

May 3, 2007

Mary A. Colligan, Assistant Regional Administrator
for Protected Resources
National Marine Fisheries Service
Northeast Regional Office
One Blackburn Drive
Gloucester, MA 09130-2298

SUBJECT: EXPLANATION OF HOPE CREEK GENERATING STATION EXTENDED
POWER UPRATE AND CONCLUSION OF INFORMAL CONSULTATION (TAC
NO. MD3002)

Dear Ms. Colligan:

As described in our letter dated December 8, 2006, the U.S. Nuclear Regulatory Commission (NRC) is reviewing an application submitted by PSEG Nuclear, LLC (PSEG) for an amendment to the current operating license of Hope Creek Generating Station (HCGS) for an extended power uprate. HCGS is a single-unit nuclear plant, located on Artificial Island in Lower Alloways Creek Township, New Jersey. In accordance with the National Environmental Policy Act (NEPA) of 1969, as amended, NRC is preparing an Environmental Assessment (EA). NRC requested that National Marine Fisheries Service (NMFS) provide information regarding Federally listed, proposed, and candidate species and critical habitat under the jurisdiction of NMFS that may be in the vicinity of HCGS and its associated transmission lines, pursuant to Section 7 of the Endangered Species Act (ESA) of 1973, as amended.

In response, NMFS issued a letter dated January 26, 2007, providing information on the endangered shortnose sturgeon (*Acipenser brevirostrum*) and five species of endangered or threatened sea turtles: loggerhead (*Caretta caretta*), Kemp's ridley (*Lepidochelys kempii*), leatherback (*Dermochelys coriacea*), green (*Chelonia mydas*), and hawksbill (*Eretmochelys imbricata*) turtles. Atlantic sturgeon (*Acipenser oxyrinchus oxyrinchus*) is a candidate species for listing.

NMFS also requested that NRC provide additional information regarding the HCGS extended power uprate to better assess the need for consultation. The primary concern for these endangered and threatened species is the risk of impingement or entrainment due to cooling water intake by the plant. The intake flow would not be changed, and therefore, there would be no increase in the risk of impingement and entrainment. To dissipate the additional heat created by the power uprate, the temperature of the plant's cooling water discharge would be slightly elevated, but still within the National Pollutant Discharge Elimination System permit's 24-hour average temperature limit of 97.1°F. Therefore, there are no anticipated effects related to discharge.

The HCGS has had no takes of any of these endangered or threatened species. The neighboring nuclear power plant, Salem Nuclear Generating Station (SNGS), has had a total of 96 sea turtles (plus 3 recaptures) collected at the circulating water system (CWS) intake

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since 1979, and 17 shortnose sturgeon at the CWS intake since 1978. Since 2000, three loggerhead sea turtles (two dead) and three shortnose sturgeons (all dead) have been collected at the CWS intake. Two trawl surveys conducted by PSEG in the vicinity of HCGS and SNGS in 2004 picked up a loggerhead sea turtle in July and a shortnose sturgeon in September.

Because the intake flow of HCGS would remain the same after the extended power uprate, and the cooling water intake structure would not change, NRC staff does not anticipate an increased risk of impingement and entrainment of marine life, including endangered or threatened species. In a phone call with Julie Crocker of the Protected Resources Division of NMFS's Northeast Regional Office, on March 30, 2007, she agreed that NRC could conclude an informal consultation by letter. Therefore, NRC will not initiate a formal Section 7 consultation with NMFS, and the informal consultation is concluded.

If you have any additional questions or concerns regarding the NRC staff review of this license amendment application, please contact Mr. Dennis Logan, Aquatic Biologist, at 301-415-0490 or DTL1@nrc.gov.

Sincerely,

/RA/

Eric Benner, Branch Chief
Environmental Branch A
Division of License Renewal
Office of Nuclear Reactor Regulation

Docket No. 50-354

cc: See next page

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Eric Benner, Branch Chief
Environmental Branch A
Division of License Renewal
Office of Nuclear Reactor Regulation

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cc: See next page

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