

BEFORE

THE OHIO POWER SITING BOARD

In the Matter of the Application of)
American Transmission Systems, Inc. for a)
Certificate of Environmental Compatibility) Case No. 14-2162-EL-BSB
and Public Need for the Construction of the)
Lake Avenue Substation Project.)

OPINION, ORDER, AND CERTIFICATE

The Ohio Power Siting Board, considering the above-entitled matter, approves and adopts the joint stipulation between American Transmission Systems, Inc., and Staff, thus, granting the application requesting authority to construct a new substation in the city of Elyria, Ohio, at the preferred site, subject to the stipulation and the conditions set forth in this Opinion, Order, and Certificate.

APPEARANCES:

Porter, Wright, Morris & Arthur, LLP, by Robert J. Schmidt, Jr. and L. Bradfield Hughes, 41 South High Street, Columbus, Ohio 43215, and Anne Rericha, FirstEnergy Service Company, 76 South Main Street, Akron, Ohio 44308, on behalf of American Transmission Systems, Inc.

Mike DeWine, Ohio Attorney General, by John H. Jones, Assistant Section Chief, Public Utilities Section, 180 East Broad Street, 6th Floor, Columbus, Ohio 43215-3793, on behalf of the Staff of the Ohio Power Siting Board.

OPINION:

I. Procedural History of this Case

All proceedings before the Ohio Power Siting Board (Board) are conducted according to the provisions of R.C. Chapter 4906 and Ohio Adm.Code Chapter 4906.

On December 17, 2014, American Transmission Systems, Inc. (ATSI or the Applicant), a wholly-owned subsidiary of FirstEnergy Corporation (FirstEnergy), filed a preapplication notification letter that it would be filing an application to construct the Lake Avenue Substation (project or facility), a new substation with 345 kilovolt (kV) to 138 kV transformation, in the city of Elyria, Ohio, and adjacent to Elyria Township, in Lorain County, Ohio. On December 29, 2014, and January 5, 2015, ATSI filed proofs of

publication of notice of a public informational meeting held on January 5, 2015, in Elyria, Ohio.

On March 6, 2015, ATSI filed its application in this case (App. Ex. 1). On that same date, ATSI filed a motion for a partial waiver of Ohio Adm.Code 4906-15-06(E)(2)(a), which requires that an application contain electric and magnetic field (EMF) modeling data, including strength calculations, for the proposed preferred and alternate sites. Noting that a full complement of EMF strength calculations was provided with respect to the operation of the preferred site, ATSI requested a waiver of the requirement that EMF strength calculations for the alternate site be provided with the application. In response, Staff explained that, due to the unique circumstances associated with the proposed location of the alternate site, which is within the boundaries of a quarry operation, Staff did not object to the waiver request, given that EMF impacts to sensitive residential or institutional land uses would be unlikely.

By letter dated May 11, 2015, the chairman of the Board notified ATSI that its application for the project was found to comply with the content requirements of Ohio Adm.Code Chapters 4906-1, et seq. On May 20, 2015, ATSI filed proof of service of the application upon local public officials, as required under Ohio Adm.Code 4906-5-06 and 4906-5-07.

Pursuant to an Entry dated June 15, 2015, the administrative law judge (ALJ) scheduled a local public hearing for August 12, 2015, at Lorain County Community College, in Elyria, Ohio, and an evidentiary hearing for August 26, 2015, at the offices of the Board, in Columbus, Ohio. Further, the Entry directed ATSI to publish notice of the application and hearings, as required by Ohio Adm.Code 4906-5-08, and directed that petitions to intervene by interested persons be filed by July 13, 2015, or within 30 days following publication of the notice required by Ohio Adm.Code 4906-5-08, whichever was later. Finally, the ALJ granted ATSI's request for a partial waiver of the requirement to file EMF modeling data for the alternate site, in light of the unique circumstances associated with the site.

On July 28, 2015, Staff filed its report of investigation of the application (Staff Report) (Staff Ex. 1). The local public hearing was held, as scheduled, on August 12, 2015. At the local public hearing, no testimony was offered regarding the proposed substation. Proofs of publication of notice of the public hearing were filed by ATSI on July 1, 2015, and July 30, 2015 (App. Ex. 2).

On August 18, 2015, ATSI filed the direct testimony of Nataliya Bryksenkova (App. Ex. 3). Staff filed the direct testimony of James S. O'Dell on August 21, 2015 (Staff Ex. 2). On August 25, 2015, ATSI and Staff filed a joint stipulation and recommended findings of fact and conclusions of law (stipulation) (Joint Ex. 1). The evidentiary hearing

commenced, as scheduled, on August 26, 2015. At the evidentiary hearing, ATSI witness Nataliya Bryksenkova testified in support of the stipulation.

II. Summary of Ohio Revised Code and Ohio Administrative Code Certification Criteria

ATSI is a corporation and a person under R.C. 4906.01(A). Pursuant to R.C. 4906.04, before construction can begin on any major utility facility within the state of Ohio, such as the project proposed by ATSI in its application, a certificate of environmental compatibility and public need must be obtained from the Board.

Among other things, R.C. 4906.06 requires that an application for a certificate must contain the following information:

- (1) A description of the location and of the major utility facility.
- (2) A summary of studies made of the environmental impact of the facility.
- (3) A statement explaining the need for the facility.
- (4) A statement of the reasons why the proposed location is best suited for the facility.

Ohio Adm.Code Chapter 4906-15 sets forth the specific information that an applicant must provide in its application, including: a facility overview; a review of the need for the facility; the site and route alternative analyses, including the factors and rationale used to determine the preferred and alternate sites; technical and financial data; and socioeconomic, land use, and ecological impact analyses.

Pursuant to R.C. 4906.10(A), 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 gas pipeline.
- (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 the 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 such facility will serve the interests of electric system economy and reliability.
- (5) The facility will comply with R.C. Chapters 3704, 3734, and 6111 and all rules and standards adopted under those chapters and under R.C. 1501.33, 1501.34, and 4561.32.
- (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 R.C. Chapter 929 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 the various alternatives.

III. Summary of the Record

A. Applicant's Description of the Proposed Facility

According to the application, the proposed project involves the construction of the new Lake Avenue Substation, which would have 345 kV to 138 kV transformation capabilities, in Lorain County, Ohio. ATSI proposes both a preferred site and an alternative site for the project. ATSI notes that the layout of the preferred site, which would be located on land owned by the Applicant/FirstEnergy in the city of Elyria, would require an approximately 300 feet by 738 feet fenced area with a storm water detention basin located outside the fence line, with access from Freedom Court, which is a dead end street. ATSI further notes that the alternate site, which would be located on a quarry owned by Quarry Development, Inc., in Elyria Township, would require an estimated fenced area of 486 feet by 460 feet, contain two storm water detention basins located outside of the fenced area, and be accessible from a new access road from Lorain Boulevard. ATSI explains that the proposed Lake Avenue Substation is needed to support electric system load requirements and to enhance overall system reliability for all customers in the greater Lorain area. ATSI proposes to complete its construction of the project and commence operation by December 1, 2016. (App. Ex. 1 at 1-2 to 1-3, 1-8.)

Ohio Adm.Code 4906-15-03 requires that an applicant proposing an electric power transmission substation conduct a site selection study to evaluate all practicable sites for the proposed facility identified in the project area. In its site selection study, ATSI evaluated multiple locations for the proposed Lake Avenue Substation within an approximately nine square mile area in the vicinity of the intersection of the existing Avon-Beaver and Black River-Johnson transmission lines, in an effort to identify the site with the fewest total impacts and to identify potentially sensitive areas and land uses. The study, which used an iterative process to evaluate potential sites based on location, size, availability, and other characteristics, identified the preferred and alternate sites among 12 candidates in the study area, with the preferred site ultimately being selected due to its proximity to the existing 345 kV and 138 kV transmission lines, as well as the fact that a large portion of the site was for sale and undeveloped. ATSI notes that it has since acquired the preferred site for the project. According to the application, the site selection process for the project included an evaluation of potential impacts to land use, transportation corridors, utility corridors, noise sensitive areas, agricultural land, regional development, visual aesthetics, cultural resources, floodplains, wetlands, vegetation, and protected species and other wildlife. (App. Ex. 1 at 1-3 to 1-5.)

B. Public Comments

As stated previously, at the local public hearing held on August 12, 2015, no testimony was offered regarding the proposed Lake Avenue Substation. One letter from a parcel owner adjacent to the preferred site was filed in this case, raising concerns regarding water drainage, the effects of any necessary easements, and the impacts to a stream, septic system, and property value that may result from the project.

C. Staff's Review of the Basis of Need Criterion in R.C. 4906.10(A)(1)

R.C. 4906.10(A)(1) requires that the Board consider the basis of the need for the facility. In the application, ATSI states that the proposed Lake Avenue Substation is needed to enhance the reliability of the electric system, particularly with respect to overall power quality, and to reduce power flows on facilities in the area. ATSI notes that industrial and commercial customers in the project area have been adding new equipment to their manufacturing processes, including a new electric arc furnace installed by Republic Steel, which has increased the total system load. ATSI explains that the project would increase the available short circuit values in the greater Lorain area, thus, ensuring reliable operation of Republic Steel's electric arc furnace, without causing voltage flicker problems. ATSI further explains that the project would significantly reduce loading on a number of transmission lines. ATSI concludes that the installation of the Lake Avenue Substation would significantly improve the operation of the transmission and sub-transmission systems in the project area, strengthen the entire transmission system under

numerous planning contingencies, and improve overall efficiency and flexibility in the operation of the transmission system. (App. Ex. 1 at 2-3 to 2-4.)

In the Staff Report, Staff notes that, without the proposed Lake Avenue Substation, the electric grid in the Lorain area may face capacity shortages and operating limitations, including potential voltage flicker, and that ATSI would be unable to maintain compliance with North American Electric Reliability Corporation (NERC) reliability standards, as well as PJM Interconnection, LLC (PJM) planning and operating manuals for the bulk electric system. Staff further notes that the Lake Avenue Substation has been designated as a supplemental project by PJM. According to Staff, load flow studies verify that the construction of the project would improve reliability and enable the transmission system to provide safe and stable electric service, while meeting all of the applicable planning criteria. (Staff Ex. 1 at 11-12.)

Staff recommends that the Board find that the basis of need for the Lake Avenue Substation has been demonstrated and, therefore, complies with the requirements specified in R.C. 4906.10(A)(1), provided that any certificate issued by the Board for the proposed facility includes the conditions specified in the Staff Report (Staff Ex. 1 at 12).

D. Staff's Review of the Nature of Probable Environmental Impact and Minimum Adverse Environmental Impact Criteria, and Other Pertinent Considerations in R.C. 4906.10(A)(2) and (A)(3)

R.C. 4906.10(A)(2) and (A)(3) require the Board to consider the nature of the probable environmental impact and whether 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. Staff reviewed the environmental information contained in ATSI's application and determined the nature of the probable impact to the environment. The following is a summary of Staff's findings.

- (1) The project would be located in Lorain County, approximately three miles north-northwest of downtown Elyria near the northeast corner of Elyria Township. The project area contains large industrial zones, small wooded areas, and scattered residences. The population of Lorain County increased an estimated six percent between 2000 and 2013. During the same time period, the populations of the city of Elyria and Elyria Township decreased 3 percent and 6.9 percent, respectively. The populations of the city of Elyria and Elyria Township are expected to decrease annually by 0.2 percent and 0.3 percent, respectively, compared to an expected population increase of 0.2 percent for all of Lorain County. In 2014, the city of Elyria

and Elyria Township had population densities of 2,624 and 577 persons per square mile, respectively, compared to 620 persons per square mile for all of Lorain County.

- (2) Land use within the project area consists of a mix of residential, commercial, and light industrial land uses. Multiple corridors extend through the vicinity of the project area, including an active rail line, an abandoned railroad, and electric transmission lines. Construction of the project is not expected to limit or prevent future development or project growth in the area.
- (3) Approximately 26 residences are located within 1,000 feet of the preferred site. Of these residences, two are located within 100 feet of the proposed site boundary. The approximate distance between the proposed substation fence line and nearest residence is 135 feet. No substation equipment would be located within 100 feet of either residence. Approximately 15 residences are located within 1,000 feet of the alternate site. None of these residences are within 100 feet of the alternate site. No residences would need to be removed during construction of the project at either site. Most of the residential impacts would be temporary and occur during the construction of the facility.
- (4) For the preferred site, permanent screening would be necessary to mitigate lasting visual impacts during normal operation. Five residences are located within 250 feet of the fence line at the preferred site. Due to extensive site clearing during construction, very little existing screening between these residences and the substation is expected to remain. Although ATSI proposes to replant vegetative screening along the southeast fence line, the project is still likely to significantly alter the residents' views. Staff, therefore, recommends a vegetation mitigation plan to further address these impacts. The alternate site is already significantly screened by existing trees and vegetation that would remain after construction.
- (5) There are approximately 18 commercial/industrial facilities located within 1,000 feet of the preferred site. There are two commercial/industrial facilities located within 1,000 feet of the alternate site, including the material storage and processing operations at the quarry. These commercial/industrial

facilities are not expected to be significantly impacted by the construction, operation, or maintenance of the proposed project. A portion of the quarry would have to be acquired to construct the substation at the alternate site. No agricultural land uses exist within 1,000 feet of either site.

- (6) No recreational or institutional facilities exist within 1,000 feet of the preferred site. St. Vincent DePaul Catholic Church and its associated facilities are located approximately 1,000 feet north of the alternate site, although it is unlikely that the project would significantly impact the church or its facilities. No other recreational or institutional facilities exist within 1,000 feet of the alternate site.
- (7) ATSI researched various databases, including the National Register of Historic Places, for information on historic districts, previously identified archaeological sites, architectural resources, cemeteries, and cultural resources. ATSI also conducted a Phase I archaeological survey of the project area. No cultural resources were identified. ATSI coordinated with the Ohio Historic Preservation Office, which concurred that impacts to cultural resources are not anticipated.
- (8) The proposed facility would have an overall positive impact on the local economy due to construction spending and local tax revenues. The proposed facility would also have a positive impact on regional development through increased reliability and availability of electric power as industrial load increases. The approximate total property tax associated with installing the substation at the preferred site is \$2,375,000, compared to \$2,486,000 at the alternate site.
- (9) The alternate site is situated within an area that has been previously quarried for sand and gravel, although the quarry is no longer an active mining site and is currently used for material and equipment storage and staging operations. Neither the preferred site nor the alternate site presents any geological obstacles that would prevent the construction or operation of the proposed substation.
- (10) ATSI has not identified any slope or soil conditions that would potentially limit construction at either of the proposed site locations. However, the soils at the preferred site are more

conductive to building construction. More site preparation would be necessary at the alternate site due to the need to conduct cut and fill operations to bring the site up to grade. Considering soil and other subsurface features, the preferred site is more conducive to site preparation and would result in subsequent cost savings related to the design and construction of the foundation for the substation.

- (11) Seismic activity is not anticipated to cause any adverse effect to the construction or operation of the facility.
- (12) The preferred site contains two ephemeral streams, which would be relocated by ATSI. No streams would be impacted during construction within the alternate site. A few small ponds are located north of the alternate site. One category 2 palustrine forested (PFO) wetland (0.275 acre) was identified within the preferred site, with two other wetlands identified north and northwest of the preferred site. ATSI would permanently fill 0.275 acre of the category 2 PFO wetland at the preferred site. The alternate site contains two category 1 wetlands, a portion of another category 1 wetland, and a portion of one category 2 wetland. ATSI would permanently fill 0.096 acre of category 1 wetlands at the alternate site. ATSI would obtain the necessary permits, coordinate with the proper permitting authorities, and implement best management practices during construction.
- (13) Eight acres of tree clearing would be necessary at the preferred site, and four acres of tree clearing would be necessary at the alternate site. Areas not containing equipment or crushed rock would be revegetated/reseeded with grass after construction. At the preferred site, ATSI would incorporate woody vegetation, shrubs, and trees along the southeast portion of the site.
- (14) The project is within range of the piping plover, upland sandpiper, Kirtland's warbler, sandhill crane, red knot, Blanding's turtle, spotted turtle, Indiana Bat, Northern long-eared bat, lake sturgeon, channel darter, and bigmouth shiner, which are state- or federally-listed threatened or endangered plant and animal species. Due to its location, the project is not likely to impact most of these species. With respect to the upland sandpiper and sandhill crane, Staff recommends that

construction be avoided in suitable habitats during their nesting periods. ATSI conducted a mist net survey for the preferred site and found no Indiana bats or Northern long-eared bats.

- (15) The preferred site is not located within 1,000 feet of any major highways or railroads. The alternate site is located within 1,000 feet of State Route 57. Equipment deliveries to either site would be accomplished primarily by utilizing existing local roads and ATSI would minimize impacts by complying with load limits as required by local jurisdictions. ATSI would need to construct a permanent access road at either site. ATSI would repair any damaged public roads or bridges promptly to their previous condition under the guidance of the appropriate local authorities.
- (16) Most noise impacts associated with the proposed substation would be confined to the construction period. ATSI proposes to mitigate noise impacts by ensuring all construction equipment mufflers are properly installed and that equipment receives proper maintenance. The transient nature of the construction activities and ATSI's intention to limit construction to daylight hours on weekdays would further reduce impacts to neighbors. In order to minimize impacts during operation and maintenance, ATSI proposes to locate the transformers, which would account for the vast majority of operational noise, at both proposed sites as far from neighboring residences as possible. ATSI also proposes to install transformers rated 10 decibels lower than typical industry standard transformers and to use additional landscaping adjacent to the substation's southeast fence line in order to abate noise.
- (17) ATSI intends to comply with safety standards set by the Occupational Safety and Health Administration, Public Utilities Commission of Ohio, NERC reliability standards, and equipment specifications. ATSI would design the facility to meet the requirements of the National Electric Safety Code.
- (18) ATSI does not expect radio or television interference to occur from the operation of the proposed substation. Any source of radio or television interference would be a localized effect

primarily from defective hardware that should be easily detected and replaced.

(Staff Ex. 1 at 13-21.)

In considering the overall impact of the project and the proposed locations, Staff notes that the soils at the preferred site are more suitable for construction, whereas the alternate site would require more extensive grading and foundation preparation. Staff further notes that both sites present similar potential ecological impacts, including minor wetland and stream impacts, which would be addressed by ATSI's utilization of best management practices during construction and adherence to appropriate federal and state permits. Staff also explains that, because the preferred site is owned by ATSI, the potential for delay that can result from property acquisition activities would be minimized. Staff states that the preferred site is more centrally located to existing transmission lines, thus, requiring shorter and less invasive interconnections. Staff also emphasizes that the construction of the alternate site would be compromised by the proposed substation's layout directly underneath an existing 345 kV transmission line, which was the result of negotiations with the landowner as a solution that would minimize impacts to future quarry operations. According to Staff, construction underneath an existing transmission line is feasible, although it is not a preferred engineering practice as ATSI would need to request multiple and extended transmission line outages. (Staff Ex. 1 at 22-23.)

Additionally, Staff explains that, while neither site is expected to significantly impact institutional facilities or cultural resources, there are five residences in proximity to the preferred site that are expected to experience significant alteration of their aesthetic experiences. Staff also notes that the residence closest to the southeast corner of the substation is expected to experience a minor increase in noise during substation operation. Staff points out that the aesthetic and noise impacts for these five residences can be effectively rectified by a vegetative mitigation plan. (Staff Ex. 1 at 23.)

Noting that both the preferred and alternate sites are viable options, Staff concludes that the installation of the proposed substation would significantly enhance the surrounding area's electrical reliability and potential for economic growth, while presenting minimal impacts to nearby land uses. However, in light of the need for multiple and longer outages during construction of the substation at the alternate site, Staff recommends that the Board approve the project's construction at the preferred site. Therefore, Staff recommends that the Board find that the nature of the probable environmental impact has been determined for the proposed facility and that the proposed facility represents the minimum adverse environmental impact and complies with R.C. 4906.10(A)(2) and (A)(3), provided that any certificate by the Board for the proposed facility includes the conditions specified in the Staff Report. (Staff Ex. 1 at 21, 23.)

E. Staff's Review of the Electric Power Grid Criterion in R.C. 4906.10(A)(4)

R.C. 4906.10(A)(4) provides that, in the case of an electric transmission line or generating facility, the Board must ensure that 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 such facility will serve the interests of electric system economy and reliability. In the application, ATSI explains that the proposed Lake Avenue Substation would reduce potential voltage flicker, increase available capacity, and improve reliability in the Lorain area (App. Ex. 1 at 2-8).

In evaluating the impact of integrating the Lake Avenue Substation into the existing regional transmission grid, Staff determines that, without the proposed substation and during certain contingencies, ATSI would be unable to maintain compliance with internal standards, as well as NERC and PJM reliability criteria. Staff notes that an increase in load, along with Republic Steel's new electric arc furnace, has caused a need to enhance power quality and reduce power flows. Staff further notes that short circuit current at the Black River Substation would be increased by 35 to 40 percent with the addition of the proposed Lake Avenue Substation, which would help to ensure reliability when the electric arc furnace is in operation, without causing voltage flicker problems. Staff also reports that the proposed substation would reduce loading on existing transmission lines and transformers. (Staff Ex. 1 at 24-27.)

Additionally, Staff indicates that ATSI provided details regarding its load flow studies, which demonstrated that, without the proposed facility, the Applicant would be unable to provide safe and reliable electric service. According to Staff, the proposed facility is a supplemental project under PJM's Regional Transmission Expansion Plan, has been approved by the PJM Board, is consistent with plans for expansion of the regional power system, and serves the interests of electric system economy and reliability. (Staff Ex. 1 at 27.)

Therefore, Staff recommends that the Board find that the proposed facility is consistent with regional plans for expansion of the electric power grid of the electric systems serving the state and interconnected utility systems, and that the facility would serve the interests of electric system economy and reliability. Further, Staff recommends that the Board find that the facility complies with the requirements specified in R.C. 4906.10(A)(4), provided that any certificate issued by the Board includes the conditions specified in the Staff Report. (Staff Ex. 1 at 27.)

F. Staff's Review of the Air, Water, Solid Waste, and Aviation Criterion in R.C. 4906.10(A)(5)

R.C. 4906.10(A)(5) requires that the Board consider whether the facility will comply with the following provisions in the Revised Code and all rules and standards adopted under these provisions: R.C. Chapter 3704, air pollution control standards; R.C. Chapter 3734, solid and hazardous waste standards; R.C. Chapter 6111, water pollution control standards; R.C. 1501.33, criteria to be followed when applying to the Ohio Department of Natural Resources (ODNR) for a permit for a major increase in withdrawal of waters in the state of Ohio; R.C. 1501.34, criteria to be applied by ODNR when considering an application under R.C. 1501.33; and R.C. 4561.32, rules regarding the regulation of airports located in Ohio by the Ohio Department of Transportation (ODOT).

In the Staff Report, Staff notes that air quality permits are not required for construction of the proposed facility; however, fugitive dust rules adopted pursuant to R.C. Chapter 3704 may be applicable to the proposed facility. Further, Staff explains that ATSI would control fugitive dust through dust suppression techniques such as irrigation, mulching, or the application of tackifier resins, which would be sufficient to comply with fugitive dust rules. (Staff Ex. 1 at 28.)

Staff states that neither construction nor operation of the proposed facility would require the use of significant amounts of water; therefore, the requirements under R.C. 1501.33 and 1501.34 are not applicable to the project. Staff further states that, with respect to streams and wetlands, ATSI intends to submit a Notice of Intent for coverage with the Ohio Environmental Protection Agency (Ohio EPA) for a National Pollutant Discharge Elimination System (NPDES) General Permit and a related Stormwater Pollution Prevention Plan (SWPPP), which would be developed for the project pursuant to Ohio EPA regulations and conform to ODNR's Rainwater and Land Development Manual. Staff believes that ATSI's adherence to the SWPPP, as well as the use of best management practices for construction activities, would help to minimize any erosion-related impacts to streams and wetlands. Staff also reports that ATSI has indicated that it will coordinate with the United States Army Corps of Engineers to obtain a Section 404 Dredge and Fill Permit for impacts to drainage at the preferred and alternate sites, while the project would also require a Section 401 Water Quality Certification issued by the Ohio EPA. (Staff Ex. 1 at 28.)

Additionally, Staff states that wetlands, streams, and other environmentally-sensitive areas would be clearly identified by ATSI before commencement of clearing or construction and no construction or access would be permitted in these areas unless clearly specified in the application, thus, minimizing any clearing-related disturbance to surface water bodies. Staff concludes that construction of the proposed facility would

comply with the requirements of R.C. Chapter 6111 and the rules and laws adopted under the chapter. (Staff Ex. 1 at 28.)

With respect to solid waste, Staff notes that ATSI indicates that solid waste generated from construction activities, including conductor scrap, construction material packaging, and used stormwater erosion control materials, would be disposed of in accordance with local regulations, while clearance poles, conductor reels, and other materials that have salvage value would be removed from the construction area for reuse or salvage. Staff further notes that any contaminated soils discovered or generated during construction would be handled in accordance with applicable regulations. According to Staff, among other preventative measures, on-site vehicles would be monitored for leaks and receive regular maintenance to reduce the chance of leakage. Staff believes that ATSI's solid waste disposal plans comply with the solid waste disposal requirements in R.C. Chapter 3734 and the rules and laws adopted under the chapter. (Staff Ex. 1 at 29.)

Finally, in terms of aviation, Staff reports that the nearest airport to the proposed facility is Richards Airport, which is a private airstrip located approximately 4,900 feet southeast of the preferred site and 4,000 feet southeast of the alternate site. Staff states that the tallest substation structures are anticipated to be the 345 kV dead end structures, which would be approximately 90 feet in height. Staff further states that, based on Federal Aviation Administration (FAA) criteria for obstructions, the preferred and alternate sites would not present a conflict with Richards Airport, FAA-regulated airports, or navigable airspace. Staff also reports that, in accordance with R.C. 4561.32, Staff contacted ODOT's Office of Aviation in order to coordinate a review of the potential impacts of the facility on local airports and that, as of the date of the Staff Report, no such concerns have been identified. (Staff Ex. 1 at 29.)

Staff, therefore, concludes that the proposed facility complies with the requirements contained in R.C. 4906.10(A)(5), provided that any certificate issued by the Board includes the conditions specified in the Staff Report (Staff Ex. 1 at 29).

G. Staff's Review of the Public Interest, Convenience, and Necessity Criterion in R.C. 4906.10(A)(6)

R.C. 4906.10(A)(6) provides that the Board must consider whether the facility will serve the public interest, convenience, and necessity. Staff states that the purpose of the proposed Lake Avenue Substation is to maintain and enhance the quality of residential, industrial, and commercial electric service and reliability of the bulk electric system in the greater Lorain area for the foreseeable future. According to Staff, the project would support new industrial load growth in the area and enable ATSI to better serve Republic Steel's load. Staff also believes that the project would have an overall positive impact on the local economy due to construction spending and local tax revenues. Staff notes that

the approximate total property tax associated with installing the substation at the preferred site is \$2,375,000, compared to \$2,486,000 at the alternate site. (Staff Ex. 1 at 15, 30.)

With respect to EMFs, Staff reports that laboratory studies have failed to establish a strong correlation between exposure to EMFs and effects on human health. However, in light of concerns that EMFs may impact human health, Staff states that ATSI was required to compute the EMFs associated with the project's new circuits and, based on the Applicant's estimates, the overall magnetic fields at the substation fence line would be less than 163 milligauss, while the electric field at the fence line would be less than 1.66 kV/meter. Staff points out that the magnetic field output is comparable to that of common household appliances and that the daily current load levels would normally operate below the maximum load conditions on which ATSI's estimates are based, thereby reducing nominal EMF values. Further, Staff explains that electric fields are easily shielded by physical structures such as walls, foliage, or earthen berms and that magnetic fields generated by a substation are attenuated very rapidly as the distance from them increases. Noting that the nearest residence is more than 125 feet from the southeast fence line of the preferred site and more than 600 feet from the alternate site, Staff advises that, within 100 feet of the fence line of a typical substation, the magnetic field is not of sufficient strength to be measureable, because the background effects overwhelm the measurements. Staff concludes that EMFs are not expected to significantly affect residences near the Lake Avenue Substation. (Staff Ex. 1 at 30-31.)

Therefore, Staff recommends that the Board find that the proposed facility would serve the public interest, convenience, and necessity, and complies with the requirements set forth in R.C. 4906.10(A)(6), provided that any certificate issued by the Board includes the conditions specified in the Staff Report (Staff Ex. 1 at 31).

H. Staff's Review of the Agricultural Districts and Agricultural Lands Criterion in R.C. 4906.10(A)(7)

R.C. 4906.10(A)(7) requires the Board to consider the impact of the facility on the viability as agricultural land of any land in an existing agricultural district established under R.C. Chapter 929. Staff reports that no agricultural district land parcels have been identified within 1,000 feet of the preferred or alternate site and that no impacts to agricultural district land parcels are expected. Staff, therefore, recommends that the Board find that the impact of the proposed substation on the viability of existing agricultural land in an agricultural district has been determined, as required under R.C. 4906.10(A)(7), provided the certificate issued by the Board for the proposed facility includes the conditions specified in the Staff Report. (Staff Ex. 1 at 32.)

I. Staff's Review of the Water Conservation Practice Criterion in R.C. 4906.10(A)(8)

R.C. 4906.10(A)(8) requires the Board to consider whether the facility incorporates maximum feasible water conservation practices as determined by the Board, considering available technology and the nature and economics of the various alternatives. Staff states that the proposed facility will not require the use of water for operation. Therefore, water conservation practice, as specified in R.C. 4906.10(A)(8), is not applicable to the project. (Staff Ex. 1 at 33.)

J. Staff's Recommended Conditions

In the Staff Report, Staff recommends that 26 conditions be imposed if the Board issues a certificate for the proposed facility (Staff Ex. 1 at 35-39). Staff's recommended conditions are the same as the conditions that the parties agreed upon in their stipulation, as detailed below.

K. Summary of the Stipulation Between ATSI and Staff

As stated previously, ATSI and Staff filed a stipulation on August 25, 2015, which would resolve all of the issues between them in this case. In the stipulation, the parties stipulate and recommend to the Board that adequate evidence has been provided to demonstrate that the construction of the proposed project meets the statutory criteria of R.C. 4906.10(A)(1) through (A)(8) (Joint Ex. 1 at 4-6). As part of the stipulation, the parties recommend that the Board issue a certificate for the preferred site, as described in the application, subject to the 26 conditions set forth in the stipulation. The following is a summary of the conditions agreed to by the parties and is not intended to replace or supersede the stipulation. The parties agree that:

- (1) The facility shall be installed at ATSI's preferred site as presented in the application and as modified and/or clarified by the Applicant's supplemental filings and further clarified by recommendations in the Staff Report.
- (2) ATSI shall utilize the equipment and construction practices as described in the application and as modified and/or clarified in supplemental filings, replies to data requests, and recommendations in the Staff Report.
- (3) ATSI shall implement the mitigation measures as described in the application and as modified and/or clarified in supplemental filings, replies to data requests, and recommendations in the Staff Report.

- (4) ATSI shall conduct a preconstruction conference prior to the start of any construction activities. Staff, ATSI, and representatives of the prime contractor and all subcontractors for the project shall attend the preconstruction conference. The conference shall include a presentation of the measures to be taken by ATSI and contractors to ensure compliance with all conditions of the certificate, and discussion of the procedures for on-site investigations by Staff during construction. Prior to the conference, ATSI shall provide a proposed conference agenda for Staff review. ATSI may conduct separate preconstruction meetings for each stage of construction.
- (5) At least 30 days prior to the preconstruction conference, ATSI shall have in place a complaint resolution procedure to address potential public grievances resulting from project construction and operation. The resolution procedure must provide that ATSI will work to mitigate or resolve any issues with those who submit either a formal or informal complaint and that the Applicant will immediately forward all complaints to Staff. ATSI shall provide the complaint resolution procedure to Staff for review and confirmation that it complies with this condition, prior to the preconstruction conference.
- (6) At least 30 days before the preconstruction conference, ATSI shall submit to Staff, for review to ensure compliance with this condition, one set of detailed engineering drawings of the final project design, including the facility, temporary and permanent access roads, any crane routes, 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. The final project layout shall be provided in hard copy and as geographically-referenced electronic data. 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.
- (7) 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 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

to ensure compliance with this condition, prior to construction in those areas.

- (8) Within 60 days after the commencement of commercial operation, ATSI shall submit to Staff a copy of the as-built specifications for the entire facility. If ATSI demonstrates that good cause prevents it from submitting a copy of the as-built specifications for the entire facility within 60 days after commencement of commercial operation, it may request an extension of time for the filing of such as-built specifications. ATSI shall use reasonable efforts to provide as-built drawings in both hard copy and as geographically-referenced electronic data.
- (9) 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.
- (10) 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.
- (11) Prior to commencement of construction, ATSI shall develop a public information program that informs affected property owners of the nature of the project, specific contact information for the Applicant's personnel who are familiar with the project, the proposed timeframe for project construction, and a schedule for restoration activities.
- (12) Prior to commencement of construction, ATSI shall prepare a vegetative mitigation plan that addresses the aesthetic and noise impacts of the facility. Of special concern are the five residential properties that are located nearest to the southeast corner of the preferred site. ATSI shall consult with those property owners in the development of this plan and provide the plan to Staff for review and confirmation that it complies with this condition.
- (13) Prior to the commencement of construction activities that require permits or authorizations by federal or state laws and regulations, ATSI shall obtain and comply with such permits or authorizations. ATSI shall provide copies of permits and authorizations, including all supporting documentation, to

Staff within seven days of issuance or receipt by the Applicant. ATSI shall provide a schedule of construction activities and acquisition of corresponding permits for each activity at the preconstruction conference.

- (14) ATSI shall have an environmental specialist on site during construction activities that may affect sensitive areas, as mutually agreed upon between the Applicant and Staff, and as shown on the Applicant's final approved construction 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.
- (15) ATSI shall contact Staff, ODNR, and United States Fish and Wildlife Service (USFWS) within 24 hours if state- or federally-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 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.
- (16) Construction in upland sandpiper preferred nesting habitat types shall be avoided during the species' nesting period of April 15 to July 31.
- (17) Construction in sandhill crane preferred nesting habitat types shall be avoided during the species' nesting period of April 1 to September 1.
- (18) ATSI shall restrict public access to the facility with appropriately placed warning signs or other necessary measures.
- (19) 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.

- (20) 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, hoe ram, and blasting 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. ATSI shall notify property owners or affected tenants, within the meaning of Ohio Adm.Code 4906-5-08(C)(3), of upcoming construction activities, including potential for nighttime construction activities.
- (21) ATSI shall meet all Federal Communications Commission and other federal agency requirements to construct an object that may affect radio or television communications. ATSI shall mitigate any effects or degradation caused by facility operation or placement. For any residence that is shown to experience a degradation of television or radio reception or interference due to facility operation, ATSI shall provide, at its own expense, cable or direct broadcast satellite television service or other mitigation acceptable to the affected residents.
- (22) At least seven days before the preconstruction conference, ATSI shall submit to Staff, for review to ensure compliance with this condition, a copy of all NPDES permits, including its approved SWPPP, approved Spill Prevention, Control, and Countermeasure procedures, and its erosion and sediment control plan. Any soil issues must be addressed through proper design and adherence to Ohio EPA best management practices related to erosion and sedimentation control.
- (23) ATSI shall employ the following erosion and sedimentation control measures, construction methods, and best management practices when working near environmentally-sensitive areas

and/or when in close proximity to any watercourses, in accordance with the NPDES permits and SWPPP obtained for the project:

- (a) During construction of the facility, seed all disturbed soil, within seven days of final grading, with a seed mixture acceptable to the appropriate county cooperative extension service. Denuded areas, including spoils piles, shall be seeded and stabilized within seven days, if they will be undisturbed for more than 21 days. Reseeding shall be done within seven days of emergence of seedlings as necessary until sufficient vegetation in all areas has been established.
- (b) Inspect and repair all erosion control measures after each rainfall event of one-half of an inch or greater over a 24-hour period, and maintain controls until permanent vegetative cover has been established on disturbed areas.
- (c) Delineate all watercourses, including wetlands, by fencing, flagging, or other prominent means.
- (d) Avoid entry of construction equipment into watercourses, including wetlands, except at specific locations where construction has been approved.
- (e) Prohibit storage, stockpiling, and/or disposal of equipment and materials in environmentally-sensitive areas.
- (f) Locate structures outside of identified watercourses, including wetlands, except at specific locations where construction has been approved.
- (g) Divert all stormwater runoff away from fill slopes and other exposed surfaces to the greatest extent possible, and direct instead to appropriate catchment structures, sediment ponds, etc., using diversion berms, temporary ditches, check dams, or similar measures.

- (24) ATSI shall remove all temporary gravel and other construction staging area and access road materials after completion of construction activities, as weather permits, unless otherwise directed by the landowner. Impacted areas shall be restored to preconstruction conditions in compliance with the NPDES permits obtained for the project and the approved SWPPP created for the project.
- (25) All construction debris and all contaminated soil shall be promptly removed and properly disposed of in accordance with Ohio EPA regulations.
- (26) ATSI shall comply with fugitive dust rules by the use of water spray or other appropriate dust suppressant measures whenever necessary.

(Joint Ex. 1 at 8-15.)

IV. Board's Conclusion and Certificate Conditions

In the stipulation, the parties recommend that the Board issue a certificate for the construction, operation, and maintenance of the Lake Avenue Substation, at the preferred site, as described in the application, and subject to the conditions summarized above (Joint Ex. 1 at 8). Although not binding on the Board, stipulations are given careful scrutiny and consideration, particularly where no party objects to the stipulation.

At the evidentiary hearing, ATSI witness Nataliya Bryksenkova testified that the stipulation is the product of serious bargaining among capable, knowledgeable parties. Additionally, Ms. Bryksenkova testified that the stipulation is in the public interest, because the construction of the Lake Avenue Substation at the preferred site will ensure the long-term reliability of transmission service and operation in the project area. Finally, Ms. Bryksenkova testified that the stipulation does not violate any important regulatory practice or principle. (Tr. at 12-13.)

The Ohio Supreme Court has recognized that the Board is vested with the authority to issue certificates upon such conditions as the Board considers appropriate. As acknowledged by the Court, the construction of projects subject to the Board's authority 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 that the Board has set. In *re* Buckeye Wind, LLC, 131 Ohio St.3d 449, 2012-Ohio-878, 966 N.E.2d 869. Such monitoring includes the convening of preconstruction conferences and the submission of follow-up studies and plans by an applicant. Additionally, as with all certificates, the Board emphasizes that, if Staff should

discover, through its continued monitoring and review of the progress of the project, that ATSI is not complying with any of the conditions, Staff should bring such concerns to the attention of the Board.

Accordingly, based upon all of the above, the Board finds that the stipulation is the product of serious bargaining among knowledgeable parties, will promote the public interest, convenience, and necessity, and does not violate any important regulatory principle or practice. Further, based upon the record in this proceeding, the Board finds that the evidence supports a finding that all of the criteria in R.C. 4906.10(A) are satisfied for the construction, operation, and maintenance of the Lake Avenue Substation, at the preferred site, subject to the conditions set forth in the stipulation. Therefore, the Board approves and adopts the stipulation and hereby issues a certificate to ATSI for the construction, operation, and maintenance of the Lake Avenue Substation, at the preferred site, as described in the application and subject to the 26 conditions set forth in the stipulation and this Opinion, Order, and Certificate.

FINDINGS OF FACT AND CONCLUSIONS OF LAW:

- (1) ATSI is a corporation and a person under R.C. 4906.01(A).
- (2) The Lake Avenue Substation is a major utility facility as defined in R.C. 4906.01(B)(1).
- (3) ATSI held a public informational meeting in Elyria, Ohio, on January 5, 2015. On December 29, 2014, and January 5, 2015, ATSI filed proofs of publication of notice of the public informational meeting.
- (4) On March 6, 2015, ATSI filed its application for a certificate for the proposed Lake Avenue Substation.
- (5) On May 11, 2015, the chairman of the Board notified ATSI that the application was found to comply with the content requirements of Ohio Adm.Code Chapters 4906-1, et seq.
- (6) On May 20, 2015, ATSI filed an affidavit of proof of service of the complete application on local public officials.
- (7) On July 1, 2015, and July 30, 2015, ATSI filed proofs of publication of the newspaper notice required by Ohio Adm.Code 4906-5-08.
- (8) On July 28, 2015, Staff filed its Staff Report.

- (9) A local public hearing was held, as scheduled, on August 12, 2015. No individuals provided testimony regarding the project.
- (10) On August 25, 2015, ATSI and Staff filed a stipulation that would resolve all of the issues raised in this proceeding.
- (11) The evidentiary hearing was held, as scheduled, on August 26, 2015.
- (12) The record establishes the need for the project, as required by R.C. 4906.10(A)(1).
- (13) The record establishes the nature of the probable environmental impact from construction, operation, and maintenance of the project, as required by R.C. 4906.10(A)(2).
- (14) The record establishes that the preferred site, subject to the conditions set forth in this Opinion, Order, and Certificate, represents the minimum adverse environmental impact, considering the available technology and nature and economics of the various alternatives, and other pertinent considerations, as required by R.C. 4906.10(A)(3).
- (15) The record establishes that the preferred site, subject to the conditions set forth in this Opinion, Order, and Certificate, is 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 R.C. 4906.10(A)(4).
- (16) The record establishes that the preferred site, subject to the conditions set forth in this Opinion, Order, and Certificate, will comply with R.C. Chapters 3704, 3734, and 6111, R.C. 1501.33, 1501.34, and 4561.32, and all rules and regulations thereunder, to the extent applicable, as required by R.C. 4906.10(A)(5).
- (17) The record establishes that the project, subject to the conditions set forth in this Opinion, Order, and Certificate, will serve the public interest, convenience, and necessity, as required by R.C. 4906.10(A)(6).

- (18) The record establishes that the project, subject to the conditions set forth in this Opinion, Order, and Certificate, has been assessed as to viability of agricultural land in an existing agricultural district, as required by R.C. 4906.10(A)(7).
- (19) Inasmuch as water conservation practices are not involved with the project, R.C. 4906.10(A)(8) does not apply under the circumstances of this case.
- (20) The stipulation filed by ATSI and Staff is reasonable and should be adopted.
- (21) The evidence supports a finding that all of the criteria in R.C. 4906.10(A) are satisfied for the construction, operation, and maintenance of the Lake Avenue Substation at the preferred site, subject to the conditions set forth in the stipulation and this Opinion, Order, and Certificate.
- (22) Based on the record, the Board should issue a certificate of environmental compatibility and public need, pursuant to R.C. Chapter 4906, for the construction, operation, and maintenance of the Lake Avenue Substation, subject to the conditions set forth in the stipulation and this Opinion, Order, and Certificate.

ORDER:

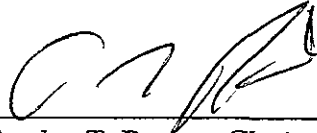
It is, therefore,

ORDERED, That the stipulation filed by the parties be approved and adopted. It is, further,

ORDERED, That a certificate be issued to ATSI for the construction, operation, and maintenance of the project as proposed at the preferred site, subject to the conditions set forth in the stipulation and this Opinion, Order, and Certificate. It is, further,

ORDERED, That a copy of this Opinion, Order, and Certificate be served upon all parties and interested persons of record.

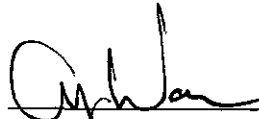
THE OHIO POWER SITING BOARD



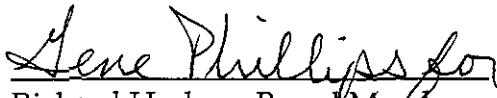
Andre T. Porter, Chairman
Public Utilities Commission of Ohio



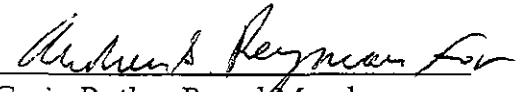
David Goodman, Board Member
and Director of the Ohio
Development Services Agency



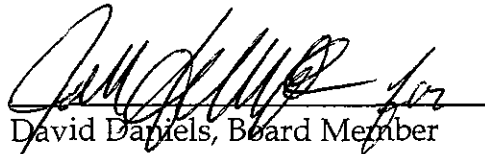
James Zehringer, Board Member
and Director of the Ohio
Department of Natural Resources



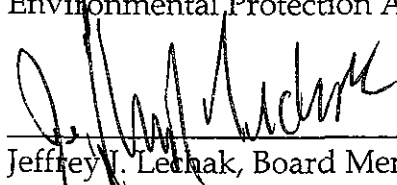
Richard Hodges, Board Member
and Director of the Ohio
Department of Health



Craig Butler, Board Member
and Director of the Ohio
Environmental Protection Agency



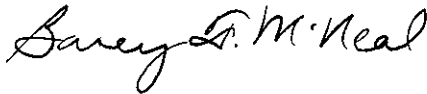
David Daniels, Board Member
and Director of the Ohio
Department of Agriculture



Jeffrey J. Lechak, Board Member
and Public Member

SJP/vrm/sc

Entered in the Journal



Barcy F. McNeal
Secretary