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50 CFR 402.14(i)(3)

December 28, 2007

RA-07-042

National Marine Fisheries Service Northeast Region
Protected Resources Division
One Blackburn Drive
Gloucester, MA 01930
Attention: Pasquale Scida

Dear Mr. Scida:

Subject: OYSTER CREEK NUCLEAR GENERATING STATION (OCNGS)
DOCKET NO. 50-219
ANNUAL SEA TURTLE INCIDENTAL TAKE REPORT - 2007

Enclosed is a copy of the 2007 Annual Sea Turtle Incidental Take Report for the Oyster Creek Nuclear Generating Station. The report is submitted in accordance with Terms and Conditions No. 8 of the Incidental Take Statement of the 2006 Endangered Species Act Section 7 Consultation Biological Opinion.

If you have any questions concerning this submittal, please contact Mr. Malcolm Browne, Environmental Scientist, at (609) 971-4124.

Sincerely,

James J. Randich

James J. Randich
Plant Manager
Oyster Creek Nuclear Generating Station

Enclosure

cc: NRC Document Control Desk
Administrator, Region I
NRC Project Manager
Senior Resident Inspector

IE23
IE25
MLR

Annual Report of Sea Turtle Incidental Takes - 2007

Oyster Creek Nuclear Generating Station

License No. DPR-16

Docket No. 50-219

Prepared by:

AmerGen Energy Company, LLC

December 2007

Introduction

The Annual Report of Sea Turtle Incidental Takes provides a summary of the incidental takes of all species of sea turtles at the Oyster Creek Nuclear Generating Station (OCNGS) during the past year. The report is required by Terms and Conditions (8.) of the Incidental Take Statement of the OCNGS Endangered Species Act Section 7 Consultation Biological Opinion. This report covers all incidental takes and sightings of Sea Turtles that occurred during 2007.

Incidental Take Reports documenting the circumstances of incidental takes of sea turtles are completed following any OCNGS sea turtle incidental take and are provided to NMFS and USNRC within 30 days. Incident reports (Sea Turtle Incidental Take Report 2007-1 and Sea Turtle Incidental Take Report 2007-2) are provided below. Photographs of the two turtles have already been supplied with the individual reports and therefore are not included in this report.

Sea Turtle Incidental Take Report 2007-1

At approximately 0925 hours on Thursday August 9, 2007, an Oyster Creek Nuclear Generating Station (OCNGS) operator noticed a live sea turtle among the materials being removed from the trash racks while performing a routine trash rack cleaning of Bay # 4 of the circulating water intake structure. The turtle appeared to be healthy and moving about normally. OCNGS Environmental personnel who took custody of the turtle confirmed it to be a juvenile Kemp's ridley sea turtle (Lepidochelys kempi). The water temperature at the time of the incidental take was approximately 82.8 F (27.9 C) and OCNGS was in operation at 100 % 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 trash bars prior to removal, the circulating water trash racks had been inspected and cleaned earlier the same morning. The turtle was not observed during that trash rack inspection and cleaning.

The turtle measured only 10.0 in (25.4 cm) carapace length straight line and weighed 6 lb (2.7 kg). No tags were present on the turtle when captured. USNRC and NMFS personnel were notified of the incidental take within 24 hours.

The turtle was taken to the Marine Mammal Stranding Center (MMSC) in Brigantine, NJ at approximately 1115 hours on August 9, 2007. At the MMSC, the turtle was examined, measured, fed and briefly held for observation prior to release. Because the turtle appeared to be in very good physical condition, it was released into the nearby Atlantic Ocean by MMSC personnel later the same afternoon.

Sea Turtle Incidental Take Report 2007-2

At approximately 0803 hours on Sunday, September 16, 2007, an OCNGS operator noticed a live sea turtle among the materials being removed from the trash racks while performing a routine trash rack cleaning of Bay #4 of the dilution water intake structure. The turtle appeared to be healthy and moving about normally. OCNGS Environmental personnel who took custody of the turtle confirmed it to be a juvenile Kemp's ridley sea turtle (Lepidochelys kempi). The water temperature at the time of the incidental take was approximately 69.8 F (21.0 C) and OCNGS was in operation at 100% 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 trash bars prior to removal, what is presumed to be the same turtle was spotted earlier that morning at approximately 0100 hours swimming away from the circulating water intake structure which is located on the opposite

bank of the intake canal from the dilution water intake structure.

The turtle measured 11.5 inches (29.3 cm) carapace length straight line and weighed 9.4 pounds (4.3 kg). No tags were present on the turtle when captured. USNRC and NMFS personnel were notified of the first sighting and the subsequent incidental take within 24 hours.

The turtle was taken to the Marine Mammal Stranding Center (MMSC) in Brigantine, NJ at approximately 1130 hours on September 16, 2007. At the MMSC, the turtle was examined, measured, fed, and briefly held for observation prior to release. Because the turtle appeared to be in very good physical condition, MMSC personnel released the turtle into the nearby Atlantic Ocean on September 20, 2007, after tagging.

Comparison of Annual Sea Turtle Incidental Takes With Prior Years

Regarding trends in the number of incidental sea turtle takes at the OCGS, two incidental takes with no fatalities occurred during 2007 which is lower than the six incidental takes occurred during 2006. The long-term average over the last fifteen years has been between two and three incidental takes per year. The annual abundance of sea turtles in this vicinity appears to be highly variable, unpredictable, and unrelated to the operation of the OCGS. There are several factors that may influence the number of sea turtle incidental takes that occur at the OCGS. Barnegat Inlet, the only tidal inlet in the vicinity of Oyster Creek, which provides access to Barnegat Bay from the Atlantic Ocean, was deepened during dredging operations in the early 1990's. Completion of the Barnegat Inlet dredging operation resulted in an increase in the tidal prism, or volume of water entering and exiting the inlet on a single tidal cycle, as well as a slightly greater tidal range at Oyster Creek. The deepening of Barnegat Inlet and associated waterway channels was completed immediately prior to 1992, when incidental takes of sea turtles began to occur at OCGS, and may partially explain the occurrence of the turtles.

It is likely that the local variability of sea turtle abundance is also related to biological factors including the abundance of organisms on which sea turtles prefer to feed, such as blue crabs, horseshoe crabs, and calico crabs. Blue crabs have been particularly abundant in Barnegat Bay in recent years, in contrast to other coastal bays along the Atlantic coast such as Chesapeake Bay. Physical factors, such as an oceanic front or an oceanic gyre occurring unusually close to Barnegat Inlet, may also play a part in the prevalence of sea turtles near Oyster Creek because oceanic fronts have been shown to be used as a migratory and forage habitat by sea turtles (Polovina et al, 2000). Experience has also shown that the passage of a severe storm or pressure system near Barnegat Inlet can cause major increases in winds, waves, tides and tidal prism in shallow estuarine waters such as Barnegat Bay. These events could increase the likelihood of slowly swimming organisms such as sea turtles occurring in the estuary.

Many years of environmental sampling conducted near the OCGS have repeatedly demonstrated that the abundance of various marine organisms can vary considerably from year to year, often by orders of magnitude. This is particularly true for seasonal migrants, whose abundance in Barnegat Bay is highly dependent upon physical and biological factors along the migratory route. Therefore, the observed annual variation in sea turtle incidental takes at the OCGS from a minimum of zero to a maximum of eight per year is not considered particularly significant. The ultimate goal of the considerable effort being put forward at the OCGS for the protection of sea turtles is to protect the turtles that do arrive at the plant, and to release as many turtles as possible to safety. The OCGS program for the protection of threatened and endangered sea turtles can be considered to be quite successful because most of the sea turtles incidentally captured at OCGS since 1992 have subsequently been released alive and well, to the Atlantic Ocean in locations free from potential cold-

shock, due to the efforts of OCGS and MMSC personnel. The two incidental takes of Kemp's ridley turtles during 2007 at the OCGS did not exceed the Incidental Take Statement (ITS) limit, which is currently a maximum of eight sea turtles of all species per year.

2006 Endangered Species Act Section 7 Consultation

In a letter dated June 9, 2006, NRC requested the initiation of Section 7 consultation on the effects of the operation of OCGS under a renewed NRC license. The current OCGS NRC license expires on April 9, 2009. NRC is currently considering an extension of the term of the OCGS license for an additional 20 years, with the renewed license expiring on April 9, 2029. On November 21, 2006 NOAA's National Marine Fisheries Service (NMFS) issued its Biological Opinion (Opinion) and ITS on the impacts on endangered and threatened species of the NRC's proposal to renew the OCGS operating license. In this Opinion, NMFS concludes that the continued operation of OCGS under a renewed operating license may adversely affect but is not likely to jeopardize the continued existence of endangered Kemp's ridley, green, or threatened loggerhead sea turtles. The ITS exempts the annual take of up to 8 sea turtles at OCGS each year. NMFS anticipates that up to 3 of the 8 sea turtles may be dead; of the dead sea turtles, no more than 1 is likely to be a green sea turtle and no more than 1 is likely to be a loggerhead.

Note that NMFS is of the understanding that OCGS will operate under the limits of its current Biological Opinion and ITS (dated September 22, 2005) until such time as NRC renews the OCGS NRC Operating License. At the time NRC renews the license for OCGS, NMFS will consider the September 22, 2005 Biological Opinion and ITS withdrawn and the conditions of the November 21, 2006 ITS will become effective.

Oyster Creek NGS
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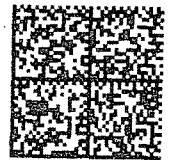

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