



December 31, 2009

The Honorable Alan R. Schriber, Chairman Public Utilities Commission of Ohio Ohio Power Siting Board 180 East Broad Street Columbus, OH 43266-0573

Matthew J. Satterwhite Legal Counsel --Regulatory Services (614) 716-1915 (P) (614) 716-2014 (F) mjsatterwhite@aep.com Re: Letter of Notification, 09-2013-EL-BLN (Kyger Creek-Pierce 345 kV Line/345 kV Bypass of DOE X533 Station)

Dear Chairman Schriber:

In accordance with Rules 4906-5-02 and 4906-11-01, Ohio Administrative Code ("O.A.C."), Ohio Valley Electric Corporation ("OVEC") working with American Electric Power ("AEP") submits this Letter of Notification.

As required by Rule 4906-11-01(D)(4), O.A.C., OVEC has submitted a copy of this Letter of Notification to the political subdivisions immediately affected by the proposed project. Specifically, copies of the notification on structures, structure types, and construction schedules to the Scioto Township Trustees and the Pike County Commissioners. The cover letter accompanying these mailings is included in the Letter of Notification.

Please feel free to contact me if there are any questions.

Respectfully Submitted,

Matthew J. Satterwhite, Legal Counsel

Attachment

This, is to certify that the images appearing are an accurate and complete reproduction of a case file document delivered in the regular course of business.

Technician When the process 12/2.184

789 DEC 21 DUID 21

Letter of Notification

for the

Kyger Creek – Pierce 345 kV Line 345 kV Bypass of DOE X533 Station

Submitted by

American Electric Power and Ohio Valley Electric Corporation

to

The State of Ohio Power Siting Board

December 2009

Letter of Notification

In accordance with Ohio Administrative Code Section 4906-11-01 <u>Letter of Notification</u>, American Electric Power (AEP) and Ohio Valley Electric Corporation (OVEC) submits the following information:

4906-11-01 (B) General Information

4906-11-01 (B) (1) Project Name and Reference Number

The name of this project is the Kyger Creek – Pierce 345 kV Line Bypass of the Department of Energy (DOE) Station X533.

4906-11-01 (B) (1) Description of the Project

The existing DOE X533 station is located at the Piketon Uranium Enrichment facility in Pike County, Ohio. This station is presently served by three 345 kV transmission lines coming from AEP's Don Marquis Station and OVEC's Pierce and Kyger Creek Stations. Due to changes within the DOE facility, DOE does not want or need 345 kV service to their X533 station. DOE has requested for AEP/OVEC to remove the 345 kV service to this station and completely bypass this station. This will be accomplished by installing five (5) self—supporting steel poles and removing three (3) existing steel towers along with the associated conductors. This project is located on land owned by the U.S. Department of Energy.

4906-11-01 (B) (1) Reason the Project Meets Letter of Notification Requirements

This project meets the requirements for a Letter of Notification because the extent of this project is defined by Item (1)(b) of Appendix A "Application Requirement Matrix for Electric Power Transmission Lines" of Section 4906-1-01 of the Ohio Administrative Code. This project consists of constructing a line that is greater than 300 kV but not greater than 1 mile in length.

Page 2 of 8

4906-11-01 (B) (2) Need for the Project

Due a change in operating procedures, DOE no longer needs their X533 station and plans to remove it. DOE has requested that AEP and OVEC remove the existing 345 kV transmission facilities that currently feed this station.

4906-11-01 (B) (3) Project Location Relative to Existing or Proposed Lines

The location of this project is shown on Maps 1 and 2

4906-11-01 (B) (4) Alternatives Considered

This work is being done at the request of the Department of Energy (DOE) and Ohio Valley Electric Corporation. No other alternatives were considered.

4906-11-01 (B) (5) Anticipated Construction Schedule

Construction of this transmission line project is expected to begin early March 2010. This project is scheduled to be completed and placed in service by May, 2010.

4906-11-01 (B) (6) Maps Depicting Project Location

The project is located in Scioto Township, Pike County, Ohio. Two Maps have been prepared showing the project location. Map 1, the General Location Map, indicates the area surrounding the project. This map is a partial copy of the United States Geologic Survey Piketon, Ohio Quad. Map 2 is a Detail Site map showing the project site details.

To view this project take US Route 23 south to Piketon, then take the exit for the DOE Uranium Enrichment facility. After passing through the guard shack continue south until you reach a tee in the road. Turn left on the unnamed road and follow for about 2 miles. The project area is on the left side of the road.

For security reasons, to gain access to the Department of Energy property, you must call (740)897-2171 at least 24 hours in advance and supply proper identification.

4906-11-01 (B) (7) Property Easements

The proposed transmission line will be constructed on land owned by the US Department of Energy. Additional easements for conductor overhang have been secured from the US Department of Energy for the construction of this line. All new structures will be located within the existing transmission line right of way. The property owner has been notified and is aware of the proposed transmission line

4906-11-01 (C) Technical Features of the Project

4906-11-01 (C) (1) Description of Technical Features

The proposed transmission line will be designed for and operated at 345kV. Figure 1 depicts the typical proposed dead end single pole structure to be installed. Three (3) 2,303,500 cm ACAR (45/7) conductors and one (1) 159,000 cm ACSR (12/7) Alumoweld overhead ground wires will be installed.

4906-11-01 (C) (1) Number and Type of Structures

The transmission line work will include (5) self-supporting dead-end steel poles as shown in Figure 1. All new structures will be located within the existing 345 kV transmission line rights of way.

4906-11-01 (C) (1) Right of Way and Land Requirements

The proposed transmission line will be constructed on land owned by the US Department of Energy. Additional easements for conductor overhang have been secured from the US Department of Energy for the construction of this line. All new structures will be located within the existing transmission line right of way. The property owner has been notified and is aware of the proposed transmission line.

4906-11-01 (C) (2) (a) Calculated Electric and Magnetic Field Levels

Electric and Magnetic Fields During Operation

(a) Calculated Electric and Magnetic Field Levels

Line Loading & Rating

Circuit (345 kV)	Normal Maximum Loading	Emergency Loading	Winter Normal Conductor Rating
Kyger Creek – Pierce	376 Amps	546 Amps	2479 Amps
Kyger Creek - Marquis	383 Amps	523 Amps -	2479 Amps

The electric and magnetic field levels for the proposed project were calculated for the conductor configuration as depicted by "Figure 2"

Electric & Magnetic Field (EMF) Strength

	Electric Field (kV/m)		Magnetic Field (mG)	
Conductor Condition	Maximum Under Line	Edge of R.O.W. (200')	Maximum Under Line	Edge of R.O.W (200')
Normal Maximum Loading	0.898	0.027	10.23	5.11
Emergency Line Loading	0.898	0.027	14.56	7.24
Winter Normal Conductor Rating	0.993	0.027	72.66	33.99

4906-11-01 (C) (2) (b) Discussion of Design Alternatives

No other design alternatives were considered. Page 5 of 8

> AEP/OVEC Letter of Notification DOE 345 kV Bypass

4906-11-01 (C) (3) Estimated Capital Costs

The following estimated 2009 capital costs for the proposed project have been tabulated by the Federal Energy Regulatory Commission (FERC) Electric Plant Transmission Accounts:

FERC Accounts	Estimated Capital Costs
350 Land and Land Rights (R/W)	\$ 0
355 Poles and Fixtures	\$ 810,000
356 Overhead Conductors and Devices	\$ 450,000
Total	\$ 1,260,000

4906-11-01 (D) Socioeconomic Data

4906-11-01 (D) (1) Land Use and Population Density

This project is located in Scioto Township, Pike County, Ohio. The area around the proposed line is wooded with widely scattered farms and home sites. Based upon the 2000 census, the project area has a population density of 50-people/per square mile.

4906-11-01 (D) (2) Location and Description of Existing Agricultural Districts

The proposed relocation is not within any agricultural land and/or within the limits of an Agricultural District as defined by Chapter 929 of the Ohio Revised Code.

4906-11-01 (D) (3) Archaeological and Cultural Resources

The project area is within the existing transmission line right of way and in an area that has been previously disturbed by industrial activity. The potential for existence of any archeological or cultural resource in this area is extremely low.

4906-11-01 (D) (4) Local Officials to be Notified

Copies of this Letter of Notification have been sent to the Pike County

Commissioners and the Scioto Township Trustees. Copies of the cover letters to
these officials are attached.

4906-11-01 (D) (4) Public Information Program

This project is located on a large tract of land owned by the US Department of Energy. There are no adjacent property owners that will be affected by this proposed transmission line.

4906-11-01 (D) (5) Current or Pending Litigation

There is no litigation involving this project and none is expected.

4906-11-01 (D) (6) Local, State and Federal Requirements

This line will be designed, constructed and operated to meet or exceed the requirements of the National Electric Safety Code, AEP design standards and all applicable OSHA standards.

4906-11-01 (E) Environmental

4906-11-01 (E) (1) Endangered or Threatened Species

The project area is within the existing transmission line right of way and in an area that has been previously disturbed by industrial activity. This industrial activity continues today. This area is an open field that has been kept mowed by DOE. The existence of any endangered or threatened species in this area is extremely low.

4906-11-01 (E) (2) Areas of Ecological Concern

The project area is within the existing transmission line right of way and in an area that has been previously disturbed by industrial activity. This industrial activity continues today. This area is an open field that has been kept moved by DOE.

4906-11-01 (E) (3) Additional Information

There are no unusual conditions that will result in significant environmental or social impacts from the installation and operation of this 345 kV transmission line project.







