

FILE
NC

FirstEnergy

76 South Main St.
Akron, Ohio 44308

1-800-633-4766

January 30, 2007

Ms. Renee J. Jenkins
Director, Administration Department
Secretary to the Commission
Docketing Division
The Public Utilities Commission of Ohio
180 East Broad Street
Columbus, OH 43215-3793

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PUCO

Letter of Notification
Dale-West Canton 138 kV Transmission Line
New Structure Adjacent to Dale Substation Project
Case No. 07- 103 -EL-BLN

Dear Ms. Jenkins:

Enclosed for filing in accordance with Rule 4906-1-03 of the Ohio Administrative Code ("OAC"), FirstEnergy Service Company, a subsidiary of FirstEnergy Corp., on behalf of American Transmission Systems, Incorporated, ("ATSI") also a FirstEnergy Corp. subsidiary, hereby transmits one (1) original and eleven (11) copies of the subject Letter of Notification.

In this Letter of Notification, ATSI is proposing to install one new wood pole H-frame structure in the existing Dale-West Canton 138 kV transmission line adjacent to the Dale Substation. A line reactor is being installed on the Dale-West Canton 138 kV transmission line at the Dale Substation. The new structure will reposition the conductors of the Dale-West Canton 138 kV transmission line as they pass into the Dale Substation to facilitate their connection to the line reactor.

In accordance with the requirements of OAC 4906-5-03(A)(3)(a-c), please be advised of the following:

- a) Name and address of the applicants: American Transmission Systems, Incorporated
76 South Main Street
Akron, Ohio 44308
- b) Name of proposed facilities: Dale-West Canton 138 kV Transmission Line
New Structure Adjacent to Dale Substation
Project

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Ms. Renee J. Jenkins
Docketing

January 30, 2007

- c) Location of proposed facilities: The Project is located near 7181 Arlington Road in Jackson Township of Stark County, Ohio.
- d) Description of proposed facilities: The proposed Project installs one new transmission line H-frame structure.
- e) Applicants' representative: Ted Krauss, Senior Transmission Engineer
Energy Delivery Technical Services
FirstEnergy Service Company
76 South Main Street
Akron, OH 44308-1890

After docketing, please return a time-stamped copy of the Letter of Notification for our records. We have provided a copy of the Letter of Notification by certified mail, with return receipt requested, to each official of the political subdivisions immediately affected by the proposed project as listed in the attached Exhibit 1. Attached for your file are the transmittal letters addressed to the local government representatives of Jackson Township and Stark County, Ohio.

Should the Ohio Power Siting Board desire further information or discussion of this submittal, please contact me at (330) 761-4268.

Sincerely,



Ted Krauss, Senior Transmission Engineer
Energy Delivery Technical Services
FirstEnergy Service Company

Attachments

EXHIBIT 1
Officials Served Copy of Letter of Notification
Crissinger-Roberts 138 kV Transmission Line
Relocation Adjacent to Crissinger Substation Project
Case No. 07- -EL-BLN

Stark County

The Honorable Gayle Jackson
Stark County Commissioner
Stark County Office Building
110 Central Plaza South
Canton, Ohio 44702

The Honorable Todd Bosley
Stark County Commissioner
Stark County Office Building
110 Central Plaza South
Canton, Ohio 44702

The Honorable Jane Vignos
Stark County Commissioner
Stark County Office Building
110 Central Plaza South
Canton, Ohio 44702

Mr. Michael J. Rehfus, P.E., P.S.
Stark County Engineer
5165 Southway SW
Canton, Oh, 44706

Mr. Bob Font, Park District Director
Serving Stark County, Ohio
5300 Tyner Street NW
Canton, Oh 44708

Mr. Robert A. Nau, Director
Stark County Regional Planning Commission
201 3rd St NE, Suite #201
Canton, OH 44702-1211

Jackson Township (Stark County)

Mr. Steven M. Meeks, President
Jackson Township Board of Trustees
Jackson Township Administration Offices
5735 Wales Avenue NW
Massillon, Ohio 44646

Mr. John E. Pizzino, Vice-President
Jackson Township Board of Trustees
Jackson Township Administration Offices
5735 Wales Avenue NW
Massillon, Ohio 44646

Mr. William Burger, Trustee
Jackson Township Board of Trustees
Jackson Township Administration Offices
5735 Wales Avenue NW
Massillon, Ohio 44646

Mr. Randy Gonzalez, Fiscal Officer
Jackson Township Board of Trustees
Jackson Township Administration Offices
5735 Wales Avenue NW
Massillon, Ohio 44646

AMERICAN TRANSMISSION SYSTEMS, INCORPORATED
A Subsidiary of FirstEnergy Corp.

LETTER OF NOTIFICATION

**DALE-WEST CANTON 138 kV TRANSMISSION LINE
NEW STRUCTURE ADJACENT TO DALE SUBSTATION
PROJECT**

OPSB CASE NO. 07-103-EL-BLN

January 29, 2007

**American Transmission Systems, Incorporated
76 South Main Street
Akron, Ohio 44308**

**LETTER OF NOTIFICATION
DALE-WEST CANTON 138 kV TRANSMISSION LINE
NEW STRUCTURE ADJACENT TO DALE SUBSTATION PROJECT**

The following information is being provided in accordance with the procedures delineated in Ohio Administrative Code Section 4906-11-01: Letter of Notification Requirements of the Rules and Regulations of the Ohio Power Siting Board.

4906-11-01 (A) (1): a. Name and Reference Number

Name of Project: Dale-West Canton 138 kV Transmission Line New Structure
Adjacent to Dale Substation Project ("Project")

2006 LTFR Reference: This Project is not identified in FirstEnergy Corp.'s 2006
Electric Long-Term Forecast Report ("LTFR") submitted to
the Public Utility Commission of Ohio in Case Number
06-0504-EL-FOR.

4906-11-01 (A) (1): b. Brief Description of Project

In this Project, American Transmission Systems, Incorporated's ("ATSI"), a FirstEnergy Corp. subsidiary, is proposing to install one new wood pole H-frame structure in the existing Dale-West Canton 138 kV transmission line adjacent to the Dale Substation. Exhibit 1 shows the General Layout of the Project, and Exhibit 2 shows the Project Location on a partial copy of the United States Geologic Survey, Canal Fulton, Ohio Quad, map ID number 40081-H5. The new structure to be installed is shown in Exhibit 3 and consists of a wood pole H-frame structure. The new structure will be installed along the centerline of the existing transmission line approximately 75 feet south of the substation fence line.

The Project is located adjacent to the Dale Substation which is located at 7181
Arlington Road in Jackson Township of Stark County, Ohio. The existing Dale-West

Canton 138 kV transmission line and the new structure will be owned and operated by ATSI.

4906-11-01 (A) (1): c. Need for the Project

Based on 2006 loads, the Dale-West Canton 138 kV transmission line loads to 110 percent of its system normal load of 209 MVA. When an outage occurs outage on the South Canton-Star 345 kV transmission line, the Dale-West Canton 138 kV transmission line loads to 145 percent of its system normal load of 209 MVA and 108 percent of its system emergency load of 281 MVA. These overload conditions on the Dale-West Canton 138 kV transmission line will be corrected by installing a line reactor on the Dale-West Canton 138 kV transmission line at the Dale Substation. Installation of the line reactor will increase the impedance of the Dale-West Canton 138 kV transmission line which will reduce the energy flow on this transmission line by causing the energy flows on other lines of the transmission grid to increase. The most appropriate method of installation the line reactor requires the conductors of the Dale-West Canton 138 kV transmission line to enter the Dale Substation in a horizontal configuration. Unfortunately, the conductors currently enter the substation transitioning from a vertical configuration on the pole outside the substation to a horizontal configuration at the substation take-off structure. Installing the proposed new structure will allow the conductors to transition from a vertical configuration on the pole outside the substation to a horizontal configuration on the new H-frame structure and then to allow the conductors to remain in horizontal configuration between the new structure and the substation take-off structure as they enter the substation.

4906-11-01 (A) (1): d. Why the Project Meets the Requirements for a Letter of Notification

The project meets the requirements for a Letter of Notification because the project is within the types of project defined by Item (4)(a) of the Application Requirement Matrix for Electric Power Transmission Lines in Appendix A of Section 4906-1-01 of

the Ohio Administrative Code permitting the filing of a Letter of Notification. This item states:

(4) Replacing electric power transmission line structures(s) with a different type of structure(s) or adding structure(s) within an existing electric power transmission line and:

(a) Two miles or less of new right-of-way required.

The proposed Project installs one new transmission line structure. No new right-of-way is required.

4906-11-01 (A) (2): Location Relative to Existing or Proposed Lines

The location of the Project relative to existing or proposed transmission lines is shown in Exhibit No. 5. Exhibit No. 5 (which is not attached to the LON) is the FirstEnergy Geographic – West (CEI, OE, PP,TE) Map, included as the last map in Chapter 3 of the confidential portion of FirstEnergy's 2006 Long-Term Forecast Report submitted to the PUCO under rules 4901:5-5:04 (C) of the Ohio Administrative Code and is incorporated by reference only. This map shows ATSI's 345 kV and 138 kV transmission lines and transmission substations, including the location of the Dale Substation and the Dale-West Canton 138 kV transmission line. The Project area is located on the map (printed 8-1/2 by 11 inch version included in the Long-Term Forecast Report) approximately 3-15/16 inch from the right edge of the map box and 3-3/8 inch from the bottom of the map box. The general layout of the Project is shown on Exhibit No. 1, the project location of the Project is shown in Exhibit No. 2 and the general arrangement of the new structure is shown on Exhibits No. 3.

4906-11-01 (A) (3): Alternatives Considered

Using their best engineering judgment, ATSI's staff analyzed and identified the best solution for installing the line reactor and the new transmission line structure proposed in this Project. No other significant viable alternatives to the proposed Project were identified.

4906-11-01 (A) (4): Construction Schedule

Construction on the project is expected to begin as early as May 2, 2007 and be completed by May 31, 2007.

4906-11-01 (A) (5): Area Map

The general layout of the Project is shown on Exhibit No. 1, and the Project location is shown in Exhibit No. 2. To locate and view the Project area from the Columbus, Ohio area, travel to the project site can be accomplished by taking Interstate 71 north toward Cleveland. At exit 209, travel east on I-76/US-224 towards Akron for approximately 18.8 miles. Where I-76 turns to the north, remain on US-224, which joins I-277, for approximately 3.6 miles. At the US-224/I-277 and I-77 interchange, travel south on I-77 approximately 2.7 miles to exit 120 at South Arlington Road. Travel south along South Arlington road for approximately 8.0 miles to the Project area which is located adjacent to the Dale Substation. Dale Substation is located on the west side of South Arlington Road at 7181 South Arlington Road.

4906-11-01 (B): Technical Features of the Project

4906-11-01 (B) (1): Operating Characteristics

The existing and relocated portion of the Dale-West Canton 138 kV transmission line has the following characteristics:

Voltage:	138 kV
Conductors, Existing/New	605 kcmil 24/7 ACSR
Static wire:	3 # 6 Alumoweld
Insulators:	138 kV polymer suspension insulators
New Structure:	Exhibit No. 3 – H-Frame

4906-11-01 (B) (2) (a): Calculated Electric and Magnetic Fields

The following table itemizes the line loading of the Dale-West Canton 138 kV transmission line with the new line reactor in-service. The normal line loading represents FirstEnergy's peak system load for the transmission line. The emergency line loading represent the maximum loading of the transmission line under contingency operation. The winter rating is based on the continuous maximum

conductor ratings (MCR) of the conductors of the transmission line and an ambient temperature of zero degrees centigrade (32 deg. F), wind speed of 1.3 miles per hour, and a circuit design operating temperature of 100 degrees centigrade (212 deg. F).

Line Name	Normal Loading Amps	Emergency Loading Amps	Winter Rating Amps
Dale-West Canton 138 kV Transmission Line	645	910	1,035

The following EMF calculations were performed using the EPRI EXPOCALC program software. This program software assumes the input transmission line configuration is located on flat terrain. Also, a balanced, three-phase circuit loading is assumed for the transmission circuit. The calculations are based on a model of the Dale-West Canton 138 kV Transmission Line based on the new structure proposed to be installed in the Project, with a 60-foot wide right-of-way and a minimum conductor ground clearance of 21-feet 7-inches.

EMF CALCULATIONS		Electric Field kV/meter	Magnet Field mGauss
Normal Loading	Under Lowest Conductors	2.35	198
	At Right-of-Way Edges	1.72	102
Emergency Loading	Under Lowest Conductors	2.35	279
	At Right-of-Way Edges	1.72	143
Winter Rating	Under Lowest Conductors	2.35	337
	At Right-of-Way Edges	1.72	186

4906-11-01 (B) (2) (b): EMF Discussion

Background Information

Electric and magnetic fields (EMFs) are naturally occurring in the environment and can be found in the Earth's interior and in the human body. EMFs are generated essentially anywhere where there is a flow of electricity, including electrical appliances and power equipment. Electric fields are associated with the voltage of the source; magnetic fields are associated with the flow of current in a wire. The strength

of these fields decreases rapidly with distance from the source. EMFs associated with electricity use are not disruptive to cells like x-rays or ultraviolet rays from the sun. EMF fields are thought to be too weak to break molecules or chemical bonds in cells. Scientists have conducted extensive research over the past two decades to determine whether EMFs are associated with adverse health effects, and although the research and debate of this issue continues, at this time there is no firm basis to conclude that EMFs cause adverse health effects. A number of independent scientific panels have reviewed the research and have stated that there is no basis to conclude that EMFs cause adverse health effects nor has it been shown that levels in everyday life are harmful.

Recent Developments

As a part of the National Energy Policy Act of 1992, the Electric and Magnetic Fields Research and Public Information Dissemination (EMF RAPID) program was initiated within the five-year effort under the National EMF Research Program. The culmination of this five-year effort resulted in a final RAPID Working Group report, which was released for public review in August 1998. The Director of the National Institutes of Environmental Health Sciences (NIEHS) then prepared a final report to Congress after receiving public comments. The NIEHS' Director's final report, released to Congress on May 4, 1999, concluded that extremely low frequency electric and magnetic fields (ELF-EMF) exposure cannot be recognized at this time as entirely safe because of weak scientific evidence that exposure may pose a leukemia hazard. The Director further stated that the conclusion of this report is insufficient to warrant aggressive regulatory concern.

Sources for Additional Information

The following websites sponsored by federal agencies or other organizations provide additional information on EMF:

- Centers for Disease Control/National Institute for Occupational Safety and Health: <http://www.cdc.gov/niosh/topics/emf/>

- National Institute of Environmental Health Sciences (NIEHS) EMF Rapid Program: <http://www.niehs.nih.gov/emfrapid/home.htm>

4906-11-01 (B) (3): Estimated Costs

The following are the estimated capital costs by FERC Accounts for the proposed project:

Account	Cost
350 Land Rights.	\$ 0
355 Poles and Fixtures	\$ 7,000
356 Overhead Conductors & Devices	\$ 21,000
Removal	\$ 0
Total	\$ 28,000

4906-11-01 C: Socioeconomic Data

4906-11-01 (C) (1): Land Use

The proposed Project is located in close proximity to an existing substation. Nearby land use is a mixture of agricultural and residential areas. No significant changes or impacts to the current land use is anticipated to occur as a result of the proposed Project. Based on the U.S. Bureau of Census estimates, the 2000 population of Jackson Township was 37,744 and Stark County, Ohio was 378,098.

4906-11-01 (C) (2): Agricultural Land

The new transmission line structure is being installed in close proximity to the existing transmission line structure and the existing substation. No significant changes or impacts to the agricultural land use is anticipated to occur as a result of the proposed Project.

4906-11-01 (C) (3): Archaeological or Cultural Resources

The new transmission line structure is being installed in close proximity to the existing transmission line structure and the existing substation. Given the general setting and nature of the project, and likely previous ground disturbance in this area, it is unlikely that any significant archaeological or cultural resources would be disturbed by the Project.

4906-11-01 (C) (4) (a): Documentation of Letter of Notification Transmittal

This Letter of Notification is being provided concurrently to the following officials of Jackson Township and Stark County, Ohio.

Stark County

The Honorable Gayle Jackson
Stark County Commissioner
Stark County Office Building
110 Central Plaza South
Canton, Ohio 44702

The Honorable Todd Bosley
Stark County Commissioner
Stark County Office Building
110 Central Plaza South
Canton, Ohio 44702

The Honorable Jane Vignos
Stark County Commissioner
Stark County Office Building
110 Central Plaza South
Canton, Ohio 44702

Mr. Michael J. Rehfus, P.E., P.S.
Stark County Engineer
5165 Southway SW
Canton, Oh, 44706

Mr. Bob Font, Park District Director
Serving Stark County, Ohio
5300 Tyner Street NW
Canton, Oh 44708

Mr. Robert A. Nau, Director
Stark County Regional Planning
Commission
201 3rd St NE, Suite #201
Canton, OH 44702-1211

Jackson Township (Stark County)

Mr. Steven M. Meeks, President
Jackson Township Board of Trustees
Jackson Township Administration Offices
5735 Wales Avenue NW
Massillon, Ohio 44646

Mr. John E. Pizzino, Vice-President
Jackson Township Board of Trustees
Jackson Township Administration Offices
5735 Wales Avenue NW
Massillon, Ohio 44646

Mr. William Burger, Trustee
Jackson Township Board of Trustees
Jackson Township Administration Offices
5735 Wales Avenue NW
Massillon, Ohio 44646

Mr. Randy Gonzalez, Fiscal Officer
Jackson Township Board of Trustees
Jackson Township Administration Offices
5735 Wales Avenue NW
Massillon, Ohio 44646

Copies of the transmittal letters to these officials have been included with the transmittal letter submitting this Letter of Notification to the Ohio Power Siting Board.

4906-11-01 (C) (4) (b): Public Information Program

FirstEnergy's Area Manager will advise local officials of features and the status of the proposed transmission line project as necessary.

4906-11-01 (C) (5): Current or Pending Litigation

There is no known current or pending litigation involving this project.

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

There are no known local, state, or federal requirements that must be met prior to commencement of construction on the proposed transmission line project.

4906-11-01 (D): Environmental Data

4906-11-01 (D) (1): Endangered, Threatened, and Rare Species Investigation

As part of ATSI's investigation of the Project, a request was submitted to the Ohio Department of Natural Resources (ODNR) to research the presence of any endangered, threatened, or rare species. The ODNR's January 22, 2007 response, attached as Exhibit No. 4, indicated no records within one half mile of the Project.

4906-11-01 (D) (2): Areas of Ecological Concern

Based on a review of United States Geologic Survey ("USGS") maps, aerial photographs of the Project area, areas of ecological concern have not been identified at the Project location.

4906-11-01 (D) (3): Additional Information

Construction and operation of the proposed Project will be in accordance with the requirements specified in the latest revision of the NESC as adopted by the PUCO and will meet all applicable safety standards established by OSHA.



SUMMIT COUNTY
STARK COUNTY

MT. PLEASANT ST. NW

AKRON-
CANTON
AIRPORT

LUTZ AVE. NW

ARLINGTON AVE. NW

STRAUSSER ST. NW

DALE
SUB

S.R. 241

PORTAGE ST. NW

LAKE O'SPRINGS AVE. NW

FRANK AVE. NW

INTERSTATE 77

S.R. 687

DALE-WEST CANTON 138kV
(EXISTING LINE)

DALE-SOUTH AKRON 138kV
(EXISTING LINE)

75' ±

DALE SUBSTATION

INSTALL
NEW H-FRAME
SEE EX. 3



SKETCHES\DALE-WCANTON-EX1

ISSUE DATE:

- ☐ CONSTRUCTION
☐ AS BUILT
☐ RECORD

DR. *SGM*

1/07

C.E. 06-77-X

CHK.

ORDER NO. 11990761

INS.

WRS OC-000772-SCB-TSUS-C
R/W

APP.

SCALE N.T.S.

DALE-WEST CANTON 138kV
NEW STRUCTURE ADJACENT TO DALE SUBSTATION
GENERAL LAYOUT

FirstEnergy
Transmission Design

OPERATING CO.
OHIO EDISON

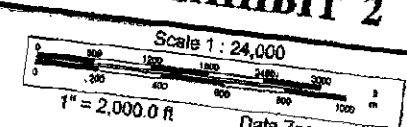
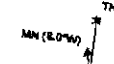
DWG NO.

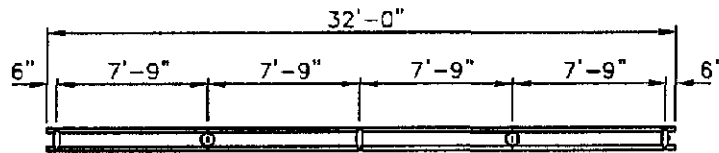
EXHIBIT 1

SHEET REV.

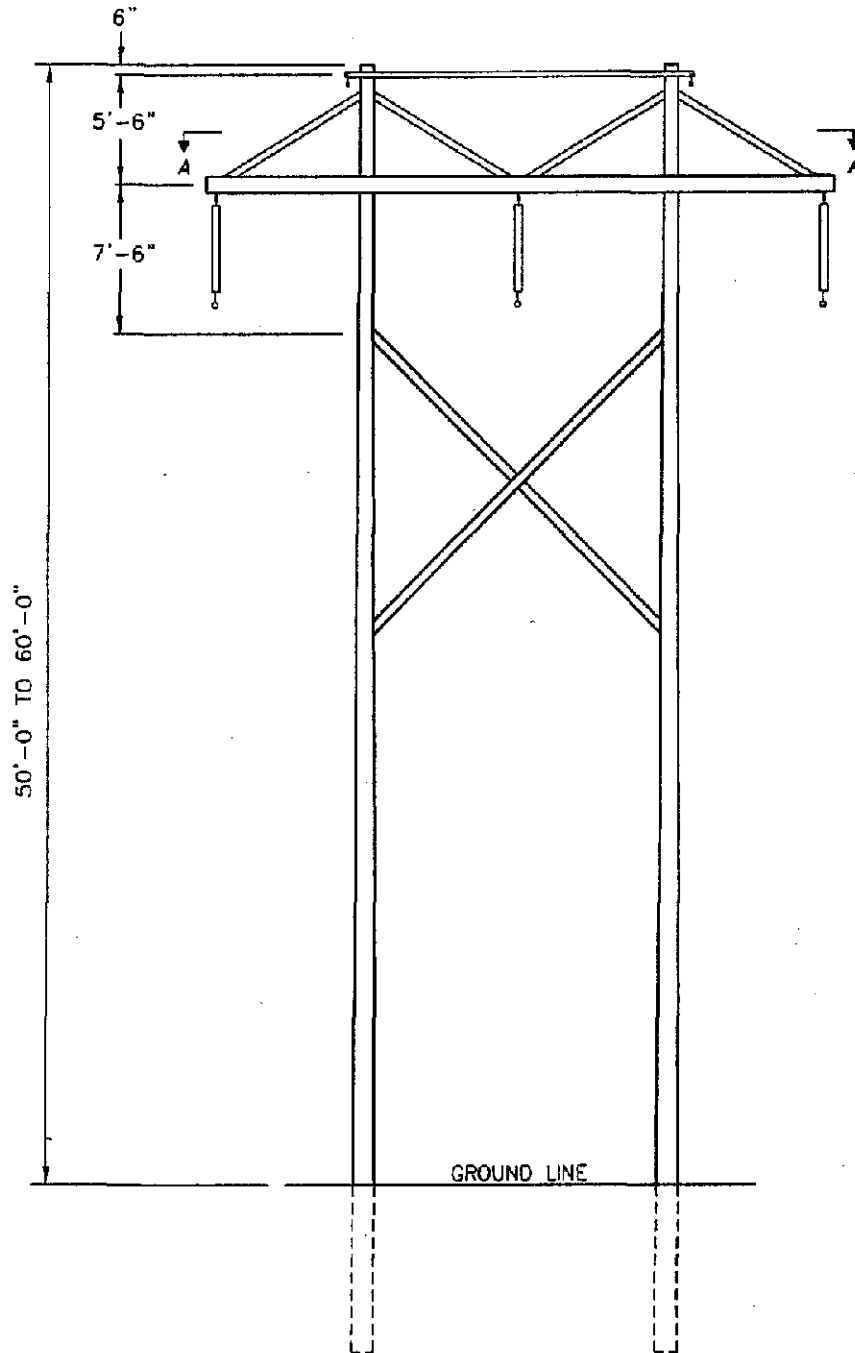


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SECTION A-A



SKETCHES\DALE-WCANTON-EX3

ISSUE DATE: ☐ CONSTRUCTION ☐ AS BUILT ☐ RECORD	DR. <i>SGM</i>	1/07	C.E. 06-77-X	DALE-WEST CANTON 138kV NEW STRUCTURE ADJACENT TO DALE SUBSTATION H-FRAME STRUCTURE			
	C.E.		ORDER NO. 11990761				
	NS.		WBS OC-000772-SC8-TSUS-C R/W		OPERATING CO. OHIO EDISON	DWG NO. EXHIBIT 3	SHEET REV.
	APP.		SCALE N.T.S.				



Ohio Department of Natural Resources

TED STRICKLAND, GOVERNOR

SEAN D. LOGAN, DIRECTOR

Division of Natural Areas & Preserves

Bob Gable, Chief

2045 Morse Rd., Bldg. F-1

Columbus, OH 43229-6693

Phone: (614) 265-6453 Fax: (614) 267-3096

January 22, 2007

Ted Krauss
First Energy Service Company
76 S. Main St.
Akron, OH 44308

**DALE-WEST CANTON 138 kV
TRANSMISSION LINE NEW STRUCTURE
ADJACENT TO DALE SUBSTATION**

ODNR RESPONSE

EXHIBIT 4

Dear Mr. Krauss:

After reviewing our Natural Heritage maps and files, I find the Division of Natural Areas and Preserves has no records of rare or endangered species within one half mile of the First Energy Service Company Dale-West Canton 138kV Transmission Line New Structure Adjacent to Dale Substation project. The site is located in Sec. 8, Jackson Twp., Stark Co., Canal Fulton Quadrangle.

There are no existing or proposed state nature preserves at the project site. We are also unaware of any unique ecological sites, geologic features, breeding or non-breeding animal concentrations, state parks, scenic rivers, state nature preserves, state forests, or wildlife areas within the project area.

Our inventory program has not completely surveyed Ohio and relies on information supplied by many individuals and organizations. Therefore, a lack of records for any particular area is not a statement that rare species or unique features are absent from that area. Although we inventory all types of plant communities, we only maintain records on the highest quality areas. For National wetlands Inventory maps, please contact Madge Fitak in the Division of Geological Survey at (614) 265-6576. Aerial photos may be obtained from ODOT at (614) 275-1369. USGS maps can be requested directly from the U.S. Geological Survey at 1-888-275-8747.

Please contact me at (614) 265-6409 if I can be of further assistance.

Sincerely,

Butch Grieszmer, Data Specialist
Resource Services Group