

BEFORE

THE OHIO POWER SITING BOARD

In the Matter of the Application of)
American Transmission Systems,)
Incorporated for a Certificate to Construct) Case No. 11-4884-EL-BTX
the East Springfield-London-Tangy 138)
Kilovolt Transmission Line.)

In the Matter of the Application of)
American Transmission Systems,)
Incorporated for a Certificate to Expand) Case No. 11-4885-EL-BSB
the London Substation to Include a)
Transmission Switch.)

OPINION, ORDER, AND CERTIFICATES

The Ohio Power Siting Board (Board), coming now to consider the above-entitled matter, having appointed administrative law judges (ALJ) to conduct the public and evidentiary hearings, having reviewed the exhibits introduced into evidence, including the Joint Stipulations and Recommendations, and being otherwise fully advised, hereby waives the necessity for an ALJ report and issues its opinion, order, and certificates in these cases, as required by Section 4906.10, Revised Code.

APPEARANCES:

Porter Wright Morris & Arthur LLP, by Robert J. Schmidt and C. Darcy Copeland Jalandoni, 41 South High Street, Columbus, Ohio 43215, and FirstEnergy Service Company by Anne Juterbock, 76 South Main Street, Akron, Ohio 44308, on behalf of American Transmission Systems, Incorporated.

Mike DeWine, Ohio Attorney General, by John Jones, Assistant Attorney General, Public Utilities Section, 180 East Broad Street, 6th Floor, Columbus, Ohio 43215, and by Summer Plantz and Cameron Simmons, Assistant Attorneys General, Environmental Enforcement Section, 30 East Broad Street, 25th Floor, Columbus, Ohio 43215, on behalf of the Board's Staff.

Richard C. Pfeiffer, Jr., Columbus City Attorney, by John C. Klein, III, Deputy City Attorney, Real Estate Division, 109 North Front Street, 4th Floor, Columbus, Ohio 43215, on behalf of the city of Columbus.

Ice Miller LLP, by Christopher L. Miller, 250 West Street, Suite 700, Columbus, Ohio 43215-7509, on behalf of the Nationwide Realty Investors, Ltd.

OPINION:I. Summary of the Proceedings

All proceedings before the Board are conducted according to the provisions of Chapter 4906, Revised Code, and Chapter 4906, Ohio Administrative Code (O.A.C.).

On September 12, 2011, through September 15, 2011, American Transmission Systems, Incorporated (ATSI)¹ held four public information meetings, in Springfield, London, Plain City, and Dublin, Ohio, regarding applications to be filed with the Board to construct a transmission line and to convert a substation. The proofs of publication for the public information meetings were filed with the Board on November 18, 2011.²

On April 23, 2012, in Case No. 11-4884-EL-BTX (11-4884), ATSI filed a motion for a waiver of certain requirements for a transmission line application, yet to be filed, including waivers of: Section 4906.06(A)(6), Revised Code, regarding the one-year notice period; Rule 4906-5-04, O.A.C., regarding the requirement that the preferred and alternative routes have less than 20 percent in common; and Rule 4906-1-08, O.A.C., regarding the presentation of the wetland and stream maps. On April 23, 2012, , in Case No. 11-4885-EL-BSB (11-4885), ATSI also filed a motion for waiver of Rule 4906-5-04, O.A.C., regarding alternative substation site information for, a yet to be filed, substation application. In each case, on July 30, 2012, Staff filed correspondence indicating that it did not object to the motion for waivers.

On May 18, 2012, as amended on July 17, 2012, ATSI filed, with the Board, an application in Case No. 11-4884 for a certificate of environmental compatibility and public need to construct a 138 kilovolt (kV) transmission line (ATSI Ex. 1-L).

On May 18, 2012, ATSI also filed, with the Board, an application in Case No. 11-4885 for a certificate of environmental compatibility and public need to convert the London substation from a distribution substation to a distribution substation and a transmission switching substation (ATSI Ex. 1-S).

By letters filed July 20, 2012, the Board notified ATSI that its applications for the East Springfield-London-Tangy 138 kV transmission line project (Line Project) and the London Substation conversion project (Substation Project) were certified as sufficiently

¹ ATSI is a wholly-owned subsidiary of FirstEnergy Corporation.

² The proofs of publication for the public information meetings include a description of the proposed transmission line project and the proposed substation conversion project.

complete, pursuant to Rule 4906-5-05, O.A.C., to permit Staff to commence its review and investigation of the applications.

On May 29, 2012, ATSI filed motions for protective treatment to seal portions of the record in these cases in order to protect certain confidential trade secrets and critical energy infrastructure information, pursuant to the requirements of Section 1333.61, Revised Code. In addition, on September 6, 2012, ATSI filed a motion to consolidate the Line Project and the Substation Project for purposes of investigation and hearing. ATSI also filed a request, on September 20, 2012, that the public hearings for the Line Project and the Substation Project be held in January, 2013.

By entry issued November 5, 2012, ATSI's motions for waivers, to consolidate the Line Project and Substation Project for purposes of investigation and hearing, and for protective treatment, were granted. The November 5, 2012, entry also scheduled two local public hearings to be held on January 7, 2013, at 6:00 p.m., at the Pleasant Valley Fire Department in Plain City, Ohio, and on January 8, 2013, at 6:00 p.m., at the at London City Council Chambers in London, Ohio. The entry also scheduled an evidentiary hearing to commence on January 23, 2013, at 10:00 a.m., at the offices of the Board, 180 East Broad Street, Columbus, Ohio 43215. Further, the November 5, 2012, entry directed ATSI to publish notice of the applications and hearings, as required by Rule 4906-5-08, O.A.C., and directed that petitions to intervene by interested persons be filed within 30 days following publication of the first notice required by Rule 4906-5-08, O.A.C., but by no later than December 20, 2012.

Rule 4906-5-09(A), O.A.C., requires an applicant to file proof of the first public notice within 14 days of publication. On December 4, 2012, ATSI filed its proofs of publication of the first notices and a motion requesting acceptance of its proofs of publication. The proofs of publication were filed four days late and the motion requested that they be accepted. By entry issued December 12, 2012, the ALJ granted ATSI's motion to accept, as timely filed, its proofs of publication of the first notice. ATSI filed its proof of publication of the second notice on January 3, 2013. The proofs of publication for the first and second notices demonstrated that the notices were published in Clark, Delaware, Madison, and Union counties, as required by Rule 4906-5-08(C), O.A.C.

On December 20, 2012, Staff filed its report of investigation of the applications (Staff Report) (Staff Ex. 1). On that same date, the city of Columbus (Columbus) filed motions to intervene in 11-4884 and 11-4885. Nationwide Realty Investors, Ltd. (NRI) also filed a motion to intervene in 11-4884. By entry issued January 7, 2013, Columbus and NRI were granted intervention in 11-4884; however, Columbus' request to intervene in 11-4885 was denied.

The local public hearings were held, as scheduled, on January 7, and January 8, 2013. At the local public hearing on January 7, 2013, in Plain City, Ohio, 16 individuals offered testimony regarding the Line Project. At the local public hearing on January 8, 2013, in London, Ohio, seven individuals offered testimony regarding the Line Project. No public testimony was offered regarding the Substation Project.

Pursuant to the procedural schedule set forth in the November 5, 2012 entry, ATSI filed the testimony of Jay Ruberto (ATSI Ex. 3) on January 14, 2013, and Staff filed the testimony of Jim O'Dell on January 17, 2013. NRI filed a statement in lieu of testimony on January 17, 2013.

The evidentiary hearing commenced, as scheduled, on January 23, 2013, during which ATSI, Staff, NRI, and Columbus indicated that the parties had negotiated a Joint Stipulation and Recommendation resolving all the issues in 11-4884 (Joint Ex. 1-L). ATSI and Staff, the only two parties to 11-4885, also stated that they had negotiated Joint Stipulation and Recommendation³ resolving all the issues raised in that case (Joint Ex. 1-S). At the hearing, Mr. Ruberto testified in support of the Stipulations. Also admitted into evidence during the hearing were the respective applications (ATSI Ex. 1-L and 1-S, respectively), the proofs of publication of the notices as required by Rule 4906-5-08, O.A.C., (ATSI Ex. 2), and the staff's report of investigation (Staff Report)(Staff Ex. 1). ATSI also offered the testimony of Tracey J. Janis, in response to comments made at the public hearings, and the resume of Ms. Janis was admitted (ATSI Ex. 4).

II. Proposed Facility and Siting

According to the application, ATSI's system in Clark, Delaware, Madison, and Union Counties currently faces significant operational limitations. The purpose of the proposed Line Project and the Substation Project is to correct operational limitations, reinforce ATSI's system in the project area, and ensure reliable energy delivery in central Ohio. The proposed Line Project is necessary for the forecasted load growth and the interconnection of large customers. The proposed Line Project is needed to ensure compliance with the North American Electric Reliability Corporation (NERC) planning criteria, and load forecast as determined by PJM Interconnection LLC (PJM). Furthermore, according to the application, the Line Project, as proposed, represents the best option to resolve the capacity limitations, thermal overages, and voltage constraints of the existing infrastructure. ATSI claimed that construction of the Line Project will provide a new, robust electric supply in central Ohio and, thereby, correct the inadequate capacity available in the area. (ATSI Ex. 1-L at 2-1 to 2-2; ATSI Ex. 1-S at 1-4 to 1-5)

³ The Joint Stipulations and Recommendations in 11-4884 and 11-4885 shall be jointly referred to herein as the Stipulations.

The proposed Line Project involves the construction of a 138 kV transmission line, which would be the East Springfield-London-Tangy line, in two segments. The first segment, the East Springfield-London Line No. 2 is approximately 18.5 miles and will begin at ATSI's existing East Springfield Substation in Springfield, Clark County, Ohio and extend east to the existing London Substation, in Madison County. ATSI evaluated 60 routes for this segment of the Line Project. Both the preferred and alternate routes for the East Springfield-London segment of the Line Project incorporate installation of the proposed transmission line within an existing right-of-way on unused arms of existing transmission structures for approximately 14.5 miles (Common Section). ATSI requested, and was granted, a waiver of Rule 4906-5-04(A), O.A.C., which requires that the preferred and alternate routes have no more than 20 percent of the route in common. After the Common Section, the alternate and preferred routes travel approximately one mile to the London Substation. ATSI evaluated four routes for this portion of the Line Project. The preferred route would be installed on wood poles in an existing right-of-way, causing minimal additional aesthetic impact to nearby residences. The alternate route would have, in ATSI's opinion, a greater aesthetic impact and would require the acquisition of rights-of-way. (ATSI Ex. 1-L at 3-1 to 3-6.)

The second segment of the Line Project, the London-Tangy line segment, extends approximately 40 miles. The London-Tangy line segment will begin at the London Substation. The preferred and alternate routes of the London-Tangy line segment will extend approximately nine miles northeast to a tap to be connected to the planned site of a substation in Madison County. The proposed London-Tangy line segment would continue an additional 31 miles northeast to the Tangy Substation in Delaware County. ATSI stated that it evaluated a total of 395 routes for the proposed London-Tangy line segment. According to the application, the preferred route allows ATSI to use existing right-of-way to co-locate the proposed London-Tangy line segment parallel to existing overhead distribution lines to reduce aesthetic and ecological impacts and fewer impacts on the highest quality wetlands in the study area. The alternate route shares approximately 17 percent of its route in common with the preferred route. (ATSI Ex. 1-L at 3-1 to 3-6.)

As proposed, the Substation Project would involve the interconnection of two new 138 kV transmission line segments, which together comprise the proposed Line Project, to the existing London Substation. The London Substation interconnections would create the East Springfield-London No. 2 138 kV transmission line and the London-Tangy 138 kV transmission line circuits. Upon the completion of the proposed Substation Project and Line Project, the London Substation would be operated as both a distribution substation and transmission switching station. The proposed Substation Project can be accommodated within the fence line of the existing London Substation and would not require the acquisition of additional property. ATSI studied other potential locations for the Substation Project; however, alternate sites for the substation would require the

construction of a new substation, causing significantly more adverse impacts, and the relocation of the existing equipment and transmission lines at the London Substation. Therefore, ATSI requested, and was granted, a waiver of Rule 4906-5-04(A), O.A.C., which requires the submission of a proposed alternate substation site. (ATSI Ex. 1-S at 3-1 to 3-5.)

III. Certification Criteria

Pursuant to Section 4906.10(A), Revised Code, the Board shall not grant a certificate for the construction, operation, and maintenance of a major utility facility, either as proposed or as modified by the Board, unless it finds and determines all of the following:

- (1) The basis of the need for the facility if the facility is an electric transmission line or natural gas transmission line.
- (2) The nature of the probable environmental impact.
- (3) The facility represents the minimum adverse environmental impact, considering the state of available technology and the nature and economics of the various alternatives, and other pertinent considerations.
- (4) In case of an electric transmission line or generating facility, such facility is consistent with regional plans for expansion of the electric power grid of the electric systems serving this state and interconnected utility systems, and that such facilities will serve the interests of electric system economy and reliability.
- (5) The facility will comply with Chapters 3704, 3734, and 6111, Revised Code, and all rules and standards adopted under those chapters and under Sections 1501.33, 1501.34, and 4561.32, Revised Code.
- (6) The facility will serve the public interest, convenience, and necessity.
- (7) The impact of the facility on the viability as agricultural land of any land in an existing agricultural district established under Chapter 929, Revised Code, that is located within the site and alternative site of the proposed major facility.
- (8) The facility incorporates maximum feasible water conservation practices as determined by the Board, considering available technology and the nature and economics of various alternatives.

IV. Summary of the Evidence

A. Local Public Hearings

At the local public hearings, a total of 22 witnesses testified regarding the proposed Line Project; however, no testimony was offered regarding the proposed Substation Project. Eleven of the witnesses offering testimony at the public hearings, including a county official, a county engineer, and a representative of The Friends of Concord Township, who offered a petition reported to include 1,400 signatures, endorsed the installation of the proposed transmission line along the preferred route. Witnesses argued that the preferred route incorporates the use of existing rights-of-way, thus, avoiding the need to acquire new rights-of-way, avoiding additional aesthetic impacts and reducing the cost of the Line Project. Some of the witnesses acknowledged that they endorsed the preferred route because the alternate route would cross their property. One witness expressed concern that the preferred route would interfere with the city of Springfield's plan to develop residential and commercial property near National Road and Bird Road. The Union County Engineer testified that installation of the transmission line along the preferred route in Union County on Route 42 could conflict with future plans to widen the highway or make improvements to the intersection. Six witnesses offered testimony in support of the alternate route. Among the testimony offered, a couple of witnesses asserted that construction of the Line Project along the alternate route would inhibit development on their property. Two other witnesses stated that construction of the Line Project along the preferred route would put Tuffco Sand and Gravel Quarry out of business; therefore, they supported installation along the alternate route. Other individuals advocated for the alternate route to avoid any perceived impact on surrounding property values if the line is installed along the preferred route. One witness, who testified on behalf of the Nature Conservancy, endorsed the comments submitted by the Ohio Department of Natural Resources (ODNR). (Plain City Tr. at 8-74; London Tr. at 7-21.)

B. Evidentiary Hearing

At the evidentiary hearing, ATSI offered the testimony of Jay A. Ruberto, Senior Advisor in the Transmission and Substation Group of Energy Delivery for FirstEnergy Service Company.⁴ Mr. Ruberto testified that, in his career with FirstEnergy, as well as his prior employer, he is familiar with transmission siting matters and the process of preparing such applications in Ohio. Mr. Ruberto sponsored the application for the Line Project (ATSI Ex. 1-L) and the application for the Substation Project (ATSI Ex. 1-S). Further, Mr. Ruberto testified that ATSI has staff responsible for monitoring public comments and inquiries. In this instance, as project lead, Mr. Ruberto is responsible for

⁴ FirstEnergy Service Company is an affiliate of ATSI and a subsidiary of FirstEnergy Corporation.

ensuring that there is a response to each inquiry or comment. Mr. Ruberto offered that, to the best of his knowledge, every effort has been made to respond to all public comments received on the projects. (Hearing Tr. at 9-11, 13-14.)

Further, Mr. Ruberto testified that he was familiar with the Stipulations negotiated by the parties to each case (Joint Ex. 1-L and Joint 1-S). Mr. Ruberto testified that the Stipulations are the product of serious bargaining among capable and competent parties and that, to the best of his knowledge and belief, the Stipulations do not violate any important regulatory principle or practice. According to Mr. Ruberto, there is a significant need for new electric transmission in the project area and the Stipulations allow the proposed projects to move forward to the benefit of consumers and the public interest. (Evidentiary Hearing Tr. at 18-20.)

ATSI also presented the testimony of Tracey Janis, Interim Manager of Right of Way Services for FirstEnergy Service Company. Ms. Janis testified that, in her current position, she is responsible for the acquisition of land rights associated with transmission projects. In response to testimony offered at the public hearing, Ms. Janis asserted that, despite the claims of certain witnesses, ATSI communicates with property owners, their counsel and/or their surveyors regarding easements and rights-of-way. Further, Ms. Janis testified, in particular, that ATSI representatives also discussed one witness's right-of-way with him at the public information meetings held in September, 2011. Ms. Janis offered that, subsequent to the public information meetings, a meeting was held with the property owner, his counsel, his surveyor, and representatives of FirstEnergy. Ms. Janis testified that it was her understanding that an agreement was reached between the parties regarding the location of the easement. Further, Ms. Janis stated that the witness's property was subject to the easement prior to the current owner's purchase of the property and that the easement is a recorded, perpetual easement that does not allow future use of the easement. (Evidentiary Hearing Tr. at 21-25.)

Ms. Janis was also familiar with property leased to Tuffco Sand and Gravel Quarry in Madison County, along the preferred route. Ms. Janis testified that the preferred route traverses an existing FirstEnergy easement on the property and the operation of the quarry on the property significantly impacts ATSI's ability to construct on the easement. In Ms. Janis' opinion, operation of the quarry on the property violates the terms of the recorded easement. Ms. Janis represented that ATSI, the owners of the property, and Tuffco Sand and Gravel Quarry continue to discuss the easement. (Evidentiary Hearing Tr. at 25.)

Finally, Ms. Janis acknowledged that the preferred route parallels U.S. 40 in Springfield, Ohio and crosses nine parcels of land in the area. Of the nine parcels crossed, Ms. Janis noted that the property owners of seven of the parcels have agreed to the terms and conditions of the easement for the Line Project. She further testified that, even with

the construction of the transmission line, the parcels could be developed for commercial purposes. (Evidentiary Hearing Tr. at 26.)

C. Basis of Need (Section 4906.10(A)(1), Revised Code)

According to the Staff Report, ATSI believes that the Line Project and the Substation Project are necessary to ensure reliability of the local and regional electric grid. The projects are needed to support recent and future increases in electric load and to maintain proper voltage levels and thermal ratings. Without the projects, FirstEnergy would be unable to maintain compliance with the NERC planning criteria for the ATSI 138 kV system, PJM planning criteria, and FirstEnergy's internal transmission planning criteria for the 69 kV sub-transmission system. (Staff Ex. 1 at 9.)

The O.A.C. requires electric utilities and transmission owners to file a forecast report. The report requires a 10-year plan of committed or tentatively projected projects on the bulk power transmission network. The projects in this case were identified in ATSI's 2011 long-term forecast report, Case No. 11-1435-EL-FOR, *In the Matter of the Long-Term Forecast Report of FirstEnergy Corporation and Related Matters*. (Staff Ex. 1 at 9.)

PJM is the regional transmission organization charged with planning for upgrades to the regional transmission system in Ohio. PJM issues an annual Regional Transmission Expansion Plan (RTEP) that analyzes reliability criteria, operational performance of the transmission system, and economic and environmental factors. The RTEP provides for the construction of expansions and upgrades of the PJM transmission system, as needed to maintain compliance with reliability criteria and to enhance the economic and operational efficiency of wholesale electricity markets in the PJM region. The transmission line and substation projects were identified by PJM in the 2011 RTEP and approved by the PJM Board in February, 2012. (Staff Ex. 1 at 9.)

Electric demand has recently been increasing by an average rate of one percent per year in the area. Prior to the economic recession that began in 2008, electric demand in the area was growing at a rate of two percent or greater. PJM forecasted that electric demand will continue to grow at an average rate of one percent per year in the area. FirstEnergy used a one percent load growth rate in their analysis of the projects. On July 21, 2011, the ATSI zone load reached an all-time system peak of 14,039 megawatts (MW), which was 700 MW greater than what PJM projected for the summer of 2011. The project area system load reached 414 MW, which was 19 MW more than what the local electric distribution utility had planned. (Staff Ex. 1 at 9-10.)

There has also been significant residential growth in the project area. ATSI provided data that suggests demand will continue to increase in the project area. Delaware County is the fastest growing county in the state of Ohio, according to the

Delaware County Regional Planning Commission in 2012. Delaware County is expected to grow by approximately 24 percent between the years 2010 and 2020. The commercial and industrial sectors are also increasing their demand for electricity. Recent additions to the system include a hospital, a warehouse, and a distribution center, which has added approximately 9 MW of load to the system. There are future plans for companies to expand or construct new facilities that would require at least 10 MW of additional electricity. (Staff Ex. 1 at 10.)

The proposed substation and line would reinforce the ATSI transmission system and not adversely affect neighboring utilities. PJM and ATSI studies confirmed that the construction of the proposed transmission line would improve reliability by correcting thermal overloads, capacity limitations, and voltage violations. (Staff Ex. 1 at 10.)

Staff concluded that ATSI has demonstrated the basis of need due to the reliability problems caused by continued load growth in the project area. PJM predicted that load is expected to grow at the rate of one percent per year and record summer peak loads were set during the summer of 2011. With the increasing system loads, due to population, commercial, and industrial growth, the system is in jeopardy of not complying with PJM and NERC planning criteria, making the system unstable and unreliable. The proposed project would allow the transmission system to provide safe, reliable electric service, while meeting all the applicable ATSI, NERC, and PJM reliability criteria. Staff recommended that the Board find the basis of need for the transmission line and substation projects has been demonstrated as required by Section 4906.10(A)(1), Revised Code. (Staff Ex. 1 at 10.)

D. Nature of Probable Environmental Impact and Minimum Adverse Environmental Impact (Sections 4906.10(A)(2) and (3), Revised Code)

The proposed Substation Project is located in Madison County and the Line Project would traverse Clark, Union, Madison, and Delaware counties. The population change from the years 2000 to 2001 in the majority of the unincorporated areas in Clark, Union, and Madison Counties ranging from a 10 percent decline to a three percent increase. Incorporated areas, townships adjacent to incorporated areas, and Delaware County have increased in population since 2000 at rates ranging from an increase of 13 percent to 347 percent. The proposed line would pass through the population centers of Springfield, London, and Plain City. However, both the preferred and alternate routes primarily follow existing electric distribution rights-of-way through agricultural tracts away from the densely-populated incorporated areas of Delaware County. (Staff Ex. 1 at 11.)

There are 1,447 residences within 1,000 feet of the preferred route, 16 of which are within 100 feet of the preferred route. The closest residence would be approximately 25 feet from the proposed transmission line along the preferred route. Ten of the 16

residences within 100 feet of the preferred route are located where the transmission line would be constructed on existing open arm structures. Four of the 16 residences within 100 feet of the proposed line are located where the preferred route would be adjacent to an existing electric distribution line, but would be more than 60 feet away from the proposed line. No residences would be removed for construction or operation of the transmission line. However, construction would permanently alter residential land within the project right-of-way. (Staff Ex. 1 at 11-12.)

There are three commercial facilities within 1,000 feet of the preferred route, none of which are within 100 feet of the route. Two facilities are within 1,000 feet of the alternate route, none of which are within 100 feet of the alternate route. No negative impacts to commercial land uses are expected from construction, operation, or maintenance of the Line Project. (Staff Ex. 1 at 12.)

Six industrial facilities are within 1,000 feet of the preferred route, one of which is less than 100 feet away and is crossed by the preferred route. There is a quarry that ATSI proposes to cross on existing, unused right-of-way, which would reduce the minable area in the quarry. Construction along the preferred route would limit full use of the quarry. There are two industrial facilities along the alternate route, the closest of which is located within 450 feet of the alternate route. There is one industrial facility within 1,000 feet of the common route. (Staff Ex. 1 at 12.)

No agricultural uses or recreational uses would be impacted by these projects. Two recreational uses were identified within 1,000 feet of the preferred route and four recreational uses were identified within 1,000 feet of the alternate route, but no recreational uses would be impacted by the projects. (Staff Ex. 1 at 12.)

ATSI conducted a literature review for the area within 1,000 feet of either side of each transmission line route. Two Ohio Historic Inventory (OHI) structures, no National Register of Historic Places (NRHP) listed structures, and no historic districts were identified within the study area for the preferred route. Two OHI structures, no NRHP listed structures, and no historic districts were identified within the study area for the alternate route. No historic structures, NRHP listed structures, or historic districts were identified within the study area for the Common Section. Staff, in coordination with Ohio Historic Preservation Office (OHPO), conducted a field review of the project. Based on observations from the field review, Staff concluded that an architectural-history survey should be required for the project and that the survey should reflect the recommendations filed by OHPO. (Staff Ex. 1 at 12.)

No archaeological sites were identified within the 100-foot study corridor of either transmission line route alternative. ATSI conducted the literature review for the area. There have been archaeological surveys in several areas within 1,000 feet of the routes.

However, Staff, after consulting with OHPO, concluded that a Phase 1 archaeological survey of certain sections of the preferred route is necessary. Staff recommended that ATSI be required to develop a study plan in consultation with Staff and OHPO for the preferred route. Furthermore, for the substation and any substation expansions, shovel testing with 15-meter spacing should be conducted for the newly impacted area. There is potential for archaeologically-sensitive settings at all major stream crossings, especially where the preferred route crosses Little Darby Creek. Stream crossings would require intensive shovel testing, including clusters of shovel testing at pole locations and evenly-spaced between pole locations. The majority of the routes traverse agricultural fields and the upland fields would also require shovel testing. Many of the non-upland fields would not require shovel testing and could be visually surveyed by walking select transects along the route. Both routes proposed for the line are viable with respect to cultural resources, but Staff's recommendations were limited to the preferred route. (Staff Ex. 1 at 13.)

Permanent visual impacts would result from the introduction of a new man-made element to the landscape and the removal of trees from the line right-of-way. Where the line corridor crosses wooded areas, vegetative clearing would be required across the entire 80 to 100 foot width of the transmission line right-of-way, and the overhanging branches of some nearby trees would be trimmed to ensure reliable operation of the line. Aesthetic impact would vary with the viewer and setting, and depend on the degree of contrast between the proposed transmission line and the existing landscape. Portions of the line would be constructed over open and wooded area, and aesthetic contrast with surrounding rural land would be greater in these areas. ATSI has sited the proposed line to minimize aesthetic impacts of the project to the greatest extent practicable. The line has been designed to avoid area residences and utilize the existing right-of-way where possible. (Staff Ex. 1 at 13.)

The estimates of applicable intangible and capital costs for the proposed London Substation portion are \$1,325,000. The applicable intangible and capital costs associated with the 138 kV transmission line for the preferred route is \$26.7 million and for the alternate route is \$31.6 million. (Staff Ex. 1 at 14.)

The preferred site for the London Substation is located at the existing London Substation, which is within the city limits of London in Madison County, Ohio. The approximate increase in annual property taxes, based on 2012 tax rates, associated with the substation in the first year is \$74,896. The approximate annual property taxes associated with the transmission line for the preferred route is \$1,551,111 and for the alternate route is \$1,799,302. These projects are anticipated to have a small, but positive, impact on the local economy, as a portion of the construction labor and materials would be drawn from local resources. (Staff Ex. 1 at 14.)

The preferred route construction corridor for the transmission line contains 37 streams, with 3,456 linear feet of stream within the proposed 40 to 90 foot construction corridor. The common route construction corridor of the line contains 10 streams, with 762 linear feet of stream within the proposed 60 foot construction corridor. The alternate route construction corridor contains 38 streams, with 4,372 linear feet of stream within the proposed 50 to 60 foot construction corridor. No streams or drainage channels were identified within 100 feet of the substation site. (Staff Ex. 1 at 14.)

The preferred and alternate routes of the London-Tangy segment of the Line Project crosses Big Darby Creek and Little Darby Creek, which are listed as State and National Scenic Rivers. The proposed crossing locations of Big Darby Creek and Little Darby Creek were determined after Staff held meetings with the ODNR Scenic Rivers Program to identify locations that would minimize impacts to the rivers. Based on coordination with the ODNR Scenic Rivers Program, ATSI will incorporate engineering changes to the preferred route to overbuild an existing structure at the Big Darby Creek crossing to minimize impacts to the riparian corridor and associated floodplain wetlands. Both the preferred and alternate routes cross the Big Darby Creek and Little Darby Creek in areas that parallel existing utility corridors and were selected to minimize vegetation clearing to the maximum extent practical. Staff recommended that ATSI be required to develop a streamside vegetation restoration plan to offset impacts to the riparian corridors along Little Darby Creek associated with the clearing of the riparian vegetation within ODNR's Little Darby Creek Corridor Protection Project. The plan would include locations where ATSI would replant appropriate low-growing, shrubby vegetation along all stream banks to be cleared. The plan would also include locations where ATSI would plant additional vegetation along Little Darby Creek in coordination with the ODNR Scenic Rivers Program. ATSI would not conduct mechanized clearing within 25 feet of any stream channel. Stumps would be left in place to help maintain bank stability. To further limit impacts to the streams, tree clearing, which would be conducted by hand, would be limited to those trees that are perceived as posing an imminent risk to the construction and operation of the facility. All vegetative waste, such as tree limbs and hunks generated during construction, would be wind-rowed or chipped and disposed of appropriately. However, no windrowed or chipped vegetation, or other project-related material, would be left in wetlands or in riparian areas within 50 feet of any stream. (Staff Ex. 1 at 14-15.)

The preferred and alternate routes of the London-Tangy segment both cross the Scioto River, a Section 10 stream regulated by the U.S. Army Corps of Engineers (USACE). The alternate route of the London-Tangy segment crosses a 660-foot wide portion of the Scioto River that was impounded in 1925 to create the 912-acre O'Shaughnessy Reservoir. The preferred route of the London-Tangy segment crosses the Scioto River approximately 1.5 miles north of the alternate route, where the river is narrower, approximately 200 feet across. (Staff Ex. 1 at 15.)

The preferred route construction corridor contains 21 delineated wetlands, totaling 2.19 acres. The centerline of the preferred route crosses 12 wetlands, totaling 1,732 linear feet crossed by the line. The common route construction corridor of the East Springfield-London segment contains six wetlands, totaling 0.84 acres. The centerline of the common route spans five wetlands totaling 295 linear feet. The alternate route construction corridor contains 22 wetlands, totaling 2.43 acres. The centerline of the alternate route crosses 12 wetlands totaling 1,437 linear feet. No wetlands were identified within 100 feet of the London substation site. (Staff Ex. 1 at 15.)

The Staff Report indicated that ATSI would take care to avoid or minimize the tilling and introduction of sedimentation into wetlands, which could occur as a result of construction activities. The wetlands along the East Springfield-London segment and London-Tangy segment are expected to be spanned by new conductors, with the new transmission structures being installed in upland areas. The common route of the East Springfield-London segment uses existing structures, none of which are located within a wetland. Wetlands would be clearly staked prior to the commencement of any clearing in order to minimize incidental vehicle impacts. Operation of heavy mechanized equipment is not planned within any identified wetland, although some construction equipment would need to cross wetlands using timber matting. Selective hand-clearing would be required to remove woody vegetation in wetlands that might impede construction or interfere with operation of the transmission line. (Staff Ex. 1 at 15.)

In order to minimize impacts to surface waters, Staff recommended that ATSI be required to provide a construction access plan for review prior to the preconstruction conference, as outlined in the conditions. The plan would consider the location of streams, wetlands, wooded areas, and sensitive plant species, as identified by the ODNr, Division of Wildlife (ODNR-DOV), and explain how impacts to all sensitive resources would be avoided or minimized during construction, operation, and maintenance. Staff also recommended that, for both construction and future right-of-way maintenance, ATSI should limit, to the greatest extent possible, the use of herbicides in proximity to surface waters, including wetlands along the right-of-way. Individual treatment of tall-growing, woody plant species is preferred, while general, widespread use of herbicides during initial clearing or future right-of-way maintenance should only be used where no other options exist. (Staff Ex. 1 at 15-16.)

No ponds, lakes, or reservoirs were observed by Staff at the London Substation site. Other than the O'Shaughnessy Reservoir, no major lakes or reservoirs were observed by Staff along the preferred or alternate routes. The preferred route of the London-Tangy segment crosses over two quarries that contain ponds, with the proposed centerline spanning four ponds for a distance of 803 linear feet. The proposed centerline for the

alternate route of the London-Tangy segment spans one pond for a distance of 209 linear feet. No ponds were identified along any other route segments. No impacts are anticipated to the reservoir and ponds from construction, operation, or maintenance of the proposed transmission line. Best management practices, including utilization of silt fencing, should be used, as appropriate, during construction to minimize erosion and runoff siltation. (Staff Ex. 1 at 16.)

The preferred and alternate routes cross through several vegetative communities. All impacts to each vegetative community would be associated with the clearing within the proposed new transmission line right-of-way and potentially along access roads. However, Staff expects that additional trees, such as hazard trees located outside the right-of-way, could be removed if they have a potential to interfere with safe construction and operation of the transmission line. Staff recommended that ATSI be required to provide information on vegetative clearing in the construction access plan. The London Substation project site is currently utilized as a substation, and no wooded or herbaceous areas are located on the substation footprint. Therefore, no potential impacts to woody and herbaceous vegetation are proposed for the Substation Project. (Staff Ex. 1 at 16.)

According to the Staff Report, ATSI requested information from the ODNr and the United States Fish and Wildlife Service (USFWS) regarding state and federally listed threatened and endangered plant and animal species. Additional information was provided through field assessments and review of published ecological information. Suitable habitat for the loggerhead shrike, Eastern massasauga, and Indiana bat exists within the project area for the proposed transmission line. Construction of the Substation Project would occur within the existing substation footprint and should not impact protected species due to the lack of suitable habitat. (Staff Ex. 1 at 16, 18.)

Loggerhead shrikes prefer open habitat characterized by low-growing grasses and forbs interspersed with bare ground and shrubs or low trees. The proposed Line and Substation Projects could negatively impact this species primarily through associated construction activities during its nesting period. Therefore, if grassland or prairie habitat would be impacted, construction must not occur in this habitat during the species' nesting period of April 1 to August 1. (Staff Ex. 1 at 19.)

The western section of the East Springfield-London segment lies within the range of the Eastern massasauga. Eastern massasaugas hibernate in low, wet areas, primarily in crayfish burrows, but may use other structures. Presence of a water table near the surface is important for a suitable hibernaculum. In the summer, massasaugas use drier, open areas that contain a mix of grasses and forbs such as goldenrods and other prairie plants that may be intermixed with trees or shrubs. Adjoining lowland and upland habitat with variable elevations between are critical for the species to travel back and forth seasonally. Should the proposed project area contain any of the habitat types or features described

above, the USFWS and Staff recommended that a habitat survey be conducted to determine if suitable habitat for the species exists within the vicinity of the proposed project. The survey would be conducted by an USFWS and ODNR approved herpetologist. If Eastern Massasaugas are not detected, then no further avoidance and minimization measures would be required. If the Eastern Massasaugas are detected, or if a survey is not conducted, then the presence of this species would be assumed and ATSI would need to implement USFWS and ODNR approved avoidance and minimization measures. (Staff Ex. 1 at 14.)

The Indiana bat has an historical range that includes the project area. As a tree-roosting species during the nonwinter months, the Indiana bat, if present at the site, could be negatively impacted as a result of the tree clearing associated with construction and maintenance of the project. Limiting tree removal, particularly in the areas identified as potential Indiana bat habitat, would help reduce potential impacts to this species. In order to reduce potential negative impacts to this species, ODNR and Staff recommended that ATSI be required to adhere to seasonal cutting dates (September 30 through April 1) for the clearing of trees that exhibit suitable Indiana bat summer habitat, such as roosting and maternity roost trees. (Staff Ex. 1 at 19.)

According to the Staff Report, ATSI stated that soil tests are not anticipated for the design and construction of the transmission line. ATSI plans to use existing poles and new wood poles, so foundation work would not be necessary. ATSI also indicated that, in the event the final design of the approved route requires steel structures on concrete foundations, ATSI would perform soil tests according to common engineering methods. The samples collected would be used to determine soil type and other engineering properties. Rock coring would commence if encountered during the course of auguring and soil sampling. ATSI does not expect to core greater than five to 10 feet into the bedrock. (Staff Ex. 1 at 19.)

ATSI has categorized the various soil associations crossed along the East Springfield-London segment and the London-Tangy segment corridors. Soil types exceeding 12 percent slope were identified within the construction corridors of the preferred and alternate routes, except in the eastern section of the East Springfield-London segment. Slopes exceeding 12 percent can limit building site development and other construction activities. When disturbed, the soil on these slopes is subject to slippage if fill is placed on the soil or the slope is undercut, removing toe support. Runoff and erosion also increases during construction. Temporary cover should be established as soon as possible to prevent this occurrence. ATSI, through its desktop survey, did not find any soil types or conditions, for either the preferred or alternate routes, that would potentially limit the construction of the proposed transmission line. (Staff Ex. 1 at 20.)

The most recent recorded seismic event near the project area took place in Clark

County on October 4, 1980, at a magnitude of two. The oldest record of seismic activity closest to the project area occurred west of the city of Urbana, in Champaign County, in 1843. ATSI does not anticipate seismic activity having any effect on this project. (Staff Ex. 1 at 20.)

The project crosses a number of major roads, one interstate highway, and several railroads. The transmission line project would be constructed above ground, using the existing utility corridor and new right-of-way. Traffic signals and other overhead utility lines should not be impacted by the construction of the Line Project. ATSI does not expect to disrupt traffic or cause any damage to roads and bridges during construction of the project. (Staff Ex. 1 at 20.)

Staff concluded that the nature of the probable environmental impact has been determined for the proposed facility and complies with the requirements set forth in Section 4906.10(A)(2), Revised Code, provided that any certificate issued by the Board include the conditions as set forth in the Staff Report. (Staff Ex. 1 at 20.)

E. Minimum Adverse Environmental Impact (Section 4906.10(A)(3), Revised Code)

Pursuant to Section 4906.10(A)(3), Revised Code, the proposed facility must represent the minimum adverse environmental impact, considering the state of available technology and the nature and economics of the various alternatives, along with other pertinent considerations. ATSI conducted a systematic route selection study to identify preferred and alternate transmission line routes that minimize cost, as well as ecological, cultural, and land use impacts. ATSI mapped land use, ecological, engineering, and cultural attributes in the study area that represent possible constraints to the transmission line construction. Primary constraints included the Scioto River, woodlots, wetlands and streams, habitat of endangered or threatened species, high-density residential development, sensitive land uses, road and railroad crossings, and sites of historic or archaeological significance. ATSI identified 395 potential routes that avoid these major site constraints to the greatest extent practicable. ATSI then evaluated the potential corridors against 25 quantifiable characteristics of the project area, assigning each route a numerical score that ranks its overall desirability. Route scores ranged from 19.56 to 78.14, with the lower scores representing fewer potential impacts. The first and third ranked routes are the top two routes that do not share more than 20 percent in-common. (Staff Ex. 1 at 21.)

ATSI identified several other route segments that merited further review based on the potential to locate the route in existing right-of-way. In addition, these route segments would avoid known high-value wetlands that were not identified in the preliminary route evaluation. Based on the further evaluation, ATSI selected the 40th ranked route as the

preferred route and the 3rd ranked route as the alternate route. ATSI received a waiver from the requirement that no more than 20 percent of the preferred and alternate routes be in-common. Approximately 15 miles of the proposed routes between East Springfield and London are in-common, because the transmission line would be located on existing open arm structures. The construction of the proposed Line Project would provide for the electrical system demands that have resulted from increased residential, commercial, and industrial growth in the area. Upon completion of the Line Project, as well as the Substation Project, the electrical transmission system in the area would meet all applicable planning and reliability guidelines. Impacts for the proposed project are dramatically reduced by ATSI's utilization of existing structures and right-of-way. Approximately 15 miles of the proposed Line Project can be installed on the open arms of existing steel lattice towers. The majority of the remaining 43 miles parallel existing transmission and distribution line right-of-way. The fence line for the existing London Substation would not have to be modified to accommodate the new electrical interconnections. Only a slight modification of existing equipment at the London Substation is required; thus, substantial cost savings are realized and potential land use conflicts are avoided. (Staff Ex. 1 at 21.)

Generally, impacts to land uses are similar for both proposed transmission line routes. However, the alternate route would require approximately \$5,000,000 more to acquire land rights. The preferred and alternate routes for the Line Project will cross the Scioto River. ATSI consulted extensively with Staff and the ODNR Scenic Rivers Program to select potential crossing locations. Both routes utilize existing electrical distribution corridors. ATSI has agreed to engineering approaches that allow the distribution and transmission lines to be overbuilt, thus, allowing structures to be condensed into a much smaller right-of-way. The preferred route crosses the Scioto River where the river significantly narrows, needing to traverse only about 200 feet, rather than 600 feet for the alternate route. Impacts to wetlands, ponds, and other ecologically sensitive areas are similar for both routes. Potential impacts would be minimized by ATSI's development of vegetation management and access plans. Coordination with appropriate agencies and the employment of an environmental specialist would also be required. (Staff Ex. 1 at 21-22.)

Staff concluded that the preferred transmission line route and substation represent the minimal adverse environmental impact, and comply with the requirements specified in Section 4906.10(A)(3), Revised Code, provided that any certificate issued by the Board include the conditions as set forth in the Staff Report. (Staff Ex. 1 at 22.)

F. Electric Power Grid (Section 4906.10(A)(4), Revised Code)

The purpose of the proposed Line Project and Substation Project is to address operational limitations and to ensure reliable electric service in the service area. The proposed projects would be within the PJM control area. According to studies performed by ATSI and PJM, without the Line Project and Substation Project, the energy

delivery system in the area will experience capacity limitations and voltage collapses by 2015 and is insufficient to handle projected system load growth. (Staff Ex. 1 at 23-24.)

According to ATSI, the load east of the proposed Substation Project is served by two radial 69 kV transmission lines looped together by an open 69 kV line switch. Based on projected future load forecast for 2015, with the loss of either 69 kV line, the remaining line would not be able to carry the entire load without violating operating criteria. Further, under summer conditions, the 138 kV transmission facilities fail to meet NERC reliability standards and exceed rated capacity limits. (Staff Ex. 1 at 24.)

ATSI performed a load flow study in the Line Project area using PJM forecast summer peak load conditions, with and without the proposed Line Project, under a variety of contingencies. The study revealed that, using the July 21, 2011, all-time system peak with a one percent yearly growth rate, voltages were outside the planning criteria. With the proposed projects in-service, the voltage issues were resolved. (Staff Ex. 1 at 24.)

Further, the proposed projects were identified in PJM's study as supplemental projects in the RTEP and approved by the PJM Board. Staff believed the studies demonstrate that, without the proposed projects, ATSI will be unable to maintain compliance with PJM and NERC reliability criteria. Staff recommended that the Board find that the proposed Line and Substation Projects are consistent with the plans for expansion of the electric grid service in Ohio and its interconnected utility systems, and would serve the interests of electric system economy and reliability. On that basis, Staff recommended the Board find that the proposed projects comply with the requirements of Section 4906.10(A)(4), Revised Code, provided the certificates include the conditions specified in the Staff Report (Staff Ex. 1 at 25.)

G. Air, Water, Solid Waste, and Aviation (Section 4906.10(A)(5), Revised Code)

Pursuant to Section 4906.10(A)(5), Revised Code, the facility must comply with specific sections of the Ohio Revised Code regarding air and water pollution control, withdrawal of waters of the state, solid and hazardous wastes, and air navigation. Air quality permits are not required for construction of the proposed facilities. ATSI will control fugitive dust through dust suppression techniques such as irrigation, mulching, or application of tackifier resins. These methods of dust control are sufficient to comply with fugitive dust rules. (Staff Ex. 1 at 26.)

Neither construction nor operation of the proposed facilities would require the use of significant amounts of water, so requirements under Sections 1503.33 and 1501.34, Revised Code, are not applicable to the proposed projects. ATSI would apply for the Ohio National Pollutant Discharge Elimination System (NPDES) Construction Water

General Permit, Ohio Environmental Protection Agency (EPA) No. OHC000003, and seek coverage under the USACE Nationwide Permit (12) Utility Line Activities, for stream and wetland impacts associated with the proposed transmission line. ATSI intends to submit a notice of intent for coverage under the Ohio EPA's NPDES General Permit for Storm Water Discharges Associated with Construction Activity and a related Storm Water Pollution Prevention Plan (SWPPP). This SWPPP would be developed for the projects pursuant to Ohio EPA regulations and would conform to the ODNr's Rainwater and Land Development Manual, including a detailed construction access plan. Following the SWPPP, as well as using best management practices for construction activities, would help minimize any erosion-related impacts to streams and wetlands. Wetlands, streams, and other environmentally sensitive areas shall be clearly identified before commencement of clearing or construction. No construction or access would be permitted in these areas, unless clearly specified in the construction plans and specifications, thus, minimizing any clearing-related disturbance to surface water bodies. With these provisions, construction of this facility would comply with requirements of Chapter 6111, Revised Code. Solid waste generated from construction activities would include items such as conductor scrap, construction material packaging including cartons, insulator crates, conductor reels, and wrapping, and used storm water erosion control materials. All construction-related debris would be disposed of in Ohio EPA approved landfills, or other appropriately licensed and operated facilities. Any contaminated soils discovered or generated during construction would be handled in accordance with applicable regulations. ATSI plans to have a Spill Prevention Plan in place and would follow manufacturer's recommendations for any spill cleanup. Vegetation waste from clearing activities would be removed or windrowed along the edge of the right-of-way. Marketable timber would be cut into appropriate lengths for sale or disposition by the landowner and stumps would not be removed. However, no timber, firewood, windrowed vegetation, or other project-related material will be left in wetlands or in riparian areas within 50 feet of any stream. ATSI's solid waste disposal plans would comply with solid waste disposal requirements in Chapter 3734, Revised Code. (Staff Ex. 1 at 26-27.)

For the proposed transmission line, the height of the tallest anticipated above-ground structure and construction equipment is approximately 90 feet. According to the Federal Aviation Administration (FAA) Office of Aeronautical Information Services (OAI), 10 airports and two heliports are located in Clark County. Two airports, an airstrip, and one heliport are located in Madison County. The Madison County Hospital heliport and a small airstrip in Madison County are within 0.5 miles of the proposed routes. Union County has seven airports, one airstrip, and two heliports. Mitchell Airport is the only one of these Union County facilities within 0.5 miles of the proposed routes. Delaware County has 12 airports, three heliports, and one ultralight facility. Although the exact pole locations have not been determined, points at five-mile intervals along the proposed routes were entered into FAA's Notice Criteria Tool website. Based

on the coordinates, elevations, and heights of these locations, four areas exceeded the notice criteria. In these zones, an additional evaluation was conducted for major turning points where poles would likely be required. Ten major turning points were located in areas that exceeded the notice criteria. (Staff Ex. 1 at 27.)

All of the areas that exceeded the notice criteria were listed as being in the vicinity of two airports: Madison County Airport and Delaware County Airport. Based on this preliminary information, additional coordination with the FAA and the Ohio Department of Transportation (ODOT) Office of Aviation (OA) would be required. FAA 7460-1 Forms must be completed and submitted to both the FAA and ODOT-OA. Once submitted, a determination would be made as to whether or not the proposed construction or alteration would constitute a hazard to air navigation. For the substation, the height of the tallest existing above ground structure and construction equipment is expected to be 58 feet. According to the FAA-OAI, two airports, an airstrip, and one heliport are located in Madison County. Of these registered facilities, only the Madison County Hospital heliport is located within one mile of the substation. Madison County Hospital heliport is located approximately 0.5 miles to the northeast of the London Substation. The 58-foot feature height was added to the base elevation of the center of the substation footprint and entered into the FAA's Notice Criteria Tool website. Based on the coordinates, elevations, and heights of the substation project, notification is required. An FAA Form 7460-1 must be completed and submitted to both the FAA and ODOT-OA. Once submitted, a determination would be made as to whether or not the proposed construction or alteration would constitute a hazard to air navigation. In accordance with Section 4561.32, Revised Code, Staff contacted the ODOT-OA Aviation during review of this application in order to coordinate review of potential impacts of the proposed facilities on local airports and no concerns were identified. (Staff Ex. 1 at 27.)

Staff, therefore, contended that the facility will comply with the requirements contained in Section 4906.10(A)(5), Revised Code, provided the proposed facility includes the conditions provided in the Staff Report. (Staff Report at 27.)

H. Public Interest, Convenience, and Necessity (Section 4906.10(A)(6), Revised Code)

The purpose of the proposed Line and Substation Projects is to correct the operational limitations, reinforce the electric system, and ensure reliable energy service in the project area. In its report, Staff noted that ATSI computed the electromagnetic fields (EMF) associated with the new circuits, based on the maximum loadings of the lines. The magnetic fields were estimated at the substation fence line to be less than 67.21 milligauss (mG), and the electric field would be less than 0.82 kV/meter (kV/m) (ATSI Ex. 1-S at 6-13, Table 6-2). The magnetic fields for the transmission line were estimated at the right-of-way to be less than 110.25 mG, and the electric field would in the range of 0.07/0.85 kV/m

(ATSI Ex. 1-L at 6-46 - 6-47, Table 6-12). Staff explained that the magnetic field output is comparable to that of common household appliances. Staff also stated that daily current load levels normally operate below the maximum load conditions, further reducing nominal EMF values. Further, according to Staff, the electric fields are easily shielded by physical structures, and the magnetic fields generated by the transmission line and substation are rapidly reduced as the distance from the facility increases.

Therefore, Staff recommended the Board find that the proposed facilities would serve the public interest, convenience, and necessity, and comply with the requirements set forth in Section 4906.10(A)(6), Revised Code. (Staff Ex. 1 at 28.)

I. Agricultural Districts and Agricultural Lands (Section 4906.10(A)(7), Revised Code)

Classification as agricultural district land is achieved through an application and approval process administered through the local county auditor's office. ATSI represented that there are no agricultural district land parcels within the right-of-way along the preferred or alternate route for the proposed Line Project and, therefore, ATSI proposed no mitigation for agricultural district land. Accordingly, Staff recommended the Board find that the impact of the proposed transmission line and substation projects on the viability of existing agricultural land in an agricultural district has been determined, as required under Section 4906.10(A)(7), Revised Code. (Staff Ex. 1 at 29.)

J. Water Conservation Practice (Section 4906.10(A)(8), Revised Code)

Staff stated that the proposed transmission line and substation projects will not require the use of water for operation. Therefore, Staff reasoned, water conservation practices, as specified in Section 4906.10(A)(8), Revised Code, are not applicable to the proposed Line Project or the Substation Project. Staff recommended the Board find that requirements specified in Section 4906.10(A)(8), Revised Code, are not applicable to these projects. (Staff Ex. 1 at 30.)

V. Stipulations

In the Stipulations, the parties recommended to the Board that adequate evidence has been provided to demonstrate that construction of the proposed transmission line and substation projects meets the statutory criteria of Sections 4906.10(A)(1) through (8), Revised Code (Joint Ex. 1-L at 11-20; Joint Ex. 1-S at 10-19). As part of the Stipulations, the parties recommended the Board issue certificates for the Line Project, along the preferred route and for the preferred substation site, as described in the applications, subject to the 31 conditions set forth in the Stipulations (Joint Ex. 1-L at 11-20; Joint Ex. 1-S at 10-19). The

following is a summary of the conditions agreed to by the stipulating parties and is not intended to replace or supersede the Stipulations. The stipulating parties agree that:

- (1) The facility shall be installed at ATSI's preferred substation site, and the transmission line project be constructed on the preferred route, including the Common Section, as modified and/or clarified by the supplemental filings, consistent with the Staff Report.
- (2) ATSI shall utilize the equipment and construction practices as described in the applications and as modified and/or clarified in supplemental filings, replies to data requests, and recommendations in the Staff Report, as amended by the Stipulations.
- (3) ATSI shall implement the mitigation measures as described in the applications and as modified and/or clarified in supplemental filings, replies to data requests, and recommendations in the Staff Report, as amended by the Stipulations.
- (4) ATSI shall conduct preconstruction conferences prior to the start of any construction activities for each stage of the projects. The preconstruction conferences shall be attended by Staff, ATSI, and representatives from the prime contractor and all subcontractors for the projects. The conferences shall include a presentation of the measures to be taken by ATSI and the contractors to ensure compliance with all conditions of the certificates, and discussion of the procedures for on-site investigations by Staff during construction.
- (5) ATSI, in consultation with the city of Columbus Department of Public Utilities Watershed Management, shall prepare a restoration and management plan for easement areas through city of Columbus-owned lands along the O'Shaughnessy Reservoir. At least 30 days before the preconstruction conference pertaining to the phase of the Line Project involving construction on city of Columbus-owned lands along the O'Shaughnessy Reservoir, ATSI shall submit to Staff, for review and confirmation that it complies with this condition, the restoration and management plan for easement areas on the lands described above. ATSI shall notify and invite the city of Columbus Department of Public Utilities Watershed

Management to participate in the applicable preconstruction conference described above.

- (6) At least 30 days before the preconstruction conference pertaining to construction on property owned by NRI, ATSI will notify NRI of the forthcoming construction activities and the information submitted to Staff, and offer to meet with NRI to discuss how to minimize, to the extent possible, disruptions to the planned development of NRI's property from construction activities.
- (7) At least 30 days before each preconstruction conference, ATSI shall submit to Staff, for review and confirmation, one set of detailed engineering drawings of the final project design for that stage of construction, including the transmission line, electric tower and pole locations, substation, temporary and permanent access roads, construction staging areas, and any other associated facilities and access points, so that Staff can determine that the final project design is in compliance with the terms of the certificate. Unless requested by Staff, foundation, structure, and equipment fabrication and construction drawings, and wiring diagrams and similar detailed engineering drawings do not need to be included in this submittal. The final project layout shall be provided in hard copy. ATSI's geographically referenced electronic data of the final project layout, to the extent that the ATSI develops this as part of its engineering design, shall also be provided. The final design shall include all conditions of the certificate and references at the locations where ATSI and/or its contractors must adhere to a specific condition in order to comply with the certificate.
- (8) If any changes are made to the project layout after the submission of final engineering drawings, all changes shall be provided to Staff in hard copy and, to the extent applicable, as geographically referenced electronic data. All changes outside the environmental survey areas and any changes within environmentally-sensitive areas will be subject to Staff review and acceptance, to ensure compliance with all conditions of the certificate, prior to construction in those areas.
- (9) Within one year after the commencement of commercial operation, ATSI shall submit to Staff a copy of the as-built

specifications for the entire facility. ATSI shall provide as-built drawings in both hard copy and, to the extent applicable, as geographically-referenced electronic data. If ATSI demonstrates that good cause prevents it from submitting a copy of the as-built engineering drawings of the facility within one year after completion of construction, it may request an extension of time for the submittal of such as-built engineering drawings.

- (10) The certificate shall become invalid if ATSI has not commenced a continuous course of construction of the proposed facility within five years of the date of journalization of the certificate.
- (11) As the information becomes known, ATSI shall provide to Staff the date on which construction will begin, the date on which construction was completed, and the date on which the facility begins commercial operation.
- (12) Prior to the commencement of construction activities that require permits, licenses, or authorizations by federal or state laws and regulations, ATSI shall obtain and comply with such permits, licenses, or authorizations. ATSI shall provide copies of permits and authorizations, including all supporting documentation, to Staff within seven days of issuance or receipt by ATSI. ATSI shall provide a schedule of construction activities and acquisition of corresponding permits for each activity at the preconstruction conference. No new structures shall be constructed within railroad rights-of-way without the railroad's prior approval or the approval of an appropriate tribunal with authority to authorize such construction.
- (13) Prior to commencement of any construction for each stage of construction, ATSI shall prepare a Phase I cultural resources survey program for archaeological work within the construction disturbance area, in consultation with Staff and the OHPO. If the resulting survey work discloses a find of cultural or archaeological significance, or a site that could be eligible for inclusion in the NRHP, then ATSI shall submit an amendment, modification, or mitigation plan to the Board.
- (14) Prior to commencement of any construction for each stage of construction, ATSI shall develop an historic preservation survey plan in consultation with Staff and the OHPO.

- (15) General construction activities shall be limited to the hours of 7:00 a.m. to 7:00 p.m., or until dusk when sunset occurs after 7:00 p.m. Impact pile driving and hoe ram operations, if required, shall be limited to the hours between 10:00 a.m. to 5:00 p.m., Monday through Friday. Construction activities that do not involve noise increases above ambient levels at sensitive receptors are permitted outside of daylight hours when necessary.
- (16) ATSI shall have a construction access plan based on final plans for the access roads, transmission line, and types of equipment to be used, that addresses the concerns outlined in the Staff Report. Prior to commencement of construction for each stage of construction, ATSI shall submit the plan to Staff, for review and confirmation that it complies with this condition.
- (17) ATSI shall have a vegetation management plan that addresses the concerns outlined in the Staff Report. Prior to commencement of construction, ATSI shall submit this plan to Staff, for review and confirmation that it complies with this condition.
- (18) Based on previous coordination with the ODNR Scenic Rivers Program, ATSI has incorporated the engineering changes to the crossing at Big Darby Creek to avoid and/or mitigate impacts to the riparian corridor and associated floodplain wetlands. At least 30 days prior to the commencement of clearing activities, ATSI shall submit such engineering changes to the ODNR Scenic Rivers Program and to Staff for review and confirmation that it complies with this condition.
- (19) ATSI shall have a vegetation restoration plan to mitigate impacts associated with the placement of the electric transmission line adjacent to the Little Darby Creek and within ODNR's Little Darby Creek Corridor Protection Project. The vegetation restoration plan shall include the planting of tree seedlings outside of the transmission line right-of-way adjacent to the Little Darby Creek within ODNR's property as a measure to offset the removal of large trees associated with transmission line construction. At least 30 days prior to the commencement of clearing activities, ATSI shall submit such plan to the ODNR Scenic Rivers Program and to Staff for review and confirmation that it complies with this condition.

- (20) ATSI shall have a Staff-approved environmental specialist on site during construction activities that may affect sensitive areas, as mutually agreed upon between ATSI and Staff, and as shown on ATSI's final access plan. Sensitive areas include, but are not limited to, areas of vegetation clearing, designated wetlands and streams, and locations of threatened or endangered species or their identified habitat. The environmental specialist shall be familiar with water quality protection issues and potential threatened or endangered species of plants and animals that may be encountered during project construction.
- (21) ATSI shall contact Staff, ODNR, and the USFWS within 24 hours if state or federal threatened or endangered species are encountered during construction activities. Construction activities that could adversely impact the identified plants or animals shall be halted until an appropriate course of action has been agreed upon by ATSI, Staff, and ODNR in coordination with the USFWS. Nothing in this condition shall preclude agencies having jurisdiction over the facility with respect to threatened or endangered species from exercising their legal authority over the facility consistent with law.
- (22) ATSI shall adhere to the seasonal cutting dates of September 30 through April 1 for removal of suitable Indiana bat habitat trees, if avoidance measures cannot be achieved. If suitable Indiana bat habitat trees must be cut during the summer season of April 2 through September 29, a mist-netting survey must be conducted in May or June prior to cutting. Net surveys shall incorporate either two net sites per square kilometer of project area, with each net site containing a minimum of two nets used for two consecutive nights, or one net site per kilometer of stream within the project limits, with each net site containing a minimum of two nets used for two consecutive nights. Staff and ODNR shall be contacted to discuss methodologies prior to commencement of any mist-netting surveys proposed by ATSI. All mist-netting results shall be submitted to Staff and ODNR. If the results of the survey indicate the presence of Indiana bats, then further coordination with Staff, USFWS, and ODNR shall be required prior to the cutting of trees in order to avoid impacts to the Indiana bat.

- (23) Prior to construction for the western section of the East Springfield-London segment and the Common Section in Clark County, an ODNR-approved herpetologist shall conduct a presence/absence survey for the Eastern massasauga rattlesnake. If suitable habitat or the species is present within the project area, then further coordination with the ODNR-DOV and Staff is required.
- (24) ATSI shall avoid suitable habitat for the loggerhead shrike during the species' nesting period of April 1 to August 1.
- (25) Prior to commencement of construction activities that require transportation permits, ATSI shall obtain all such permits. ATSI shall coordinate with the appropriate authority regarding any temporary or permanent road closures, lane closures, road access restrictions, and traffic control necessary for construction and operation of the proposed facility. Coordination shall include, but not be limited to, the county engineer, ODOT, local law enforcement, and health and safety officials. This coordination shall be detailed as part of a final traffic plan submitted to Staff prior to the preconstruction conference for review and confirmation that it complies with this condition.
- (26) If ATSI utilizes implosive splicing technology during installation of the project, ATSI shall prepare a blasting management plan that describes this construction activity, including identification of all applicable permits and similar requirements, and identifies ATSI's procedures for notifying local officials of the activity. The plan shall also include procedures for written notification of all residents or owners of dwellings or other structures within 1,000 feet of the blasting site. At least seven days prior to the preconstruction conference for construction activities involving implosive splicing technology, ATSI shall submit this plan to Staff for review and confirmation that it complies with this condition.
- (27) Should site-specific conditions warrant blasting for pole foundation construction, ATSI shall submit a blasting plan, at least 30 days prior to blasting, to Staff for review and acceptance. ATSI shall submit the following information as part of its blasting plan:

- (a) The name, address, and telephone number of the drilling and blasting company.
 - (b) A detailed blasting plan for dry and/or wet holes for a typical shot. The blasting plan shall address blasting, blasting signs, warnings, access control, control of adverse effects, and blast records.
 - (c) A plan for liability protection and complaint resolution.
- (28) Prior to the use of explosives for pole foundation construction, ATSI or explosive contractor shall obtain all required local, state, and federal licenses/permits. ATSI shall submit a copy of the license or permit to Staff within seven days of obtaining it from the local authority.
- (29) The blasting contractor shall utilize two blasting seismographs that measure ground vibration and air blast for each blast associated with pole foundation construction. One seismograph shall be placed at the nearest dwelling and the other placed at the discretion of the blasting contractor.
- (30) At least 30 days prior to the initiation of blasting operations for pole foundation construction, ATSI must notify, in writing, all residents or owners of dwellings or other structures within 1,000 feet of the blasting site. ATSI or the explosive contractor shall offer and conduct a pre-blast survey of each dwelling or structure within 1,000 feet of each blasting site, unless waived by the resident or property owner. The survey must be completed and submitted to Staff at least 10 days before blasting begins.
- (31) ATSI shall file the required FAA 7460-1 Forms when final pole locations and heights (AGL) are determined and for substation additions.

(Joint Ex. 1-L at 11-20; Joint Ex. 1-S at 10-19.)

VI. Conclusion

In the Stipulations, the parties recommended that, based upon the record and the information and data contained therein, that the Board issue certificates for the construction, operation, and maintenance of the proposed Line Project, along the preferred

route and for the proposed Substation Project at the preferred site (Joint Ex. 1-L at 22 and Joint Ex. 1-S at 21). Although not binding on the Board, stipulations are given careful scrutiny and consideration, particularly where no party objects to the stipulation.

ATSI witness Ruberto testified that the Stipulations are the product of serious bargaining among capable and knowledgeable parties, represented by experienced counsel, who have each participated in negotiations. Moreover, the witness offered the Stipulations allow the projects to move forward in a timely manner and will benefit customers and the public interest by improving transmission and electric service quality in the project area. Further, Mr. Ruberto stated that, to the best of his knowledge and belief, the Stipulations do not violate any important regulatory principles or practices. (Evidentiary Hearing Tr. at 19-20.)

As mentioned previously, witnesses appeared at the local hearings and raised various concerns. However, upon review of the entire evidentiary record, the Board finds that the issues raised at the local hearings were investigated and addressed during the course of these proceedings. The Board is satisfied that the findings in the Staff Report and conditions set forth in the Stipulations adequately address the concerns raised at the local public hearings.

The Ohio Supreme Court has recognized that the statutes governing these cases vest the Board with the authority to issue certificates upon such conditions as the Board considers appropriate; thus acknowledging that the construction of these projects necessitates a dynamic process that does not end with the issuance of a certificate. The Court concluded that the Board has the authority to allow Staff to monitor compliance with the conditions the Board establishes. *In re Application of Buckeye Wind, L.L.C. for a Certificate to Construct Wind-Powered Electric Generation Facilities in Champaign County, Ohio*, 2012-Ohio-878, ¶16-17, 30 (*Buckeye*). Such monitoring includes the convening of preconstruction conferences and the submission of follow-up studies and plans by ATSI. As recognized in *Buckeye*, if an applicant proposes a change to any of the conditions approved in the certificate, the applicant is required to file an amendment application. In accordance with Section 4906.07, Revised Code, the Board would be required to hold a hearing, in the same manner as on an application, where an amendment application involves any material increase in any environmental impact or substantial change in the location of all or a portion of the facility.

Therefore, based upon the record in these proceedings, the Board finds that all of the criteria in Section 4906.10(A), Revised Code, are satisfied for the construction, operation, and maintenance of the Line Project, along the preferred route, and the Substation Project, at the preferred site, subject to the conditions set forth in the Stipulations.

Accordingly, the Board finds that the Stipulations are the product of serious bargaining among knowledgeable parties, will promote the public interest, convenience and necessity, and do not violate any important regulatory principle or practice. Therefore, based upon all of the above, the Board approves and adopts the Stipulations and hereby issues certificates to ATSI for the construction, operation, and maintenance of the proposed Line Project, along the preferred route, and the Substation Project, at the preferred site, as described in the applications, subject to the conditions set forth in the Stipulations and consistent with this Order.

FINDINGS OF FACT AND CONCLUSIONS OF LAW:

- (1) The transmission line and substation projects are major utility facilities as defined in Section 4906.01(B)(2), Revised Code.
- (2) ATSI is a person under Section 4906.01(A), Revised Code.
- (3) ATSI held 4 public information meetings on September 12, 2011 through September 15, 2011, in Springfield, London, Plain City, and Dublin, Ohio.
- (4) On April 23, 2012, ATSI filed a motion for waiver of certain limited requirements of Section 4906.06(A)(6), Revised Code, regarding the one-year notice period, Rule 4906-5-04, O.A.C., regarding the requirement that the alternative routes have less than 20 percent in common and alternate site information, and Rule 4906-1-08, O.A.C., regarding the presentation of the wetland and stream maps.
- (5) On May 18, 2012, ATSI filed its applications for certificates for the transmission line and substation projects. On July 17, 2012, ATSI filed revisions to its application for the transmission line project.
- (6) On May 29, 2012, ATSI filed motions for protective orders, seeking protective treatment for load-flow data and critical energy infrastructure information. ATSI's motions for protective orders were granted by entry issued on November 5, 2012.
- (7) On July 20, 2012, the Board notified ATSI that the applications were complete.
- (8) By entry issued November 5, 2012, ATSI's motion to consolidate the Line Project application and the Substation

Project application proceedings for purposes of investigation and hearing was granted. The November 5, 2012, entry also scheduled two local public hearings, one to be held in Plain City, Ohio, and one to be held in London, Ohio, and scheduled an evidentiary hearing for January 23, 2013, at the offices of the Board, in Columbus, Ohio.

- (9) On December 4, 2012, as supplemented on January 3, 2013, ATSI filed its proofs of service of the applications to the appropriate government officials and public agencies pursuant to Rule 4906-5-06, O.A.C.
- (10) On December 20, 2012, Staff filed its report of investigation of the applications.
- (11) Two local public hearings were held, as scheduled, on January 7, and January 8, 2013. At the local public hearings, 22 individuals offered testimony on the proposed transmission line project. No individual offered testimony on the proposed substation project.
- (12) On January 23, 2013, ATSI and Staff filed a Stipulation resolving all issues raised in the Substation Project.
- (13) On January 23, 2013, ATSI, Staff, NRI and Columbus filed a Stipulation resolving all issues raised in the Line Project.
- (14) On January 23, 2012, the evidentiary hearing was held.
- (15) The record establishes the need for the Line Project and the Substation Project, as required by Section 4906.10(A)(1), Revised Code.
- (16) The record establishes the nature of the probable environmental impact from construction, operation, and maintenance of the Line Project and the Substation Project, as required by Section 4906.10(A)(2), Revised Code.
- (17) The record establishes that the preferred transmission line route and preferred substation site, subject to the conditions set forth in this order, represent the minimum adverse environmental impact, considering the available technology and nature and economics of the various alternatives, and other

pertinent considerations, as required by Section 4906.10(A)(3), Revised Code.

- (18) The record establishes that the preferred transmission line route and preferred substation site, subject to the conditions set forth in this order, are consistent with regional plans for expansion of the electric grid for the electric systems in this state, will have no adverse impact upon the grid, and will serve the interests of electric system economy and reliability, as required by Section 4906.10(A)(4), Revised Code.
- (19) The record establishes that the preferred transmission line route and preferred substation site, subject to the conditions set forth in this order, will comply with Chapters 3704, 3734, and 6111, Revised Code, and Sections 1501.33, 1501.34, and 4561.32, Revised Code, and all rules and regulations thereunder, to the extent applicable, as required by Section 4906.10(A)(5), Revised Code.
- (20) The record establishes that the Line Project and the Substation Project, subject to the conditions set forth in this order, will serve the public interest, convenience, and necessity, as required by Section 4906.10(A)(6), Revised Code.
- (21) The record establishes that the Line Project and the Substation Project, subject to the conditions set forth in this Order, has been assessed as to viability of agricultural land in an existing agricultural district, as required by Section 4906.10(A)(7), Revised Code.
- (22) Inasmuch as water conservation practices are not involved with Line Project or the Substation Project, Section 4906.10(A)(8), Revised Code, does not apply in these circumstances.
- (23) The record evidence in these proceedings provides sufficient factual data to enable the Board to make an informed decision.
- (24) Based on the record, the Board shall issue certificates of environmental compatibility and public need pursuant to Chapter 4906, Revised Code, for the construction, operation, and maintenance of the Line Project and the Substation Project, subject to the conditions set forth in the Stipulations and consistent with this order.

ORDER:

It is, therefore,

ORDERED, That the Stipulations filed by the parties are approved and adopted. It is, further,


ORDERED, That certificates be issued to ATSI for the construction, operation, and maintenance of the Line Project, along the preferred route, and the Substation Project, at the preferred site. It is, further,

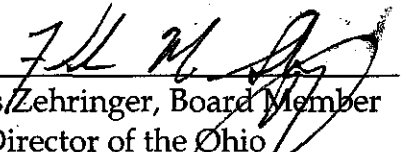
ORDERED, That the certificates contain the 31 conditions set forth in Section V of this order. It is, further,


ORDERED, That a copy of this opinion, order, and certificates, be served upon each party of record and any other interested person of record.

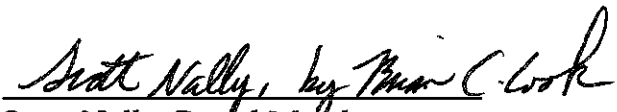
THE OHIO POWER SITING BOARD



Todd A. Snitchler, Chairman
Public Utilities Commission of Ohio

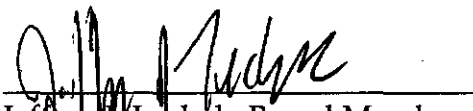

Christiane Schmenk, Board
Member and Director of the Ohio
Development Services Agency


James Zehringer, Board Member
and Director of the Ohio
Department of Natural Resources


Theodore Wymyslo, Board
Member and Director of the
Ohio Department of Health

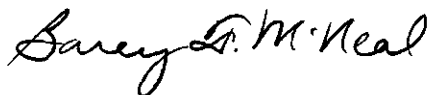

Scott Nally, Board Member
and Director of the Ohio
Environmental Protection Agency


David Daniels, Board Member
and Director of the Ohio
Department of Agriculture


Jeffrey Lechak, Board Member
and Public Member

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Entered in the Journal

MAR 11 2013



Barcy F. McNeal
Secretary