea turtle at the Oyster Creek Nuclear Generating Station. The turtle was captured alive during the morning of August 18, 1998 at the circulating water intake structure trash racks. As indicated on the attached incident report, the turtle has been transferred to the Marine Mammal Stranding Center in Brigantine, NJ for rehabilitation. This is only the second incidental capture of a sea turtle at Oyster Creek since August of 1994.

If you have any questions or require additional information, please do not hesitate to contact Mr. Malcolm Browne of our Environmental Affairs Department at (609) 971-4124.

Very truly yours,

Michael B. Roche
V. P. & Director
OCNGS

MAB/ars
Enclosure

cc: Ms. Nancy Haley (by cert. mail RRR# Z 051 941 127)
U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Marine Fisheries Service
Habitat and Protected Resources Division
One Blackburn Drive
Gloucester, MA 01930

ITEM # 12

C/111

Ms. Claudia Craig
Page 2 of 2

6530-982-2135

AUG 25 1998

cc: Hub Miller (by cert. mail RRR# Z 051 941 128)
Administrator, Region I
US Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406

Ron Eaton (by cert. mail RRR# Z051 941 129)
Senior Project Manager
US Nuclear Regulatory Commission
Washington, DC 20555

US Nuclear Regulatory Commission (by cert. mail RRR# Z 051 941 130)
Document Control Desk - NRC
Washington, DC 20555

Mr. Dave Jenkins (by cert. mail RRR# Z 051 941 126)
NJ Department of Environmental Protection
Division of Fish, Game, and Wildlife
P.O. Box 236
Tuckahoe, NJ 08250

OCNGS NRC Resident Inspector, OC SEB

Oyster Creek Nuclear Generating Station
Sea Turtle Incidental Capture Report 98-1

August 18, 1998

At approximately 0959 hours on Tuesday, August 18, 1998, an Oyster Creek Nuclear Generating Station (OCNGS) operator noticed a sea turtle in front of the trash rack in Bay # 4 of the circulating water intake structure. The turtle was carefully removed as quickly as possible using a sea turtle dip net and found to be alive and moving about actively. However, a length of several feet of fish netting was wrapped tightly around the right front flipper of the turtle, causing restricted circulation and movement of that limb. It was apparent from the atrophied and partially decayed condition of the right front flipper that the turtle had been entangled in the fish netting long before its incidental capture. OCNGS Environmental Affairs personnel who took custody of the turtle confirmed it to be a subadult loggerhead (*Caretta caretta*). The water temperature at the time of the incidental capture was approximately 80.5 F (26.9 C) and OCNGS was in operation at full power with four circulating water pumps and two dilution pumps in operation. Although it is impossible to say precisely how long the turtle had been near the intake structure prior to removal, the intake trash racks had been mechanically cleaned the previous afternoon.

The turtle measured 20.0 in (50.8 cm) carapace length straight line and weighed 53.9 lb (24.4 kg). Sex was not determined. No tags were present on the turtle when captured.

After the turtle was examined by Environmental Affairs personnel, it was transferred to the Marine Mammal Stranding Center (MMSC) in Brigantine, NJ. MMSC personnel then began to locate a facility where the turtle can receive appropriate medical treatment and rehabilitation prior to eventually being released in the ocean. Sea World of Orlando, FL has indicated they will provide these services. The turtle was transported to Sea World August 21, 1998.

USNRC and NMFS personnel were notified of the incidental capture within 24 hours on August 18, 1998.

ATTACHMENT I

GPUN Responses to Request for Additional Information and Revisions Regarding Biological Assessment of Sea Turtles

General Comments

1. Update the assessment to include information on recent sea turtle takes at Oyster Creek and any completed necropsy reports.

RESPONSE: This information will be included in the revised Biological Assessment.

2. Revise document such that metric units are followed by English equivalents in parenthesis.

RESPONSE: The document will be revised as requested.

3. Address the capability to adequately observe the intake structures during raking operations and the ability to see below the surface, especially at night. Does someone observe the trash rake while operating so that it can be stopped if a sea turtle is sighted? Also, lighting at the intake does not appear adequate. Are there any plans to upgrade the lighting? Are portable spot lights utilized?

RESPONSE: The trash rake units are designed to allow the operator to observe the trash bars as they are cleaned. Newly developed Sea Turtle Surveillance, Handling and Reporting Instructions for Operations Personnel (Attachment II; Section 4.0) direct personnel cleaning the trash bars to observe the rake during the cleaning operation so that it may be stopped if a sea turtle is sighted. The trash rake units are fitted with floodlights which provide adequate lighting of the intake bays as they are cleaned; the floodlights can be seen in the photographs that will be provided in response to detailed comment #4. There are no plans to install additional lighting. The Sea Turtle Surveillance, Handling, and Reporting Instructions direct operations personnel to utilize portable spot lights during night inspections of the intake trash bars. The ability to see below the surface, however, is limited by water column transparency (average Secchi depth approximately 1.14 m or 3.7 ft.) and the amount of debris on the trash bars. The Biological Assessment will be revised to include this information.

4. Provide details of the location that turtles have been found in the intake bays as well as their orientation and behavior when found.

RESPONSE: To the extent that this information is available, it will be included in Section 6.0 of the Biological Assessment. However, when turtles are removed from more than a few feet below the surface or if they are obscured by debris, detailed information on their exact location and orientation may not be available. The OCNGS Sea Turtle Incidental Sighting/Capture Report Form, an attachment to the Sea Turtle Surveillance, Handling and Reporting Instructions (Attachment II), was developed in order to standardize the gathering of data related to future incidental captures.

5. Explain in more detail the trash raking process. Also, are inspections performed on the trash that is dumped from the trash bars to ensure that turtles are not confused with horseshoe crabs?

RESPONSE: The description of the trash raking process in the Biological Assessment will be expanded to include more details such as the use of the floodlights installed on the trash rake unit, the requirement to observe the trash rake during the cleaning operation, etc. In addition, as indicated in Section 4.0 of the Sea Turtle Surveillance, Handling and Reporting Instructions (Attachment II), the debris removed from the trash bars is hand raked into the trash car hopper. Operators are instructed to observe the material during this process to ensure that sea turtles are not present and that they are not mistaken for horseshoe crabs. The Biological Assessment will be revised to include this information.

Detailed Comments

1. Page 1-3, third complete paragraph: Delete the word "Mitigating" from the first sentence. The development of reporting/notification procedures do not mitigate.

RESPONSE: The Biological Assessment will be revised as requested.

2. Figure 3-2 is very difficult to understand. A better schematic is needed.

RESPONSE: A better schematic is being developed and will be included in the revised Biological Assessment.

3. Page 4-1, Section 4.1.1. Indicate and discuss the maximum permissible delta T, under the existing NPDES permit.

RESPONSE: The Biological Assessment will be revised to include a discussion of the NPDES permit temperature limits, including the maximum permissible delta T of 12.8°C (23°F) under normal operating conditions.

4. Page 4-2, Section 4.1.1.1. Provide a drawing of the trash bars and trash rake apparatus. Describe in more detail the current trash bar inspection program. Who performs the inspections and how are they performed? How does he/she know what to look for, how are results recorded and reported. What is he/she supposed to do with a captured specimen (include specific handling procedures).

RESPONSE: Drawings and/or photographs of the trash bars and trash rake apparatus are being prepared and will be included in the revised Biological Assessment.

The trash bar inspection program is described in detail in Attachment II, "Sea Turtle Surveillance, Handling, and Reporting Instructions for Operations Personnel." These instructions were developed in order to define the surveillance, handling and reporting requirements for operations personnel as well as to provide for the documentation of the results of those activities. The instructions are being adopted as a Standing Order for Oyster Creek Station personnel and will be included as an appendix to the revised Biological Assessment. GPUN believes that these instructions address all of the questions raised in this comment.

Please note that the Sea Turtle Surveillance, Handling, and Reporting Instructions call for the conduct of two inspections of the trash bars and intake bays at both the Circulating Water Intake and Dilution Pump Intake Structures during each 8-hour work shift (Section 3.1 of Attachment II) throughout the sea turtle season. This represents an increase in the frequency of intake structure inspections previously described in Section 7.3.6 of the Biological Assessment. This increase in the frequency of inspections is a response to the incidental capture of two Kemp's ridley sea turtles during July of this year. Previously, incidental captures of this species had only occurred during the month of October and we had proposed increasing the frequency of inspections during that month. The most recent data suggest that we could expect to find Kemp's ridley sea turtles in the vicinity of our intake structures throughout the June-October period. Section 7.0 of the Biological Assessment will be revised accordingly.

5. Page 4-4, section 4.1.2. Expand the dilution pump explanation. This is an unusual system unlike any other nuclear plant. Provide an explanation of the operating schedule and explain when the dilution pumps are used. Provide a better drawing than Figure 4-5, more along the lines of Figures 4-3 and 4-4. Include a better line drawing of the trash bars.

RESPONSE: A detailed explanation of the operation of the dilution pumps, including the operational schedule, will be included in the revised Biological Assessment. As required by the Station's NJPDES Permit, when the temperature in Oyster Creek exceeds 87°F, as measured at the U.S. Route 9 bridge, one dilution pump will be put into operation. If, after one dilution pump has been in operation for at least two hours, the temperature measured at such point continues to exceed 87°F, a second dilution pump will be put into operation. Also, when the ambient (intake) water temperature is less than 60°F, two dilution pumps are put into operation.

Improved drawings of the dilution pumps and trash bars are being developed and will be included in the revised Biological Assessment.

6. Figures 4-6 and 4-7 are not applicable and can be deleted.

RESPONSE: These figures will be deleted.

7. Page 5-1, section 5-1, third paragraph. It should either be "...and the genus Dermochelys..." or "D. coriacea" or "Dermochelys sp". The genus Dermochelys is monotypic so it would be acceptable use "D. coriacea".

RESPONSE: The Biological Assessment will be revised to reflect this comment.

8. Page 5-5, section 5.2.5, first sentence of the fifth paragraph. Delete the word "Although", and insert the word "and" after "(Frazer, 1986),".

RESPONSE: The Biological Assessment will be revised accordingly.

9. Figure 5-1, Is there stranding data for 1993? If so, provide this information (by county, if available).

RESPONSE: GPUN is attempting to obtain this information and will include whatever is available in the revised Biological Assessment.

10. Figure 5-5. Is there nesting information for 1992, and 1993? If so, provide this information, as well as delineating any New Jersey specific nests.

RESPONSE: GPUN is attempting to obtain this information and will include whatever is available in the revised Biological Assessment.

11. Table 6-1. Include time of day and water temperature for each collection date.

RESPONSE: Table 6-1 has been revised to include time of day and water temperature for each collection date.

12. Page 7-6, section 7.3.2. The dip net mentioned was not observed at the intake structure. Where is it kept and how accessible is it to the individuals inspecting the trash bars? Also it is not clear whether the dip net is only adequate for retrieving turtles from the surface. Explain.

RESPONSE: As indicated in Section 4.1.1 of the Sea Turtle Surveillance, Handling, and Reporting Instructions (Attachment II), a rescue sling suitable for larger turtles (in excess of 40 pounds) is kept in the fish sampling pool at the Circulating Water Intake structure. Long handled dip nets suitable for the smaller turtles most commonly encountered are also available. We are presently working with the Security Department to provide for their storage, attached to the security fence adjacent to the sea turtle identification/resuscitation postings at the Circulating Water and Dilution Pump intake structures.

Both the rescue sling and the long handled dip nets are only adequate for retrieving turtles from the surface or 2-3 feet below the surface because the use of either device requires that the sea turtle be visible from the surface.

13. Page 7-7, section 7.3.5. Update section to reflect comments made at our meeting. We are concerned about shift surveillances made more or less at the same time. Perhaps it would be best to propose some wording and discuss it with the staff before submitting a revision.

RESPONSE: As indicated in Section 3.2 of the Sea Turtle Surveillance, Handling, and Reporting Instructions (Attachment II), the first inspection should normally be conducted one to two hours into each 8-hour work shift; the second inspection should normally be conducted five to six hours into each 8-hour work shift. This should prevent the successive surveillances from being made more or less at the same time. Note that the instructions also call for documenting the time that each inspection is completed. Section 7.3.5 of the Biological Assessment will be revised to reflect these instructions and the instructions will be included as an Appendix to the document. We welcome comments from the NRC and NMFS staff regarding the proposed wording.

ATTACHMENT II

Oyster Creek Nuclear Generating Station

**Sea Turtle Surveillance, Handling, and
Reporting Instructions for Operations Personnel**

Revision 0
August 20, 1994

ITEM # 15

C/13

1.0 Purpose

To define the surveillance, handling and reporting requirements necessary to minimize the impact of station operation on sea turtles as well as document the occurrence of sea turtles in the vicinity of the station's intake structures.

2.0 Applicability

These instructions apply to all operations personnel responsible for conducting surveillance of the intake structures, cleaning trash racks and making notifications. This includes Equipment Operators, Group Operating Supervisors and Group Shift Supervisors.

3.0 Surveillance of Circulating Water Pump and Dilution Pump Intakes

3.1 Seasonality and Frequency

During the June 1-October 31 period the Circulating Water Pump and the Dilution Pump intake trash racks, and the area immediately upstream of the trash racks, will be inspected at least twice per 8-hour shift for the presence of sea turtles.

3.2 Timing

The first inspection should normally be conducted one to two hours into the work-shift; the second inspection should normally be conducted five to six hours into the work-shift.

It is recognized that other responsibilities or emergencies may periodically prohibit adherence to this schedule. The intent of the schedule is to prevent the individual inspections from being clustered together in a relatively short time period.

3.3 Conduct of Inspections

The trash racks and the area immediately upstream of the trash racks should be inspected for the presence of sea turtles. Note that sea turtles are distinguishable from Diamondback Terrapins and Snapping Turtles by the presence of swimming flippers on sea turtles, instead of walking feet with claws. In addition, unlike Terrapins and Snapping Turtles, sea turtles are unable to completely withdraw their heads into their shell (see Attachment I). Information on how to identify sea turtles is also posted at the Circulating Water and Dilution Pump intake structures.

Portable spot lights shall be used during night inspections to assist in spotting sea turtles.

The time that each inspection of the Circulating Water Intake and Dilution Intake is completed shall be recorded on the intake area supplemental tour sheets.

4.0 Trash Rack Cleaning

Personnel cleaning the Circulating Water and Dilution intake trash racks during the June 1-October 31 period shall observe the trash rake during the cleaning operation so that the rake may be stopped if a sea turtle is sighted. It may be necessary to utilize the nets described in Section 4.1.1 in order to prevent injury to the turtle while it is removed from the trash racks.

As the debris removed from the trash racks is hand raked into the trash car hopper, the Equipment Operator should observe the material to ensure that sea turtles are not present. Particular care must be taken to ensure that sea turtles are not mistaken for horseshoe crabs.

4.1 Actions Required if a Sea Turtle is Observed

- 4.1.1 Sea Turtles observed on the trash racks shall be recovered immediately, taking care to prevent injury to the animal.

Long handled dip nets suitable for smaller turtles are located at the Circulating Water Intake and at the Dilution Pump Intake structures, hanging on the fence adjacent to the sea turtle posters.

A rescue sling that is suitable for larger turtles is stored in the fish sampling pool at the Circulating Water Intake.

When handling sea turtles, do not assume an inactive turtle is dead. When water temperatures are relatively low, for example during the fall, inactive turtles may only be "cold-stunned", resulting in a temporary, coma-like condition (see Attachment II).

Keep clear of the head and front flippers which have claws. Pick up sea turtles by the front and back of the top shell. Do not pick them up by the flippers, the head or the tail.

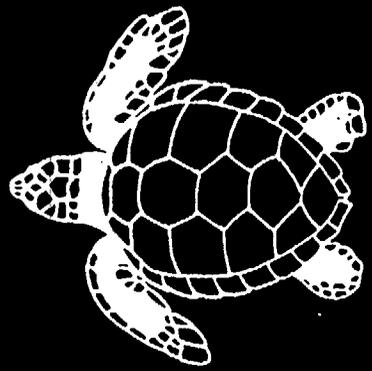
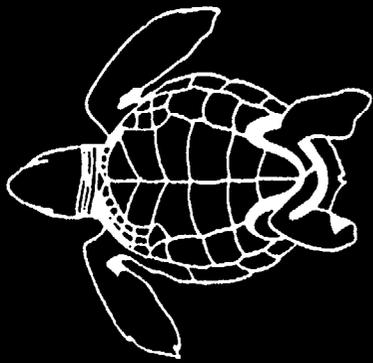
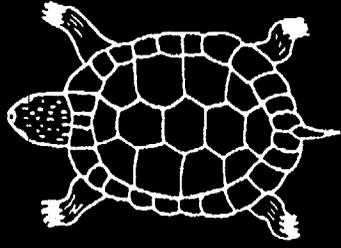
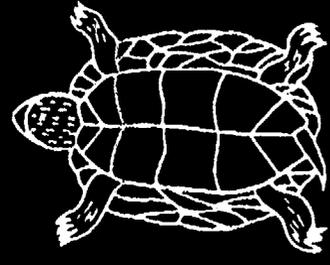
- 4.1.2 The presence of any sea turtle, alive or dead, on the trash racks or in the vicinity of the intake structures must be reported in accordance with sections 4.1.3 and 4.1.4 of these Instructions.
- 4.1.3 The Group Shift Supervisor (Ext. 4667) shall be notified immediately.
- 4.1.4 The Group Shift Supervisor, or his designee, shall notify Environmental Affairs as soon as possible in accordance with Procedure 126 "Notification of Station Events".

- 4.1.5 Sea turtles removed from the intakes, regardless of their condition, should be kept moist and out of direct sunlight until Environmental Affairs personnel arrive to remove them from the site. Fiberglass tubs suitable for holding sea turtles are stored in the fish sampling pool building at the Circulating Water intake structure. A small amount of intake water may be added to the tub, **but do not cover the mouth or nostrils with water.**

Diamondback Terrapins or Snapping Turtles removed from the intake structures may be released into the discharge canal; no additional actions or notification are required for these species.

- 4.1.6 Attempts should be made to revive inactive sea turtles immediately after they are retrieved. Normally, this activity would be performed by Environmental Affairs personnel, however, if they do not arrive within a few minutes after the sea turtle is retrieved, resuscitation efforts should be initiated by Station personnel. Guidance on handling and resuscitation is provided in Attachment II and is posted at the intake structures.
- 4.1.7 After consulting with Environmental Affairs personnel regarding the identity and condition of the sea turtle, the Group Shift Supervisor or his designee shall make the appropriate regulatory agency notification in accordance with Procedure 126 "Notification of Station Events".
- 4.1.8 The Group Shift Supervisor or his designee shall complete the Sea Turtle Incidental Sighting/Capture Report form (Attachment III) and submit it to Environmental Affairs.

HOW TO DISTINGUISH SEA TURTLES FROM TERRAPINS

<p>Top View</p>  <p>Bottom View</p> 	<p>Sea Turtles</p> <p>Adult can grow to over three feet in length.</p>	<p>Terrapins</p> <p>Does not exceed 10 inches in length.</p>   <p>Terrapins</p>
<p>Actions Required</p>	<p>Notifi Group Shift Supervisor (x1667) and Environmental Controls (x1022)</p>	<p>None required. May be gently removed from intake and returned to discharge canal.</p>

ATTACHMENT II

Sea Turtle Handling and Resuscitation Procedures

Handling:

Do not assume an inactive turtle is dead. Pressing the soft tissue around the nose of a sea turtle may result in an eye reflex in a comatose turtle. The onset of rigor mortis is often the only definite indication that a turtle is dead.

Keep clear of the head.

Adult male sea turtles of all species other than leatherbacks have claws on their foreflippers. Keep clear of slashing foreflippers.

Pick up sea turtles by the front and back of the top shell (carapace). Do not pick up sea turtles by flippers, the head or the tail.

Resuscitation Procedures:

If a turtle appears to be comatose (unconscious), attempts should be made to revive it immediately. These procedures are designed to void the turtles' lungs of water by active pumping and passive drainage. Sea turtles have been known to revive up to 24 hours after these procedures have been followed:

- 1) Place the turtle on its back and gently pump the breastplate. This may stimulate the animal to breathe and allow water to drain.
- 2) Place the animal on its breastplate and raise the hindquarters. The degree of elevation depends on the size of the turtle; greater elevations are required for larger turtles.
- 4) Keep the turtle shaded and moist and observe for 24 hours.

Special Instructions for Cold-Stunned Turtles:

Comatose turtles found in water less than 10°C (50°F) are probably "cold-stunned". This is most common in the fall and early winter. If a turtle appears to be cold-stunned, the following applies:

To increase blood flow, flap the flippers and rub the skin. Gradually, (over a period of six hours) move the turtle to a warmer area.

If possible, place the animal in a few inches of water that is warmer than the water it was removed from. Do not cover the mouth or nostrils with water. It is not imperative that sea turtles be kept in water.

Dead sea turtles should be retained for necropsy.

OCNGS SEA TURTLE INCIDENTAL SIGHTING/CAPTURE REPORT FORM

Reporter's full name (print): _____ Dept. _____ Tel. no. _____
(GSS or designee)

Date of sighting/capture: _____ Time of day of
(mm-dd-yy) sighting/capture: _____ hrs.

Who first observed the turtle? (print name): _____ Tel. no. _____

Location of sighting/capture: Circ. water intake Which bay? _____ # Circ. pumps op.?
 Dilution intake Which bay? _____ # Dil. pumps op.?

Turtle behavior and orientation: Was turtle impinged against trash rack?
 Was turtle swimming near trash racks?
 Other (Describe below)

First observation: Was turtle first observed at or near the water surface?
 Brought up from below surface with trash rake?
 Other (Describe below)

Method of capture: Trash rake When was trash rack in
 Dipnet bay with turtle last cleaned? _____
 Sling (Date & time)

Condition of specimen: Alive Intake water temperature
 Stunned or comatose when sighted/captured: _____ F.
 Dead/decomposed
 Not sure

Remarks: _____

