AEP
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August 9, 2016

Chairman Asim Z. Haque
Ohio Power Siting Board
180 East Broad Street
Columbus, Ohio 43215

Erin C. Miller
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Re: Case No. 16-1523-EL-BLN Request for Expedited Treatment
In the Matter of the Letter of Notification for the
Corner-Parkersburg 138 kV Transmission Line Rebuild Project

Dear Chairman Haque,

As indicated in the Corner-Parkersburg 138 kV Transmission Line Rebuild Project Letter of Notification ("LON") submitted by AEP Ohio Transmission Company, Inc. ("AEP Ohio Transco") on August 1, 2016, AEP Ohio Transco submits finalized electric and magnetic field data to supplement its previous LON filing. This information was not available at the time of the filing of the LON and is submitted in accordance with O.A.C. 4906-6-05.

If you have any questions, please do not hesitate to contact me.

Respectfully Submitted,

/s/ Erin C. Miller
Erin C. Miller
Contract Counsel
AEP Ohio Transmission Company, Inc.

cc: Jon Pawley, OPSB Staff

FINALIZED EMF DATA SUPPLEMENT FOR LETTER OF NOTIFICATION FOR CORNER-PARKERSBURG 138 KV TRANSMISSION LINE REBUILD PROJECT

August 9, 2016

B(9)(b)(i) Calculated Electric and Magnetic Field Strength Levels

Three loading conditions were examined: (1) normal maximum loading, (2) emergency line loading, and (3) winter normal conductor rating. Normal maximum loading represents the peak flow expected with all system facilities in service. Daily/hourly flows fluctuate below this limit. Emergency loading is the maximum current flow during unusual (contingency) conditions, which exist only for short periods of time. Winter normal (WN) conductor rating represents the maximum current flow that a line, including its terminal equipment, can carry during winter conditions. It is not anticipated that this line would operate at its WN rating in the foreseeable future. Loading levels and the calculated electric and magnetic fields ("EMF") are summarized below. The line loading level used in the EMF calculations is for the normal maximum and is presented below. The corresponding designs, including normal maximum loading phase configurations are shown in Appendix B.

GROUND CLEARANCE, RIGHT-OF-WAY, AND PROJECTED LOADING LEVELS

Line	Phase Conductor (kCM ACSR)	Ground Clearance	Right-Of-Way		Line Loading
		(Feet)	Width (Feet)	Edge (Feet)**	Normal (A)
Corner-Parkersburg 138 kV	1,033 KCM ACSR (54/7) CURLEW conductor	55/53	100	50	239.40

* Minimum ground clearance: normal maximum.
** Distance from centerline to ROW edge.

The calculated electric and magnetic fields are summarized below.

EMF CALCULATIONS

Condition	Line Load (MVA)	Electric Field (kV/m)	Magnetic Field (mG)
Corner-Parkersburg 138 kV			
(1) Normal Maximum Loading	57	0.26 /0.45/ .35	5.43 /6.88 / 6.20
(2) Emergency Line Loading	79	0.26 /0.45/ 0.23	7.45 / 9.44/ 8.50
(3) Winter Normal Conductor Rating	375	0.27 / 0.47 / 0.37	37.46 /48.20/ 43.13

* EMF levels (left right-of-way edge/maximum/right right-of-way edge) calculated one meter above ground assuming balanced currents and nominal voltages. Electric fields reflect normal and emergency operations; lower electric fields are expected during emergency conditions when one mutually-coupled line is out of service.

Summary: Correspondence - Corner-Parkersburg Supplemental EMF Filing electronically filed by Mrs. Erin C Miller on behalf of AEP Ohio Transmission Company