American Electric Power 1 Riverside Plaza Columbus, OH 43215 2573 614 223 1000

CERTIFIED

August 7, 1996

Mr. Craig A. Glazer, Chair State of Ohio Public Utilities Commission 180 East Broad Street Columbus, OH 43266-0573

POWER 0001 96-769-EL-BLN 6 1996 AUG

AMERICAN ELECTRIC

Letter of Notification Riley Creek - Paulding-Putnam 138 kV

Dear Mr. Glazer:

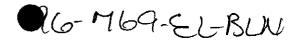
In accordance with Chapter 4906-15-12 of the Power Siting Board Rules and Regulations, Ohio Power Company hereby submits a Letter of Notification for the proposed Riley Creek - Paulding-Putnam 138 kV Line. Enclosed are one original and 11 copies of the Letter of Notification.

As requested by Rule 4906-15-12(C)(9), we have submitted a copy of this Letter of Notification to the political subdivisions immediately affected by the proposed project. Copies of the Letter of Notification have been sent by Certified Mail to the Putnam County Commissioners and the Ottawa Township Trustees. The cover letter accompanying these mailings is attached for your file.

Cordially,

/J. E. Schrader Transmission Line Engineering

Enclosures



Letter of Notification

AUG 6 1996

DOCKETING DIVISION Public Utilities Commission of Ohio

RECEIVED

for the

Riley Creek - Paulding-Putnam 138 kV Line

Submitted by Ohio Power Company

to

The State of Ohio Power Siting Board 1996

OPSB-4906-15-12 PAGE 1

<u>Section 15-12</u>

LETTER OF NOTIFICATION

Pursuant to Rule 4906-15-12(C) of the State of Ohio Power Siting Board Rules and Regulations, Ohio Power Company hereby submits the following information:

<u>4906-15-12(C)</u>

(1) Project Name and Reference Number

The name of this project is the Riley Creek -Paulding-Putnam 138 kV Line. This project is identified in Columbus Southern Power and Ohio Power Company's 1996 Long-Term Forecast Report as OP-P6.

(2) (a) Description of this Project

This project consists of tapping the East Lima -Richland 138 kV transmission line and constructing approximately 1.2 miles of single circuit 138 KV line to serve Paulding-Putnam Co-Op's proposed Baseline Station. The proposed line, which will tap the East Lima -Richland 138 kV Circuit (FA15) will utilize three (3) 336,400 ACSR (18/1) conductors, one (1) 7#8 Alumoweld overhead groundwire, one (1) single steel pole switch structure, and thirteen (13) single steel pole structures All necessary right-of-way for the new line has been secured.

(2) (b) Maps Depicting Project Location

Two maps have been prepared showing the project location. Map 1, the General Location Map, indicates the area and existing electrical facilities surrounding the project. Map 2, the Detail Site Map, shows the specific location of the proposed line and structures.

(2) (c) Need for the Project

Paulding-Putnam Co-Op has additional load in the area, which cannot be adequately served from their existing system. In order to serve this additional load, Paulding-Putnam Co-Op has requested that Ohio Power Company provide service to this new 138 kV Delivery point located in Ottawa Township, Putnam County, Ohio as shown on Maps 1 & 2.

(2) (d) 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 Items 1(d), of Rule 4906-1-01(U), the Transmission Line Matrix. This project consists of constructing a line which is greater than 125 KV but less than 300 KV and not greater than 2 miles in length.

(3) Project Location Relative to Existing or Proposed Lines

The location of the Riley Creek - Paulding-Putnam 138 kV Line in relation to existing and proposed Transmission Lines is shown on Maps 1 and 3. Map 3 is a reduced copy of Ohio Power Company's Transmission System as of December 31, 2006, as submitted to the Public Utility Commission of Ohio in our 1996 Long-Term Forecast Report. The location of the proposed 138 KV project has been circled for easy identification.

(4) Reference in the Long-Term Forecast

This project is referenced in Ohio Power Company's 1996 Long-Term Forecast Report as project OP-P6.

(5) Anticipated Construction Schedule

Construction of the new line is expected to begin in November, 1996. This project is scheduled to be completed and placed in service by December, 1996.

(6) Description of Technical Features

The proposed line will be designed for and operated at 138 kV. Figures 1 and 2 depict the intermediate tangent structures, Figure 3 depicts the angle structures, Figure 4 depict the strain structure adjacent to the proposed Baseline Station, and Figure 5 depicts the pole-mounted switch structure. Three (3) 336,400 cm ACSR (18/1) conductors will be installed from the switch

structure to the proposed Paulding-Putnam Co-Op's Baseline distribution Station. Agreements for an 80' wide Right-of-Way, 40' on each side of centerline, has been secured from all landowners.

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

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The electrical and magnetic field levels for the proposed line were calculated for two conductor configurations. The results of the calculations are shown in the following tables.

<u>Single Pole Delta Configuration</u> (See Figure 6)				MAGNETIC		
		jat 11	leter	at 1 Meter		
		Above	Ground	Above (Ground	
	Assumed	Center	Edge	Center	Edge	
	Load	-Line	OF R/W	-Line	OF R/W	
	In		l In		In	
	MVA	Kilovolt/meter		Milligauss		
Normal Maximum Loading:	12	1.35	0.75	8.22	3.46	
Emergency Line Loading:	12	1.35	0.75	8.22	3.46	
Winter Normal Conductor Rating:	189	1.60	0.78	155.37	58.75	
Single Pole Vertical Configuration (See Figure 7)		ELECTRIC FIELD at 1 Meter Above Ground		MAGNETIC FIELD at 1 Meter Above Ground		
	Assumed	Center	r Edge	 Center	Edge	
	Load	-Line	OF R/W	-Line	OF R/W	
	In	In Kilovolt/meter		In		
	MVA			Milligauss		
Normal Maximum Leading:	12	1.29	0.29	5.40	3.01	
Emergency Line Loading:	12	1.29	0.29	5.40	3.01	
Winter Normal Conductor Rating:	189	1.51	0.29	100.86	51.68	
	<u> </u>			•	-	

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(6) (b) Discussion of Design Alternatives

The area traversed by this project is open agricultural land with a developing industrial park at the western end of the line. Since this transmission line is associated with a community development program, the right of way for this project was acquired by the Putnam County Office of Economic Development. Their discussions with the landowners determined structure type (single steel pole) and right of way location. Due to these discussions, few design options were available for Ohio Power to consider. However, as the line passes near a house located near the east end of the project, all three phases of the proposed transmission line were placed on the north side of the structure, away from the home, to increase the distance between the residence and the conductors.

The calculated EMF values for the proposed design are similar to other 138 kV transmission projects constructed by Ohio Power.

(7) Estimated Capital Costs

The following estimated 1996 capital costs for the proposed project have been tabulated by the Federal Energy Regulatory Commission (FERC) Electric Plant Transmission Accounts:

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FERC Accounts	Estimated Capital Costs
355 Poles and Fixtures	\$333,000
356 Overhead Conductors and Devices	<u>\$119,000</u>
Total	\$452,000

(8) Land Use

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This transmission line is located in Ottawa Township, Putnam County, Ohio. The immediate area surrounding this project is in agricultural use with a few widely scattered residences. In agricultural areas, to minimize the impact on crops and farming operations, structures are located on property or crop lines. In the future industrial park area, the line is located on the north side of a proposed 60' roadway.

(9) Local Officials to be Notified

Copies of this Letter of Notification have been sent by certified mail to the Putnam County Commissioners and Ottawa Township Trustees. Copies of the cover letters to these officials are attached.

(10) Additional Information

There are no unusual conditions which will result in significant environmental or social impacts from the

installation and operation of this proposed 138 KV circuit.

(11) Location and Description of Existing Agricultural

<u>Districts</u>

The line is not within the limits of an Agricultural District as defined by Chapter 929 of the Ohio Revised Code. (12) Area Map and Project Location

Two maps have been prepared showing the project location. Map 1, the General Location Map, indicates the area and existing electrical facilities surrounding the project. Map 2, the Detail Site Map, shows the specific location of the proposed line and structures.

To view this project take State Route 65 south out of Ottawa for approximately 1/2 mile. Go east on Towship Road L-10 to Oak Street. Go south on Oak Street for approximately 0.1 miles to Township Road L-9 (Woodland Drive). The project area can be viewed to the east.

(13) Archaeological and Cultural Resources

ASC Group, an independent archeological consultant, was contacted regarding the possible presence of archaeological or historical resources which could be affected by this project. They found no known archaeological or historic resource which could be affected by this project. A copy of the findings from ASC Group is is attached for your reference.

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(14) Endangered or Threatened Species

The United Stated Department of the Interior's Fish and Wildlife Service, the Ohio Department of Natural Resources' Division of Wildlife, and the Ohio Department of Natural Resources' Division of Natural Areas and Preserves were all contacted regarding the presence of any endangered, threatened, or rare species which may be affected by this project. None of these three organizations could find any evidence or records of endangered or threatened species located within or affected by the proposed project. A copy of the responses from the U.S. Fish and Wildlife Service, ODNR Division of Wildlife, and the ODNR Division of Natural Areas and Preserves are attached for your reference.

(15) Areas of Ecological Concern

The Buffalo District of the United States Army Corps of Engineers and the Ohio Department of Natural Resources were contacted regarding the presence of areas of ecological concern. Neither agency indicated any areas of ecological concern. A copy of the responses from the Army Corps of Engineers, and the Ohio Department of Natural Resources are attached for your reference.

The transmission line was located to pass approximately 60' north of an existing wood lot located in

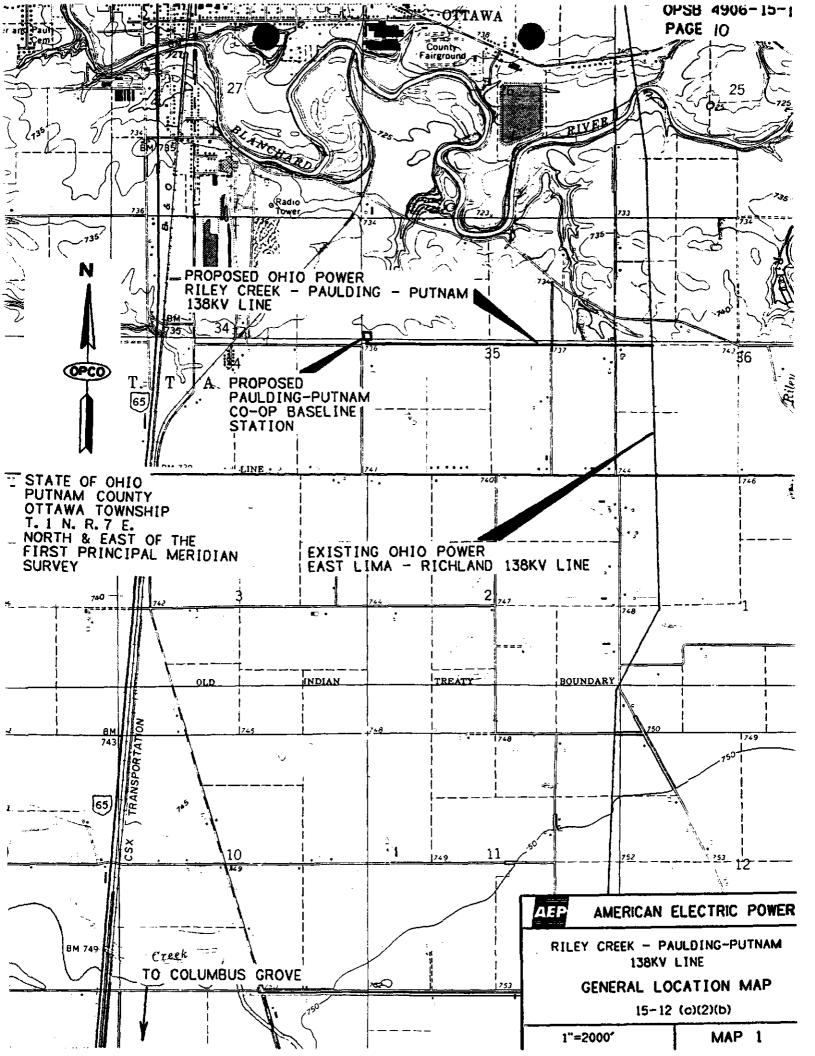
Section 35 (as shown on the Detail Site Map). Accordingly, no trees will be cut in this wood lot for line construction (16) Local, State and Federal Requirements

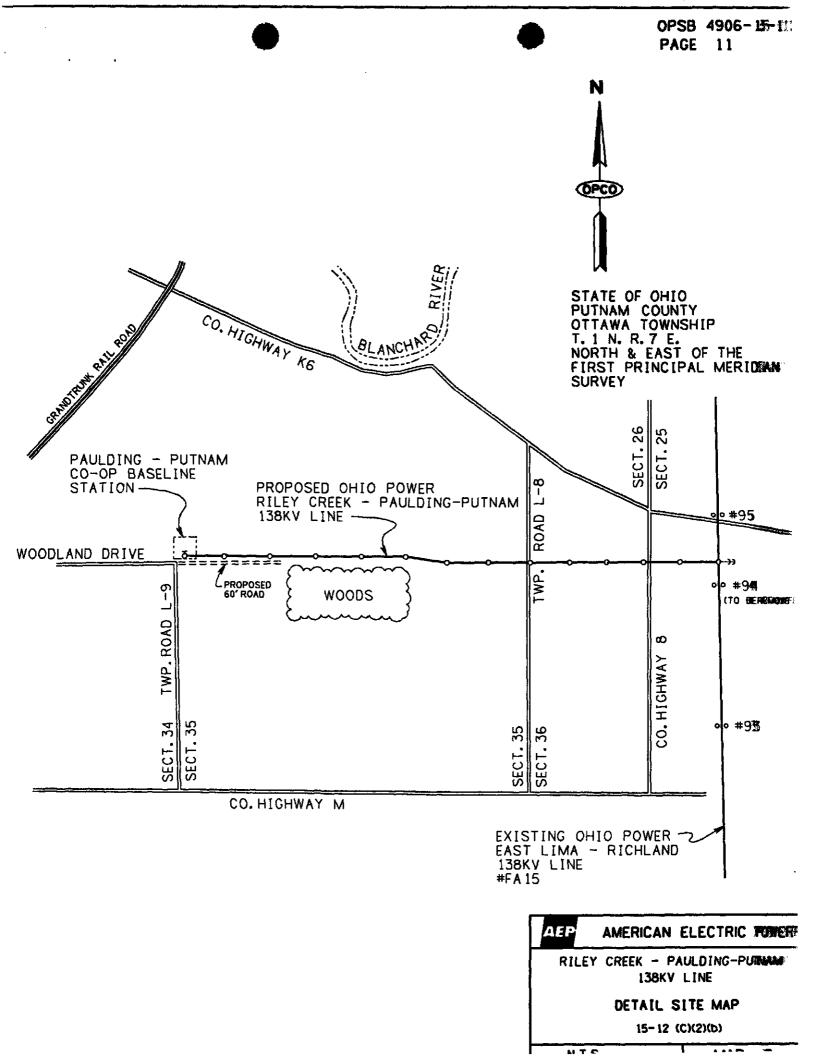
This line will be designed, constructed, and operated to meet or exceed the requirements of the National Electrical Safety Code, Ohio Power Company safety and design standards, and all applicable OSHA standards. No permits are required from the Ohio Department of Transportation or the Army Corps of Engineers.

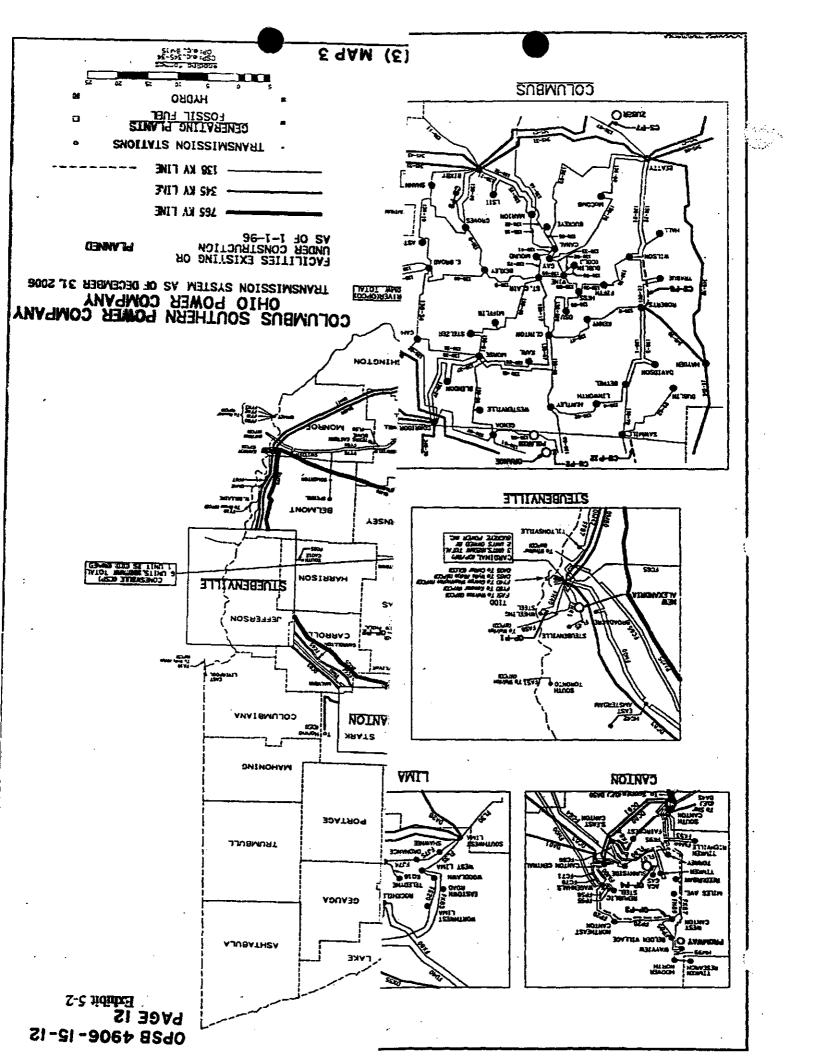
(17) Current or Pending Litigation

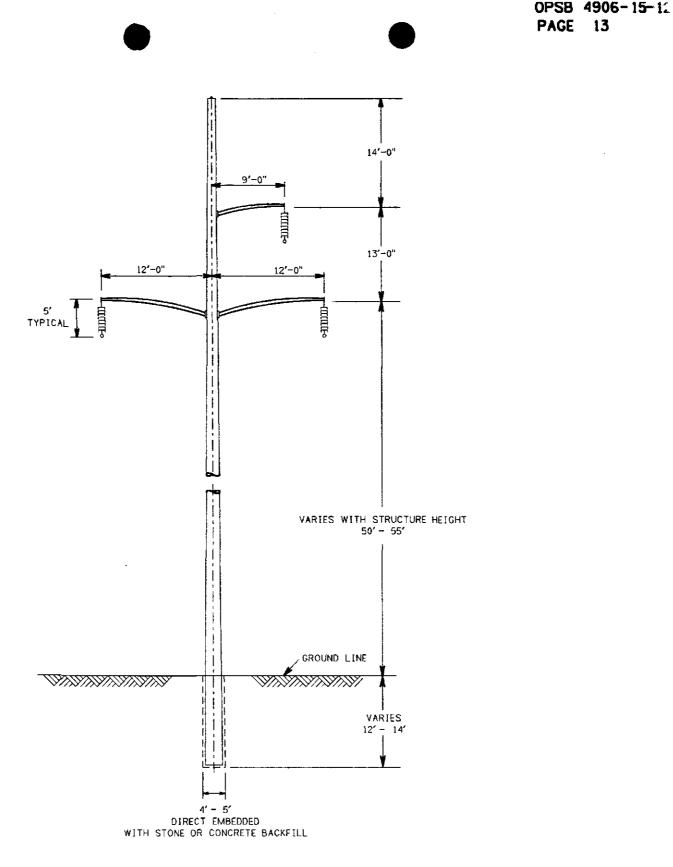
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Agreements to consruct this line have been reached with all landowners. There is no current litigation involving this project and none is expected.

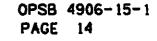


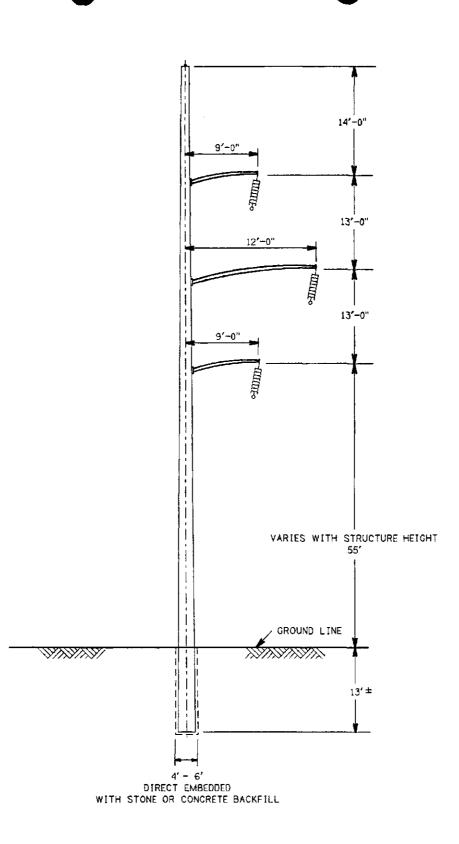




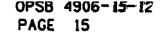


	AEP AMERICAN ELECTRIC POWER				
	RILEY CREEK - PAULDING-PUTHANNE 138KV LINE				
	SINGLE POLE SUSPENSION STRUCTURE: 15-12(C)(6)				
COMPUTER GENERATED DWG., DO NOT MANUALLY REVISE	NOT TO SCALE FIGURE				

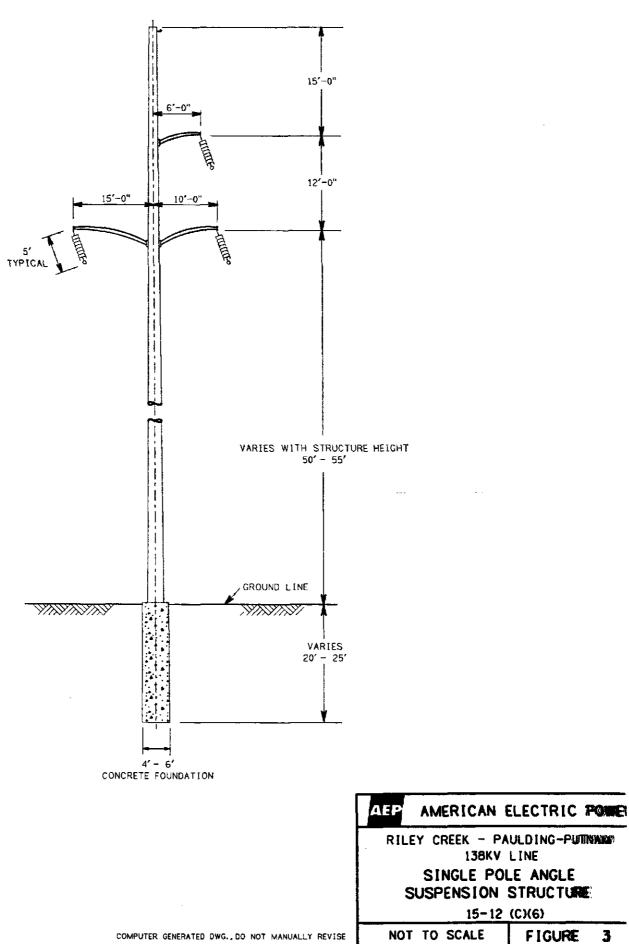


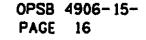


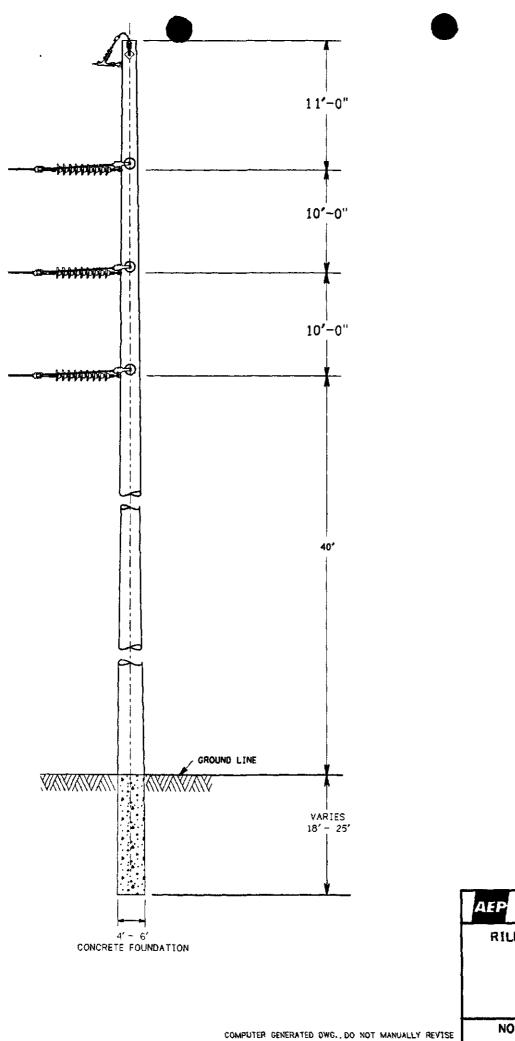
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ľ	RILE	Y CREEK - PA		TNAM
		SINGLE SUSPENSION	POLE	
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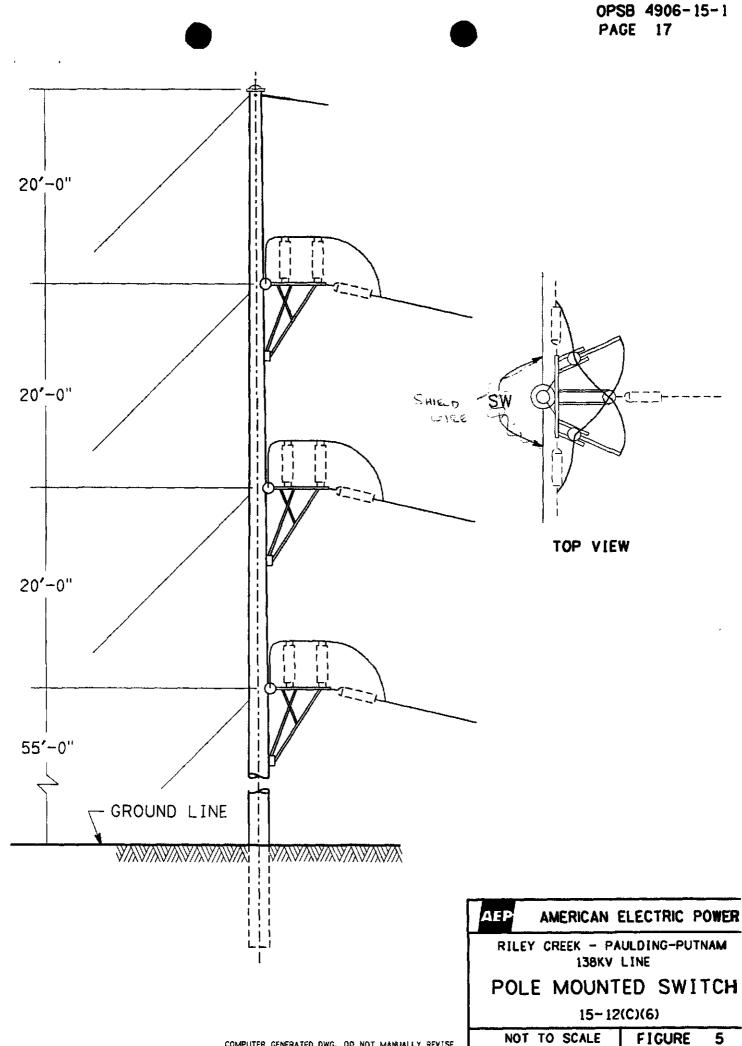
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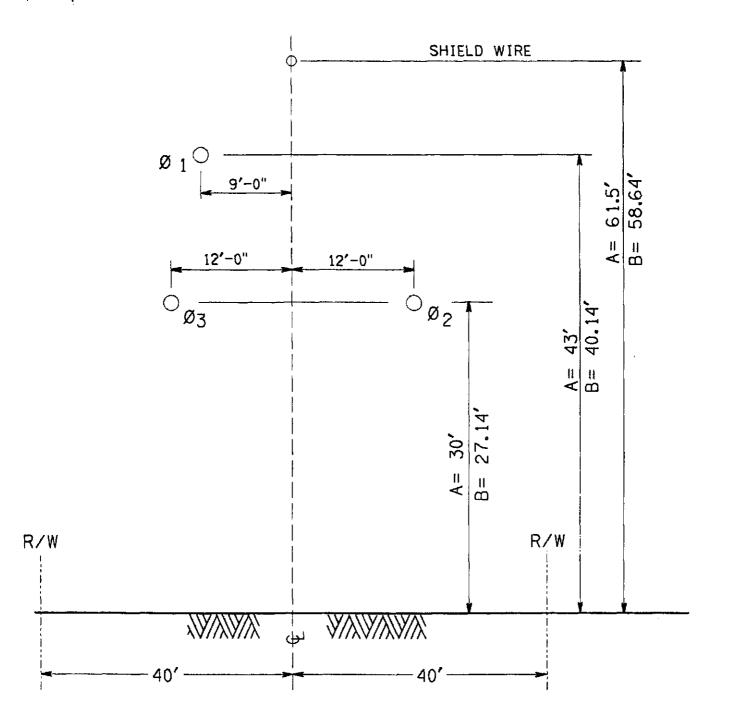


AEP AMERICAN ELECTRIC POWE RILEY CREEK - PAULDING-PUTNAM 138KV LINE SINGLE POLE STRAIN STRUCTURE 15-12(C)(6) NOT TO SCALE FIGURE 4



COMPUTER GENERATED DWG., DO NOT MANUALLY REVISE

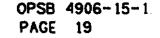
OPSB 4906-15-1 PAGE 18

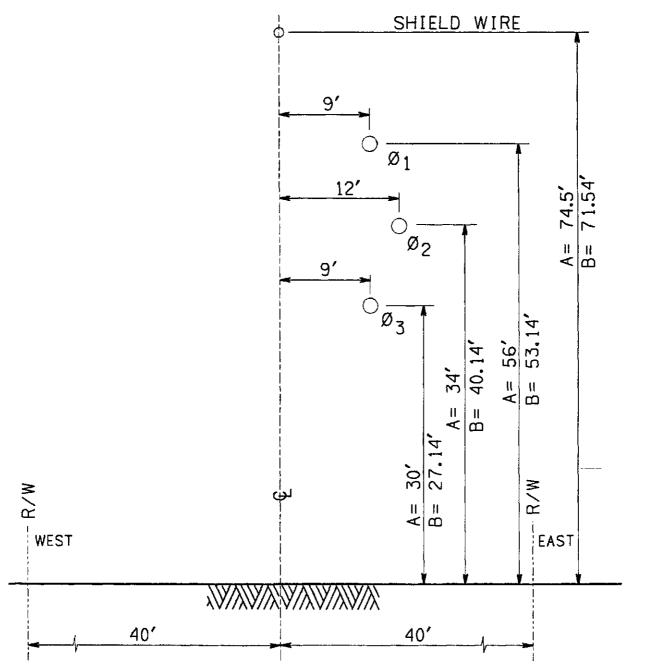


DIMENSION "A" LINE CONFIGURATION - I38KV UNDER EMERGENCY AND NORMAL MAXIMUM LINE LOADING CONDITIONS

DIMENSION "B" - UNDER WINTER NORMAL CONDUCTOR RATING CONDITIONS

AEP	AMERICAN	ELECTRIC F	OWEF	
RILEY	CREEK - PA 138KV		'NAM	
MUL	TIPLE POL	E STRUCTU	JRE	
15-12 (0)(2)(0)				
فيتحادث والبريجا المتحادث	TO SCALE	FIGURE	_	





DIMENSION "A" LINE CONFIGURATION - 138KV UNDER EMERGENCY AND NORMAL MAXIMUM LINE LOADING CONDITIONS

DIMENSION "B" - UNDER WINTER NORMAL CONDUCTOR RATING CONDITIONS

	AEP	AMERICAN	ELECTRIC P	OWER	
	RILEY CREEK - PAULDING-PUTNAM 138KV LINE				
	SINGLE POLE TANGENT STRUCTURE				
		15-12 (c)(2)(o)			
COMPUTER CENERATED DWG., DO NOT MANUALLY REVISE	NOT	TO SCALE	FIGURE	7	







Archaeological Services Consultants • Diffusion Laboratory • Architectural Surveying and Community Interpretation
Archaeological Data Services • Microwear and Faunal Laboratory

July 22, 1996

Mr. John Heppner American Electric Power Company 1 Riverside Plaza Columbus, Ohio 43215-2373

Re: Riley Creek-Paulding Putnam - 138 kV Line

Dear Mr Heppner:

Under contract with American Electric Power of Columbus, Ohio, ASC Group, Inc. conducted a cultural resource literature review for the proposed 138 kV line near the village of Ottawa, in Ottawa Township, Putnam County, Ohio. The literature review was performed by David Blanton of ASC Group, Inc. on July 16 and 17, 1996. The purpose of the literature review was to determine if any previously documented cultural resources exist within the proposed project bounds, or if any previously documented sites would be impacted by the construction of the new power transmission line. The project area consisted of a linear corridor 1,818 m long E-W by 24 m wide N-S (see enclosed map).

The following references were reviewed to determine if any known archaeological or historical sites exist within the project area, or if any archaeologically or historically sensitive areas were likely to be found within the project area:

- 1. The Ohio Archaeological Inventory files;
- 2. The Ohio Historic Inventory files;
- 3. The National Register of Historic Places files;
- 4. Archaeological Atlas of Ohio (Mills 1914);
- 5. USGS 7.5' and 15' topographic quadrangle maps;

- 6. Ohio Historical Society county report files; and
- 7. Putnam County atlases and maps.

All references listed were housed at either the Ohio Historical Society or the Ohio Historic Preservation Office, both located in Columbus, Ohio.

The review indicated no known archaeological or historic sites are documented within, or adjacent to, the proposed right-of-way. No architectural structures are inventoried within, or adjacent to, the proposed right-of-way. No portion of the project area has been the subject of any previous, professional cultural resource survey. Historic cartographic sources did not indicate any structures within the proposed corridor. County histories did not indicate any significant events having occurred in any portion of the project area; there is no definitive connection between any of the known property owners (as indicated on the historic atlases) and any significant events in local, regional, or national history.

The nearest documented archaeological sites are approximately 8 km from the project area, well outside the 6.5 km study radius for the literature review. Two structural locations, indicated on both the historic cartographic sources and the current USGS 7.5' topographic quadrangle map, lie well to the south of the project corridor; the nearest is at a distance of approximately 150 m. Two structural locations not indicated on the historic cartographic sources, but found on the current USGS 7.5' topographic quadrangle maps are located near the eastern end of the project area.

The literature review gives no indication that any known prehistoric or historic cultural resource will be impacted by the construction of the proposed 138 kV electric transmission line. Any structures within or immediately adjacent to the project area should be professionally documented for possible inclusion in the Ohio Historic Inventory. Although no documented archaeological sites exist within the project area, it remains possible that historic or prehistoric sites may exist within the project corridor but have not yet been documented do to a lack of professional field survey.

If you have any questions, comments, require further information or documentation, or if we can be of any further assistance, please feel free to contact me.

Sincerely,

David Blanton, pp.

David Blanton Archaeologist

DB:plp

Bibliography of Sources Consulted

Calvin, Marguerite, and David Adams

1981 People and Places, Putnam County Ohio 1800-1900. Hubbard Company, Defiance, Ohio.

H.H. Hardesty and Company

1880 *History of Putnam County, Ohio.* H.H. Hardesty and Company Publishers, Chicago and Toledo.

Kinder, George

1915 History of Putnam County, Ohio. B.F. Bowen and Company, Indianapolis, Indiana.

Mills, William C.

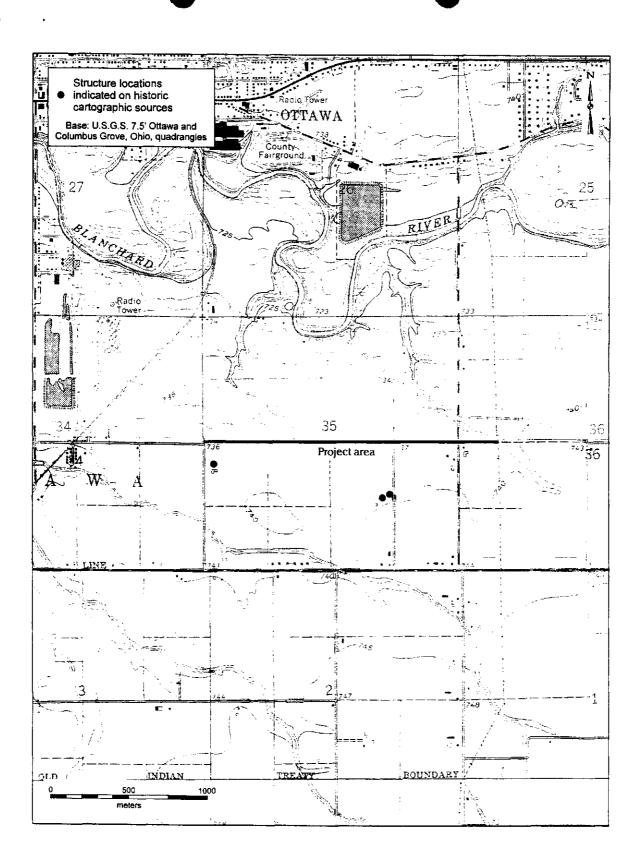
1915 Archaeological Atlas of Ohio. Ohio State Archaeological and Historical Society. Fred J. Heer, Columbus, Ohio.

Putnam County Pioneer Association

1973 Putnam County Pioneer Association Centennial History 1873-1973. Heffner Printing Company, Columbus Grove, Ohio.

Seitz, D.W., and O.C. Talbot

1895 The Putnam County Atlas. D.W. Seitz and O.C. Talbot, Ottawa, Ohio.



Project 1039 - AEP 138 KU Line Pauling-Putnam Electric Co-op Figure 1 Filename: 039fig1.cdr 7/19/96 First proof



George V. Voinovich • Governor Donald C. Anderson • Director

June 27, 1996

John R. Heppner American Electric Power 1 Riverside Plaza Columbus, OH 43215-2373

Dear Mr. Heppner:

After reviewing our Natural Heritage maps and files, I find the Division of Natural Areas and Preserves has no records of rare species in the 138 kV transmission line project area to serve Paulding-Putnam Electric Cooperative, Inc. in Ottawa Township, Putnam County.

There are no existing or proposed state nature preserves or scenic rivers at the project site. We are also unaware of any unique ecological sites, geologic features, breeding or nonbreeding animal concentrations, champion trees, or state parks, forests or wildlife areas in the project vicinity.

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 site. Please note that we inventory only highquality plant communities and do not maintain an inventory of all Ohio wetlands.

Please contact me at 614-265-6818 if I can be of further assistance.

Sincerely,

Deller Marchile

Debbie Woischke, Ecological Analyst Division of Natural Areas & Preserves



United States Department of the Interior

FISH AND WILDLIFE SERVICE Ecological Services 6950-H Americana Parkway Reynoldsburg, Ohio 43068

IN REPLY REFER TO:

(614) 469-6923/FAX (614) 469-6919 June 28, 1996

Mr. John R. Heppner: American Electric Power 1 Riverside Drive Columbus, Ohio 43215-2373

RE: New 138 kV Transmission Line for Paulding-Putnam Electric Cooperative in Ottawa Township, Putnam County, Ohio

Dear Mr. Heppner:

This responds to your June 25, 1996 letter requesting our comments on your proposal referenced above.

These comments are provided under the authority of the Endangered Species Act of 1973, as amended.

ENDANGERED SPECIES COMMENTS: The proposed project lies within the range of the Indiana bat, a Federally listed endangered species. Summer habitat requirements for the species are not well defined but the following are thought to be of importance:

- Dead trees and snags along riparian corridors especially those with exfoliating bark or cavities in the trunk or branches which may be used as maternity roost areas.
- 2. Live trees (such as shagbark hickory) which have exfoliating bark.
- 3. Stream corridors, riparian areas, and nearby woodlots which provide forage sites.

Considering the above items, we recommend that if trees with cavities or exfoliating bark (which could be potential roost trees) are encountered in the project area, they and surrounding trees should be saved wherever possible. If they must be cut, they should not be cut between April 15 and September 15.

If desirable trees are present, and if the above time restriction is unacceptable, mist net or other surveys should be conducted to determine if bats are present. The survey should be designed and conducted in coordination with the endangered species coordinator for this office, Mr. Buddy Fazio. The survey should be conducted in June or July since the bats would only be expected in the project area from approximately May 1 to August 31. Sincerely,

per (int) Kent Έ. Kroohem Supervisor

CC: DOW, Wildlife Environmental Section, Columbus, OH ODNR, Division of Real Estate and Land Management, Columbus, OH Ohio EPA, Water Quality Monitoring, Attn: C. Crook, Columbus, OH US EPA, Office of Environmental Review, Chicago, IL



DEPARTMENT OF THE ARMY

BUFFALO DISTRICT, CORPS OF ENGINEERS 1776 NIAGARA STREET BUFFALO, NEW YORK 14207-3199

July 23, 1996

REPLY TO ATTENTION OF: Regulatory Branch

SUBJECT: Department of the Army Application No. 96-369-0003

Mr. John R. Heppner American Electric Power 1 Riverside Plaza Columbus, Ohio 43215-2373

Dear Mr. Heppner:

I am writing in response to your letter dated June 25, 1996 in which you requested information regarding the presence of any wetlands along a proposed 138 kV transmission line in Ottawa Township, Putnam County, Ohio.

Based upon a review of the Putnam County Soil Survey and our telephone conversation the week of July 8, 1996, it does not appear that the proposed transmission line will be located in any wetlands. The only potential wetlands are located in the woodlot between TWP RD L-8 and TWP RD L-9. During our telephone conversation, you indicated that the line will be installed to the north of this woodlot in a farm field. Additionally, you indicated that no work or discharge of dredged or fill material will occur in the unnamed tributaries to the Blanchard River, which are located immediately to the west of CO HWY 8.

Provided that the transmission line is installed along the route shown on the attached drawing, a Department of the Army permit is not required.

If you have any questions pertaining to this matter, you can contact me by calling (716) 879-4315, or by writing to the above address.

Sincerely,

Kathy M.⁰ Griffin Biologist