

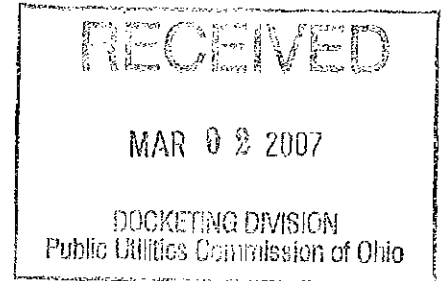
FILE

NC

07-242-EL-BLN

## Letter of Notification

for the



Portsmouth – Trenton 138 kV Line #1

Service to  
Dayton Power & Light Middleboro Station

Submitted by

Ohio Power

to

The State of Ohio Power Siting Board

March, 2007

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Technician AW Date Processed 3/5/07

## **LETTER OF NOTIFICATION**

In accordance with Ohio Administrative Code Section 4906-11-01, Letter of Notification requirements, American Electric Power submits the following.

### **49016-11-01 (A) Need Statement**

#### **(1)(a) Name of Project**

The name of this project is the Portsmouth – Trenton 138 kV Line #1 Service to Dayton – Power & Light’s Middleboro Station. This project is not identified in Ohio Power’s latest Long Term Forecast.

#### **(1)(b) Description of this Project**

This project involves tapping the existing Portsmouth – Trenton 138 kV Line #1 and installing approximately 180’ of new 138 kV transmission line to serve a new distribution station owned and operated by Dayton Power and Light proposed distribution station. The existing circuit to be tapped is the Hillsboro – Hutchings 138 kV Circuit.

#### **(1)(c) Need for this Project**

The installation of this tap is being done at the request of Dayton Power & Light (DP&L). Further details regarding the need for the project can be found in DP&L’s Letter of Notification (OPSB Case No. 04-1383-EL-BLN).

#### **(1)(d) Reasons this Project Meets the Letter of Notification Requirements**

This project meets the for a Letter of Notification because the extent of this project is defined by Item (1)(c) of Appendix A “ Application Requirement Matrix for Electric Power Transmission Lines. This project consists of constructing a line that is greater than 135 kV but less than 300 kV and not greater than 2 miles in length.

## (2) Projection Location Relative to Existing or Proposed Lines

The proposed 138kV project area has been identified on "Map 1" (see Appendix). Map 3 is a copy of Ohio Power's Transmission System as of December 31, 2012, as submitted to the Public Utilities Commission of Ohio in our latest Long-Term Forecast Report. A detailed site is shown in "Map 2" (see Appendix).

## (3) Alternatives Considered

The location of DP&L's Middleboro distribution station is adjacent to the existing 138kV transmission line. No other alternatives were considered.

## (4) Anticipated Construction Schedule

Depending upon weather conditions and circuit outage availability, construction of this transmission line project is expected to begin on or about April 16, 2007 and be completed by May 25, 2007.

## (5) Maps Depicting Project Location

The project is located in Harlen Township, Warren County, Ohio. Map 1 has been prepared to show the general project site location (see Appendix).

This project is located on Middleboro Road approximately 0.8 miles southeast of state Route 132 where it runs through the Village of Middleboro. Middleboro is approximately 5-1/2 miles east of Morrow, Ohio via US Route 22/State Route 3 and Middleboro Road.

# **49016-11-01 (B) Technical Features**

## (1) Number and Type of Structures

The existing Portsmouth - Trenton 138 kV Line #1 is a single circuit 138 kV line supported on double wood pole structures. To tap this line two double wood pole structures will be removed and replaced with two new single pole steel structures. A steel switch pole will also be installed. The existing Portsmouth - Trenton 138 kV Line #1 currently consists of three

477,000 ACSR (26/7) conductors and two 5/16" Steel ground wires. The tap line to Middleboro station will consist of three 477,000 cm ACSR (26/7) conductors and one 7#10 alumoweld overhead groundwires.

(2)(a) Calculated Electric and Magnetic Field Levels

As explained in DP&L's Letter of Notification (OPSB Case No. 04-1383-EL-BLN) there will be no significant change in the electric and magnetic fields associated with the operation of the existing Portsmouth – Trenton 138 kV Line #1 (Hillsboro – Hutchings 138 kV Circuit). Compared to how the line has operated over the years. The tap line extending into DP&L's new station will be approximately 180 feet from the substation property line, so electric and magnetic fields at the property line due to the lightly loaded tap line are insignificant.

(2)(b) Discussion of Design Alternatives

No other alternatives were considered.

(3) Estimated Capital Costs

The 2007 capital cost estimates for the proposed project have been tabulated by the Federal Energy Regulatory Commission (FERC) Electric Plant Transmission Accounts:

FERC Accounts	Estimated Capital Costs
355 Poles and Fixtures	\$ 77,500
356 Overhead Conductors and Devices	\$ 50,500
<b>Total</b>	<b>\$128,000</b>

**49016-11-01 (C) Socioeconomic Data**

(1) Land Use and Population Density

The primary land use in the vicinity of the project is agricultural. The land in the immediate area of the project is a distribution station owned and operated by DP&L. The estimated

population density in the area around the Middleboro substation tap project is less than 80 persons/square mile.

(2) Agricultural Land and Agricultural Districts

The proposed line is not within the limits of an Agricultural District as defined by Chapter 929 of the Ohio Revised Code. The area around the existing Portsmouth – Trenton 138 kV Line #1 in the immediate vicinity of the proposed tap is presently cropland.

(3) Investigation of Archeological and Cultural Resources

DP&L conducted a record search for archeological and cultural resources as part of their Letter of Notification. DP&L found that this project will have no impact on any recorded archeological or historic sites. Information regarding this investigation can be found in OPSB Case No. 04-1383-EL-BLN.

(4) Local Officials to be Notified and Public Information Program

Copies of this Letter of Notification have been sent to the Warren County Commissioners, Warren county Administrator and the Harlan Township Trustees. Copies of the cover letters to these officials are attached. No formal public information program has been created because all construction will be limited to DP&L property and to property contained within existing transmission line easements. Adjacent property owners will be contacted and made aware of the work within the easement area on their property.

(5) Current or Pending Litigation

There is no current or pending litigation involving this project and none is expected.

(6) Local, State and Federal Requirements

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

#### **49016-11-01 (D) Environmental Data**

##### **(1) Endangered or Threatened Species**

As part of their Letter of Notification, DP&L contacted several state and federal agencies regarding endangered and threatened species. Responses from these agencies did not indicate the presence of any rare or endangered species within the project area. Information regarding this investigation can be found in OPSB Case No. 04-1383-EL-BLN.

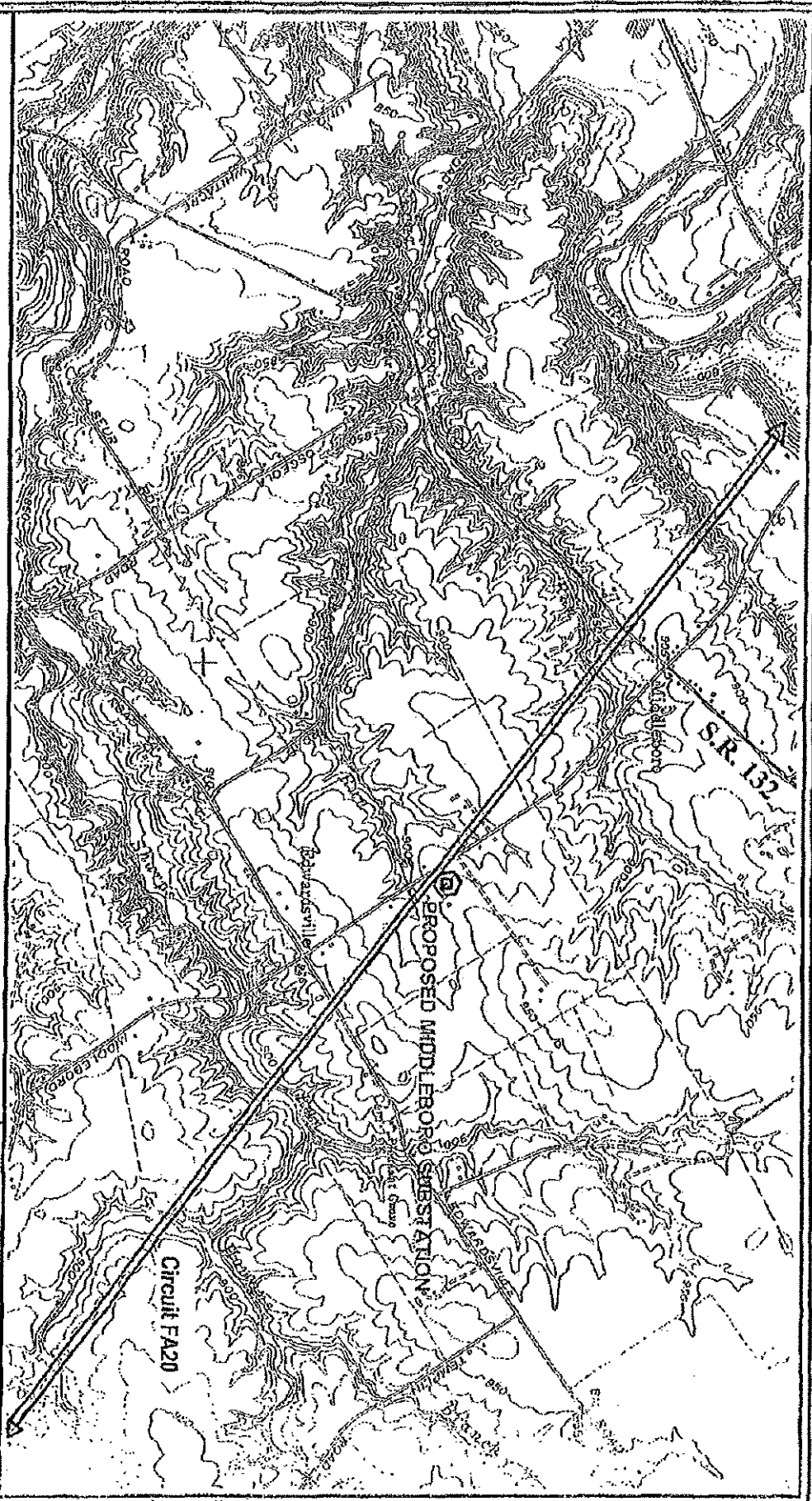
##### **(2) Areas of Ecological Concern**

D As part of their Letter of Notification, DP&L contacted several state and federal agencies regarding areas of ecological concern. . Responses from these agencies did not indicate the presence of any areas of ecological concern within the project area. Information regarding this investigation can be found in OPSB Case No. 04-1383-EL-BLN.

##### **(3) Additional Information**

There are no unusual conditions that will cause significant environmental or social impacts from the installation and operation of this proposed transmission line tap.

## **Appendix**



American Electric Power

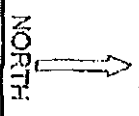
Tap to Middleboro Rd Substation

Base Map Source: Compiled from USGS 7.5 minute topographic quadrangle map: Pleasant Plain, Ohio, 1968

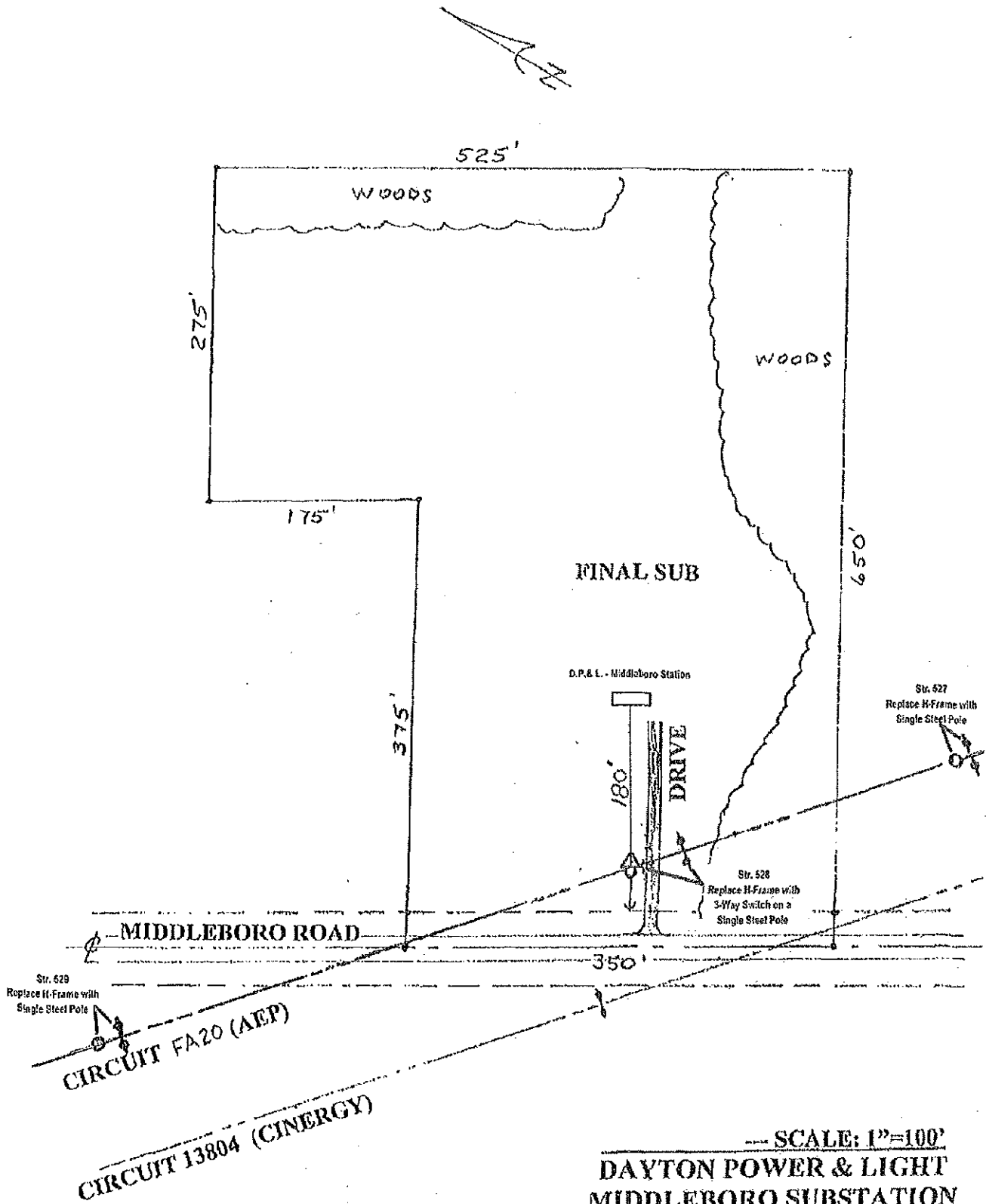
Scale 1:24000 (1in = 2000ft)

Project area is in Warren County, Harlan Township, located approximately 5.1 miles Southeast of the City of Morrow

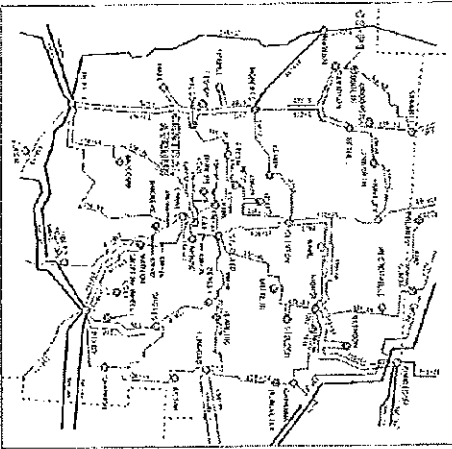
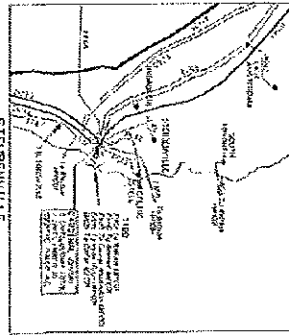
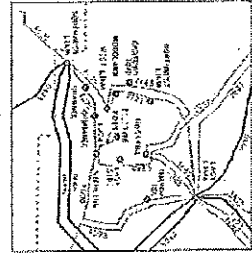
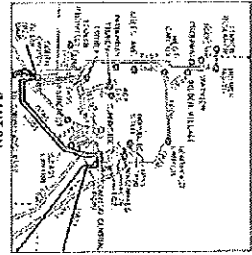
Map 1  
General Area





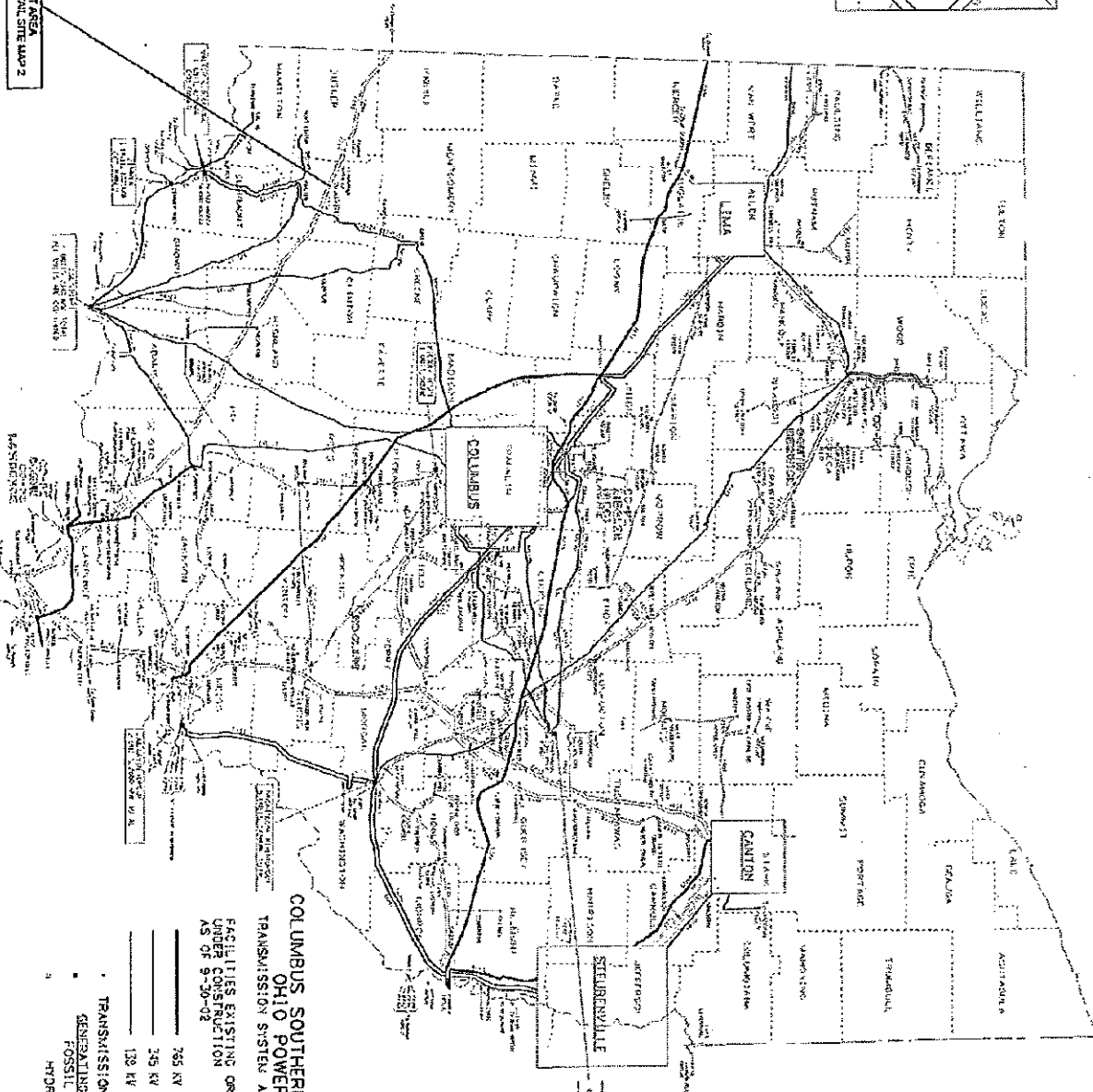


American Electric Power  
MAP 2



COLUMBUS

PROJECT AREA  
SEE DETAIL MAP 2



COLUMBUS SOUTHERN POWER COMPANY  
OHIO POWER COMPANY  
TRANSMISSION SYSTEM AS OF DECEMBER 31, 2012

FACILITIES EXISTING OR  
UNDER CONSTRUCTION FUTURE PLANNED  
AS OF 9-30-02

765 KV LINE  
345 KV LINE  
138 KV LINE

TRANSMISSION STATIONS  
GENERATING PLANTS  
FOSSIL FUEL  
HYDRO

MAP 2



American Electric Power  
700 Morrison Road  
Gahanna, OH 43230

February 28, 2007

Mr. Dave Gulley  
Warren County Administrator  
406 Justice Drive  
Lebanon, OH 45036

**Letter of Notification**  
**Portsmouth – Trenton 138 kV Line #1**  
**Service to Dayton Power & Light's Middleboro Distribution Station**

Dear Mr. Gulley:

In accordance with Chapter 4906 of the Ohio Administrative Code, the Ohio Power Company is required to submit a Letter of Notification to the State of Ohio Power Siting Board whenever a substantial change is made to our transmission facilities.

American Electric Power is planning to install a tap structure to serve Dayton Power & Light's Middleboro Distribution Station in Harlan Township, Warren County, Ohio.

In compliance with Rule 4906-15-08 of the OPSB Rules and Regulations, we have prepared and filed the attached Letter of Notification. This Notification contains details on the line location, structure types and construction schedule, and is submitted for your information.

Cordially,

A handwritten signature in black ink, appearing to read 'John Heppner', is written over the typed name.

John Heppner  
Transmission Line Projects Engineering



American Electric Power  
700 Morrison Road  
Gahanna, OH 43230

February 28, 2007

Warren County Commissioners  
Administration Building – 1<sup>st</sup> Floor  
406 Justice Drive  
Lebanon, OH 45036

**Letter of Notification  
Portsmouth – Trenton 138 kV Line #1  
Service to Dayton Power & Light's Middleboro Distribution Station**

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John Heppner  
Transmission Line Projects Engineering



American Electric Power  
700 Morrison Road  
Gahanna, OH 43230

February 28, 2007

Ms Ginny Williams  
Clerk, Harlan Township Trustees -  
7334 State Route 123  
Blanchester, OH 45107

**Letter of Notification  
Portsmouth - Trenton 138 kV Line #1  
Service to Dayton Power & Light's Middleboro Distribution Station**

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