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2009 FEB -6 PM 2:32

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February 6, 2009

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**RE: Case No. 08-170-EL-BTX
OSU-Roberts 138kV Transmission Line Project**

Dear Mr. Lambeck:

On behalf of Columbus Southern Power Company (CSP), enclosed please find responses to the Staff's questions/clarifications (Set #2) docketed on January 26, 2009. Please let me know if you have any questions or concerns regarding CSP's responses.

Thank you for your attention to this matter.

Cordially,

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Please define the northern and southern boundaries of the study area for the route selection study:

While the western and eastern study area boundaries were defined by the beginning and end points of the project, the northern boundaries were defined only by the extent of practicable route candidates, as dictated by river crossing points and consultations with the City of Upper Arlington. Often in siting studies there is a geographic barrier that defines useful study area boundary. In this case there is no such obvious barrier, so it is the suite of routes that are under consideration that effectively define a study area. AEP is not aware that study area boundaries are required to be defined as part of the route selection study.

Please explain why the northern route around the quarry was selected even though the southern route was described more favorably in the Route Selection Study:

As Chapter 3 of the Application states, the quantitative route selection study was one part of the decision support process for the eventual route decision. The area is very complex with the additional significant factor of coordination with the Cities of Upper Arlington and Columbus. Other non-quantitative factors include engineering issues (e.g. utility congestion, etc) and preferences of the local communities (e.g. Upper Arlington). It is possible that the best scoring route may not be ultimately chosen as the primary option. In this particular case, there are two main reasons why the northern route was eventually selected. First the angle to make the crossing of the Scioto River is much more favorable if the route approaches from the north making set up and operation of the bore (which has some vertical radius limitations with a buried sewer in the area) less technically challenging. Second, AEP wanted to maximize use of the existing overhead utility right of way on the northerly option. Given that the existing wood poles would be replaced on a one for one basis with the new steel poles, there would be minimal disruption and no change in land use from this option. These compelling factors were not included in the numeric route selection study.

Please identify the property that is planned for residential development at the Scioto River Crossing and how the route L-M would affect the development plans. What amount of additional woodlot clearing required for L-M compared with route K-M would occur on the property that is planned for development.

The property that, according to the owner was slated for residential development, is included in Figure 1 attached to this response (Property ID 580-259059). The property owner alerted AEP to his plans to develop the property but has not provided details. Assuming the property would be subdivided, the emergence of the transmission line from the bore under the river and the presence of a 35 foot wide right of way would restrict a portion of this property from structure development.

AEP does not understand the woodlot question as posed. Assuming the request is to compare woodlot clearing along L-M and K-M, approximately ½ acre of woodlot will be cleared on the potential residential property along Segment L-M, individual trees will be

cut along L-M which runs along several residential front yards, the combined clearing would be less than ½ acre.

Please describe in detail the criteria used for selecting the two candidate routes crossing Upper Arlington, and the process by which other potential west-east route candidates and north-south connectors were eliminated. Please provide a map showing the constraint data that was used to select candidate routes in this area.

Maps showing constraint data used were provided in the application as Figures 1-4 of Section 4906-15-03

As discussed in the Application, the crossing through Upper Arlington was greatly influenced by the preferences of the City. The question above does not appear to acknowledge the role of the City of Upper Arlington in the decision making process. From the beginning of the project the only options available for routing a project through Upper Arlington was within road right of way. Given that, the first order of business is to look at physical restrictions, such as existing utilities (sewer, electric, cable, fiber optic, natural gas, water etc). Once these issues have been addressed (see the table in the route selection study that shows utility congestion), then the next concern is selection of options that are acceptable to the City of Upper Arlington. Given that the project will impact City roads and utilities, AEP cannot select an option that is not acceptable to the City.

AEP consulted early and extensively with the city officials to make sure their input was received. Initially, AEP assessed that the City would not look favorably on use of the Lane Avenue route due to the higher daily traffic volume, and event traffic. The alternative to Lane Avenue, located further to the south was along residential streets that the City indicated would be excavated for some scheduled work. Combining these two projects would minimize traffic disruption and disruption to residents in the area. Initially the City opposed the use of Lane Avenue, citing the thoroughfare as a main transportation artery and expressing concern over potential traffic and business disruption.

Subsequently, Upper Arlington was approached by a fiber optic company who proposed installation of communications cable along Lane Avenue to link schools and institutions. Upper Arlington suggested that the AEP project and the fiber optic project use the same conduit and proceed concurrently. AEP agreed to explore this arrangement and subsequently agreed to the route preference change. (See letter from Upper Arlington included in Section 3 of the Application)

Please explain why the northern route through Upper Arlington (M-S) was selected as part of the Preferred Route over the southern route (M-O-P), given that the southern route is described more favorably in the route selection study.

See the response above.

In the letter provided in the application, an official from Upper Arlington lists the Lane Avenue route as the "City's primary choice", however the route selection study states that the "city has expressed a preference for the southern route along Cambridge Drive and Waltham Avenue" (Application Appendix 03-1, p. 10). Please clarify.

See the response above.

Please describe in detail the criteria used for selecting the candidate routes from Upper Arlington to the OSU Substation, and the process by which other potential west-east route candidates and north-south connectors were eliminated. Please provide a map showing the constraint data that was used to select candidate routes in this area.

As described in the Application, initially it appeared that Upper Arlington would strongly favor the non-Lane Avenue option, resulting in Node P as the beginning point for the Upper Arlington to OSU section of the route. However, the change of preference by Upper Arlington meant that the starting point for the OSU traverse is Node S.

These options were evaluated in the Route Selection study but were not described in detail in the text. The criteria used for this segment were length, residences within 100 feet, traffic count data (average daily), utility congestion, and road right of way availability. Of the three options from Node S, S-T-U had the most available road ROW, the least existing utility congestion and the least traffic volume.

AEP can only provide information on the routes it considered. The options shown are those that the combination of utility congestion work (performed by Team Fischel), negotiations with OSU, Upper Arlington, and City of Columbus were deemed practicable by AEP. The options deemed practicable were evaluated using the methods detailed in the Application and reiterated above.

Were any other combinations of various segments of the Preferred and Alternate routes considered? Is there any combination of the two routes that would create a more desirable route than either the Preferred or Alternate?

The quantitative route selection study was conducted for the options that, in URS's and AEP's and Team Fischel's professional judgment were deemed practicable. There are always alternatives that can be considered but often these are not practical options. In this study area there are major geographic obstacles including Marble Cliff Quarry, the Scioto and Olentangy Rivers, dense residential areas and recreational facilities. Ultimately, the most prominent factor was the preference of the City of Upper Arlington.

Please provide a table comparing the Preferred and Alternate routes in their entirety, based on the siting criteria or constraints that were used in the route selection study.

The route selection study makes it clear that the routes were divided into three segments to which different criteria were applied. The table below repeats what is presented in the Application:

Constraints for the Preferred and Alternate Routes		
Constraints	Preferred	Alternate
Length (ft)	32,956	31,289
Length (mi)	6.24	5.93
Overhead Length (ft)	5,912	6,206
Overhead Length (mi)	1.12	1.18
Underground Length (ft)	27,044	25,082
Underground Length (mi)	5.12	4.75
Residences within 100 ft.	31	124
Residences within 1,000 ft.	1,407	1,286
Woodlots within 60 ft. (acres)	12.43	3.12
Threatened and Endangered Species within 100 ft	0	0
Planned Development	No	Yes
Average Traffic Count	20,000-20,811	6,800-8,900
Average Number of Traffic Lanes	4	2
Utility Congestion	80-90%	60-80%
Upper Arlington Preference	Yes	No

Socioeconomic and land use impact analysis (4906-15-06)

Please provide a table listing the number of properties of each type of land use listed in 4906-15-06(B)(3) within 100 and 1,000 feet of each route. (The evaluation in the application is not complete. For example, the only commercial land use mentioned is the Lane Avenue Shopping Center and Lennox Town Center, but most of Lane Avenue between Northwest Blvd. and the edge of Clinton Township east of North Star Rd. is commercial, plus parts of Kinnear Rd, Arlington Ave., and other areas within 1,000 feet).

Number of Parcels within 100 and 1,000 ft. of the Preferred and Alternate Routes				
	Preferred Route		Alternate Route	
Land Use	100 ft.	1,000 ft.	100 ft.	1,000 ft.
Residential	155	1,500	183	1,382
Commercial	68	133	47	158
Industrial	14	40	24	61
Agriculture	0	0	0	0
Recreation	2	5	1	3
Institutional	18	56	15	54
Total	257	1,734	270	1,658

What is the expected impact of traffic disruptions and construction noise on all land uses along both routes? How will the Applicant minimize and/or mitigate traffic and noise impacts, particularly in the commercial corridors along Lane Ave. and Kinnear Rd., and near schools, police stations, and other institutional land uses? Please be much more specific than the analysis in the application, including items such as estimated length of disruption along specific areas of the routes, expected limits on entry to commercial properties during construction, and other potential impacts. Please compare impacts of the two routes.

Construction noise would be limited to daytime hours and would be equivalent to heavy traffic and typical roadwork noise along any busy street. Lane Avenue has been subjected to a significant amount of construction over recent years, and this project would likely be no more disruptive than those projects.

It is not anticipated that construction noise will be a factor that causes significant disruption to any of the land uses along either route. Based on the minimal and temporary noise footprint of the project, no specific mitigation is proposed other than to ensure that equipment used is fitted with standard mufflers and that construction crews wear proper noise protection. Daytime noise in commercial corridors is not a typical concern, especially since these are located on an already heavily traveled highway. Police Stations are not typically considered noise sensitive areas. Schools are considered noise sensitive. AEP will work with the city and contractors to establish protocols and equipment used in the vicinity of schools. Ultimately, combining the AEP project with installation of fiber optic cable along Lane Avenue will effectively reduce noise impacts through reducing two construction projects to one. Until the project is bid out, AEP will not be able to provide details of the equipment used, but this information should be available at the time of the pre-construction meeting.

In the route selection study, the northern option from the Roberts Substation to the Scioto River, which became part of the Preferred Route, is described as follows: " . . . the northern option crosses Griggs Reservoir Park. Within the park, woodlots would need to be cleared which would increase the erosion potential along the banks of the Scioto River" (Application Appendix 03-1, p. 7). In the impact analysis section, the impacts of the Preferred Route on Griggs Reservoir Park are described as temporary and "will only occur during the construction phase" (Application, p. 06-12). Please clarify.

The two statements describe the same thing, namely that removal of vegetation will increase erosion potential until vegetation is re-established. This is an issue during construction that is largely eliminated once construction is complete and vegetation is re-established. This issue is the cornerstone of stormwater permitting and best management practices. In addition, during the route selection study, the portion of the route along the Scioto River was to be overhead and would have likely required more clearing than if the route was underground. Based on limited room, the decision was made to bury this portion of the route.

The Preferred Route runs along two sides of a recreation facility on the Ohio State campus, and past a police substation, a health care facility, an agricultural field, and numerous other varied land uses on Ohio State property that are not mentioned in the application. Please describe the potential impacts of construction, operation, and maintenance to the various land uses on the Ohio State campus, and any mitigation procedures to be used to minimize impacts.

There will be no operation or maintenance impacts to any of the land uses mentioned in the question. The route in this location is underground and adjacent to or within road right of way. The only construction impacts are access changes (noise issues are addressed above). No land use changes or restrictions will result. AEP will coordinate access issues with the City and land owners to ensure their businesses are not disrupted and that their facilities can be accessed at all times. More details will be available at the time of the pre-construction meeting where the contractors will be present. It is not anticipated that construction in any one location will last more than a few days.

Please verify the location of the park identified as "Hayden Falls" in the application.

Hayden Falls Park is actually well north (over three miles) of both routes (where Hayden Run discharges into the Scioto River) and is not a factor in the project. The parks GIS database indicates a sliver of the park reaches as far south as the project area, but this appears to be an error.

In the cultural resources section, on pages 06-27 - 06-29, the Preferred and Alternate route sections appear to be swapped. Please clarify and/or correct.

The Cultural resources evaluation was conducted at the time when the City of Upper Arlington had expressed a preference for the southern route as the Preferred Route. The question correctly points out that these are swapped in the Cultural Resources Section of the Application.

The above-ground section of the Preferred Route passes near two previously identified historic structures. Please evaluate the potential impact to these structures and any mitigation procedures to be used to minimize impacts.

No impacts based on the location of an existing transmission line in the same place. There will be no additional encroachment on either property, the viewshed will remain similar, and the area is not currently aesthetically unique. No mitigation impacts planned.

Please provide the boundary of the area that will be disturbed during construction for all HDD entry and exit locations.

Precise boundaries have yet to be developed. Typical workspace limits for HDD entry areas are 110' X 250'. Typical exit area limits are 60' x200'.