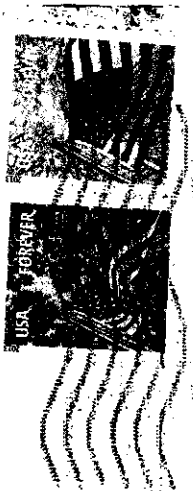


FILE

13-0429-EL-BTX

15



EST. PAID JUL 11 2014 5:51 PM  
100 APR 2014 PM 3:11

Ohio Power Siting Board  
Attn: Kim Wissman, Executive Director  
180 East Broad St.  
Columbus, OH 43215-3793

4321533793 0038

B. Johnson  
2717 Edgewater Bay  
Woodbury, MN 55125

This is to certify that the images appearing are an accurate and complete reproduction of a case file document. This is in the regular course of business.  
Technician SM Date Processed APR 14 2014

PUCO

2014 APR 14 PM 2:38

RECEIVED-DOCKETING DIV

## BRENDA L. JOHNSON

2717 EDGEWATER BAY, WOODBURY, MN 55125

(651) 578-7490  
bmm.johnson@msn.com

February 24, 2014

Ohio Department of Natural Resources  
Attn: Director James Zehringer  
2045 Morse Road  
Columbus, OH 43068

Re: Biers Run – Hopetown – Delano Transmission Line Project, 13-0429-EL-BTX

Dear Director Zehringer,

We, like you, oppose the Biers Run-Hopetown-Delano transmission line.<sup>1</sup> This line is detrimental to some of Ohio's most treasured resources –its world-class agricultural land, its world-unique cultural resources and, most importantly, some of its most precious resources, its children – the children of Unioto Schools.

While we agree on opposing the transmission line, we disagree on where it should be sited.

**I ask that you immediately open discussions with AEP to consider a route through the Pleasant Valley Wildlife Area (PVWA) for reasons I will outline below.**

According to AEP, the most direct (and likely least expensive) route for this transmission line would pass through some part of the Pleasant Valley Nature Center, a tax payer supported public recreational hunting ground. It was AEP's preferred route.

Ohio 4905-15-03 states the routing study "shall be designed to evaluate *all* practicable sites, routes, and route segments for the proposed facility." This was not done because of ODNR's refusal to participate in the process. AEP's application for the transmission line notes that "**Based on comments from the ODNR, AEP did not fully evaluate candidate routes through this area, greatly reducing the number of alternatives available...**"

As a voting member of the Power Siting Board, it is inappropriate and unacceptable that ODNR did not allow the process to proceed per the law. This not only resulted in a reduction of the number of alternatives available, it has put additional environmentally, socially, and culturally sensitive areas at risk. It also increases the expense of the project (longer transmission line, higher expense), increases expense to the affected landowners, and ultimately increases expense to AEP customers.

By refusing to consider the transmission line in the Pleasant Valley Wildlife Area ODNR, a tax payer supported state agency, is putting the needs and wants of a limited

<sup>1</sup> Email from [Gary.Ludwig@dnr.state.oh.us](mailto:Gary.Ludwig@dnr.state.oh.us) included in AEP's application to the OPSB. See Exhibit II.

special interest group (recreational hunters) ahead of the significant economic impacts of permanently taking prime farmland out of production, affecting the livelihoods of Ross County residents, decreasing the value of the largest investment 227 people have (their homes), impacting the health of thousands of schoolchildren and adults, and risking destruction of several Hopewell earthworks treasures. We do not believe this is appropriate or fair.

The reasoning cited by ODNR in opposing the transmission line and refusing to cooperate (email from Gary Ludwig, Wildlife Management Supervisor) contains a number of inaccuracies:

The deed stipulation Mr. Ludwig cites does not prevent the transmission line from the property. Rather it simply requires prior GSA approval which he refuses to apply for (see Exhibit II). Mr. Ludwig fails to note that there are already existing utility rights of way (power lines and a cell tower) on PVWA ground.

Mr. Ludwig suggests that the transmission line will destroy the integrity of the forestland habitat and compromise habitat management plans for the Wildlife area. This too is not entirely accurate.

First, the route for the transmission line has not been chosen. AEP is looking to work with ODNR to find a routing that would *minimize* the impact of the transmission line on the PVWA. Without discussing with AEP where the transmission line could be sited, there is no way to determine what the impact on the PVWA or ODNR's wildlife management plan would be.

Second, it makes a variety of inaccurate assumptions:

- That only PVWA is providing habitat. PVWA doesn't corner the market on habitat – agricultural land has been shown to provide habitat for 75% of the nation's wildlife. This includes potential habitat for the Indiana bat. AEP's application specifies how potential impact to the Indiana bat's habitat, *if there were any*, will be mitigated. That mitigation will occur whether it is in the PVWA or outside of it.
- That the habitat in PVWA is unique when, in reality, it is not. Many trees and grassland habitats will be impacted on all the non-PVWA potential routes.
- That other routes are less environmentally sensitive. Each route has environmentally "sensitivities". As the length of the route is extended to go around the PVWA, the environmental impact naturally increases.

In the end, the presence of a transmission line in the PVWA will not limit or interfere with hunting. It may or may not have an impact on habitat. But, plant those poles in crop ground and there will be a multi-faceted impact that will continue forever. Plant those poles in a schoolyard and you may impact the health and welfare of children and their families for years to come.

**Using AEP's own criteria the attached matrix, comparing and contrasting the routes, demonstrates that the route with the *least* overall impacts (environmental, land use, cultural, and economic/financial) is a route through the Pleasant Valley Wildlife Area. (See Exhibit IV)**

In stating that "The Division of Wildlife highly recommends that AEP abandon plans to place a transmission line through the Pleasant Valley Wildlife Area and that other, less environmentally sensitive route options be considered and pursued, **ODNR forced AEP into routes that are detrimental not only environmentally but in other significant ways as well.**

- The Blue Route places the transmission line less than 1,000 feet from all three Unioto schools (see Exhibit III), along with 227+ homes. Studies on the effects of HVTLs have variously resulted in there being harmful health effects from their presence to suggesting no potentially harmful health effects. AEP's application suggests AEP has concern about EMF exposure due to proximity to the line.
- The "Blue Route" impacts *almost 200%* more homes than does the "Red Route". Even fewer homes, *and no schools*, would be impacted by the route through the Wildlife area.
- An analysis done by Appraisal Group One concluded "it can be stated with a high degree of certainty that there is a significant negative effect ranging from -10% to -30% of property value due to the presence of the high voltage electric transmission line (HVTL). In other studies the negative property value impacts were even larger. **This translates to a multi-million dollar reduction in property values for homes along the "Blue Route". This does not reflect the loss in value for farm land.** There would no economic impact on the PVWA should the transmission line be sited there.
- The "undeveloped land" that AEP has now targeted is really land cleared, developed and nurtured over many, many years (in our case 6 generations) for a specific and valuable purpose - food production. *Our farm is one of Ohio's food factories* -part of Ohio's largest industry, an industry that contributes \$107 billion to the state's economy. We stand to lose acres of productive crop ground (over approximately 8 fields) because ODNR values recreational hunters more than it does Ohio's largest industry.

Ohio is blessed with prime farmland soils that are the envy of the world. Ohio is one of only five states consisting of nearly 50% prime farmland. Yet:

- Between 1950 and 2000, Ohio lost more than 6.9 million acres of farmland, representing nearly one-fourth of Ohio's land. This translates to an area roughly equivalent to 23 Ohio counties.
- *Ohio has lost more high-quality acres of farmland than any other state than Texas. It is losing farmland at a much faster rate than other states.*
- Ohio ranks second in the nation for prime agricultural land converted to developed land but only 31<sup>st</sup> in the nation for population growth.<sup>2</sup>

Farmland means much more than food. Well-managed farmland shelters wildlife, supplies scenic open space, and helps filter impurities from our air and water. **It makes no sense to remove prime farmland from production to "protect" recreational hunting ground.**

---

<sup>2</sup> 7-22-2013 Ohio Department of Agriculture Fact Sheet

## **Conclusion**

Is deer and bird hunting ground, used by a limited number of people, really more important than:

- The health and welfare of 2,500 Ross Country children?
- The investment made by 227+ homeowners and the taxes they pay?
- Farmland that has been feeding Ohio's (and the world's) citizens continuously for nearly 200 years?
- Cultural treasures like Hopewell earthworks that are unique in the world? (AEP's Blue Route is slated to go *through* Anderson Works -- a unique Hopewell earthworks dating to before Christ.)

In everything a balance must be struck. We believe the greater good for Ohio is served by the Biers Run -Hopetown-Delano 138 kV line being sited through the limited use Pleasant Valley Wildlife Area in a manner that mitigates its impact. This is the best decision for all of Ohio's citizens from an environmental, land use, social, cultural, and economic standpoint.

We also believe ODNR acted inappropriately (perhaps illegally?) when it short circuited the evaluation of all practicable sites, routes and route segments for AEP's proposed facility.

***Please immediately contact AEP and the Ohio Power Siting Board and open a dialogue about an alternative route through the Pleasant Valley Wildlife Area.***

And when the project comes to a vote before the Power Siting Board, I ask that the ODNR recuse themselves from the vote due to the conflict of interest.

Respectfully,

A handwritten signature in black ink, appearing to read "Brenda L. Johnson". The signature is fluid and cursive, with the first name "Brenda" being more prominent than the last name "Johnson".

Brenda L. Johnson

CC:

Ohio Power Siting Board  
Attn: Chairman Todd Snitchler  
180 East Broad St.  
Columbus, OH 43215-3793

✓ Ohio Power Siting Board  
Attn: Kim Wissman, Executive Director  
180 East Broad St.  
Columbus, OH 43215-3793

American Electric Power  
Attn: Shawn Malone, AEP Transmission  
Project Manager  
700 Morrison Road  
Gahanna, OH 43220

Governor John Kasich  
Riffe Center, 30<sup>th</sup> Floor  
77 South High Street  
Columbus, OH 43215-6117

ODNR – Division of Wildlife  
Attn: John Sambuco, Federal Aid Lands  
Coordinator  
1500 Dublin Road  
Columbus, OH 43215

ODNR – Wildlife District One  
Attn: Gary A. Ludwig, Wildlife Management  
Supervisor  
1500 Dublin Road  
Columbus, OH 43215

Ohio Department of Agriculture  
Attn: Mr. David T. Daniels  
8995 E. Main St.  
Reynoldsburg, OH 43068

Mr. Bob Peterson, State Senator for Senate  
District 17  
Senate Building  
1 Capitol Square, Ground Floor  
Columbus, Ohio 43215

Mr. Cliff Rosenberger, State Representative for  
District 91  
77 S. High Street, 13<sup>th</sup> Floor  
Columbus, OH 43215

Mr. Gary Scherer, State Representative for  
District 92  
77 S. High Street, 13<sup>th</sup> Floor  
Columbus, OH 43215

Mr. Jim Caldwell, President, Ross County  
Commissioner  
306 Fairway Ave.  
Chillicothe, OH 45601

Mr., Steve Neal, Ross County Commissioner  
72 Sharon Road  
Chillicothe, OH 45601

Mr. Doug Corcoran, Vice President, Ross  
County Commissioner  
271 Granite Cliff Drive  
Chillicothe, OH 45601

Mr. Donald W. Arledge, Union Township  
Trustee  
210 Yellowbud Road  
Chillicothe, OH 45601

Mr. Robert L. Whitten, Union Township Trustee  
144 Andersonville Rd.  
Chillicothe, OH 45601

Mr. Harold W. Bennett, Union Township  
Trustee  
379 Shiloh Rd.  
Frankfort, OH 45628

Ms. Karen Rittinger-Grossman,(FO), Union  
Township Trustee  
9254 Williamsport Pike  
Chillicothe, OHIO 45601

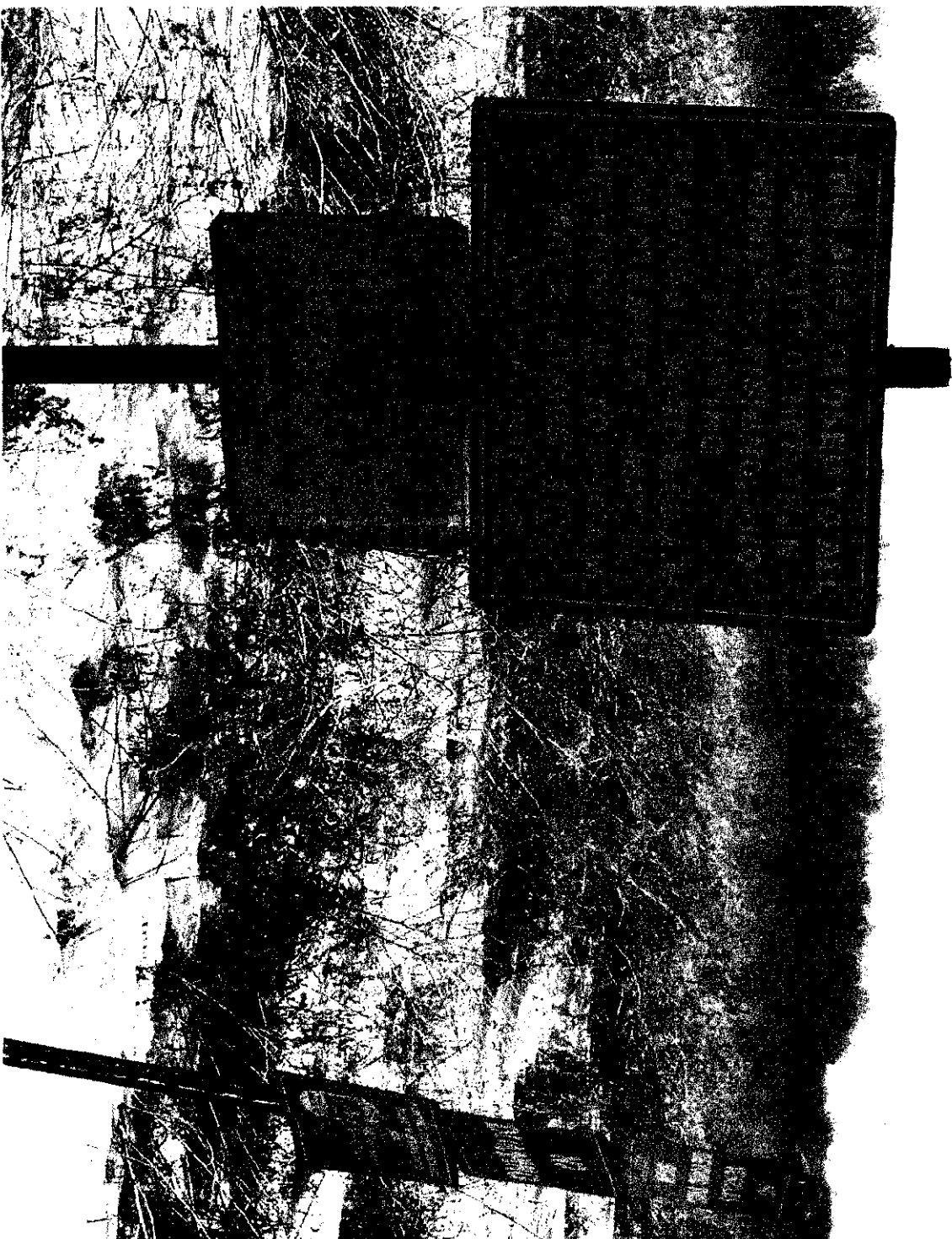
Ms. Carolyn Eselgroth  
Barrett, Easterday, Cunningham & Eselgroth,  
LLP  
7259 Sawmill Road  
Dublin, OH 43016

Mr. Murray Johnson  
539 S. Park Rd.  
LaGrange, IL 60525

Mr. Troy Johnson  
5523 Tower Ave.  
Superior, WI 54880

Pudge Campbell  
15535 U.S. Rt. 50 West,  
Chillicothe, OH 45601

Exhibit I



# Exhibit II

From: "Ludwig, Gary" <[Gary.Ludwig@dnr.state.oh.us](mailto:Gary.Ludwig@dnr.state.oh.us)>  
Date: January 4, 2013, 5:24:14 PM EST  
To: "rpmcnally@aep.com" <[rpmcnally@aep.com](mailto:rpmcnally@aep.com)>  
Cc: "Windus, Jennifer" <[Jennifer.Windus@dnr.state.oh.us](mailto:Jennifer.Windus@dnr.state.oh.us)>, "Daniel, Donna" <[Donna.Daniel@dnr.state.oh.us](mailto:Donna.Daniel@dnr.state.oh.us)>, "Carter, Ron" <[Ron.Carter@dnr.state.oh.us](mailto:Ron.Carter@dnr.state.oh.us)>, "Sambuco, John" <[John.Sambuco@dnr.state.oh.us](mailto:John.Sambuco@dnr.state.oh.us)>  
Subject: AEP Right-of-Way Inquiry - Pleasant Valley Wildlife Area, Ross County, Ohio

Hello Mr. McNally,

Thank you for recently submitting a preliminary "Authorization for Standard Use of Division of Wildlife Lands" application for the purposes of routing a 138 KV transmission line through the Pleasant Valley Wildlife Area in Ross County, Ohio. After a thorough review and discussion of this application with my Program Administrator, I must let you know that the Division of Wildlife opposes the placement of this transmission line at this time.

The basis for our opposition lies in the fact that Pleasant Valley Wildlife Area was deeded to the Division of Wildlife by the U.S. Gov't. through the General Services Administration (GSA). Deed stipulations say that "*the property shall be continuously maintained and used for wildlife conservation purposes.*" These purposes include the management and manipulation of habitat in support of wildlife-based recreational activities such as hunting. Pleasant Valley is subject to regular GSA compliance inspections (the last occurring in July, 2008) and the Federal government has retained the right to reclaim the land if the Division does anything that violates those stipulations. All non-wildlife conservation related uses of the Area (e.g. petroleum product & natural gas pipelines, cell phone towers, and power transmission lines, etc.) would require prior approval by the GSA in addition to the standard Right-of-Way, Right-of-Entry, or Easement Agreements required by the Department of Natural Resources. It is the Division of Wildlife who would petition the GSA for that approval, not the applicant. Since we are generally opposed to the transmission line, we would not petition for its approval.

We also oppose the route chosen for this transmission line mainly because it destroys the integrity of the forestland habitat and compromises our habitat management plan for the Wildlife Area. The proposed route would essentially divide the Wildlife Area in half; bisecting the mature forestlands comprised of saw-log size red and white oak, hickory and maple in four separate locations. The environmental work that will be required to document and mitigate for the potential impacts on endangered species (e.g. Indiana bat) and the effects of forest fragmentation would add a significant amount of time to the approval process as well as expense to the bottom line. Our ability to manage the grassland habitat on adjoining agricultural fields through the cooperative farming program would also be significantly reduced and would have to be compensated for.

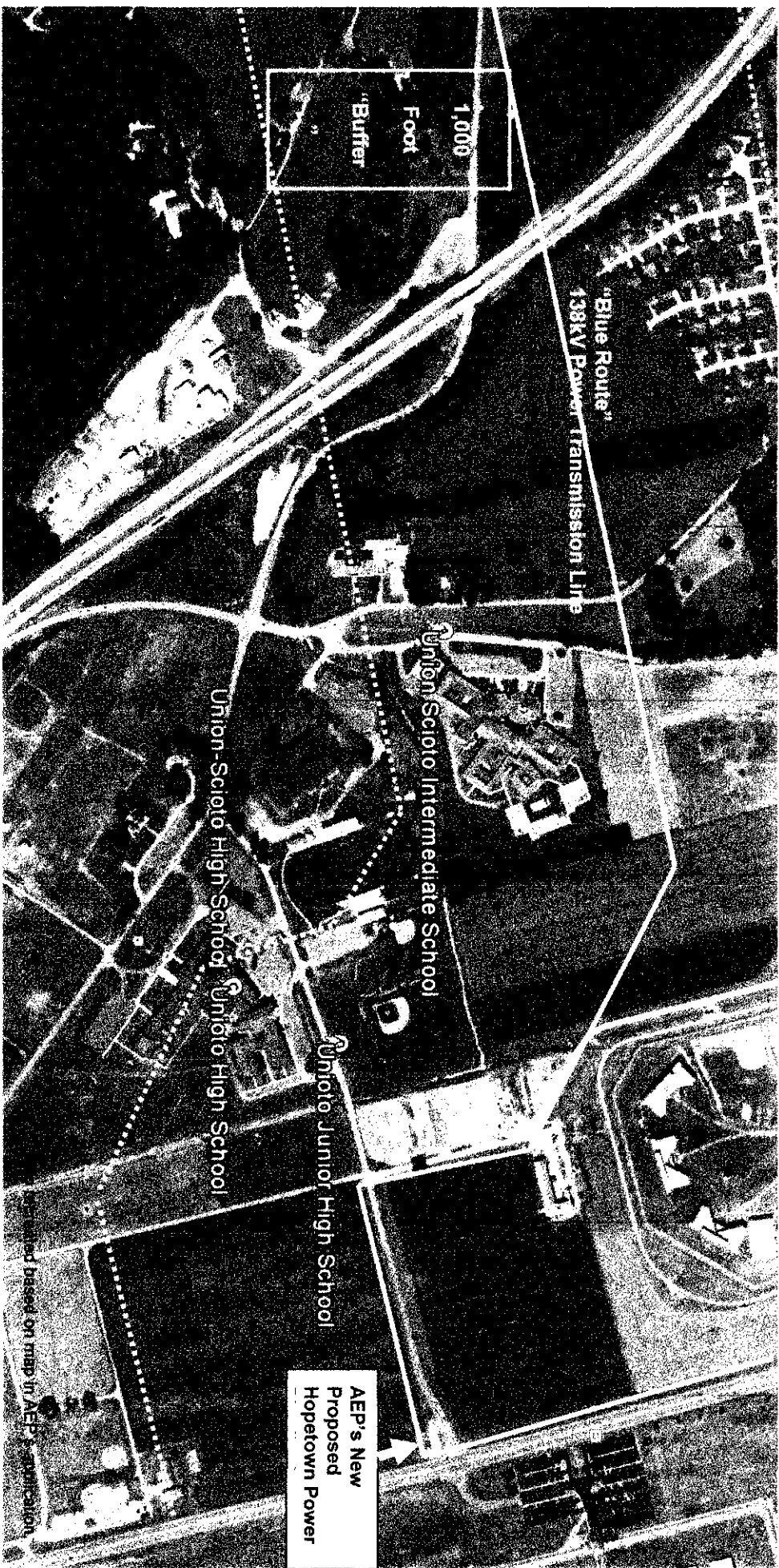
In conclusion, The Division of Wildlife highly recommends that AEP abandon plans to place a transmission line through the Pleasant Valley Wildlife Area and that other, less environmentally sensitive route options be considered and pursued. If you have any further questions regarding our position, please feel free to contact me.

Sincerely,

GARY A. LUDWIG  
Wildlife Management Supervisor  
Wildlife District One  
1500 Dublin Rd.  
Columbus, Ohio 43215  
(614) 644-3925  
[gary.ludwig@dnr.state.oh.us](mailto:gary.ludwig@dnr.state.oh.us)  
<http://www.odnr.com/wildlife/>



# Exhibit III



## Exhibit IV

# Biers Run- Hopetown – Delano Transmission Project Application Summary of Qualitative and Quantitative Factors

---

According to 4905-15-03 “***The study shall be designed to evaluate all practicable sites, routes, and route segments for the proposed facility*** identified within the project area. AEP’s application notes the “***the goal of the Route Selection Study was to identify viable routes*** where structures could be physically located, while avoiding or limiting impacts to sensitive land uses, ecological, and cultural features in the project vicinity.”

AEP and URS identified potential route corridors. A preliminary corridor was relatively direct from Biers Run Station east toward Delano Station. Approximately 2.2 miles of this corridor crosses the Ohio Department of Natural Resources’ (ODNR) Pleasant Valley Wildlife Area, a public hunting ground. ODNR noted their opposition to the transmission line and refused to apply for the applications needed for approval of the line. It should be noted that alternative routes studied passed through other nature centers. As a result of ODNR’s refusal to consider allowing the line to cross taxpayer property, AEP looked to alternative routes that excluded Nature Center property and did not study it further.

Given the requirements of 4905-15-03, and that AEP still feels the route through the Pleasant Valley Nature Center is the most direct route, it is only appropriate to reflect all the routes in the attached comparison of the routes. The information in this matrix is primarily drawn from AEP’s application.

“It is desirable to maximize certain criteria along a given route (e.g. paralleling existing corridors). These criteria are known as opportunities. Undesirable criteria, such as wetlands, historic properties, etc. are termed constraints and the study seeks to avoid/minimize their proximity to the project. Therefore the ***goal of routing is to maximize attributes while minimizing constraints.***”<sup>3</sup> The criteria considered in the Route Selection Study are **bolded** in the matrix.

“In addition to the ecological, land use, cultural, and engineering attributes and constraints, several qualitative factors were considered. These issues include construction and maintenance access, schedule, and likely right-of-way availability along the routes.” The weight placed on the qualitative factors is not specified. Their effect, however, is to further skew the process toward what’s easiest and most cost effective for AEP to build without consideration of other important socioeconomic factors.

Note – the weights placed on the ecological, land use, cultural, and engineering attributes emphasize the existence of a criteria ***not*** the impact on the factor. For example, the number of streams to be crossed is a factor even though there no permanent impact. For the number of houses and schools within 1000 feet, and farms, the impact ***is*** significant and permanent. Yet there is no difference in the weighting of the factors to reflect this.

Criteria **highlighted in red** show where there is an appreciable negative difference between the preferred and alternate routes. Criteria **highlighted in green** reflect where there is clearly an advantage presented by one route.

---

<sup>3</sup> AEP’s Biers Run-Hopetown-Delano Transmission Line Project, January 2014

# Exhibit IV

## Biers Run- Hopetown – Delano Transmission Project Application Summary of Qualitative and Quantitative Factors

|   |              |              | <b>Most Direct Route<br/>Through Wildlife Area</b>  | <b>Comments</b>   |
|---|--------------|--------------|---|---|
| Total Route Scores  | 29.22        | 29.36        | Not Scored  | The Blue Route score is depressed by the weight AEP placed on ecological factors such as woodlots to be cleared and streams to be spanned. Using their ecological features, AEP's study is biased in favor of targeting farmland and also raises a bias against other land uses and cultural factors. They also placed equal weight on long term impacts and <i>potential</i> construction impacts which they note are not significant.   |
| Estimated Capital Cost  | \$16,630,102 | \$16,331,502 | Not Costed  | Note: The financial analysis only reflects AEP's cost. There is no analysis of financial or economic impacts to the land uses impacted by the transmission line.  |
| Length (miles)  | 12.8         | 12.7         | 7.5<br>Estimated based on AEP maps  | The application notes that approximately 2.2 miles of the most direct route would cross the Pleasant Valley Nature Center.  |
| % of Length in or Adjacent to Existing Road Rights-of-Way   | 31%          | 31%          | Not Determined  |   |
| % of Length in or Adjacent to Existing Transmission Line Rights-of-Way  | 21%          | 17%          | Not Determined  |   |
| <b>Land Use (40%) Note: Land Use does not contemplate agricultural impacts. This study views productive, high value farm land as simply "undeveloped" land. It places greater value on woodlots and wetlands.</b> |              |              |   |   |
| # of Homes within 1,000 feet  | Approx. 227  | 77           | Not Studied.<br><br>Estimated to be less than the Red Route since 30% of the route would be through public hunting grounds. | P.6-19, 4906-15-06 Socioeconomic and Land Use Impact Analysis, (E) Health and Safety: "Transmission lines associated with Biers Run-Hopetown-Delano 138kV Project are proposed in locations that would not place them in close proximity to existing residential areas and, therefore, will not significantly increase EMF exposure of the public."<br><br>P. 06-21 "AEP has limited the potential aesthetic impacts of the transmission line to the extent possible through the route selection process..."<br><br><b><i>What is AEP's definition of public?</i></b> |
| Approx. # of people living within 1,000 feet  | 680          | 231          | Not Determined.<br>Estimated to be significantly less than Blue and Red Routes.   | This was approximated using U.S. Census data for Ross County.   |
| # of Homes within 100 feet  | 3            | 1            | Not Determined  |   |
| Median value of houses  | \$30,418,000 | \$10,318,000 | Not Determined  | Median value of houses in Ross County: \$134,000.   |

# Exhibit IV

## Biers Run- Hopetown – Delano Transmission Project Application Summary of Qualitative and Quantitative Factors

|   |  |                                | Most Direct Route<br>Through Wildlife Area                               | Comments  |
|---|--|--------------------------------|--|---|
| impacted  |  |                                |  | <b>Note:</b> The <i>value is understated</i> as it is based on the median and does not include the actual value of all real estate impacted.  |
| Financial impacts of a reduction<br>in housing value due to the line:<br>-10%<br>-30% | (\$3,041,800)<br>(\$9,125,400)   | (\$1,031,800)<br>(\$3,095,400) | Not Determined   | Section 4905-15-06 calls for AEP to provide the socioeconomic impact of the proposed facility on each land use. Per Merriam-Webster, socioeconomic is defined as "relating to, or involving a combination of social and economic factors". No economic factors or impact were included in AEP's application.  |
| % of Route Along Centerline<br>of Existing Line to be Rebuilt                         | ???  | ???                            | ???  | This is a construction factor and is unrelated to land use.   |
| # of Schools within 1,000 feet  | 3<br>Unioto High,<br>Intermediate,<br>and Primary<br>Schools, plus<br>football and<br>baseball fields. | 0                              | 0  | P. 7 "...crosses property developed with Union-Scioto schools..."<br><br>P.6-19, 4906-15-06 Socioeconomic and Land Use Impact Analysis, (E) Health and Safety: "Transmission lines...are proposed in locations that would not place them in close proximity to existing residential areas and, therefore, will not significantly increase EMF exposure of the public." <b>What is AEP's definition of public and close proximity?</b>   |
| # of students and staff within<br>1,000 feet  | >2,600   | 0                              | 0  |   |
| # Schools within 100 feet   | 0  | 0                              | 0  |   |
| # of Churches within 1,000 feet   | 1  | 1                              | Not Determined   |   |
| # of Churches within 100 feet   | 0  | 0                              | Not Determined   |   |
| # of Commercial Facilities within<br>1,000  | <10  | <10                            | Not Determined   | These businesses include gas stations, auto repair facilities, a paint shop, a boarding kennel, and a warehouse.  |
| % of Route Crossing Ag Fields<br>(Per AEP)  | 55%  | 53%                            | Not Determined.<br>Estimated to be less than<br>the Blue and Red Routes. | This factor isn't included in the quantitative land use routing comparison. It is misleading given it only represents miles of route crossing crop fields.  |
| Miles of Route Crossing<br>Agricultural Fields  | 7.0  | 6.7                            | Not Determined.<br>Estimated to be less than<br>the Blue and Red Routes. | Section 4905-15-06 calls for AEP to provide the socioeconomic impact of the proposed facility on each land use. As it relates to agricultural land, the description shall include the acreage impacted and the applicant's evaluation of impacts to cultivated land, permanent pasture land, etc. <b>This was not done.</b><br><br>AEP considers farmland "undeveloped" land. There is no evaluation regarding the number of farm acres permanently removed from production, the economic value of these acres or the crop farmers will no longer get, etc. |

# Exhibit IV

## Biers Run- Hopetown – Delano Transmission Project Application Summary of Qualitative and Quantitative Factors

|   |                                       |     | <b>Most Direct Route<br/>Through Wildlife Area</b>                    | <b>Comments</b>   |
|---|---------------------------------------|-----|---|---|
| Miles of Route Crossing Pasture and Hayfields     | 1.3                                   | 0.6 | Not Determined.<br>Estimated to be less than the Blue and Red Routes. |   |
| Miles of Route Crossing Old Field                 | 1.0                                   | 1.1 | Not determined.   |   |
| % of Route Crossing Agricultural Land             | 73%                                   | 66% | Not Determined.<br>Estimated to be less than the Blue and Red Routes. | This factor isn't included in the quantitative land use routing comparison.   |
| # Farm Acres Impacted                             | ???                                   | ??? | ???   | <p>Section 4905-15-06 calls for AEP to provide the socioeconomic impact of the proposed facility on each land use. As it relates to agricultural land, the description shall include the acreage impacted and the applicant's evaluation of impacts to cultivated land, permanent pasture land, etc. <b>There is no total of farm acres impacted in AEP's application.</b></p> <p>This statistic only contemplates the rights-of-way and doesn't contemplate additional acres that will be impacted because of line placement, fields now too small to be farmed, etc.</p> <p><b>Note:</b> This also does not reflect the <u>additional</u> fields impacted by the associated 69 kV line.</p> |
| # of Farms Impacted                               | ???                                   | ??? | Not Determined.<br>Estimated to be less than Blue or Red Routes.      | <p>Section 4906-15-06 Socioeconomic and land use impact analysis: the "applicant shall estimate the probable impact of the proposed facility on each land use (including: ... (b) field operations [such as plowing, planting, cultivating, spraying, and harvesting], irrigations, and field drainage systems)." <b>This was not done.</b> There is no analysis of the number of farms impacted or the financial impact on the farms of the proposed transmission line.</p> <p><b>Note:</b> This does not reflect the <b>additional</b> fields impacted by the associated 69 kV line.</p>  |
| # of Farm Fields impacted                         | Approximately 30+ estimated from maps | ??? | Not Determined.<br>Estimated to be less than Blue or Red Routes.      | <b>Note: This does not reflect the <u>additional</u> fields impacted by the associated 69 kV line.</b>  |
| <b>Other Sensitive Land Uses within 1000 Feet</b> | 8                                     | 4   | Not Determined.<br>Estimated to be less than the Blue or Red Routes.  | Includes airports, parks, state forests, golf courses, schools, hospitals, churches, and cemeteries.  |

## Exhibit IV

# Biers Run- Hopetown – Delano Transmission Project Application Summary of Qualitative and Quantitative Factors

|  |      |      | <b>Most Direct Route<br/>Through Wildlife Area</b>                       | <b>Comments</b>   |
|--|------|------|--|---|
| <b>Other Sensitive Land Uses<br/>within 100 Feet</b>   | 1    | 1    | Not Determined.<br>Estimated to be less than<br>the Blue or Red Routes.  |   |
| <b>Cultural (10%)</b>  |      |      |  |   |
| <b># of Previously recorded<br/>archaeological sites within<br/>1,000 feet</b>   | 100  | 103  | Not Determined.<br>Estimated to be less than<br>the Blue and Red Routes. | AEP has made <b>assumptions</b> about the location and nature of<br>Anderson Works, a unstudied earthworks that lies in close<br>proximity to the National Park Service's Hopewell earthworks.  |
| <b># if Previously recorded<br/>archaeological sites within 100<br/>feet</b>   | 16   | 17   | Not Determined.<br>Estimated to be less than<br>the Blue and Red Routes. | Same as above.  |
| <b># of National Register of<br/>Historic Places within 1000<br/>feet</b>  | 4    | 4    | Not Determined   |   |
| <b># of National Register of Historic<br/>Places within 100 feet</b>   | 0    | 0    | Not Determined   |   |
| <b># of Historic Structures (OHI)<br/>structures within 1,000 feet</b>   | 12   | 14   | Not Determined   |   |
| <b># of Ohio Historic Inventory<br/>(OHI) structures within 100 feet</b>   | 1    | 1    | Not Determined   |   |
| <b>Cemeteries within 100 feet</b>  | ???  | ???  | ???  |   |
| <b>Ecological (40%) This category counts existence of factors like woodlots, streams, and wetlands. In the case of streams and wetlands, AEP notes there will be minimal construction impact and no permanent impact to these ecological features, unlike houses and farms where the impact will be significant and perpetual.</b> |      |      |  |   |
| <b># acres of woodlot to be<br/>cleared</b>  | 12   | 23   | Estimated to be more<br>than Blue or Red Route.                          | AEP's application states the impacts to ecological features are<br>reduced along the Blue Route compared to the Red Route. This<br>statement is misleading in that it is only true of acres of woodlot to<br>be cut, a cost factor for AEP.   |
| <b># of wetlands crossings</b>   | 5    | ???  | Not Determined   |   |
| <b>Acreage of wetlands crossed</b>   | 0.48 | 0.61 | Not Determined   | Per application: "Construction impacts to streams and wetlands<br>along the Preferred Route and Alternate Route <b>will be minimal</b> as<br>the transmission line will span most of these sensitive areas."<br>"Wetland areas should not be significantly affected by the<br>operation or maintenance of the Preferred and Alternate Routes. |
| <b># Stream crossings</b>  | 20   | 30   | Not Determined   | Per application: "Construction impacts to streams and wetlands<br>along the Preferred Route and Alternate Route <b>will be minimal</b> as<br>the transmission line will span most of these sensitive areas."  |
| <b>Threatened and Endangered<br/>Species</b>   | 0    | 0    | Estimated to be the same<br>as Blue and Red Routes.                      |   |

# Exhibit IV

## Biers Run- Hopetown – Delano Transmission Project Application Summary of Qualitative and Quantitative Factors

|   |               |               | <b>Most Direct Route<br/>Through Wildlife Area</b> | <b>Comments</b>   |
|---|---------------|---------------|--|---|
| <b>Engineering (10%)</b>                                |               |               |  |   |
| Number of Public Road Crossings                         | Not Specified | Not Specified | Estimated to be less than Blue or Red Routes.      |   |
| % of Route Closely Paralleling Existing Linear Features | Not Specified | Not Specified | Not Determined.                                    | Includes, roads, railroads, electric transmission lines, and pipelines.   |
| Turn Angles Greater than 20 Degrees                     | Not Specified | Not Specified | Estimated to be less than Blue or Red Routes.      |   |
| <b>Length of Route(miles)</b>                           | 12.8          | 12.7          | 7.5<br>Estimated using AEP maps                    | Greater length translates into greater identified and unidentified impacts on affected properties, people, etc. |