APPENDIX B

CONSULTATION LETTERS UNDER SECTION 106 OF THE NATIONAL HISTORIC PRESERVATION ACT

U.S. Department of Energy

National Energy Technology Laboratory

February 18, 2004

Ms. Bernadette Castro
State Historic Preservation Officer
Parks, Recreation, and Historic Preservation Agency
Building #1, Empire State Plaza
Albany, NY 12238

Dear Ms. Castro:

The United States Department of Energy (DOE) is considering participation, through a 4.5-year cooperative agreement with CONSOL Energy, Inc., in a project to demonstrate an integrated, multi-pollutant control system on the 104-megawatt, Unit 4 boiler at the AES Greenidge Generating Station near Dresden, NY. Under the cooperative agreement, CONSOL and AES would design, install, operate, and evaluate a multi-pollutant control system for mercury, SO_2, and NO_x, acid gases, and particulate emissions control at the Greenidge Station.

The proposed project would require removal of the existing electrostatic precipitator on Unit 4 and installation of a selective catalytic reduction reactor for NO_x control and a circulating dry scrubber for SO_2, Hg, HCl, HF, and SO_3 control. The proposed control system would be expected to achieve the following control targets:

- NO_x reduction to less than 0.122 lb/million Btu when firing coal or coal-biomass blends
- SO_2 reduction by 95% while the boiler is firing coal with more than 2% sulfur
- Mercury reduction by 90% using activated carbon injection
- Reductions in emissions of other acid gases (HCl, HF, and SO_3) by 95%

A description of the proposed project and graphics depicting its location are provided as Enclosures.

As part of our coordination and consultation responsibilities, and to comply with provisions implementing Section 106 of the National Historic Preservation Act of 1966, we would appreciate receiving any information you have regarding historic or cultural properties in the project area.

Based on the scope of the proposed project, DOE has initiated preparation of an Environmental Assessment (EA), in accordance with requirements of the National Environmental Policy Act, to analyze, document, and disseminate information on the potential environmental consequences of the proposed project. Information that you provide will be incorporated and appropriately addressed in the EA. If your initial review concludes that no historic or cultural properties are present in the project area, a written acknowledgement of that conclusion would be appreciated. In any case, the information that you provide will be considered in preparing a draft EA, which will be provided for review upon availability.

626 Cochrans Mill Road, P.O. Box 10940, Pittsburgh, PA 15236-0940 ☐ 3610 Collins Ferry Road, P.O. Box 880, Morgantown, WV 26507-0880
REPLY TO: Pittsburgh Office • Pierina.Noceti@netl.doe.gov • Voice (412) 386-5428 • Fax (412) 386-4775 • www.netl.doe.gov

U.S. Department of Energy

National Energy Technology Laboratory

February 18, 2004

Should you require additional information, please contact me by telephone at 412-386-5428 or by e-mail at 'pierina.noceti@netl.doe.gov.'

Sincerely,

Pierina Noceti

Pierina Noceti
NEPA Specialist

Enclosures

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Description of the Proposed Action

GREENIDGE MULTI-POLLUTANT CONTROL PROJECT

The proposed action is for DOE to provide, through a 4.5-year cooperative agreement with CONSOL Energy, Inc., financial assistance for demonstrating an integrated, Multi-Pollutant Control system on the 104-megawatt, Unit 4 boiler at the AES Greenidge Generating Station near Dresden, NY. Under the cooperative agreement, CONSOL and AES would design, install, operate, and evaluate the multi-jpollutant control system for mercury, SO_2, and NO_x, acid gas, and particulate emissions control for application on coal-fired power generation systems.

The Multi-Pollutant Control system would be designed for long-term commercial operation following completion of the cooperative agreement with DOE. The total value of the cooperative agreement would be $32.8 million; DOE's share would be approximately $14.5 million.

The Greenidge Multi-Pollutant Control Project will demonstrate the commercial readiness of an emissions control system that, because of its low capital, operating, and maintenance costs, is particularly well suited to meet the emissions reduction requirements of a large group of smaller existing electricity generating units. The multi-pollutant control system offers the potential for low-cost, deep cleaning of air emissions, especially mercury, in support of the President's Clear Skies Initiative. Under the President's Clear Skies Initiative, emissions of SO_2 from power plants would be reduced by 73% from current emissions of 11 million tons annually to a cap of 4.5 million tons annually in 2010 and to 3 million tons annually in 2018. Emissions of NO_x would be reduced by 67% from current a current level of 5 million tons annually to a cap of 2.1 million tons annually in 2008 and to 1.7 million tons annually in 2018. Mercury emissions would be reduced by 69% from current level of 48 tons to a cap of 26 tons in 2010 and 15 tons in 2018. The proposed project addresses the need for mercury emission reduction from coal-fired power plants, which stems from EPA's December 2000 announcement of plans to regulate emissions of mercury from coal-fired power plants. Successful implementation of the proposed technology demonstration would help provide an approach for achieving timely compliance with future mercury regulations.

Unit 4 at the Greenidge Generating Station would be the host facility for the proposed project. AES Greenidge Unit 4 is a tangentially fired, 104-megawatt electricity generator burning bituminous coals with sulfur content ranging from 1.4 to 2.8 percent. Currently, Unit 4 is equipped with only an electrostatic precipitator for emissions control. Unit 4 is considered to be representative of 492 coal-fired electricity generators in the United States with capacities ranging from 50 to 300 megawatts, which collectively represent about 25% of the U.S. coal-fired generating capacity.

The proposed project would require removal of the existing electrostatic precipitator on Unit 4 and installation of a single-bed, in-duct, selective catalytic reduction (SCR) reactor for NO_x control and a circulating dry scrubber (CDS) for SO_2, Hg, HCl, HF, and SO_3 control. The proposed control system would be expected to achieve the following control targets:

- NO_x reduction to less than 0.122 lb/million Btu using a single-bed, in-duct SCR unit in combination with low-NO_x combustion technology when firing coal or coal-biomass blends
- SO_2 reduction by 95% using the CDS system while the boiler is firing coal with more than 2% sulfur
- Mercury reduction by 90% using activated carbon injection into the CDS unit
- Reductions in emissions of other acid gases (HCl, HF, and SO_3) by 95% in the CDS

TerraServer Image Courtesy of the USGS

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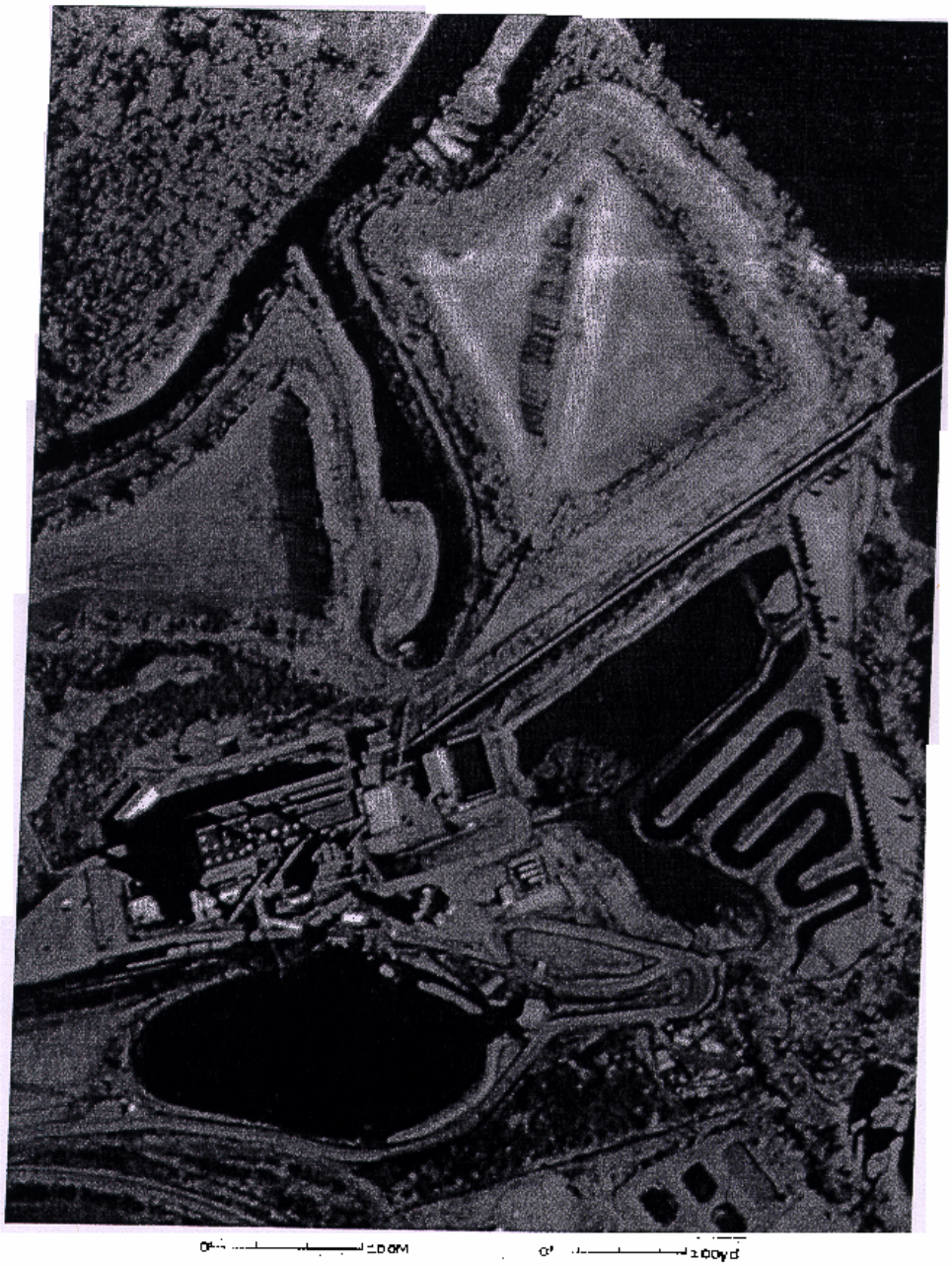

Image courtesy of the U.S. Geological Survey

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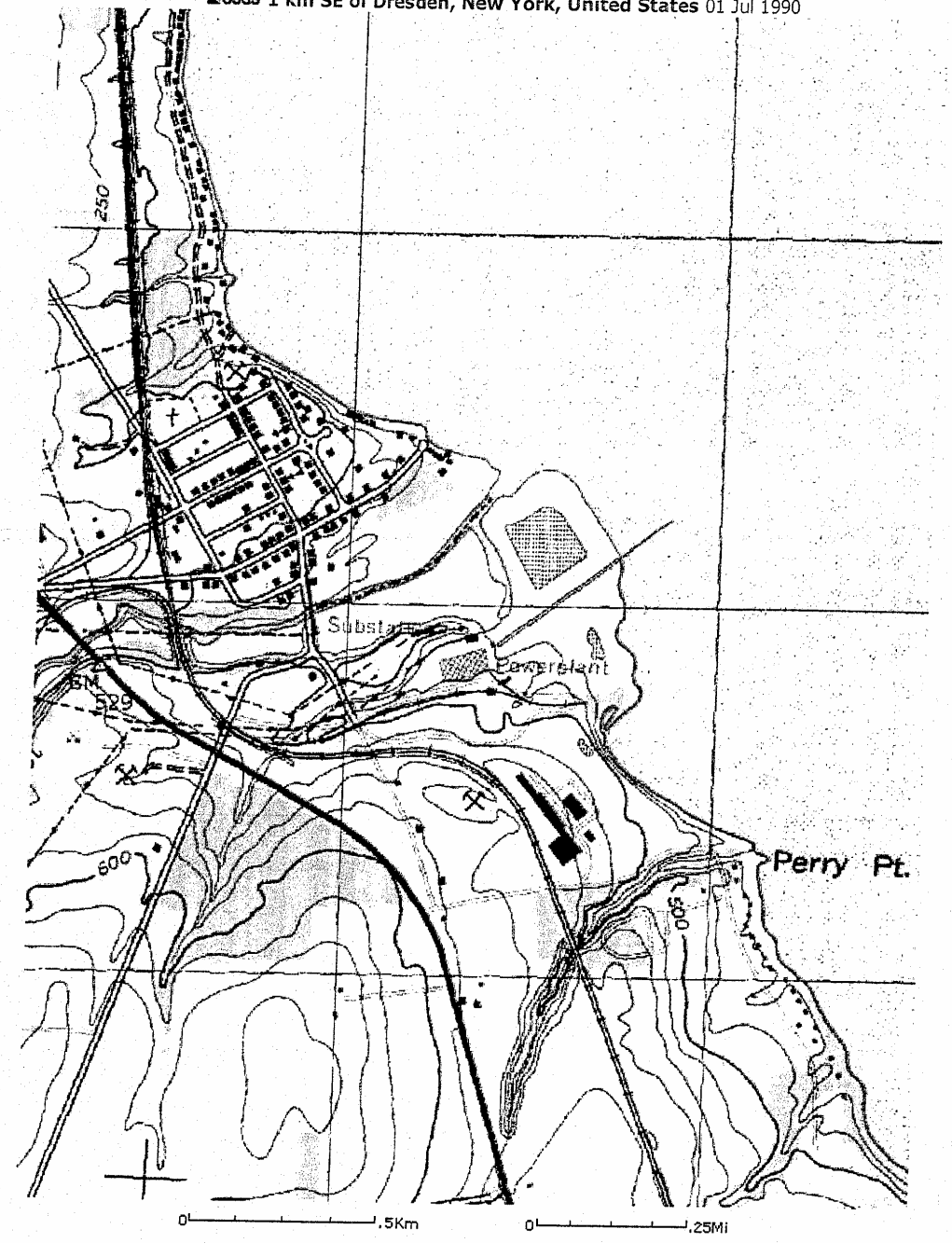
USGS **1 km SE of Dresden, New York, United States** 01 Jul 1990



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