



Entergy Nuclear Generation Company  
Pilgrim Nuclear Power Station  
600 Rocky Hill Road  
Plymouth, MA 02360

February 3, 2005

Mr. Mike Bartlett  
Project Leader  
U.S. Fish and Wildlife Service  
New England Field Office  
70 Commercial Street  
Suite 300  
Concord, NH 03301-5208

SUBJECT: Pilgrim Nuclear Power Station  
Request for Information on Threatened or Endangered Species

Dear Mr. Bartlett:

Entergy Nuclear Generation Company (Entergy) is preparing an application to the U.S. Nuclear Regulatory Commission (NRC) to renew the operating license for Pilgrim Nuclear Power Station (PNPS). The current operating license for the Station expires in June 2012. As part of the license renewal process, the NRC requires license applicants to "assess the impact of the proposed action on threatened or endangered species in accordance with the Endangered Species Act" (10CFR51.53). The NRC will request an informal consultation with your office at a later date under Section 7 of the Endangered Species Act. By contacting you early in the application process, we hope to identify any issues that need to be addressed or any information your office may need to expedite the NRC consultation.

Entergy and Boston Edison Company, the previous owner of the Station, have operated PNPS since 1972. The Station lies on the western shore of Cape Cod Bay in Plymouth County, Massachusetts, just east of the Town of Plymouth (see attached Figure 2-1). Entergy purchased PNPS from Boston Edison Company in 1999. When Entergy purchased PNPS, it did not purchase the transmission facilities. While divesting itself of fossil and nuclear generating facilities, NSTAR (the parent company of Boston Edison) retained ownership of transmission facilities. Two transmission lines were built in the early 1970s to connect PNPS to the regional electric grid. These 345 KV transmission lines, which share a single corridor, run south from PNPS to the Snake Hill Road Tap approximately 6 miles south of the station (see attached Figure 2-2).

Based on a review of company documents (surveys and monitoring studies) and information on the Massachusetts Geographic Information System and Massachusetts Division of Fisheries & Wildlife websites, Entergy believes that no Federally listed terrestrial species occur on the PNPS site proper or within/along the associated 7.2 mile-long transmission corridor. The PNPS-to-Snake Hill Road transmission corridor crosses habitat designated critical (at 50 CFR 17.95) for the endangered Northern Red-Bellied Cooter (*Pseudemys rubiventris bangsi*), but the part of the critical habitat crossed by the transmission corridor appears to be a buffer area for the population rather than high-quality turtle habitat. Northern Red-Bellied Cooters have never been observed by Boston Edison, Entergy, or NSTAR biologists in this transmission corridor. As noted above, Entergy does not own or maintain the transmission lines that run from PNPS to the Snake Hill Road Tap, and is not involved in vegetation management in the right-of-way.

Several listed terrestrial species are known to occur in the general vicinity of the PNPS site, however, and cannot be ruled out as occasional visitors to the PNPS site and environs. These include the bald eagle, piping plover, and roseate tern. Bald eagles are present year-round in Massachusetts and congregate in significant numbers in wintering areas along the coast of Cape Cod and Buzzard's Bay. Bald eagles have been observed foraging in the general vicinity of PNPS, but are not believed to nest in the area. Piping plovers nest in summer on sandy coastal beaches along the Massachusetts coast. No suitable piping plover nesting habitat is found on the PNPS site (the shoreline in the area is rocky); however, individual birds may move through the PNPS area when migrating to breeding areas further north of Plymouth Bay and returning to wintering areas along the south Atlantic and Gulf coasts. Like the piping plover, the roseate tern nests in colonies along the Massachusetts coast in summer. The roseate tern nests in dune areas with thick vegetative cover, always in association with the common tern. Although suitable nesting habitat has not been identified at PNPS, migrating terns may move through the site in late spring (en route to nesting areas in Maine and Nova Scotia) and late summer (en route to wintering areas in the West Indies and Latin America).

PNPS, a one-unit nuclear plant with a total rated output of 688 MWe (megawatts electrical), uses a once-through cooling water system that withdraws from and discharges to Cape Cod Bay. A recently-prepared Clean Water Act Section 316 Study<sup>1</sup> that was submitted to EPA Region I in 2000 concluded that the PNPS cooling water intake system has not resulted in adverse impacts to the integrity of Cape Cod Bay fish and shellfish populations, including a number of Representative Important Species (e.g., American lobster, winter flounder, rainbow smelt, cunner, alewife, and Atlantic silverside).

Boston Edison and Entergy have monitored the marine fishes of western Cape Cod Bay since 1969 to assess possible impacts of PNPS operations. These monitoring studies also suggest that PNPS operations have not had a significant effect on local and regional fish populations. Trends in abundance of groundfish, pelagic fish, and shellfish (lobsters in particular) in western Cape Cod Bay mirror population trends in the larger Gulf of Maine and western North Atlantic and do not appear to be influenced by PNPS operations.

A number of listed marine species (including 5 great whales and 5 sea turtles) are known to use Cape Cod Bay at certain times of the year, but none of these species is believed to forage, feed, rest, or reproduce in the shallow waters adjacent to PNPS. Federally listed whales known to migrate along the coast of Massachusetts include the Sei whale, right whale, blue whale, finback whale, and humpback whale. These great whales pass Cape Cod during seasonal migrations and sometimes forage in Cape Cod Bay. Five sea turtle species (loggerhead, green, leatherback, hawksbill, and Kemp's ridley) occur along the Massachusetts coast, but sightings are uncommon and limited for the most part to sub-adult "wanderers." Young sea turtles are occasionally stranded on Cape Cod beaches.

Because whales do not move into the shallow waters immediately offshore of PNPS, they are not affected by operation of the PNPS cooling water intake system or by the station's thermal discharge. No sea turtles have been observed in the vicinity of the station, and none have been impinged since operational monitoring began in the 1970s. There are no records of sea turtles congregating in the area of the PNPS discharge canal, and no indication that the thermal effluent

<sup>1</sup>ENSR, 2000, "Combined 316 Demonstration Report – Pilgrim Nuclear Power Station," Prepared for Entergy Nuclear Generation Company. March.

has disrupted normal seasonal movement or migration of turtles.

Entergy is committed to the conservation of significant natural habitats and protected species, and expects that operation of the Station through the license renewal period (an additional 20 years) would not adversely affect any listed species. Entergy has no plans to alter current operations over the license renewal period. Any maintenance activities necessary to support license renewal would be limited to previously disturbed areas. No expansion of existing facilities is planned, and no additional land disturbance is anticipated in support of license renewal. We therefore request your concurrence with our determination that license renewal would have no effect on threatened or endangered species (including candidate species and species proposed for listing) and that formal consultation is not necessary.

Please do not hesitate to call me at 508-830-7832 if you have any questions or require any additional information. After your review, we would appreciate your sending a letter detailing any concerns you may have about any listed species in the area or confirming Entergy's conclusion that operation of PNPS over the license renewal term would have no effect on any threatened or endangered species under the jurisdiction of the U.S. Fish and Wildlife Service. Entergy will include a copy of this letter and your response in the Environmental Report that will be submitted to the NRC as part of the PNPS license renewal application.

Sincerely,

A handwritten signature in black ink that reads "Stephen Bethay". The signature is written in a cursive, flowing style.

Stephen Bethay  
Director, Nuclear Assessment  
Pilgrim Nuclear Power Station  
Entergy Nuclear Generation Company

Enclosure: Figures 2-1 and 2-2 from ER

Cc: Fred Mogolesko, Entergy  
Jacob Scheffer, Entergy  
Jack Alexander, Entergy  
Jack Fulton, Entergy  
David Lach, Entergy



