

US EPA ARCHIVE DOCUMENT



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 1
1 Congress Street, Suite 1100
BOSTON, MA 02114-2023

Memorandum

Date: January 22, 2009

Subject: Endangered Species Act Section 7(a)(2) Compliance for Prevention of Significant Deterioration Permit for Dominion Energy's Brayton Point Facility in Somerset, Massachusetts

From: Donald Dahl
Environmental Engineer

To: Administrative Record for the Prevention of Significant Deterioration Permit for Dominion Energy's Brayton Point Facility in Somerset, Massachusetts

EPA-New England is currently reviewing an application for a Prevention of Significant Deterioration ("PSD") permit under the Clean Air Act ("CAA"), 42 U.S.C. § 7401, *et seq.*, submitted by Dominion Energy for authorization to construct and operate a new cooling water tower for the entire facility and install a dry scrubber and fabric filter on unit 3 at its electric generating station in Somerset, Massachusetts (Brayton Point). The final PSD permit will authorize Dominion to emit certain air pollutants. This memo documents EPA's compliance with relevant requirements of the Endangered Species Act ("ESA") in connection with this permitting action.

Section 7(a)(2) of the ESA requires federal agencies, in consultation with U.S. Fish and Wildlife Service ("FWS") and/or the National Oceanic and Atmospheric Administration Fisheries Service ("NOAA Fisheries," and, with FWS, the "Services"), to ensure that actions they authorize, fund or carry out are not likely to jeopardize the continued existence of federally-listed threatened or endangered species or result in the destruction or adverse modification of designated critical habitat of such species. 16 U.S.C. § 1536(a)(2). Under relevant implementing regulations, consultation is required only for actions that "may affect" listed species or critical habitat. 50 CFR § 402.14. Consultation is not required where the action has "no effect" on listed species or critical habitat.

To comply with the ESA, Region 1 reviewed the United States Fish and Wildlife Service (FWS)-New England Field Office web site http://www.fws.gov/northeast/newenglandfieldoffice/EndangeredSpec-Consultation_Project_Review.htm to determine if construction activity authorized by the proposed PSD permit may affect

federally-listed species in Bristol County, Massachusetts. Our review and determination is consistent with the direction EPA received from the FWS on previous PSD permits issued by EPA-New England.

The website instructs EPA to review a list of listed, proposed and candidate species to determine if a relevant species is located in the county for the permitted facility. Somerset is in Bristol County. According to the table on the web site, there are three listed endangered species in Bristol County. However, the listed species are in cities and towns that do not include the Town of Somerset. The web site directed EPA to print a letter dated January 2, 2009 and signed by Anthony P. Tur, Endangered Species Specialist for FWS. The letter states that no further review is warranted. The file contains a copy of this letter. Therefore, EPA has concluded that the activity at the construction site for the Brayton Point project authorized by the proposed PSD permit will have no effect on any listed or proposed species or their habitat in the Town of Somerset. This assessment addresses EPA's review of the effects of the permitted activities at the site of the Brayton Point plant.

This action will authorize air pollution-emitting activities, including emissions of carbon dioxide ("CO₂") and other greenhouse gases ("GHG"). Public comments in some permitting actions have alleged that authorization of these activities requires that Federal action agencies address certain species in consultations with the relevant Services under section 7(a)(2) of the ESA due to possible impacts of the GHG emissions from an authorized activity.

In the context of the final listing of the polar bear as a threatened species under the ESA, FWS determined, with supporting analysis provided by the U.S. Geological Survey, that the best currently available scientific data do not support drawing a causal connection between GHG emissions from a particular facility and effects on listed species or their habitats, for ESA purposes. Further, EPA notes that on October 3, 2008, the U.S. Department of the Interior ("DOI") issued a Solicitor's Opinion in which it detailed DOI's view why proposed actions that involve the emission of GHGs would not meet the "may affect" threshold set forth in the ESA regulations and therefore would not trigger the consultation requirements under section 7(a)(2) of the ESA.

In addition to the rationale offered by FWS in the polar bear listing and in DOI's Solicitor's Opinion, and considering EPA's expertise in current global climate change research and substantial experience in utilizing available models to analyze GHG emissions, EPA conducted a general assessment of the anticipated GHG emissions from a large coal-combusting source in relation to two listed coral species under NOAA Fisheries' jurisdiction and listed polar bears under the jurisdiction of FWS. Notwithstanding the uncertainties associated with modeling single-source emissions and localized regional or sub-regional end-point impacts, EPA assessed a model facility, using emissions estimates that were substantially greater than the emissions estimates from any project pending before EPA at the time. That assessment is described in the attached letter EPA sent to the Services on October 3, 2008 (attached).

As reflected in the October 3, 2008 letter, EPA's conclusion based on its additional

assessment is that the risk of harm to any listed species, including the listed corals or polar bears, or to the habitat of such species from the anticipated GHG emissions of the model facility – which are much larger than those authorized in the Brayton Point PSD permit – is too uncertain and remote to trigger ESA section 7(a)(2) consultation. *See* October 3, 2008 letter at page 8. NOAA Fisheries responded by letter dated October 10, 2008, indicating its agreement with EPA’s model facility analysis (attached).

GHG emissions estimates for the model facility are 14.1 million metric tons per year (“tpy”) for CO₂, 273.6 tpy for nitrous oxide (“N₂O”), and 136.8 tpy for methane (“CH₄”). GHG emissions at Brayton Point are estimated to be 7.5 million tpy for CO₂, 91.4 tpy for N₂O, and 69.6 tpy for CH₄.¹ Since the emissions of GHG from Brayton Point will be substantially less than the model facility emissions in the analysis described in the attached memorandum, any risk of harm to listed species, including the listed corals or polar bears, or to the habitat of such species from the anticipated GHG emissions of the Brayton Point is similarly too uncertain and remote to trigger ESA section 7(a)(2) consultation.

¹ The GHG emission estimates for N₂O and Methane are based on AP-42. Emission estimate for CO₂ is based on emission data the source reported to EPA from 2005-2007.