

November 13, 2006

Julie A. McMonagle, Director  
Pennsylvania Environmental Council  
Northeast Regional Office  
175 Main Street  
Luzerne, PA 18709

SUBJECT: SUSQUEHANNA STEAM ELECTRIC STATION LICENSE RENEWAL  
APPLICATION REVIEW

Dear Ms. McMonagle:

The U.S. Nuclear Regulatory Commission (NRC) is reviewing an application submitted by PPL Susquehanna, LLC (PPL), for renewal of the operating licenses for Susquehanna Steam Electric Station (SSES), Units 1 and 2. SSES is located along the Susquehanna River, approximately five miles northeast of Berwick, Pennsylvania. As part of the review of the license renewal application (LRA), the NRC is preparing a Supplemental Environmental Impact Statement (SEIS) under the provisions of Title 10 of the *Code of Federal Regulations* Part 51 (10 CFR Part 51), the NRC regulations that implement the National Environmental Policy Act (NEPA) of 1969. The SEIS includes an analysis of pertinent environmental issues, including endangered or threatened species and impacts to fish and wildlife. This letter is being submitted under the provisions of the Endangered Species Act of 1973, as amended, and the Fish and Wildlife Coordination Act of 1934, as amended.

PPL is requesting the renewal of its operating licenses for Units 1 and 2 for a period of 20 years beyond the expiration of the current license term, extending unit operation until July 2042 and March 2044, respectively. The proposed action would include the use and continued maintenance of existing plant facilities and transmission lines; PPL does not plan to construct or alter any facilities associated with the plant to support license renewal.

In total, PPL owns 2,355 acres of land on both sides of the Susquehanna River. In general, this land is characterized by open deciduous woodlands interspersed with grasslands and orchards. Approximately 487 acres are used for power generation, and the remainder of the land is primarily river floodplain forest, upland forest, and marshes. PPL maintains a 401-acre nature preserve, the Susquehanna Riverlands, located between SSES and the river; US Route 11 separates these areas. East of the Susquehanna River are 717 acres of mostly undeveloped land, which includes natural, recreational, and wildlife areas. Additionally, PPL owns Gould Island, a 65-acre island just up the Susquehanna River.

SSES uses a closed-cycle heat dissipation system to remove waste heat from the circulating water system. The circulating water and the service water systems draw water from, and discharge to, the Susquehanna River. The river intake structure is located on the western bank of the river and consists of two water entrance chambers with one-inch, on-center vertical bar screens and 3/8-inch mesh traveling screens. A low-pressure screen-wash system periodically

operates to release aquatic organisms and debris impinged on the traveling screens to the trash rack. Cooling tower blowdown, spray pond overflow, and other permitted effluents are discharged to the Susquehanna River through a buried pipe leading to a submerged discharge structure/diffuser, approximately 600 feet downstream of the river intake structure. The diffuser pipe is 200 feet long, with the last 120 feet containing 72 four-inch portals that direct the discharge upwards at a 45 degree angle then going downstream. Warm circulating water from the cooling towers can be diverted to the river intake structure to prevent icing; this usually occurs from November through March.

For the specific purpose of connecting SSES to the regional transmission system, there is a total of approximately 150 miles of transmission line corridors that occupy approximately 3,341 acres of land. These transmission line corridors are being evaluated as part of the environmental review process. The corridors pass through land that is primarily agricultural and forest land with low population densities. Two 500-kilovolt (kV) lines and one 230-kV transmission line connect SSES to the electric grid, with approximately 2.3 miles of short ties in the immediate plant vicinity to connect SSES to the 230-kV system. The 230-kV Stanton-Susquehanna #2 transmission line corridor runs northeast from the plant for approximately 30 miles and ranges from 100 to 400 feet wide. The Susquehanna-Wescosville-Alburtis 500-kV transmission line corridor ranges from 100 to 350 feet wide and runs generally southeast from the plant for approximately 76 miles. The Sunbury-Susquehanna #2 500-kV line is approximately 325 feet wide and runs 44 miles west-southwest from the plant. Pennsylvania counties crossed by the transmission line corridors include Luzerne (the location of SSES), Carbon, Columbia, Lehigh, Northampton, Northumberland, Montour, and Snyder. PPL plans to maintain these transmission lines and the associated corridors, which are integral to the larger transmission system, indefinitely. Except for the short 230-kV transmission lines, the lines will remain a permanent part of the transmission system even after SSES is decommissioned.

We plan to hold two public NEPA scoping meetings at 1:30 p.m. and 7:00 p.m. on November 15, 2006, at the Eagles Building, 107 South Market Street, Berwick, Pennsylvania 18603. You and your staff are invited to attend the public meetings. Your office will receive a copy of the draft SEIS along with a request for comments. The anticipated publication date for the draft SEIS is December 2007.

If you have any questions concerning the NRC staff review of this LRA, please contact Ms. Alicia Mullins, Project Manager at 301-415-1224 or by e-mail at [axm7@nrc.gov](mailto:axm7@nrc.gov).

Sincerely,

**/RA/**

Rani Franovich, Branch Chief  
Environmental Branch B  
Division of License Renewal  
Office of Nuclear Reactor Regulation

Docket Nos. 50-387 and 50-388

cc: See next page

If you have any questions concerning the NRC staff review of this LRA, please contact Ms. Alicia Mullins, Project Manager at 301-415-1224 or by e-mail at [axm7@nrc.gov](mailto:axm7@nrc.gov).

Sincerely,

**/RA/**

Rani Franovich, Branch Chief  
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Docket Nos. 50-387 and 50-388

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DATE	11/13/06	11/07/06	11/07/06	11/13/06

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Letter to J. McMonagle, from R. Franovich, dated November 13, 2006

SUBJECT: REQUEST FOR LIST OF PROTECTED SPECIES WITHIN THE AREA UNDER  
EVALUATION FOR THE SUSQUEHANNA STEAM ELECTRIC STATION,  
UNITS 1 AND 2, LICENSE RENEWAL APPLICATION REVIEW

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