Application for Certificate of Environmental Compatibility and Public Need for the

BAKU – GAVIN 765 KV TRANSMISSION LINE PROJECT

OPSB Case No. 26-0426-EL-BTX

Submitted pursuant to Adm.Code 4906-4

AEP Ohio Transmission Company, Inc.

July 2026

BEFORE THE OHIO POWER SITING BOARD

Certificate Application for Electric Transmission Facilities

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4906-4-02 PROJECT SUMMARY AND APPLICANT INFORMATION

(A) PROJECT SUMMARY

AEP Ohio Transmission Company, Inc. (the Company) proposes to build the Baku–Gavin 765-Kilovolt (kV) Transmission Line Project (the Project) within Marion, Union, and Scioto townships and the unincorporated community of Stockdale in Pike County; Bloomfield, Franklin, and Scioto townships in Jackson County; as well as Cheshire, Huntington, and Morgan townships and the village of Vinton in Gallia County. The Project is also located within 500 feet from the city of Jackson in Jackson County and the village of Cheshire in Gallia County.

The Project, as shown in **Figure 2-1**, is part of the Company's Piketon Area Improvements, which involve proposed additions to the power grid to provide power to a new customer facility in the area, increase reliability, and create opportunities for future growth and community development.

(B) GENERAL PURPOSE OF THE FACILITY

The purpose of the Project is to build approximately 51 miles of new 765-kV transmission line between the Company's proposed Baku Substation (to be filed under separate cover) and the Company's existing Gavin Substation.

The Project will provide power to a new customer facility in Pike County, Ohio, and is expected to offer significant reliability increases to the region and create future growth for the area. Additional details can be found infra the portion of this Application addressing Ohio Administrative Code (Adm.Code) 4906-4-03(C).

(C) GENERAL LOCATION, SIZE, AND OPERATING CHARACTERISTICS OF THE PROPOSED FACILITY

The Project begins at the Company's proposed Baku Substation, located approximately 4.5 miles southeast of the Appalachian Highway (State Route 32 [OH-32]/State Route 124 [OH-124]) and U.S. Highway 23 (US-23), south of the U.S. Department of Energy (DOE) former Portsmouth Site (PORTS) facility. The Project continues approximately 51 miles eastward to the Company's existing Gavin Substation, located along the west side of State Route 7 (OH-7) and adjacent southwest of the village of Cheshire.

The Project involves installing steel structures, which have an approximate height of 167 feet, to support a single 765-kV circuit. Generally, the Project will involve acquiring a new 200-foot-wide right-of-way (ROW). The exact structure type, height, and ROW widths may vary, subject to final engineering design.

Figure 2-1 shows the Project endpoints and the Route Corridor identified by the Company. In total, the Preferred Route is 51.3 miles long and its 200-foot-wide ROW is approximately 1,244 acres.

(D) SUITABILITY OF THE ROUTE FOR THE PROPOSED FACILITY

After conducting a Siting Study and public information meetings, the Company determined a suitable Route Corridor for the Project that balances the constraints and opportunity features identified within the Project area, while also acknowledging input received from the public and stakeholders. The Siting Study documents the selection process of the Preferred Route and is discussed in detail in Section 4905-4-04 of this Application.

The goal of the Siting Study was to understand the constraints and opportunities in the Study Area, to develop route alternatives, evaluate potential impacts associated with the route alternatives, and identify a suitable Preferred Route for the proposed Baku–Gavin 765-kV Transmission Line. The Preferred Route is the route that (1) is most consistent with the Company's siting guidelines (see **Section 2.4** of **Appendix 4-1**); (2) reasonably minimizes adverse impacts on the natural and human environments; (3) minimizes special design requirements and unreasonable costs; and (4) can be constructed and operated in a safe, timely, and reliable manner. The Preferred Route was selected by the Company for consideration by the Ohio Power Siting Board (OPSB) in this Application.

Existing transmission line corridors and undeveloped forest and farmland were identified as the primary opportunity features for the Project. The Preferred Route from the Company's proposed Baku Substation to the existing Gavin Substation is 51.3 miles in length and parallels existing transmission line corridors for 18 percent of its total alignment (approximately 9.2 miles). Notable constraints that influenced the selection of the Preferred Route include avoiding obstructions or conflicts with the existing James A. Rhodes Airport and minimizing and mitigating impacts to planned development and identified sensitive environmental and cultural resources. Additionally, with its predominantly cross-country alignment through undeveloped areas, the Preferred Route attempts to maximize distances from aesthetic resources and residential areas to the best extent practicable.

(E) HISTORY, AFFILIATE RELATIONSHIPS, CURRENT OPERATIONS

Company History

AEP Ohio Transmission Company, Inc. (the applicant in this filing) is a subsidiary to American Electric Power (AEP), which is a public utility as defined by Ohio Revised Code 4905.02 and 4905.03 and is engaged in the business of supplying electric transmission and distribution service to customers in Ohio.

Current Operations and Affiliate Relationships

AEP was originally incorporated in 1906 as the American Gas and Electric Company. Its earliest utility properties provided electric, gas, and other services in communities in New Jersey, New York, Pennsylvania, West Virginia, Ohio, Indiana, and Illinois. The Company became AEP in 1958 and merged with Central and Southwest Corporation in 2000.

AEP is one of the largest electric utilities in the United States, delivering electricity to approximately 5.5 million customers through 223,000 miles of distribution lines in 11 states. AEP owns the nation's largest electric transmission system, which is a network comprising more than 40,000 miles and includes more 765-kV, extra-high voltage transmission lines than all other U.S. transmission systems combined. AEP also ranks among the nation's largest generators of electricity, owning approximately 30,000 megawatts of generating capacity in the United States. AEP's utility units operate as AEP Ohio, AEP Texas, Appalachian Power (in Virginia and West Virginia), Wheeling Power (West Virginia), AEP Appalachian Power (in Tennessee), Indiana Michigan Power Company, Kentucky Power, Public Service Company of Oklahoma, and Southwestern Electric Power Company (in Arkansas, Louisiana, and east Texas). News releases and other information about AEP can be found at www.AEP.com. AEP Ohio provides electricity to over 1.5 million customers in Ohio. News and information about AEP Ohio can be found at www.AEPOhio.com.

Figure 2-1: Project Area Overview

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4906-4-03 PROJECT DESCRIPTION AND PROJECT SCHEDULE IN DETAIL

(A) REQUIREMENTS FOR ALL APPLICATIONS

(1) Project Schedule in Gantt Format

Figure 3-1 provides the schedule for the Baku–Gavin 765-Kilovolt (kV) Transmission Line Project (the Project) as a Gantt bar chart, which illustrates the Project schedule in detail, including (a) preparation of the Application, (b) acquisition of rights-of-way (ROWs) and land rights, (c) submittal of the application for certificate, (d) issuance of the certificate, (e) preparation of the final design, (f) construction of the facility, (g) in-service date, and, (h) receipt of grid interconnection studies, and other critical path milestones for construction.

(2) Construction Sequence

The initial phase of construction involves establishing fly yards/emergency landing zones and corridors for access roads and the 200-ft-wide ROW. Typically, crews first prepare the ROW by clearing trees and wood-stemmed vegetation. Crews may also remove identified danger trees outside the ROW as allowed per easement language. Following the forestry work, crews prepare for construction by building access roads, marking utilities and tower locations along the power line route using stakes and flags, removing obstructions from the ROW easement area, and installing safety and environmental controls, such as fencing.

Once the construction corridor is developed, tower installation begins. Due to some challenging terrain within the Project area, the construction team plans to use fly yards/emergency landing zones for helicopter use where necessary. Crews will install and stabilize tower foundations prior to installing and securing the new tower. Towers will be assembled at established laydown yards and/or within the ROW. Once the towers are installed, the crews install new wires along the power line route. Crews energize the equipment after finishing tower and wire installations.

The final phase involves post-construction and site restoration. AEP Ohio Transmission Company, Inc. (the Company) restores properties as close to their pre-construction condition as possible. The Company's ROW team works directly with individual landowners to address any property damage. Additional details regarding the post-construction and site restoration process are included infra the portion of this Application addressing Ohio Administrative Code (Adm.Code) 4906-4-08.

(3) Project Area Description

(a) Project Area Map

As shown on **Figure 2-1**, the Baku–Gavin 765-Kilovolt (kV) Transmission Line Project is located within Marion, Union, and Scioto townships and the unincorporated community of Stockdale in Pike County; Bloomfield, Franklin, and Scioto townships in Jackson County; as well as Cheshire, Huntington, and Morgan townships and the village of Vinton in Gallia County. The western portion of the Project area is located approximately 4.8 miles south of the village of Piketon in proximity to the former Department of Energy (DOE) Portsmouth Gaseous Diffusion Plant (PORTS) facility, and the eastern portion of the Project area is located adjacent southwest of the village of Cheshire. The Project is located within 500 feet (ft) of Cheshire and the city of Jackson. No other population centers or incorporated areas are located within 1,000 ft of the Project.

The overall topography of the Project area is characterized by variable terrain, typical of the Appalachian region of southern Ohio. The Project area is predominantly characterized by undeveloped forested land, agricultural land (pasture/hayfield or cropland), and residential land. Industrial land use within the Project area is generally concentrated to the east near Cheshire, where the Company's existing Gavin Substation is located, and to the west near the DOE PORTS property. Otherwise, mixed-use commercial/industrial land use occurs sporadically within incorporated areas and/or along major road and railroad corridors, such as U.S. Highway 35 (US-35). Additional details of the surrounding Project area are listed below.

(i) Proposed Facilities, Route Corridor, and Potential Right-of-Way Extents

The proposed Project involves building approximately 51.3 miles of new 765-kV transmission line between the Company's proposed Baku Substation and the Company's existing Gavin Substation. The proposed Baku–Gavin 765-kV Transmission Line ROW is generally 200 ft wide, totaling approximately 1,244 acres. The 400-ft-wide Route Corridor identified for the Project is approximately 2,490 acres. Final engineering design may require a wider ROW in limited locations but will remain within the 400-ft Route Corridor.

(ii) Roads and Railroads

Dominant transportation features in the Project area include the Appalachian Highway (State Route 32 [OH-32]/State Route 124 [OH-124]), which crosses the northwestern portion from east to west; State Route 335 (OH-335) and State Route 776 (OH-776), both of which cross the western region generally from northeast to southwest; U.S. Highway 35 (US-35) and State Route 93 (OH-93), both of which generally traverse the central region from northwest to southeast; State Route 139 (OH-139), which travels north to south within the central region; State Route 327 (OH-327), which crosses the northern region from north

to south; State Route 325 (OH-325) and State Route 554 (OH-554), both of which cross the western region from northeast to southwest; and State Route 160 (OH-160), which traverses the southeastern region from northwest to southeast. Additionally, U.S. Highway 23 (US-23) runs north to south immediately adjacent to the western boundary of the Project. A network of local roads (e.g., Adams Road, Keystone Furnace Road, Franklin Valley Road, Germany Road, Owl Creek Road, Rapp Montgomery Road, and Thompson Road) connects these major highways and routes to the agricultural and residential properties within the Project area.

There are four active railroads within the Project area. Norfolk Southern operates a freight rail line that runs generally north to south along US-23 and near the western limits of the proposed Baku Substation in Pike County. Adjacent to Germany Road, CSX operates a freight rail line that also runs generally north–south through the western portion of the Project area. South of Jackson, Ohio, the Ohio South Central Railroad operates a freight rail line running generally north–south through the central portion of the Project area between Franklin Valley Road and OH-93. Additionally, several freight rail spurs are located near the former DOE PORTS property and along the southern boundary of the existing Gavin Substation.

(iii) Major Institutions, Parks, and Recreational Areas

No major institutions were identified within 1,000 ft of the Project. Recreational areas identified for the Project include the Franklin Valley Golf Club, located approximately 0.7 south of the Preferred Route in Jackson County, as well as the Ohio Department of Natural Resources (ODNR) Cooper Hollow Wildlife Area, located approximately 1.6 miles of the Preferred Route in Jackson County. No other major recreational areas or parks were identified within the Project area.

(iv) Existing Gas Pipelines and Electric Power Transmission Line Corridors

The proposed Baku Substation is located near the former DOE PORTS property, in which several Company and Ohio Valley Electric Corporation (OVEC)-operated transmission lines exist. Specifically, the major existing transmission lines interconnecting the various substations on the DOE PORTS property include the following:

- OVEC Kyger–Pierce 345-kV Transmission Line, which generally traverses the northern portion of the Project area from west to east
- OVEC Kyger–X530 345-kV Transmission Line, which generally traverses the southern portion of the Project area from west to east

- AEP Baker–Don Marquis 765-kV Transmission line, which crosses the southwestern portion of the Project area from north to south

- AEP Don Marquis–Bixby 345--kV and Waverly–Sargents 138-kV transmission lines, which both cross the northwestern portion of the Project area from west to east

- AEP Lucasville–Sargents 138-kV and Point O–Don Marquis 345-kV transmission lines, which both cross the western portion of the Project from north to south.

Three additional AEP existing transmission lines cross the central portion of the Project area, all of which generally traverse in a north–south direction: Lick–Addison (138 kV), Lick–Pedro (69 kV), and Oertels Corners–East Beaver (69 kV).

The eastern Project endpoint, the Company's existing Gavin Substation, is located near the coal-powered Gavin Power Plant along the Ohio River. Several existing Company-owned transmission lines cross this portion of the Project area, most of which generally traverse from northeast to southwest: the Gavin–Kammer and Gavin–Marysville 765-kV transmission lines, the Meigs–Gavin 69-kV Transmission Line, and the Gavin Extension No. 1 and No. 2 138-kV transmission lines. Additionally, the AEP Sporn–Portsmouth and Sporn–South Point 13-kV transmission lines cross the eastern portion of the Project from southwest to northeast.

Eight interstate gas transmission pipelines located near US-35 cross the Project area, either from north to south or northeast to southwest. Considering these orientations relative to the Project endpoints (Baku and Gavin Substations), any route selected for the Project would require several interstate pipeline crossings.

(v) Named Lakes, Reservoirs, Streams, Canals, and Rivers

No named lakes, reservoirs, or canals were identified within the Project area. The Scioto River is located immediately adjacent to the western boundary of the Project area, and the Ohio River is located immediately adjacent to the eastern boundary of the Project area. Dominant hydrologic features within the Project area include Big Beaver Creek, Brushy Fork, Buckeye Creek, Campaign Creek, Deer Creek, Dixon Run, Dutch Run, Fourmile Creek, Jacko Run, Keeton Run, Kyger Creek, Kyger Run, Little Kyger Creek, Little Raccoon Creek, Little Scioto River, Little White Oak Creek, Long Branch, McDowell Creek, Millstone Run, Owl Creek, Pecks Creek, Raccoon Creek, Rocky Fork, Salt Lick Creek, Sugar Camp Creek, Turkey Run, White Oak Creek, Wolf Run, and their various upstream unnamed tributaries. Surface waters within the Project area generally either flow westward to converge with the Scioto River or southeastward to converge with the Ohio River. Based on ODNR correspondence (see Adm.Code 4906-4-08), Raccoon Creek is a state scenic river in Huntington Township within Gallia County. No other state or national scenic rivers were identified within the Project area.

(vi) Population Centers and Legal Boundaries of Cities, Villages, Townships, and Counties

The Project is located within Marion, Union, and Scioto townships and the unincorporated community of Stockdale in Pike County; Bloomfield, Franklin, and Scioto townships in Jackson County; as well as Cheshire, Huntington, and Morgan townships and the village of Vinton in Gallia County. Additional population centers in proximity to the Project include the city of Jackson in Jackson County and the village of Cheshire in Gallia County.

(vii) Sensitive Receptors

No hospitals or schools are located within 500 ft of the Project. The nearest hospital, Holzer Medical Center, is located approximately 1.8 miles north of the Project in the city of Jackson. The nearest school, Vinton Elementary School, is located approximately 0.6 miles north of the Project in the village of Vinton.

Two cemeteries, two commercial/industrial buildings, and 46 residences were identified within a 500-ft buffer of the Project. No places of worship, hospital, parks, or recreational areas are located within 500 ft of the Project. Additional details on these sensitive receptors are discussed infra the portion of this Application addressing Adm.Code 4906-4-08(C).

(viii) Acres of Proposed Right-of-Way, Miles of Proposed Electric Power Line, and Number of Properties Crossed

The Baku–Gavin 765-kV Transmission Line is proposed to be 51.3 miles long. The proposed 200-ft-wide ROW is approximately 1,244 acres and crosses 334 properties.

(4) Proposed Installation Methods

(a) Site Clearing, Construction Methods, and Reclamation Operations

The following paragraphs describe the proposed site clearing, construction methods, and reclamation operations of the Project.

(i) Surveying and Soil Testing

The Preferred Route has been surveyed to establish the centerline, ROW, and pole locations. The survey was completed using conventional and/or aerial methods. Topographic features and man-made structures in the vicinity of the Preferred Route that may affect the design were located during the survey. Offsets were used to survey around large trees and other large obstructions. Profile measurements were obtained by conventional or aerial methods. The centerline and ROW will be staked prior to construction.

Soil and rock testing (borings) will be prioritized at dead-end and running angle structures (i.e., heavily loaded structures) and locations with identified geohazards (e.g., areas with historical landslides and/or coal mining activity). A geohazard desktop study has been completed, and boring locations have been selected in accordance with its findings to appropriately characterize subsurface risks.

Borings will be conducted using a truck- or track-mounted drilling rig equipped with a continuous-flight auger (typically 6-inch diameter). Soil sampling will be performed in general accordance with the applicable current ASTM standard, including split-spoon sampling in cohesionless soils and thin-walled tube sampling in cohesive soils. Soil samples are typically obtained continuously in the upper 10 ft and at 5-ft intervals below.

Borings are typically advanced to a target depth of 35 to 50 ft below existing grade, or deeper if required to characterize foundation-bearing strata. Depending on what depth bedrock is encountered, a minimum of 10 ft of competent rock is cored to confirm rock quality and continuity.

(ii) Grading and Excavation

Surficial grading of soil and rock will be required to construct access roads, pull pads, and work pads.

The transmission line is preliminarily expected to consist of lattice structures largely supported on grillage or steel-reinforced concrete foundations. Excavations for the grillages are anticipated to be between approximately 512 cubic ft (8 ft x 8 ft x 8 ft) to 3,375 cubic ft (15 ft x 15 ft x 15 ft), depending on the structure size and location. The Company will backfill grillage foundations with native soil and/or clean fill in accordance with the Company's specifications. Due to site-specific requirements, some lattice structures will require steel-reinforced concrete foundations. The excavations for steel-reinforced concrete pier foundations are anticipated to be approximately 4 to 8 ft in diameter and 15 to 50 ft deep. Direct-embedded foundations are not anticipated to be used for the Project.

Depending on the location within the Project, excavated material will either be reused, spread evenly within the ROW, or hauled off-site to an approved soils disposal site.

(iii) Construction of Access Roads and Trenches

Construction access will be required for installation of the towers and stringing of the conductor cable or wire. Access roads will require the landowner's input and approval. Preliminary access roads are presented on **Figure 8-2.** Note that these access roads cannot be fully planned and identified until after a final route is approved and contact with affected landowners for the transmission line easements has been completed by the Company. As part of this process, the Company will identify temporary and permanent access roads

for the final line route. Some access roads are anticipated to remain at the landowners' permission and/or request.

Where access across wetlands or streams is necessary, timber mats or their equivalent will be used where possible to minimize the environmental impacts. If field conditions necessitate modification of the finalized access road locations during construction, the concurrence of the property owner will be obtained, necessary environmental field studies will be performed, and necessary permits will be updated.

(iv) Stringing of Cable

During wire stringing operations, areas along the transmission line will be used as setup locations for the wire pulling equipment, including, but not limited to, conductor reels, ground wire reels, and wire tensioners. The conductor will be installed using the tension stringing method. Lightweight cables or ropes will be fed through the stringing sheaves mounted on the poles. Conductors will be pulled through under sufficient tension to keep the conductor off the ground to prevent any damage to the conductor. Temporary guard or clearance poles will be used as a safety precaution at locations where the conductors could create a hazard to either crewmembers or the public. The locations and heights of clearance poles will be such that conductors are held clear of other electric distribution lines, communication cables, railroads, and roadways. Transmission line construction crewmembers will supervise the stringing operation at all times. The observers will be in radio or visual contact with the operator of the stringing equipment.

(v) Installation of Electric Transmission Line Poles and Structures, including Foundations

The proposed design comprises Guyed-Y or self-supporting steel lattice structures. Most structure locations will involve concrete foundations. The excavation of each concrete foundation will be approximately 5 to 15 ft in diameter and 15 to 50 ft deep.

(vi) Post-Construction Reclamation

Topsoil at pole excavations will be stockpiled when necessary and protected from erosion. Topsoil will be redistributed over disturbed areas to foster re-vegetation following construction (except in wetland areas). Restoration, including temporary and permanent seeding, will be coordinated with the construction activities to provide re-vegetation and soil stabilization at the earliest reasonable time. Following construction, all tower locations, material storage sites, and most temporary access roads will be seeded with a suitable grass seed mixture as specified in the erosion and sediment control plan.

Re-vegetation techniques will enhance the ROW for use as possible wildlife habitat. Where stream banks are disturbed, they will be restored by planting low-growing species to reduce bank erosion. Lawn or garden

areas, or paved areas damaged during the construction of the transmission line, will be restored as close to pre-construction conditions as possible. Landscaping or landscape plantings damaged during construction will also be restored or replaced as directed by affected property owners. After restoration is complete, the Company will periodically inspect the ROW for areas of erosion, sedimentation, and inadequate re-vegetation conditions, if any. If such conditions are identified, corrective actions will be implemented.

(b) Facility Layout

(i) Transmission Line Route Map

Figure 8-4 is a map at 1:12,000 scale of the Preferred Route, including locations of identified preliminary access roads, fly yards, landing zones, and proposed locations for transmission line structures. Although the additional information required by Adm.Code 4906-4-03(A)(4)(b) (e.g., structure locations) will not be finalized until a final route is approved by the Ohio Power Siting Board, the final engineering design is complete, and preliminary locations are provided for the Preferred Route. No buildings or fenced-in or secured areas are planned for the Project. Additionally, no paved or permanent access roads are anticipated for the Project.

The Company is currently identifying staging areas and laydown areas for the Project. To date, one property has been identified within the Project area for a laydown area, located at 2134 Schuster Road, Piketon, Ohio, which will also be used for other projects in the area. The Company has obtained a short-term lease for portions of the property for upcoming material deliveries. Once additional sites are identified, the Company can provide final locations that support this Project, if requested.

(ii) Reasons for Proposed Layout and Unusual Feature

A detailed description of the rationale for the proposed layout (i.e., the Preferred Route) is presented in the Siting Study in **Appendix 4-1**. There are no unusual features within the Project area beyond the generally developed land use.

(iii) Future Modification Plans

The Company's planning engineers generally forecast future transmission projects in a five-year planning window. The Company currently has no plans for future modifications of the proposed Baku–Gavin 765-kV Transmission Line.

(B) REQUIREMENTS FOR A PROPOSED GENERATION FACILITY

Not applicable.

(C) REQUIREMENTS FOR A PROPOSED ELECTRIC POWER TRANSMISSION LINE OR GAS PIPEINE

(1) Need for the Proposed Facility

SB Energy has requested 9,200 MW of demand at a new delivery point near Piketon, Ohio. The customer has requested an initial load of 3,000 MW by the end of 2028 and plans to ramp up to full demand in 2030.

In connection with SB Energy's request, the DOE, SB Energy, and AEP Ohio announced planned multibillion-dollar investments in advanced digital and energy infrastructure to support data center growth and drive economic development in Appalachian Ohio. The investments will include new 765-kV electric transmission infrastructure—including the infrastructure at issue in this Application—to serve data center development at the site of the former gaseous diffusion plant in Piketon, Ohio. This transmission line Project is essential to powering the data center development, which will unlock millions of dollars in regional investment. SB Energy is committed to paying for the new transmission investments at issue in this Application to help avoid increases to transmission rates for Ohio residents. The matters related to economic development impacts of the Project and protection of other Ohio ratepayers will be addressed in detail as part of an upcoming reasonable arrangement filing under Ohio Revised Code 4905.31 before the Public Utilities Commission of Ohio (PUCO).

As the PUCO's Federal Energy Advocate noted in June 2026 correspondence to the President and CEO of PJM Interconnection, this is a "critical project" pursuant to which "SB Energy has also committed to make excess generation and transmission capacity available to the grid for the benefit of American consumers by increasing energy supply and lowering energy costs, while also investing $40 million through a Community Benefits Agreement to support the surrounding Ohio Communities." The Federal Energy Advocate noted, further, that "[T]his new large-scale technology campus … will support advanced research in industries such as fusion and quantum computing, strengthen national defense, and reinforce U.S. leadership in the global technology race, while also enhancing the grid, protecting Ohio ratepayers, and creating thousands of local jobs." Ultimately, the transmission facilities will connect to AEP's 765-kV bulk power system in Ohio and will be a significant enhancement to that power system. As such, these transmission investments—though fully paid for by SB Energy—will provide significant benefits to other Ohio retail customers.

(a) Purpose of the Proposed Facility

The purpose of the Baku–Gavin 765-kV transmission line is to add a 765-kV source between Gavin and Baku Substations that will provide transmission service to the customer's initial load from Baku Substation and increase capacity and reliability to the Piketon area.

(b) System Conditions, Local Requirements, and Other Pertinent Factors

The AEP Transmission system in the area is mainly supported by a radial 765-kV line originating from the Hanging Rock Substation and terminating at the Don Marquis 765-kV Substation. At Don Marquis, power is stepped down via a 2,250-megavolt-ampere (MVA) 765/345-kV Transformer. The 345-kV system is the backbone in the area, as Don Marquis has one 345-kV line interconnecting at AEP's Biers Run Substation, two 345-kV interconnections with OVEC Kyger Creek and Pierce Substations, one 345-kV interconnection with AES Stuart Substation, and two 345/138-kV step down transformers. Additionally at Don Marquis, there is a planned 345-kV interconnection with Duke expected to take place in the 2030 timeframe.

While the 345-kV system is prevalent in the area, it is also aging at the same time, due to its construction primarily in the 1960s and 1970s. The existing 345-kV lines in the area predominantly use Aluminum Conductor Alloy Reinforced (ACAR), which is rarely used in modern transmission line designs and does not offer enough capacity to support a load of this magnitude. Hence, a new 765-kV transmission line from Gavin into the area will provide the capacity and infrastructure necessary to serve the first phase of the customer's load and is a vital piece of the plans to ramp load to 9,200 megawatts (MW).

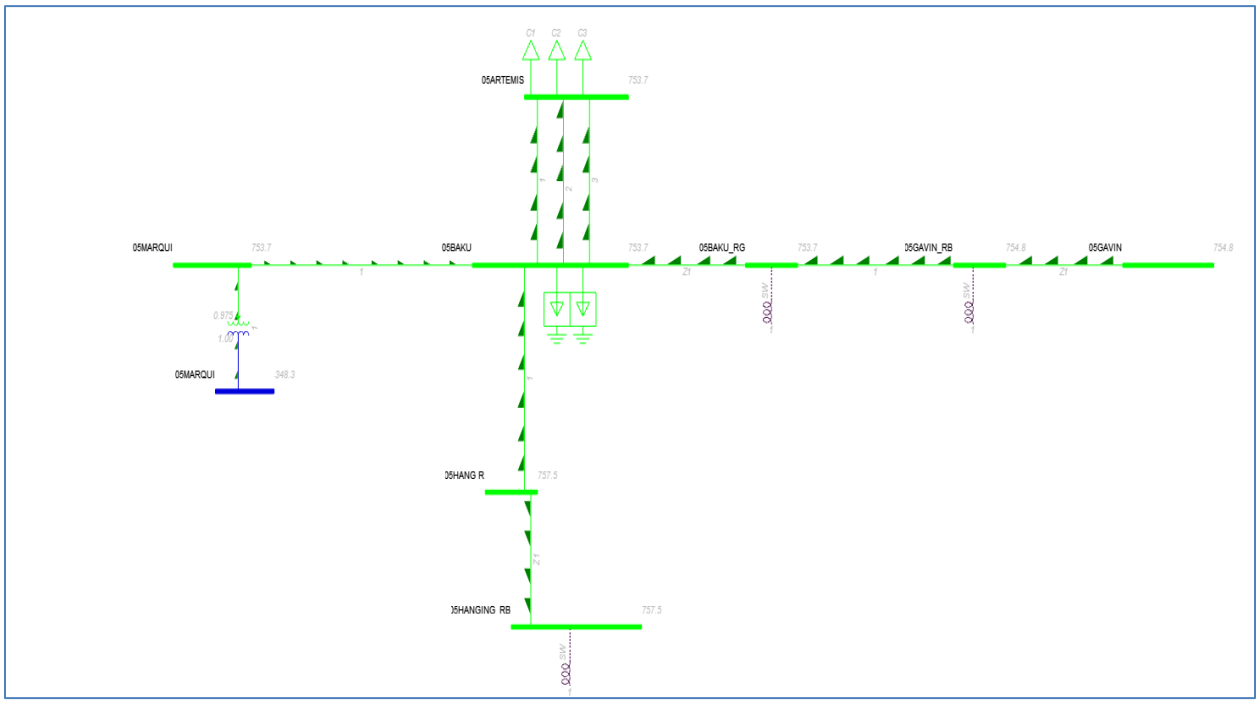
(c) Load Flow Studies and Contingency Analyses

AEP internal load flow analysis is driving the need for the Project. The 9,200 MW of load requested cannot be adequately served with anything other than new 765-kV infrastructure. The new line will also provide additional opportunities for economic development and facilitate future generation interconnections in the area. In addition, Don Marquis Substation is now served by a radial 765-kV line from Hanging Rock. Thus, the new line would also provide a redundant 765-kV path from a strong source in Gavin, that would improve the reliability of the 345-kV system in the Don Marquis area and for all customers served from the surrounding areas. Additional load flow analysis is being performed by PJM to ensure no harm to the transmission system would be expected upon integrating this load and new 765-kV transmission line.

(D) REQUIREMENTS FOR A PROPOSED ELECTRIC POWER TRANSMISSION LINE

(1) System Performance Transcription Diagrams

The transcription diagram below shows the electrical configuration of the Baku–Gavin 765-kV line and how it intends to serve the customer load interconnected at Baku 765-kV Substation. Additionally, the diagram also demonstrates how the existing Hanging Rock-Don Marquis 765-kV line will be re-terminated at Baku to support the load. This line work on the existing Hanging Rock-Don Marquis 765-kV Transmission Line will be the subject of a future filing.



(2) Analysis of the Impact of the Proposed Facility on the Electric Power System Economy and Reliability

This Project is expected to offer significant reliability increases to the region by installing a redundant 765-kV path from Gavin Substation to the Don Marquis area with the new Gavin–Baku 765-kV circuit. By offering a redundant 765-kV path, the area would boost N-1 redundancy at the 765-kV level, which will benefit all customers served from the Don Marquis area. Last, building this new 765-kV line from Gavin to Baku will also provide opportunities for future development in the area by way of new generation or load.

(3) Options Considered to Eliminate the Need for the Proposed Facility

The initial 3,000 MW of the total 9,200 MW of load requested cannot be adequately served with anything other than 765-kV infrastructure. This line will also support the regional expansion plan by providing another 765-kV path for power to serve the requested load from sources already located on the AEP system on the 765-kV network.

The level of load requested of 10 GW total cannot be adequately served with anything other than 765-kV infrastructure. This line will also support the regional expansion plan.

(4) Proposed Facility in Long-Term Forecast

(a) Reference in Long-Term Forecast

Not applicable.

(b) Explanation If Not Referenced

The Project is not reported in the Long-Term Forecast Report because the Project was unknown at the time of filing.

(c) Reference in Regional Expansion Plans

The Project has not been submitted to PJM as a supplemental upgrade. On June 15, 2026, the Federal Energy Advocate for PUCO requested PJM to initiate the State Agreement Approach outlined in PJM's Operating Agreement for the transmission infrastructure necessary to support the data center development at the former Portsmouth Gaseous Diffusion Plant in Pike County, Ohio.

(E) REQUIREMENTS FOR A PROPOSED ELECTRIC GAS PIPELINE

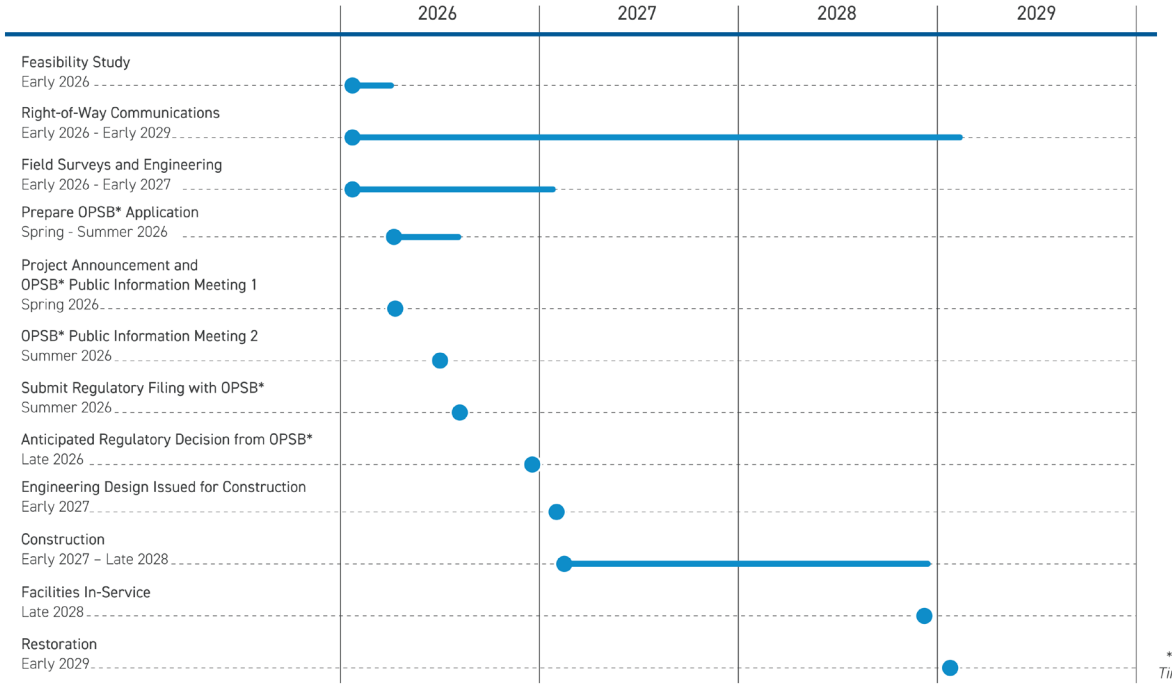
Not applicable.

FIGURE 3-1: Project Schedule in Gantt Format

Piketon
Area Improvements Project

AEP OHIO
An AEP Company

Project Schedule



*Ohio Power Siting Board.
Timeline subject to change.

BEFORE THE OHIO POWER SITING BOARD

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4906-4-04 PROJECT AREA SELECTION AND SITE DESIGN

Section Summary

A multidisciplinary team, comprising members from transmission line siting, transmission line engineering, environmental, construction management, project management, right-of-way, system planning, and public relations (collectively, the Siting Team), conducted a Siting Study to identify a Preferred Route for the Baku–Gavin 765-Kilovolt (kV) Transmission Line Project (the Project). The Siting Team included both AEP Ohio Transmission Company, Inc. (the Company) employees and outside consultants. Section 4 summarizes the route identification, evaluation, and selection process conducted by the Siting Team.

(A) SELECTION OF THE PROJECT AREA

The Siting Team developed siting criteria, identified existing constraints and opportunity features, collected and analyzed environmental and design data, solicited landowner and public feedback, coordinated with resources and permitting agencies, developed and revised a series of potential route segments (also referred to as Study Segments), analyzed Route Alternatives, and selected a Preferred Route. A copy of the Siting Study, including maps and data evaluation tables, is provided as Appendix 4-1.

(1) Study Area Description and Rationale

The Study Area (see **Map 1, Attachment A** in **Appendix 4-1**) is defined as the geographic region within which Route Alternatives could be sited to feasibly meet the Project's functional requirements while minimizing impacts to environmental resources, existing land uses, and Project costs. As shown in **Map 2a, Attachment A** in **Appendix 4-1**, the Siting Team evaluated potential routing options within an initial Study Area that encompasses the Company's proposed Baku Substation and existing Gavin Substation, as well as practical corridors connecting these endpoints.

The initial Study Area covers approximately 334 square miles and extends from just south of Piketon in Pike County eastward to the Ohio River near Cheshire in Gallia County. At its widest extent (west to east), the Study Area is approximately 63 miles in length and approximately 10 miles in width (north to south), reflecting the need to evaluate a range of potential routing options across a broad geographic area. The western boundary follows a portion of the U.S. Highway 23 (US-23) corridor, while the eastern boundary extends to the Ohio River and the Ohio–West Virginia state boundary. The northern and southern boundaries were defined to provide sufficient flexibility for route development while avoiding concentrated population centers where practicable, including a localized adjustment to avoid the city of Jackson, and to

avoid a large state wildlife area to the south (Ohio Department of Natural Resources Cooper Hollow Wildlife Area).

Within this Study Area, the Siting Team developed and evaluated six Preliminary Routing Concepts (see **Map 2a, Attachment A** in **Appendix 4-1**); one of which was parallel to existing transmission lines for nearly its entire length. Following screening and comparison of these concepts, two Primary Routing Concepts were advanced for additional feasibility evaluation (see **Map 2b, Attachment A** in **Appendix 4-1**). The routing concepts consisted primarily of greenfield alignments, as opportunities for paralleling existing infrastructure were reduced due to ongoing evaluations of induced voltage concerns and considerations.

The initial Study Area was intentionally defined broadly to allow for the identification and comparison of multiple routing options. Through the routing process, the Siting Team evaluated alternatives based on a combination of factors, including landowner feedback, environmental constraints, potential impacts to the built environment, engineering considerations, and overall Project constructability.

Based on this evaluation, the Siting Team refined the initial Study Area and associated routing segments to identify a narrower set of feasible Route Alternatives for further consideration. This refinement process reduced the geographic focus of the analysis while maintaining sufficient flexibility to avoid sensitive resources and minimize potential impacts.

(2) Study Area Map

The initial Study Area with identified constraints is shown on **Map 1, Attachment A** in **Appendix 4-1**. **Appendix 4-1** also includes depictions of the Preliminary Routing Concepts (**Map 2a, Attachment A**) and Primary Routing Concepts (**Map 2b, Attachment A**) identified for the Project. **Maps 3a and 3b** in **Attachment A** of the Siting Study depict the preliminary Study Segments and refined Study Segments identified for the Project, respectively.

The Route Alternatives with their Common Route evaluated for the Project are shown in **Map 4b, Attachment A** in **Appendix 4-1**.

(3) Siting Criteria

The Siting Team identified a range of quantitative and qualitative siting criteria as part of the alternative route analysis. These criteria, together with the established routing guidelines, were used to compare potential routes and evaluate impacts to land use, natural and cultural resources, and engineering feasibility

and to identify routes with the least overall impact. The routing process is described in greater detail in the Siting Study, provided as **Appendix 4-1**.

Quantitative and qualitative siting criteria are described in the Siting Study and were used throughout the routing process to evaluate and compare potential alignments within the Study Area.

The quantitative siting criteria include identifiable and measurable features, such as the locations of residences; property boundaries; agricultural lands; commercial, industrial, and institutional land uses; wetlands; streams; floodplains; existing infrastructure; topographic constraints (e.g., steep slopes); and cultural resources. These criteria were evaluated to quantify and compare potential impacts associated with each Route Alternative.

The qualitative siting criteria include professional judgment and experience related to aesthetic and land use compatibility, engineering and constructability considerations, and the relative feasibility of routing alternatives. Qualitative criteria also incorporate input received through public outreach and stakeholder engagement efforts conducted during the routing process.

Together, these quantitative and qualitative criteria provided a comprehensive framework for evaluating routing alternatives and refining the Study Area to identify routes that balance environmental, land use, and engineering considerations while meeting the Project's functional requirements.

(4) Siting Process

The routing process is described in detail in the Siting Study provided as **Appendix 4-1**. The Siting Team developed Study Segments based on the established routing guidelines and siting criteria. Study Segments represent an initial iteration of the routing process and comprise conceptual alignments developed to avoid large-scale constraints to the extent practicable, maximize distance from smaller constraints, and take advantage of identified routing opportunities.

The Study Segment network initially consisted of 19 preliminary Study Segments, which were subsequently refined to 16 revised Study Segments following additional review and evaluation using a combination of Geographic Information System (GIS) desktop analysis, environmental screening, and field reconnaissance (windshield surveys). In addition, the Siting Team incorporated feedback received through agency coordination efforts and public outreach, where available, to refine the Study Segment network.

Major environmental, land use, and engineering factors were considered throughout the evaluation process. These included potential impacts on residential areas, commercial and industrial uses, agricultural lands, planned and future development, and natural resources. Based on this review, certain Study

Segments were modified or removed from further consideration to minimize potential impacts while maintaining engineering feasibility and constructability. As described in the Siting Study, this process resulted in the elimination of certain Study Segments and modification of others to address environmental constraints, airport considerations, and planned development, including coordination associated with the Dixon Run Solar Project.

The routing process primarily focused on the identification of greenfield alignments, including opportunities to parallel portions of the existing AEP Lick–Rio 138-kV and the existing Ohio Valley Electric Corporation (OVEC) Kyger–Pierce 345-kV transmission lines.

During the refinement process, the Siting Team identified specific areas requiring additional consideration due to potential constraints or compatibility challenges. These areas included the vicinity of the James A. Rhodes Airport (Federal Aviation Administration [FAA] facility) and the Dixon Run Solar Project, where routing alternatives were more closely evaluated to address operational, safety, and land use considerations.

Route Alternative Development

Following refinement of the Study Segment network, the refined Study Segments were combined to form six Route Alternative combinations for comparative evaluation. These six combinations identified for the Project use identical Study Segments for approximately 17 miles, thus resulting in approximately 34 percent of commonality (represented as the Common Route on **Map 4b, Attachment A** in **Appendix 4-1)**. As such, the data comparisons provided in the Siting Study are exclusive to the alignments that diverge from the Common Route in each region of the Study Area (represented as western and eastern Route Alternatives on **Map 4b, Attachment A** in **Appendix 4-1**).

This process incorporated the siting criteria described in Ohio Administrative Code (Adm.Code) 4906-4-04(A)(3), along with input from GIS analysis, field observations, public outreach, and engineering review.

As part of this process, Study Segments were evaluated for their relative impacts and feasibility. Segments that presented comparatively greater impacts to the natural or built environment, or that posed engineering or constructability challenges, were modified or eliminated where practicable. Remaining segments were combined to form continuous Route Alternatives for further analysis.

Prior to identification of the Preferred Route, the Siting Team conducted a comparative evaluation of the Route Alternatives using both qualitative and quantitative information. This evaluation considered potential impacts to environmental resources, land use compatibility, engineering feasibility, as well as input received from stakeholders and the public.

Route Description and Rationale for Selection

Based on the evaluation of Route Alternatives, the Siting Team identified a Preferred Route that best balances the identified siting criteria and minimizes overall impacts to the natural and built environment while meeting the Project's functional requirements (see **Map 8, Attachment A** in **Appendix 4-1**). The Preferred Route identified in the Siting Study comprises the Common Route, Route Alternative West B, and Route Alternative East A. The Preferred Route reflects the Siting Team's efforts to avoid and minimize impacts to the extent practicable, while addressing constructability and long-term operation and maintenance considerations.

The Preferred Route also reflects consideration of feedback received through public outreach and stakeholder engagement, as well as the results of detailed GIS analysis, environmental screening, and field review.

Section 5.0 of the Siting Study provides additional detail regarding the evaluation of Route Alternatives and the rationale for selection of the Preferred Route.

(5) Public Involvement

Public involvement was integral to the Project's siting and routing process. The Company implemented a comprehensive public communications and outreach program to inform stakeholders, solicit input, and incorporate feedback throughout the development of the Study Segments, Route Alternatives, and Preferred Route.

Public Communications and Outreach

Public outreach for the Project began in early 2026 when the Company initiated coordination with local governments, agencies, organizations, and other key stakeholders within the Study Area. Concurrently, the Company conducted a Feasibility Study to obtain initial feedback from landowners located near the primary conceptual routes identified for the Project.

Following this initial phase, the Company refined the conceptual routing corridors into Study Segments between February and April 2026. The resulting Study Segment network initially comprised 19 preliminary Study Segments, which were refined to 16 Study Segments prior to public review. In April 2026, the Company announced the Project and mailed notification letters to landowners whose properties were crossed by or adjacent to the Study Segments. These mailings included Project information, a fact sheet, and details regarding upcoming public outreach opportunities, including in-person open house meetings, a virtual open house, and a public comment period.

A second round of mailings was conducted in June 2026 to notify landowners and public officials of the Preferred Route and additional public outreach opportunities. Both notification efforts were conducted in accordance with the public notification requirements outlined in Adm.Code 4906-3.

Public Open Houses

The Company conducted a series of Ohio Power Siting Board jurisdictional in-person open house meetings in Pike, Jackson, and Gallia counties to provide landowners and stakeholders with opportunities to review Project information and provide feedback.

The first round of open house meetings, held in mid-May 2026, presented the preliminary Study Segments identified for the Project. A second round of open house meetings, held in early July 2026, presented the Preferred Route. These meetings were conducted in an open house format and included informational stations staffed by Company representatives and subject matter experts.

The open house meetings included stations covering key Project topics, including Project need, engineering and construction, siting and environmental considerations, right-of-way (ROW) and easements, and vegetation management. A siting station included large-format map books displaying the Study Segments and the Preferred Route at a detailed scale, which allowed landowners to identify and mark features of concern on their properties.

Attendees were provided with fact sheets and opportunities to submit comments or discuss the Project directly with Company representatives and consultants.

Virtual Open House and Project Website

To supplement the in-person outreach, the Company hosted virtual open houses through the Project website. The virtual open houses were conducted between April 30 and June 12, 2026, for the Study Segment review phase, and between June 12 and July 17, 2026, for the Preferred Route review phase.

The virtual open houses were designed to mirror the in-person meetings and included information on Project need, engineering design, real estate and ROW considerations, and the siting process. An interactive map was provided to allow participants to review routing information and submit comments electronically.

The Project website also provided ongoing access to Project information and contact information for Company representatives, allowing stakeholders to submit questions and comments throughout the siting process.

Stakeholder Coordination

In addition to public outreach, the Company coordinated with key stakeholders throughout the siting process. These stakeholders included local governments, utilities, land conservation organizations, and major land use interests within the Study Area. Key coordination efforts included engagement with the following:

- Electric utilities operating within the region (e.g., Buckeye Rural Electric Cooperative and Ohio Valley Electric Corporation) to identify potential coordination opportunities and avoid conflicts with existing infrastructure
- James A. Rhodes Airport to ensure compliance with FAA requirements and evaluate potential airspace constraints
- SunEnergy1, developer of the Dixon Run Solar Project, to coordinate routing and minimize impacts to existing and planned solar infrastructure
- Land conservation organizations and major landowners, including Arc of Appalachia (Highland Nature Sanctuary), The Nature Conservancy, and Scioto Land Company, to identify sensitive natural resources and avoid or minimize impacts to conserved lands where practicable

Consideration of Public and Stakeholder Input

Public and stakeholder input was collected through multiple channels, including discussions with ROW agents as part of a Feasibility Study, comment cards, electronic submissions, the Project website, telephone, and direct engagement at open house meetings. All comments were documented and incorporated into the Project GIS database for consideration by the Siting Team.

Common themes identified through public and stakeholder input included potential impacts to agricultural operations (e.g., crop production and livestock grazing); concerns related to property value and future land use and development; potential visual and aesthetic impacts; impacts to recreational uses, including hunting; and preferences for the use of existing transmission line corridors where feasible.

The Siting Team reviewed and considered this input during the evaluation and refinement of Study Segments and the development of Route Alternatives. Public and stakeholder feedback, along with engineering analysis, environmental screening, and field observations, informed the iterative siting process and resulted in the modification or elimination of certain Study Segments to avoid or minimize impacts where practicable.

Conclusion

The Preferred Route reflects the Siting Team's efforts to balance public and stakeholder input with environmental, land use, and engineering considerations. The Company incorporated feedback throughout the siting process to the extent practicable while ensuring that the final alignment meets the Project's functional requirements, constructability needs, and long-term operational considerations.

Appendix 4-1: Route Selection Study

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4906-4-05 ELECTRIC GRID INTERCONNECTION

(A) CONNECTION TO THE REGIONAL GRID

The proposed transmission line features are described below. The planning engineers for AEP Ohio Transmission Company, Inc. (the Company) forecast future transmission projects in a five-year planning window. The Company currently has no plans for future modifications of the proposed Baku–Gavin 765-kV Transmission Line (the Project).

(1) Electric Transmission Line Design Criteria

(a) Design Voltage

The Proposed Facility will be designed for and operated at 765 kV.

(b) Pole, Conductor, and Insulator Design

The proposed design consists of Guyed-Y or self-supporting steel lattice structures with Vertical Conductor and an estimated aboveground height of 112 feet to 199 feet. The conductor used for the new transmission line will be 6 to 795 thousand circular mil (kcm), 45/7 strand, aluminum conductor steel-reinforced cable (ACSR) conductor per phase. This conductor has a maximum strength of approximately 22,100 pounds (lb). The new line will use two 0.646-inch Fiber Optic Shield Wires with up to 144 fibers, which have a maximum strength of 25,812 lb. Both the phase conductors and the shield wires will be installed in accordance with the latest version of the National Electric Safety Code (NESC). The conductors will be supported by aluminum clamps that will be attached to the insulator assembly. Suspension cushion grips will support the shield wires. At dead-end locations, compression dead-end clamps will be used on the conductor and wedged or bolted dead-end assemblies for the shield wire.

(c) Base and Foundation Design

Foundation types will vary across the Project. Foundation types predominantly include grillage and steel-reinforced concrete pier. However, micropiles or other specialty foundation types may be required pending further geotechnical investigations and construction. Direct-embedded foundations are not anticipated to be used for the Project.

Excavations for the grillages are anticipated to be between approximately 512 cubic feet (8 ft x 8 ft x 8 ft) to 3,375 cubic feet (15 ft x 15 ft x 15 ft), depending on the structure size and location. The Company will backfill grillage foundations with native soil and/or clean fill in accordance with the Company's specifications. Due to site-specific requirements, some lattice structures will require steel-reinforced concrete foundations. The

excavations for steel-reinforced concrete pier foundations are anticipated to be approximately 4 to 8 ft in diameter and 15 to 50 ft deep.

(d) Cable Type and Size

There are no underground cables associated with this Project. Therefore, this section is not applicable.

(e) Other Major Equipment or Special Structures

Ohio Substitute House Bill 15, effective in August 2025, requires applicants for certificates of environmental compatibility and public need for the construction of new transmission lines to submit a summary of studies that have been made by or for the applicant of cost-effective advanced transmission technologies that maximize the value, expand the capacity, or improve the reliability of the facility (Ohio Revised Code [R.C.] 4906.06(A)(7)). The statutory definition of advanced transmission technology includes advanced conductors, defined as "conductor with a direct current electrical resistance that is at least ten percent lower than existing conductors of a similar diameter on the electric transmission system while simultaneously increasing the energy carrying capacity by at least seventy-five per cent" (R.C. 4906.01(N)). The Company considered and applied these requirements in selecting the equipment proposed for the Project, as follows.

As part of the conductor selection analysis, the Company has determined the conductor of (6)-795 KCM ACSR 45/7 Tern will be used for the Baku–Gavin 765-kV Transmission Line Project. The conductor selection analysis looked at varying conductor types, sizes, and bundling geometries to optimize the line design while meeting acceptable performance levels. ACSR conductors were the most cost-effective with Aluminum Conductor Aluminum Reinforced (ACAR) being the closest alternative. AEP has more than 50 years of reliable service with ACSR conductors at 765 kV.

Further, high-temperature conductors, including Aluminum Conductor Steel Supported (ACSS) and Aluminum Conductor Composite Core (ACCC), were evaluated as part of the conductor selection analysis. However, these conductor technologies were not recommended based on the material cost-benefit assessment. ACSS and ACCC conductors are primarily used to increase line ampacity where thermal limitations constrain system capacity. For the proposed 765-kV design, the six-bundle conductor configuration provides substantial ampacity margin and is not thermally constrained. As a result, the additional high-temperature performance capabilities of ACSS and ACCC conductors do not provide any meaningful operational or capacity benefits at this voltage level. Also, high-temperature conductors carry significantly higher material costs compared to ACSR. Given the absence of an ampacity-driven need and the lack of associated system benefits, the increased cost cannot be justified for this application. Therefore, ACSS and ACCC conductors were excluded from further consideration.

Last, delta configuration structures were selected, in part, to optimize and reduce the right-of-way (ROW) width needed for the Project. The selection of delta configuration structures also reduces the electrical magnetic field and audible noise at the edge of the ROW. The selected delta phase arrangement significantly reduces phase impedance mismatch compared to a conventional horizontal configuration, minimizing voltage and current unbalance, protection misoperations, unequal transformer loading, circulating currents, and overexcitation. This improves system reliability, reduces thermal and insulation stress, lowers generator heating from negative-sequence currents, and mitigates auxiliary system impacts associated with voltage unbalance. Delta structures are designed to support the same or greater mechanical loads as conventional horizontal-phase structures while reducing structure weight by approximately 20 percent. The configuration is also well suited for helicopter installation, enabling efficient construction and minimizing access requirements.

(2) Electric Transmission Station Data

Not applicable. The Company's proposed Baku Substation will be filed under separate cover.

(3) Gas Transmission Line Data

Not applicable.

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4906-5-06 ECONOMIC IMPACT AND PUBLIC INTERACTION

(A) OWNERSHIP OF PROPOSED FACILITY

AEP Ohio Transmission Company, Inc. (the Company) will construct, own, operate, and maintain the proposed Baku–Gavin 765-kV Transmission Line (the Project).

The form easement in **Appendix 6-1** represents the minimum easement rights the Company would seek if condemnation proceedings were necessary to construct, operate, and maintain these facilities.

(B) CONSTRUCTION COSTS

(1) Estimated Capital and Intangible Costs

The Company developed a Class 4 estimate of the applicable intangible and capital costs for a variety of components of the Project. Each of the enumerated components is included below in **Table 6-1**. The customer is committed to paying for the total cost of the Project to help avoid increases to transmission rates for Ohio residents.

Table 6-1. Estimates of Applicable Intangible and Capital Costs

FERC Account Number	Description	Preferred Route
350	(1) Land and Land Rights	[redacted]
352	(2) Structures and Improvements	N/A
353	(3) Substation Equipment	N/A
354	(4) Towers and Fixtures	[redacted]
355	(5) Poles and Fixtures	[redacted]
356	(6) Overhead Conductors and Devices	[redacted]
357	(7) Underground Conductors and Insulation	N/A
358	(8) Underground-to-Overhead Conversion Equipment	N/A
359	(9) ROW Clearing and Roads, Trails, or Other Access	[redacted]
TOTAL		[redacted]

Key: FERC = Federal Energy Regulatory Commission; N/A = not applicable; ROW = right-of-way

(2) Comparison with Similar Facilities

As shown above in **Table 6-1**, the Project is estimated to cost a total of [redacted] **Table 6-2**, below, shows a comparison of the Project's estimated costs per mile with the most recent multi-mile 765-kV project and the only other AEP project for comparison in the United States. The Greentown–Reynolds 765-kV Transmission Line is located entirely in Indiana. Planning and engineering began in 2011, and the line went in-service in 2018.

Table 6-2. Cost Comparisons of Similar Facilities

Project Name	Case Number	Mileage	Total Cost	Cost Per Mile
Baku–Gavin 765-kV Transmission Line	26-0426-EL-BTX	~52	[redacted]	[redacted]
Greentown–Reynolds 765-kV Transmission Line	N/A	~70	[redacted]	[redacted]

Key: B = billion; kV = kilovolt; M = million; N/A = not applicable

As shown above in **Table 6-2**, the Greentown–Reynolds project costs are lower per mile than the proposed Baku–Gavin 765-kV Project.

Key factors for cost variances are the following:

- Inflation: The Greentown–Reynolds project began planning in 2011 and since then global inflation has increased significantly for costs associated with Extra High Voltage projects, including costs for construction labor, materials, and acquiring easements.

- Topography: The land and terrain characteristics are significantly different between central Indiana (Greentown–Reynolds) and southeast Ohio (Baku–Gavin). Overall, the Baku–Gavin 765-kV Project is located within areas of greater tree cover and steeper terrain, whereas Greentown–Reynolds is located within areas of flatter, mostly agricultural lands in central Indiana.

- Mining Activity: For the Baku–Gavin 765-kV Transmission Line Project, there are areas where additional foundation considerations are being implemented because of historical data showing previous mining activity. This concern was not present to the same extent for Greentown–Reynolds.

The physiography of the Project area is characterized by variable, steep terrain that predominantly exists as agricultural or undeveloped, forested land. Furthermore, several areas along and adjacent to the ROW have hydrological characteristics (i.e., streams, ponds, wetlands, and floodplains), which present a challenge from a combined constructability perspective. As a result, the Project is anticipated to require

increased environmental permitting, specialized clearing techniques, and extensive amounts of access road construction. These factors notably increase the applicable intangible and capital costs estimated for the Project (see **Table 6-1**).

(3) Present Worth and Annualized Cost for Capital Costs

The present worth of the estimated capital costs for the Project is [redacted]. Project costs estimated with inflation, based on the January 2027 construction start date, are [redacted]

(C) OPERATION AND MAINTENANCE EXPENSES

(1) Estimated Annual Operation and Maintenance Expenses

No annual operation and maintenance costs are incurred for the first two years of transmission line facilities, such as this Project.

(2) Comparison with Similar Facilities

Not applicable. No annual operation and maintenance costs are incurred for the first two years of transmission line facilities, such as this Project.

(3) Present Worth and Annualized Expenditures for Operation and Maintenance Costs

As shown above in **Table 6-1**, the present worth of the Project is [redacted]. Annualized expenditures for operation and maintenance costs and any associated costs are on an as-needed basis.

(D) ECONOMIC IMPACT OF THE PROJECT

(1) Estimated Annual Total and Present Worth of Construction and Operation Payroll

The estimated annual total construction and operation payroll is $138,399,167, and the estimated present worth of construction and operation payroll is $108,585,333.

(2) Construction and Operation Employment and Estimates

The Company estimates that approximately 600 jobs will be created during construction of the Project. These contracted jobs are temporary in nature and will only support construction of the Project.

(3) Estimated County, Township, and Municipal Tax Revenue

The Project crosses the village of Vinton and Cheshire, Huntington, and Morgan townships in Gallia County; Bloomfield, Franklin, and Scioto townships in Jackson County; and Marion, Scioto, and Union townships in Pike County. Local school districts, the Gallia County Board of Developmental Disabilities,

Rio Grande Community College, and Paint Valley Mental Health District will also receive tax revenue from the Project. The Company will pay property taxes on the utility facilities in each jurisdiction.

Based on the tax rates paid in 2025, the combined annual property taxes associated with the Preferred Route over the first year after the Project is completed are estimated to be approximately $12 million. Please note that this estimate assumes that construction on this Project starts in 2027. All transmission assets placed in-service after December 31, 2025, will be assessed at a 25 percent ratio rather than 85 percent.

Table 6-3, below, shows an estimated distribution of taxes by levy type**.**

Table 6-3 Distribution of Annual Property Tax Revenues

County	Levy	Tax (USD)
Gallia	Board of Developmental Disabilities	$264,100
Gallia	Cheshire Township	$11,500
Gallia	Cheshire Township – Excluding the Village of Cheshire	$14,400
Gallia	Gallia County	$421,500
Gallia	Gallia County Library	$123,000
Gallia	Gallia County LSD	$2,421,500
Gallia	Gallia General Health District	$95,300
Gallia	Gallia-Jackson-Vinton JVSD	$191,700
Gallia	Huntington Township	$66,300
Gallia	Morgan Township	$107,700
Gallia	Rio Grande Community College	$91,800
Gallia	Village of Vinton	$1,800
Jackson	Bloomfield Township	$173,100
Jackson	Franklin Township	$131,300
Jackson	Gallia-Jackson-Vinton JVSD	$231,700
Jackson	Jackson County	$1,382,200
Jackson	Jackson CSD	$1,891,800
Jackson	Oak Hill Union LSD	$938,500
Jackson	Rio Grande Community College	$110,900

Table 6-3 Distribution of Annual Property Tax Revenues		
County	**Levy**	**Tax (USD)**
Jackson	Scioto Township	$274,000
Pike	Marion Township	$11,000
Pike	Marion Township #1	$129,700
Pike	Marion Township – Excluding the Village of Beaver	$21,900
Pike	Paint Valley Mental Health District	$62,100
Pike	Pike County	$945,700
Pike	Pike County Area JVSD	$455,400
Pike	Scioto Township	$28,600
Pike	Scioto Valley LSD	$1,359,700
Pike	Union Township	$106,600
	TOTAL	**$12,064,800**

Key: JVSD = Joint Vocational School District; LSD = Local School District; CSD = City School District; USD = U.S. dollars

(4) Estimated Economic Impact on Local Commercial and Industrial Activities

As stated above in 4906-04-06(D)(2), construction of the Project will create approximately 600 contracted jobs. Most of the crews will live outside of the Project area, but their day-to-day duties during construction of the Project will temporarily increase direct benefits to the local economy as a result of lodging, meals and incidentals, and fueling vehicles. Long-term operation of the Project will indirectly benefit the local commercial and industrial businesses and activities since the Baku–Gavin 765-kV Transmission Line is expected to offer significant reliability increases to the region (see Ohio Administrative Code [Adm.Code] 4906-4-03).

(E) PUBLIC INTERACTION INFORMATION

This section of the application provides information regarding public interaction and the economic impact for the Project.

(1) Public Information Programs

The Company mailed letters to impacted and adjacent landowners and elected officials, issued a public notice, sent reminder postcards and emails, created a Project website (https://www.AEPOhio.com/PiketonArea), and hosted two separate in-person informational meeting

series in May and July 2026. Each in-person meeting series had a corresponding virtual open house and comment period. Copies of notification letters, informational materials available at the public open house, and landowner feedback are included in **Appendix 6-3**. Detailed information on the public involvement process is described in **Appendix 4-1**.

Throughout the duration of the Project, the public could contact a Project representative to ask questions or provide comments. A Project representative can be reached via telephone at 833-226-2043 or email (PiketonArea@AEPTransmission.com). To access the Project's website, please visit https://www.AEPOhio.com/PiketonArea. The website provides information on how to contact AEP representatives to provide comments or ask questions regarding the Project.

For copies of the Application, the public can do any of the following:

- Go to any of the following local libraries:
    - Bossard Memorial Library, 7 Spruce Street, Gallipolis, Ohio
    - Jackson City Library, 21 Broadway Street, Jackson, Ohio
    - Garnet A. Wilson Public Library, 207 North Market Street, Waverly, Ohio
- Go to http://opsb.ohio.gov and search for this project's case number (Case No. 26-0426-EL-BTX).
- Access the project's website (https://www.AEPOhio.com/PiketonArea) and follow the directions to obtain a copy.

The Company has logged comments and information provided through its public interaction program, and these comments can be shared with the Ohio Power Siting Board staff upon request.

At least seven days prior to any construction activities, the Company will notify landowners or tenants by mail, telephone, or in-person, depending on landowner preference. During the construction, the Company will maintain Project updates on its website; retain ROW land agents to discuss Project timelines, construction, and restoration activities; and convey this information to affected owners and tenants.

(2) Liability Compensation

AEP's insurance program for construction and operation of the proposed facility is outlined below:

- The Company maintains bodily injury and property damage liability insurance with limits of at least $1,000,000 for each occurrence.

- The Company is a qualified self-insuring employer under the State of Ohio Worker's Compensation law. AEP maintains insurance as required by the Industrial Commission of Ohio statutes.

(3) Anticipated Impacts to Roads and Bridges

Material/equipment deliveries and general Project construction traffic will occur along specified haul routes, which will be identified prior to commencement of construction for the Project. During construction, various vehicles such as haul trucks, fixed bed trucks, semi-trailers, rubber-tired cranes, dump trucks, pickup trucks, and standard automobiles will travel to and traverse through the Project area along the specified haul routes. The Company anticipates most of the construction-related traffic will use the Project area's primary transportation corridors, such as U.S. Highway 23 (US-23), U.S. Highway 35 (US-35), State Route 124/32 (OH-124/32), State Route 139 (OH-139), State Route 325 (OH-325), State Route 335 (OH-335), State Route 554 (OH-554), State Route 776 (OH-776), State Route 93 (OH-93), and State Route 160 (OH-160), limiting the use of smaller, local county and township roads to the extent feasible.

The Company will obtain a road use maintenance agreement (RUMA) with the appropriate jurisdictions prior to commencement of construction. As part of the RUMA process, the Company will document the existing conditions of the haul routes.

Upon completion of the Project, the roads' current conditions will be compared to those previous conditions that are documented in the RUMA. If any damage occurs along the haul routes that are a direct result of the Project's construction, the Company will take necessary compensatory measures to repair roads and bridges to at least the conditions present prior to the Project.

Impacts to roads and bridges are not anticipated because of the normal operation and maintenance of the Project.

(4) Transportation Permits

Prior to commencement of construction, the Company will obtain the necessary permits from the Ohio Department of Transportation (ODOT); Gallia, Jackson, and Pike counties; and any townships or municipalities to work within the existing road ROW. Most construction-related traffic will involve vehicles of legal weight and size. However, some oversize or wide-load vehicles may be required for hauling large equipment. In this case, the Company's contractor(s) will obtain special hauling permits from ODOT.

Where necessary for the safety of the construction personnel and the surrounding community, the Project will require temporary road and lane closures as well as appropriate traffic control measures (e.g., flagging and off-duty police presence).

Transportation permits are not anticipated for the normal operation and maintenance of the Project.

(5) Decommissioning Plan

Not applicable.

(6) Counties, Townships, Villages, and Cities Within the Project Area

The Project crosses the unincorporated community of Stockdale as well as Marion, Union, and Scioto townships in Pike County; Bloomfield, Franklin, and Scioto townships in Jackson County; and Cheshire, Huntington, and Morgan townships and the village of Vinton in Gallia County. The Project is located within 1,000 feet of the village of Cheshire in Gallia County. No other counties, townships, villages, cities or unincorporated communities are located within 1,000 feet of either side of the Preferred Route.

(7) Public Officials Contacted

Appendix 6-2 provides a list of the local public officials, including their office addresses and office telephone numbers, who will be provided with a digital or hard copy of the Application.

Appendix 6-1: Form Easement

Appendix 6-2: Public Officials Contacted and Officials to Be Served a Copy of Certified Application

Appendix 6-3: Public Information Programs

BEFORE THE OHIO POWER SITING BOARD

Certificate Application for Electric Transmission Facilities

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4906-04-07 COMPLIANCE WITH AIR, WATER, SOLID WASTE, AND AVIATION REGULATIONS

(A) DETERMINATION OF APPLICABILITY

During construction, operation, and maintenance of the Baku–Gavin 765-kV Transmission Line (the Project), the AEP Ohio Transmission Company, Inc. (the Company) will comply with all federal, state, and local regulations for air and water pollution, solid and hazardous waste, and aviation, where applicable.

(B) AIR QUALITY REGULATIONS

(1) Preconstruction Air Quality and Permits

(a) Ambient Air Quality of the Project Area

The Clean Air Act established the National Ambient Air Quality Standards (NAAQS) in 1971 for the following air pollutants known as "criteria pollutants": carbon monoxide (CO), lead, nitrogen dioxide (NO_2), ozone, particulate matter (PM), and sulfur dioxide (SO_2). The standards are reviewed every five years to incorporate the most recent scientific data and are revised if needed by the U.S. Environmental Protection Agency (USEPA) to protect public health and the environment. The NAAQS consists of primary and secondary standards (36 Federal Register 22384). The primary standards protect the general public's health as well as the health of sensitive populations, such as asthmatics, children, and the elderly. The secondary standards protect the environment and public welfare from adverse effects associated with air pollution, including decreased visibility and damage to animals, crops, vegetation, and buildings.

The Ohio Environmental Protection Agency (OEPA) provides daily measurements of regional air quality through its AirOhio program, which includes an automated data acquisition and reporting system. Based on this daily measurement reporting, areas that fall below the NAAQS threshold are designated as "attainment areas." Inversely, regions that exceed the NAAQS threshold are designated as "nonattainment areas." "Maintenance areas" are defined as regions that were previously designated as a nonattainment area for one or more criteria pollutants but has since been redesignated as an attainment area from implementing a plan to maintain those standards. In some cases, OEPA cannot determine an area's status after evaluating the available information and those areas are designated "unclassifiable" (40 Code of Federal Regulations [CFR] Part 81).

The OEPA Green Book lists nonattainment areas by county, with supporting data reported between 1997 and current (2026). The Project crosses Pike, Jackson, and Gallia counties, all of which are designated as attainment areas for all criteria pollutants. The OEPA Division of Air Pollution Control issues permits for stationary sources of air contaminants. The Project, as proposed, does not meet the definitions of a minor source (Non-Title V or Synthetic Minor Title V) or a major source (Title V) of air pollution because it is not

a generation facility. Therefore, the data requirements of Ohio Administrative Code (Adm.Code) 4906-4-07(B)(1) are not applicable to the Project.

(b) Air Pollution Control Equipment for the Proposed Facility

Air pollution control equipment is not required for the construction and operation of the Project.

(c) Applicable Federal and Ohio Air Quality Standards and Limitations

No emissions will occur during operation of the Project. Therefore, there are no federal or state regulations related to New Source Performance Standards, applicable air quality limitations, NAAQS, and applicable prevention of significant deterioration increments.

(d) Required Permits to Install and Operate Air Pollution Sources

No emissions will occur during operation of the Project. Therefore, no permits to install and operate air pollution sources are required.

(e) Map of Air Monitoring Station Locations and Major Pollution Point Sources

No emissions will occur during operation of the Project. Therefore, there are no air monitoring stations or locations of major present and anticipated air pollution sources.

(f) Compliance with Permits and Standards

No emissions will occur during operation of the Project. Therefore, no federal or state regulations apply, and no air permits are required.

(2) Plans for Emissions and Fugitive Dust Control During Construction

Minor air emissions are anticipated during the construction of the Project because of construction vehicles, personal vehicles, and haul trucks delivering materials and equipment. These motorized vehicles have internal combustion engines, which produce PM, nitrogen oxide (NO), carbon dioxide (CO_2), SO_2, and volatile organic compounds (VOCs). Considering the relative scale and duration of construction planned for the Project, the emissions are anticipated to be negligible. The Company will ensure the proper maintenance and upkeep of construction machinery and vehicles to minimize construction-related emissions. Furthermore, the emissions will be temporary and limited to active areas of construction. Therefore, the Company does not anticipate significant impacts on air quality for the Project area.

Typical sources of fugitive dust that are associated with the construction of a transmission line include disturbed soils and unpaved (gravel) roads, parking areas, and laydown yards. The Project construction

areas and immediate vicinity will be kept free from dust nuisance resulting from Project activities. During excessively dry periods of active construction, dust suppression will be implemented where necessary through irrigation, mulching, or application of tackifier resins, which are recommended measures per the current Ohio Department of Natural Resources (ODNR) Rainwater and Land Development Manual. Additionally, the Company will implement Best Management Practices (BMPs) prior to construction, and all disturbed areas will be revegetated, per the National Pollutant Discharge Elimination System (NPDES) OEPA General Construction Permit (OHC000006).

(3) Air Quality for the Operation of the Proposed Facility

Operating the Baku–Gavin 765-kV Transmission Line will not produce emissions, including NAAQS criteria pollutants, VOCs, or hazardous air pollutants. Therefore, the data requirements of Adm.Code 4906-4-07(B)(3)(a) are not applicable to the Project.

(C) WATER QUALITY REGULATIONS

(1) Preconstruction Water Permits

No known preconstruction water permits relate to electrical transmission facilities, such as those in this Project. Therefore, the data requirements of Adm.Code 4906-4-07(C)(1)(a) are not applicable to the Project.

(2) Water Quality During Construction

The Company will submit a Notice of Intent (NOI) for coverage under the NPDES OEPA General Construction Permit (OHC000006), and if impacted, a floodplain permit associated with construction activity. The Company will submit a Preconstruction Notification (PCN) for coverage under U.S. Army Corps of Engineers (USACE) Nationwide Permit (NWP) 57 – Electrical Utility Line and Telecommunications Activities) – see **Table 7-1**. Additionally, the Company may obtain an OEPA Isolated Wetland Permit for any fill anticipated for the Project that is not regulated by the USACE. A complete list of licenses, permits, and authorizations required for the Project is provided below in Adm.Code 4906-4-07(E)(5).

(a) Estimated Aquatic Discharges

No point source or non-point source aquatic discharges are anticipated during construction or operation of the Project.

(b) Mitigation Plan

A Stormwater Pollution Prevention Plan (SWPPP) will be prepared, BMPs implemented to minimize soil erosion and sedimentation and other pollutant discharges, and these will be made available on-site during Project construction. The SWPPP will include the following General Conditions, at a minimum:

Erosion and Sediment Controls: Implementation of erosion and sediment control practices will be based on the methods and standards described in the current ODNR Rainwater and Land Development Manual, the OEPA NPDES Permit Program for the discharge of stormwater from construction sites (OHC000006), and any erosion and sediment control practices required by local authorities.

Wetlands, streams, and other environmentally sensitive areas shall be clearly marked before the start of clearing or construction. No construction or access will be permitted in these areas unless clearly specified in the SWPPP.

No permanent impacts to streams or headwaters, including beds and banks, are anticipated. No transmission structures are anticipated to be located in streams, and no permanent stream crossings are anticipated. Streams, including beds and banks, if disturbed during construction, will be re-stabilized immediately after in-channel work is completed.

Grubbing activities are anticipated for access roads and work pads at a minimum. Since the Project is linear, sediment basins, traps, and perimeter sediment controls are not anticipated to be required.

Silt Fence/Filter Sock: Silt fencing and/or other appropriate BMPs for erosion control (e.g., filter socks) will be installed as needed before ground-disturbing work begins. Silt fences/filters will be installed according to the methods recommended in the Rainwater and Land Development Manual (ODNR 2014) before upslope land disturbance begins. In general, silt fences/filter socks will be used where there is the possibility that sheet flow will carry sediment-laden water into downstream creeks or wetlands. Silt fences/filter socks will be routinely inspected as required and sediment deposits will be removed in accordance with the SWPPP. Other methods will be used where flow in ditches, channels, or gullies is anticipated.

Soil Stabilization: Disturbed areas that remain unworked for more than 21 days will be stabilized with seed and mulch no longer than seven days after the last construction in those areas. Permanent seeding should be applied for areas that will be idle more than one year and portions of the site at final grade.

Maintenance and Inspection: Erosion and sediment control practices will be inspected by qualified personnel at least once every seven days and after any storm event greater than one-half inch of rain per 24-hour period by the end of the next day, excluding weekends and holidays unless work is scheduled. The inspection frequency may be reduced to at least once every month for dormant sites if the entire site is temporarily stabilized or if runoff is unlikely due to weather conditions for extended periods of time.

The Company will maintain erosion control measures in good working order. If a control practice needs repair or maintenance, it shall be repaired or maintained within three days of the inspection. Permanent records of the maintenance and inspection will be maintained throughout the construction period. Records will include, at a minimum, the inspection date, names/titles/qualifications of the inspector, weather information for the period since the last inspection, weather information and a description of any discharges occurring at the time of the inspection, location of discharges of sediment or other pollutants from the site, location of BMPs that need to be maintained, location of BMPs that failed to operate as designed or proved inadequate, location where additional BMPs are needed, and corrective action required.

Spill Prevention: The following spill prevention methods and procedures are proposed:

- A spill kit will be available on-site.
- All on-site vehicles will be monitored for leaks and receive regular preventive maintenance to reduce the chance of leakage. Petroleum products will be stored in clearly labeled and tightly sealed containers.
- Secondary containment will be provided for all on-site fuel storage tanks.
- All sanitary waste will be collected in portable units and emptied regularly by a licensed sanitary waste management contractor, as required by local regulations.
- All spills will be cleaned up immediately after discovery. Manufacturers' recommended methods for spill cleanup will be followed. Materials and equipment necessary for spill cleanup will be kept in a designated storage area on-site.
- Spills will be reported to the appropriate government agency as required.
- Any suspected hazardous materials encountered during construction will be reported to the AEP Ohio Transco Regional Environmental Coordinator by the AEP Ohio Transco Construction Representative. In addition, the AEP Ohio Transco Project Manager will be notified, as well as the required levels of AEP Ohio Transco Management.

The Company requires a Spill Prevention Plan to be created and available for review on-site for construction Projects of this scope by its contractors. This Spill Prevention Plan will cover proper handling techniques for all electrical equipment, materials, and construction equipment that require a Safety Data Sheet. The Company also requires its employees and contractors to follow all federal- and state-mandated material handling requirements.

The Company follows an internal Spill Prevention Notification Plan that is closely aligned to the AEP Ohio Transco Spill Response and Cleanup – Field Guide, and outlines spill response and cleanup procedures as well as the reporting that is required:

- Oil/Polychlorinated Biphenyl (PCB) Spill Response and Cleanup Procedure
- When to Report an oil/PCB spill to the Regional Environmental Coordinator
- Hazardous Substance Spill Response Procedure
- Regional Environmental Coordinator Contact List

The Spill Response and Cleanup – Field Guide will be available upon request.

(c) Changes in Flow Patterns and Erosion

Changes in flow patterns and erosion are not anticipated during construction of the Project, such as site clearing and grading operations. Erosion during construction will be minimized with the implementation of BMPs as previously described above in the portion of this Application addressing Adm.Code 4906-4-07(C)(2)(c).

(d) Control of Effluents Discharged

Not applicable. No effluents will be discharged into bodies of water and receiving streams during construction of the Project.

(3) Water Quality During Operation of the Facility

There are no point source water discharges resulting from the Project. Therefore, the data requirements of Adm.Code 4906-4-07(C)(3)(a)(b) are not applicable.

(a) Schedule for Receipt of NPDES Permit

Pursuant to Adm.Code 4906-3-14, the Company will file a construction notice no less than 90 days before the planned commencement of construction for the Project. Additionally, the Company will provide the fees and NOI at least 21 days prior to commencement of construction.

(b) Water and Waterborne Wastes

Not applicable. Construction and operation of the Project will not result in water and waterborne wastes.

(c) Water Conservation Practices

Construction and operation of electrical transmission facilities, such as those in this Project, are not water intensive. Therefore, the data requirements of Adm.Code 4906-4-07(C)(3)(e) are not applicable.

(D) SOLID WASTE REGULATIONS

(1) Preconstruction Solid Waste

No known preconstruction solid waste permits relate to electrical transmission facilities, such as those in this Project. Therefore, the data requirements of Adm.Code 4906-4-07(D)(1) are not applicable.

(2) Solid Waste During Construction

(a) Nature and Amounts of Debris and Solid Wastes Generated During Construction

Debris associated with building the proposed transmission line is expected to consist of various amounts of conductor scrap; construction material packaging including cartons, insulator crates, conductor reels and wrapping; as well as used and/or damaged stormwater erosion control materials.

The Project is expected to require adjusting and modifying other existing transmission line infrastructure in the area, which may result in removal and disposal of existing structures. These adjustments and/or modifications are not subject to this Application and will be filed under separate cover.

(b) Storage and Disposal of Solid Wastes

As construction work proceeds, the site will be kept clean of rubbish and debris resulting from the work. Clearance poles, conductor reels and other materials with salvage value will be removed from the construction area for reuse or salvage. Construction debris will be disposed of in accordance with state and federal requirements in an OEPA-approved landfill or other appropriately licensed and operated facility. Where vegetation must be cleared, the resulting brush will be removed or windrowed along the edge of the right-of-way (ROW) or as negotiated with individual property owners.

(3) Solid Waste During Operation

No solid waste is generated during the normal operation of electrical transmission facilities, such as those in this Project. Therefore, the data requirements of Adm.Code 4906-4-07(D)(3) are not applicable.

(4) Solid Waste Permits

No solid waste is generated during the normal operation of electrical transmission facilities, such as those in this Project. Therefore, the data requirements of Adm.Code 4906-4-07(D)(4) are not applicable.

(E) ENVIRONMENTAL AND AVIATION REGULATIONS

(1) Maximum Height of Above Ground Structures

The height of the tallest anticipated aboveground structure or construction equipment is designed to be approximately 199 feet.

(2) Aviation Facilities

The nearest Federal Aviation Administration (FAA facility) is Sword Flight Park; an ultra-light flight park located approximately 0.5 nautical mile (NM) from the Project. Five additional FAA facilities were identified within a 6-NM buffer of the Preferred Route centerline and within Ohio: the Holzer Medical Center - Jackson Heliport (OH00) and Baisden (4OI9) are located approximately 1.9 NM and 5.7 NM north, respectively; Meigs Mine 1 (4OI9) is located approximately 5.8 NM northeast; and James A. Rhodes Airport (JRO) and Russ (OI82) are located approximately 1.8 NM and 3.8 NM south, respectively (see **Figure 7-1**).

The Mason County (West Virginia) Airport, located approximately 1.9 NM southeast of the Preferred Route, is permanently closed as of December 2025. Otherwise, the Pleasant Valley Hospital Heliport (WV58) is located approximately 4.4 NM south of the Preferred Route in West Virginia.

The Company's consultant completed an airspace assessment for the Project to determine the FAA compliance requirements and height limits above each proposed structure's location (see **Appendix 7-1**).

(3) FAA Filing Status

Forty structures will exceed FAA Notice Criteria, and they will be filed so the FAA can complete a full aeronautical study on the subject structures.

(4) 14 CFR part 77 Impacts

Three structures will exceed the CFR Title 14 Chapter 1 Subchapter E Part 77.19(b) Conical Surface and VFR Conical Surface of JRO. Exceedance of an obstruction standard does not make a structure a hazard. Under Job Order (JO) 7400.2R § 6-3-8.d.1.(b), these penetrations constitute an adverse effect that rises to a substantial adverse effect only if a significant volume of Visual Flight Rule (VFR) operations would be affected. The Company's consultant anticipates favorable determinations for these structures conditioned

on marking and lighting in accordance with FAA Advisory Circular (AC) 70/7460-1M. Based on FAA JO 7400.2 and FAA AC 70/7460-1M, these penetrations can be mitigated with proper obstruction marking and lighting.

Four structures will exceed the initial climb area for proposed runway 1 of JRO. Because the resulting climb gradient requirement would terminate at or below 200 feet above the departure end of the runway, these penetrations qualify as low, close-in obstacles under FAA Order 8260.3, which are addressed through publication in a note to the departure procedure rather than through a climb gradient or an unfavorable determination. The FAA's evaluation will consider runway plans on file for proposed runway 1 consistent with JO 7400.2R § 11-4-1, and the Company's consultant expects these structures to be determined no hazard at the studied heights and locations.

The Subject Project will cross the Buckeye Military Operations Area and VFR Military Training Routes VR-1631 and VR-1632. None of the structures will penetrate the floor of the Military Operations Area. With respect to the training routes, JO 7400.2R § 6-3-8.c.3 provides that a structure's location on a VR is not a basis for determining it to be a hazard to air navigation, and the FAA will disseminate the Part 77 notices and aeronautical study information to U.S. Department of Defense representatives for their review.

(5) Licenses, Permits, and Authorizations

A summary of anticipated licenses, permits, and authorizations for the Project is provided in **Table 7-1**, below. There are no other known local, state, or federal requirements that must be met prior to commencement of the Project.

Table 7-1. Anticipated Permits

Permit/Authorization/ Coordination	Agency	Date
Stormwater Pollution Prevention Plan	Ohio Environmental Protection Agency	Expected December 2026
	Gallia County	
	Jackson County	
	Pike County	
Notice Criteria	Federal Aviation Administration	Coordination ongoing; responses expected between October 2026 and January 2027
Road Use Maintenance Agreement (RUMA)	Gallia County	Expected January 2027
	Jackson County	
	Pike County	

Table 7-1. Anticipated Permits		
Permit/Authorization/ Coordination	**Agency**	**Date**
Clean Water Act Section 404/401	United States Army Corps of Engineers (USACE)	Preconstruction Notification (PCN) to be submitted to USACE in August 2026 - Approval expected December 2026
	Ohio Environmental Protection Agency (OEPA)	OEPA Water Quality Certification expected December 2026 If needed, OEPA Isolated Wetland Permit expected December 2026
Archaeology/Architectural	Ohio Historic Preservation Office	Coordination ongoing; responses expected between July 2026 and January 2027
Threatened and Endangered Species	United States Fish and Wildlife Service	Coordination initiated on 5/8/2026 no additional consultation anticipated
	Ohio Department of Natural Resources	Coordination initiated on 6/2/2026 Additional consultation, as needed, to occur between July 2026 and January 2027
Highway Crossing	Ohio Department of Transportation	Anticipated filing for US-35, OH-335, OH-776, OH-139, OH-93, OH-325, OH-327, OH-160, and OH-554 Expected July 2027
Floodplain	Jackson County	Expected December 2026
	Pike County	
	Gallia County	Ohio Power Siting Board approval of the Project will exempt the Company from needing a floodplain development permit in Gallia County.

(6) Debris

As construction work proceeds, the site will be kept clean of rubbish and debris resulting from the work. Clearance poles, conductor reels and other materials with salvage value will be removed from the construction area for reuse or salvage. Construction debris will be disposed of in accordance with state and federal requirements in an OEPA-approved landfill or other appropriately licensed and operated facility. Where vegetation must be cleared, the resulting brush will be removed or windrowed along the edge of the ROW or as negotiated with individual property owners.

(7) Controlling Stormwater and Minimizing Erosion During Construction

Methods for controlling stormwater and minimizing erosion during construction are provided above infra the portion of the Application addressing Adm.Code 4906-4-07(C)(2)(c).

(8) Disposition of Contaminated Soil and Hazardous Materials

Methods for controlling stormwater and minimizing erosion during construction are provided above infra the portion of the Application addressing Adm.Code 4906-4-07(C)(2)(c).

(9) Construction During Excessively Dusty or Excessively Muddy Soil Conditions

The Project construction areas and immediate vicinity will be kept free from dust nuisance resulting from Project activities. During excessively dry periods of active construction, dust suppression will be implemented where necessary through irrigation, mulching, or application of tackifier resins, which are approved measures per the ODNR Rainwater and Land Development Manual (ODNR 2014).

Construction entrances will be established and maintained to a condition that will prevent tracking or flowing of sediment onto public ROWs. All sediment spilled, dropped, washed, or tracked onto public ROWs will be removed promptly.

Figure 7-1: Aviation Facilities

Appendix 7-1: Airspace Assessment

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4906-4-08 HEALTH AND SAFETY, LAND USE, AND ECOLOGICAL INFORMATION

(A) HEALTH AND SAFETY

Health and safety considerations of the proposed Project were reviewed as part of this Application and summarized below.

(1) Equipment Safety and Reliability

(a) How the Facility Will Comply with State/Federal Regulations

The construction and operation of the Project will comply with the requirements specified in the National Electrical Safety Code (NESC), the Public Utilities Commission of Ohio and will meet all applicable safety standards established by the Occupational Health and Safety Administration (OSHA).

Safety is the highest priority for the AEP Ohio Transmission Company, Inc. (the "Company"). Our priority toward employee and public safety is exemplified by the Company's policy as stated in the Company Safety Manual:

The Company system holds in high regard the safety and health preservation of its employees. Accidents injure people, damage equipment, destroy materials, and cause needless personal suffering, inconvenience, and expense. We believe, "No operating condition or urgency of service can ever justify endangering the life of anyone."

To this end, we will constantly work toward the following:

- *The maintenance of safe and healthful working conditions,*
- *Consistent adherence to proper operating practices and procedures designed to prevent injuries and illnesses,*
- *Conscientious observance of governmental and company safety regulations.*

The Company also administers a contractor safety program. Contractors working for the Company are required to maintain internal safety programs and to provide safety training.

(b) Major Public Safety Equipment

Temporary construction entrances (TCEs) will be established for the temporary access roads during construction of the Project. The TCEs and temporary access roads will be identified in the Project's Stormwater Pollution Prevention Plan (SWPPP), and appropriate signage will be posted during

construction. Additionally, contractors will adhere to the Company's safety program by selecting appropriate personal protective equipment and suitable traffic control measures for temporary road and lane closures during construction.

Additional major public safety equipment will be used for construction activities for the Company's proposed Baku Substation and existing Gavin Substation, both of which will be filed under separate cover with Ohio Power Siting Board (OPSB) later.

Major public safety equipment is not anticipated for the normal operation and maintenance of electrical transmission facilities, such as those in this Project. Nuisance shocks may occur if conductible (metal) materials, such as parked vehicles, are left near or within the Project's right-of-way (ROW). Additionally, the Company encourages landowners to limit activities in the ROW to compatible uses, such as gardening and farming, which do not interfere with the safe operation of electric facilities.

(c) Equipment Reliability

The Project will be constructed with equipment certified for 765-kV transmission facilities, such as steel towers and poles, wires, conductor, cables, guys and anchors. Selection of the equipment is based on the current national standards (NESC C2-2023) as well as the Company's internal engineering standards for transmission lines.

(d) Generation Equipment

Not applicable.

(e) Measures to Restrict Public Access

The TCEs and temporary access roads established for construction of the Project will be identified in the SWPPP, and appropriate signage will be posted during construction to limit the public from entering active construction areas. After construction of the Project is complete, the TCEs and temporary access roads may be removed depending on the landowners' preference.

Additional major public safety equipment will be used for construction activities for the Company's proposed Baku Substation and existing Gavin Substation, both of which will be filed under separate cover with OPSB.

(f) Fire Protection, Safety, and Medical Emergency Plans

Contractors working for the Company are required to maintain internal safety programs and to provide safety training. A Work Safety Health Plan will be kept and maintained on-site as well as at nearby

emergency responders (police, fire, and emergency medical services) to ensure an appropriate response to any emergencies occurring during construction of the Project.

The Company also requires that contractors complete daily task hazard assessments prior to any work during construction of the Project.

(g) Sensitive Receptor Considerations

Landowners crossed and adjacent to the transmission line will be informed of the Project's start of construction at least seven days prior to any earth disturbance. No hospitals or schools are crossed by the Project or within 250 feet; however, there are two cemeteries within the 200-foot-wide ROW. The Company's will observe a 50-foot buffer around the cemeteries to minimize impacts, as explained below in the portion of this Application addressing Ohio Administrative Code (Adm.Code) 4906-4-08(D)(2).

Within 500 feet of the Project, there is also one place of worship (Providence Church) within the most recent U.S. Geological Survey (USGS) Geographic Names Information System dataset, plotted in 1979, but based on field reconnaissance and review of current aerial imagery, it no longer exists.

(2) Impact of Air Pollution Control Equipment Failure

Not applicable.

(3) Noise From Construction and Operation of the Facility

(a) Nature of Intermittent, Recurring, or Particularly Annoying Sounds

(i) Blasting Activities

Dynamiting and blasting activities are not anticipated to occur during construction of the Project.

(ii) Operation of Earth Moving Equipment

During the construction phase of the transmission line installation, a temporary increase in noise will result from the construction equipment used to establish fly yards/emergency landing zones and corridors for access roads and the transmission line ROW, as well as from installation equipment. Standard construction techniques will be used, and procedures will comply with applicable OSHA standards. Therefore, noise will likely be minimal and temporary.

Project construction is anticipated to start in **January 2027** and will likely last for approximately 19 months, ending in **December 2028,** followed by restoration, which is anticipated to finish by **June 2029.**

(iii) Driving of Piles, Rock Breaking or Hammering, and Horizontal Directional Drilling

Driving piles is not anticipated during construction of the Project. If required, there will be a temporary increase in noise during construction only. Horizontal directional drilling is not required for the Project.

(iv) Erection of Structures

Due to the challenging terrain within the Project area, the construction team plans to use fly yards/emergency landing zones for helicopters to deliver tower equipment. Therefore, a temporary increase in aircraft noise will occur during construction. Helicopter noise comes primarily from rotor aerodynamics and engine systems that generate strong low-frequency sound. Although many aircraft produce decibel levels that are similar to loud household equipment at close range, their airborne position and acoustic characteristics make them more noticeable than the raw numbers suggest. As a helicopter climbs altitude, sound spreads out and weakens, and high-frequency components are absorbed by the atmosphere. While most helicopters measure between about 70 and 95 A-weighted decibels (dBA) at typical hover distances, low-frequency content, rotor design, altitude, and external loads determine how far the noise carries and how loud it feels to communities on the ground.

(v) Truck Traffic

Truck traffic will increase during construction for access and equipment delivery. No other additional traffic is anticipated for operation and maintenance on the Project beyond periodic mowing or removal of danger trees from the ROW.

(vi) Installation of Equipment

Crews will install and stabilize tower foundations prior to installing and securing the new tower. Towers will be assembled on-site either within the fly yards or at the tower locations themselves. Structures will be installed by vehicle-mounted cranes or equivalent equipment. Due to site-specific requirements, some lattice structures will require delivery of concrete for foundation construction, where needed, including excavation work for the foundation. Once the towers are installed, the crews install new wires along the power line route. The equipment will be installed using standard practices and equipment. Any increase in noise will be temporary and likely minimal.

(b) Operational Noise Levels Expected at the Nearest Property Boundary

Corona, a gap-type discharge due to air ionization, is a phenomenon that occurs on all types of transmission lines but becomes more noticeable at higher voltages (345 kV and higher). Under fair weather conditions, the audible noise from corona is minor and rarely noticed. However, during wet and humid conditions,

water droplets collect on the conductor and increase corona activity. Under these conditions, a crackling or humming sound may be heard in the immediate vicinity of the transmission line. Overall, the Company anticipates that any audible noise from the Baku–Gavin 765-kV Transmission Line will be limited to the 200-foot-wide ROW.

(i) Generation Equipment

Not applicable. Generation equipment is not required for the Project.

(ii) Processing Equipment

Not applicable. Processing equipment is not required for the Project.

(iii) Associated Road Traffic

Increased road traffic within the Project area is not anticipated during operation of the Baku–Gavin 765-kV Transmission Line.

(c) Noise-Sensitive Areas Within 1 Mile of the Facility

Sensitive receptors within 1 mile of the Project are discussed in further detail in the portion of this Application addressing Adm.Code 4906-4-08(D)(4) and are shown on **Figure 8-6**.

Once energized, any noticeable noise impacts from the Baku–Gavin 765-kV Transmission Line is expected to be limited to the 200-foot-wide ROW. Operation of the Project is not anticipated to result in noticeable noise impacts to nearby inhabited residences or other sensitive receptors such as places of worship, schools, or hospitals. As previously stated above in the portion of this Application addressing Adm.Code 4906-4-08(A)(3)(a), a temporary and minor increase in noise will occur during construction of the Project.

(d) Procedures for Mitigating Noise During Construction and Operation

Construction activities associated with the Project will generally occur within seasonal daylight hours between Monday and Saturday; however, construction activities may occur outside of this typical schedule. For example, stringing wire across roads during nighttime hours is generally favorable from a traffic and safety perspective and is often mandated by local jurisdictions.

The Company will remain in detailed correspondence with the impacted landowners for the duration of the construction of the Project to effectively communicate the work to be performed.

(e) Preconstruction Background Noise Study

Not applicable.

(4) Water Impacts

(a) Impacts to Public and Private Water During Construction and Operation

No in-water work is required during construction of the Project and the Baku–Gavin 765-kV Transmission Line will span surface waters.

Additionally, no Ohio Environmental Protection Agency (OEPA) Source Water Protection Areas (SWPAs) are located within the Project area. No impacts to public or private water wells or associated water supplies are anticipated during construction and operation of the Project.

(b) Impacts to Public and Private Water Due to Pollution Control Equipment Failures

Prior to and during construction, all known mains, laterals, and wells will be located through coordination with landowners, field review, and utility locates. If any system is inadvertently damaged during construction, the Company will repair it in a timely manner to ensure continued service. No impacts to off-site water wells are anticipated because of the Project.

(c) Water Sources Map

The Project crosses portions of the Upper Ohio-Shade (05030202), Raccoon-Symmes (05090101), Little Scioto-Tygarts (05090103), and Lower Scioto (05060002) Hydrologic Unit Code (HUC)-8 watersheds. Within these larger watersheds, the Project crosses multiple HUC-12 watersheds, including Kyger Creek, Campaign Creek, Robinson Run–Raccoon Creek, Deer Creek–Little Raccoon Creek, Dickason Run, Headwaters Symmes Creek, Headwaters Salt Lick Creek, Sugarcamp Creek, McDowell Creek–Little Scioto River, McConnell Creek–Rocky Fork, Headwaters Rocky Fork, Headwaters Big Beaver Creek, and Big Run–Scioto River. The western portion of the Project is located within the Mississippian aquifer system, while the eastern portion of the Project is located within the Pennsylvanian aquifer system. No U.S. Environmental Protection Agency (USEPA)-designated Sole Source Aquifers are located within 1 mile of the Project.

Figure 8-1 shows the existing aquifers, water wells, and Federal Emergency Management Agency (FEMA) 100-year floodplains and regulatory floodways within 1 mile of the Project. The nearest OEPA SWPA is the Portsmouth City System, located approximately 5 miles south of the Project.

(d) Compliance with Drinking Water Source Protection Plans

Not applicable. No aquatic discharges or waterborne pollutants will result from the construction or operation of the Project. Additionally, no OEPA SWPAs were identified within 1 mile of the Project.

(e) Flood Potential and Mitigation

The Project crosses areas mapped by FEMA as 100-year floodplains, including both Zone A and Zone AE flood hazard areas. **Figure 8-1** depicts the location of FEMA floodplains and regulatory floodways within 1 mile of the Project.

Approximately 30 acres of the proposed 200-foot ROW are located within mapped FEMA 100-year floodplains. Four of the proposed structures (Structures 98, 161, 210, and 212) will be placed in FEMA 100-year floodplains and will require permanent drilled pier concrete foundations to support the steel tower. No proposed structures are located within mapped regulatory floodway areas.

Due to the linear nature of the Project, the strategic placement of the new poles to limit impacts, the use of temporary access, and planned restoration to preconstruction condition, no effect on the hydraulic conditions of the area or the floodplain/floodway are expected (no change to base flood elevation or water storage capacity). Therefore, the Company does not anticipate any net rise in the 100-year floodplain areas. The Project is not anticipated to impede flood conveyance or substantially alter existing floodway functions.

Precipitation events will be closely monitored by the Company's contractors on-site during construction and post-construction stabilization of the Project. During construction of the Project, no equipment or hazardous materials will be stored within floodplain areas. Additionally, anchored matting will be used for temporary construction access to the Project in floodplains. Prior to construction, the Company will obtain an approved SWPPP as well as a local floodplain permit, both of which will be kept and maintained on-site.

(5) Geological Features

Figure 8-2 displays the geological features of the Project based on current available Ohio Department of Resources (ODNR) data. Within the 1,000-foot buffer area of the Preferred Route, there are 48 wells, one industrial mineral mine, and 17 surface coal mines. Of the 48 wells identified within the 1,000-foot buffer, three are located within the 200-foot ROW of the Preferred Route and one is classified as actively producing gas and oil.

Of the total 18 mines identified in the Project area, four are active and one is abandoned. Three of the active mines are located near Dixon Run Road and U.S. Highway 35 (US-35), with two cutting across the Preferred Route. The abandoned coal mine is within 200 feet of the route near Little Raccoon Creek and Sherman Road. The mineral mine is active about 250 feet from the Preferred Route and approximately 1,400 feet north of the existing Gavin Station.

The Company's consultant provided a preliminary geotechnical findings letter report for the Project, which is included in **Appendix 8-1**. The preliminary report addresses the requirements of Adm.Code 4906-4-

08(A)(5)(a)-(d); further geotechnical investigations are ongoing, and an updated letter report will be provided to the OPSB upon completion.

(a) Coordination with Ohio Department of Natural Resources

The Company's consultant coordinated with the ODNR-Office of Real Estate and Land Management on April 29, 2026, soliciting comments on the Project. Coordination with ODNR also included research of the Natural Heritage Database (NHD) historic records, including locations of rare and endangered plants and animals determined to be of value to the conservation of their species, high-quality plant communities, animal breeding assemblages, and outstanding geological features.

In their response provided on June 2, 2026, the ODNR indicated that no outstanding geological features were identified within a 1-mile radius of the Project (see **Appendix 8-2**).

(6) Wind Velocity

Wind velocities are used for structure loading design, conductor clearance checks to ground and overhead obstructions, and ROW acquisition based off blowout. A wind velocity study was performed for ROW acquisition of the Project. Additionally, sag studies and conductor clearances have also been completed as part of the Project design. Structures will be designed for a 300-year Mean Recurrence Interval (MRI) and meet NESC Extreme Wind Rule 250C and American Society of Civil Engineers (ASCE) MOP 74 with a wind speed up to 105 miles per hour (mph).

(7) Blade Shear

Not applicable.

(8) Ice Throw

Not applicable.

(9) Shadow Flicker

Not applicable.

(10) Radio and TV Reception

Radio interference can be experienced in the AM broadcast band (535–1605 kilohertz [kHz]) and FM band (88–108 megahertz [MHz]), caused by transmission line gap-type discharge (1–1000 MHz). Gap-type discharge, such as that emitted by loose or defective transmission hardware, typically is localized and can be readily detected and corrected, or additional mitigation measures can be applied to eliminate the

interference source. However, gap-type discharge is primarily seen in older transmission lines and those reaching end of life, particularly related to hardware and outdated transmission line designs. This type of gap-type discharge is not anticipated on a newly built transmission line.

Another potential source of radio noise is dielectric discharge, commonly referred to as corona, which results from ionization of the air surrounding energized conductors and hardware. Corona normally is controlled through proper line design. Modern 765-kV transmission lines are designed using appropriately sized conductors, bundled conductor configurations, and insulator assemblies and hardware that are specifically designed and tested to meet corona performance requirements under normal operating conditions. As a result, corona-generated radio interference is not expected to be a concern for the proposed transmission line.

Television signals received from air broadcast using "rabbit ears," which are transmitted at frequencies above 50 MHz, can be affected by gap discharges. However, the Digital Television Transition and Public Safety Act of 2005 required terrestrial TV signals in the United States to switch from analog broadcasting to digital and went into full effect June 12, 2009. Low-band VHF channels (50–85 MHz) have therefore been abandoned, and most of today's digital television signals at UHF frequencies are above 460 MHz in a range that is beyond that which transmission lines have potential to interfere with. Common problems with analog television included ghosting of images, noise from weak signals, and other problems, which degraded the quality of the image and sound, although the programming was still watchable. With digital TV, reception of the signal must be very nearly complete. Otherwise, audio and video are not usable. These problems have largely been addressed with the use of cable television (CATV) and internet streaming services, which do not use over-the-air signal but instead use either coaxial cable or fiber optics to deliver the CATV signal, and the signal paths are immune to external signal influences (including transmission lines of any voltage).

(11) Radar Interference

When energized, transmission lines generate electric and magnetic fields (EMF). Because the strength of these fields decreases rapidly with distance from the source, the Project is not anticipated to interfere with military and civilian radar systems.

An MHW is a non-directional, voiceless navigational aid that acts as a compass locator. The Project is over 11 nautical miles away from the nearest air navigational facility (Pike County Airport or "EOP") MWH and will not impact the operations of this facility. A detailed analysis of EMF associated with the Project is presented below in Adm.Code 4906-4-08(A)(14).

(12) Navigable Space Interference

The Company's consultant conducted an airspace assessment for the Project (see **Appendix 7-1**). The Project crosses just over 1 nautical mile north of James A Rhoades Airport (JRO). The existing Ohio Valley Electric Corporation (OVEC) Kyger–Pierce 345-kV transmission line is located in between JRO and the Project.

Forty structures will exceed Federal Aviation Administration (FAA) Notice Criteria, and they will be filed so the FAA can complete a full aeronautical study on the subject structures. Three structures will exceed the conical surface of JRO based on the Code of Federal Regulations Title 14 Chapter 1 Subchapter E Part 77.19(b) Conical Surface and Visual Flight Rules (VFR). Exceedance of an obstruction standard does not make a structure a hazard. Under Job Order (JO) 7400.2R § 6-3-8.d.1.(b), these penetrations constitute an adverse effect that rises to a substantial adverse effect only if a significant volume of VFR operations would be affected. Based on FAA JO 7400.2 and FAA Advisory Circular (AC) 70/7460-1M, these penetrations can be mitigated with proper obstruction marking and lighting.

Four structures will exceed the initial climb area for proposed runway 1 of JRO. Because the resulting climb gradient requirement would terminate at or below 200 feet above the departure end of the runway, these penetrations qualify as low, close-in obstacles under FAA Order 8260.3, which are addressed through publication in a note to the departure procedure rather than through a climb gradient or an unfavorable determination. The FAA's evaluation will consider runway plans on file for proposed runway 1 consistent with JO 7400.2R § 11-4-1, and we expect these structures to be determined no hazard at the studied heights and locations.

The Project is not expected to have any impact on private landing facilities with FAA-approved special procedures.

The Project is over 11 nautical miles away from the nearest air navigational facility EOP MWH and will not impact the operations of this facility.

The Project will cross the Buckeye Military Operations Area and VFR Military Training Routes VR-1631 and VR-1632. None of the structures will penetrate the floor of the Military Operations Area. With respect to the training routes, JO 7400.2R § 6-3-8.c.3 provides that a structure's location on a VR is not a basis for determining it to be a hazard to air navigation, and the FAA will disseminate the Part 77 notices and aeronautical study information to U.S. Department of Defense representatives for their review.

(13) Communication Interference

Only one Federal Communications Commission (FCC) tower is located within 0.25 miles of the Project centerline at 13909 OH-160 in Gallia County. The tower is located approximately 300 feet north of the

Preferred Route centerline and is owned by American Tower LLC, with service provided to Agile Network Builders LLC and New Cingular Wireless PCS, LLC.

The proposed structures for the Baku–Gavin 765-kV Transmission Line Project range between 112 and 199 feet in height. Seven FCC-licensed microwave paths cross the Preferred Route centerline. However, it is unlikely that the Project will present line-of-sight obstruction to the microwave communication signals used by nearby communications towers. Therefore, no communication interference is anticipated because of the Project.

(14) Electric and Magnetic Fields

In accordance with the OPSB requirements specified in Adm.Code 4906-4-08(A)(14), the following subsections discuss the analysis of EMF associated with the Project.

(a) Calculated Electric and Magnetic Field Strength Levels

The new Baku–Gavin 765 kV Transmission Line will use two different structure types and line configurations. Locations are identified within the following portions of the line for this analysis:

1. Portion of the new line that uses the Horizontal tower configuration
2. Portion of the new line that uses the Delta tower configuration

In each of these portions, EMF levels are computed within the ROW and at both ROW edges at the point of minimum ground clearance, where EMF is the highest. Lower EMF levels are expected beyond the ROW edges, as levels decline with distance.

Factors that affect EMF include the ROW width, operating voltage, current loading and direction, phase configuration, conductor height above ground, electrical unbalance, and other nearby objects.

Nominal voltages and balanced conditions are assumed, with currents flowing in the direction expected during normal system operation. No trees, shrubs, buildings or other objects that can block EMF are assumed in proximity to the proposed line. All calculations are made at the height of 3.28 feet (1 meter) aboveground using the Electric Power Research Institute's (EPRI's) EMF Workstation 2015 computer program.

Three loading conditions were examined: (1) normal maximum loading, (2) emergency line loading, and (3) winter normal conductor rating, consistent with the OPSB requirements. Normal maximum loading represents the peak flow expected with all system facilities in service; daily/hourly flows fluctuate below this level. Emergency line loading is the maximum current flow during unusual (contingency) conditions, which only exist for short periods of time. Winter normal conductor rating represents the maximum current

flow that a line, including its terminal equipment, can withstand during winter conditions. It is not anticipated that the new Baku– Gavin 765 kV line would operate at its winter normal conductor rating or winter normal rating in the foreseeable future.

Loading levels used in the EMF calculations are presented in **Table 8-1**. These levels are based on the 2031 projected system conditions.

Table 8-1. Projected Loading Levels

Line	Normal Maximum Loading (A)	Emergency Line Loading (A)	Winter Normal Rating (A)
Baku–Gavin 765 kilovolts (kV)	1361	2340	6457

A tabulation of conductor minimum ground clearances, ROW widths, and distances from the centerline to ROW edges of the new Baku–Gavin 765 kV Transmission Line at the identified locations are shown in **Table 8-2**.

Table 8-2. Ground Clearances and ROW Widths

Line Portion	Phase Conductor	Ground Clearance^		Right-of-way^^	
		A (Ft)	B (Ft)	Width (Ft)	Edge^^ (Ft)
(1)	6-795 Kcmil 45/7 ACSR (Tern)	53.0	47.4	200	(100/100)
(2)	6-795 Kcmil 45/7 ACSR (Tern)	50.4	46.7	200	(100/100)

Notes:
^ Minimum ground clearance of the new line: A = normal maximum and emergency line loadings; B = winter normal rating.
^^ Distance from centerline to (left ROW edge/right ROW edge).
Key: ACSR = aluminum conductor steel reinforced; ft = feet; kcmil = kilo-circular mil

The calculated EMFs are summarized in Table 8-5.

Table 8-3. EMF Calculations

Line Portion	Electric Field (kV/m)^	Magnetic Field (mG)^		
		Normal Maximum Loading	Emergency Line Loading	Winter Normal Rating
(1)	4.5/8.7/4.5	69/177/60	119/305/119	307/852/306
(2)	2.7/9.0/2.7	48/152/46	83/262/79	206/703/197

Note: ^ EMF levels (left ROW edge/maximum/right ROW edge) calculated one meter above ground assuming balanced currents and nominal voltages. Electric fields reflect normal and emergency operation.
Key: EMF = electric and magnetic fields; kV/m = kilovolts per meter; mG = milligauss

For power-frequency EMF, Institute of Electrical and Electronics Engineers (IEEE) Standard C95.1TM-2019 provides the following exposure reference level limits:

	General Public	Controlled Environment
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Electric Field Limit (kV/m)	5.0	20.0*
Magnetic Field Limit (mG)	9,040	27,100

Note: *10.0 kV/m within power line ROW.
Key: kV/m = kilovolts per meter; mG = milligauss

The calculated EMF levels shown in **Table 8-3** are within the limits specified in IEEE Standard C95.1TM-2019. Those limits have been established to "protect against established adverse health effects in humans associated with exposure to electric, magnetic, and electromagnetic fields in the frequency range of 0 Hz to 300 GHz."

(b) Current State of EMF Knowledge

EMF occurs naturally in the environment. An electric field is present between the earth and its atmosphere and can discharge as lightning during thunderstorms. The earth also has a magnetic field, which provides an operating basis for the magnetic compass. EMF exists wherever there is a flow of electricity, including electrical appliances and power equipment.

Electric fields are produced by voltage or electric charge. A lamp cord that is plugged in produces an electric field even if the lamp is turned off. These fields commonly are measured in kilovolts per meter (kV/m), the higher the voltage, the greater the electric field. Magnetic fields are created by the flow of current in a wire. As current increases, the magnetic field strength also increases; these fields are measured in units known as gauss or milligauss (mG).

Electric fields are blocked or substantially reduced by trees, shrubs, buildings, and other objects. Magnetic fields are not easily blocked and can pass through most objects. The strength of these fields decreases rapidly with distance from the source.

EMF associated with power lines and household appliances oscillate at the power frequency (60 hertz [Hz] in the United States). When people are exposed to these fields, small electric currents are produced in their bodies. These currents are weaker than natural electric currents in the heart and nervous system.

Possible health effects from exposure to EMF have been studied for several decades. Initial research, focused on electric fields, found no evidence of biological changes that could lead to adverse health effects.

Subsequently, many epidemiologic studies examined the possible role of magnetic fields in the development of cancer and other diseases in adults and children. While some studies have suggested an association between magnetic fields and certain types of cancer, researchers have been unable to consistently replicate those results in other studies. Similarly, inconclusive or inconsistent results have been reported in laboratory studies of animals exposed to magnetic fields that are representative of common human exposures. A summary of such exposures, found in residential settings, is provided in **Table 8-4**.

Table 8-4. Magnetic Fields from Household Electrical Appliances and Devices

Appliance Type	Number of Devices	Magnetic Field (mG)		
		1.2 inches (0.1 feet)	12 inches (1.0 feet)	User Distance
AC Adapters	3	1.4–863	0 -7.5	0–0.8
Blood Pressure Monitors	4	4.2–39.6	0–0.3	0 -0.2
Bluetooth Headsets	3	0	0	0
Coffee Grinders	3	60.9–779	0.3–6.5	0.8–40.9
Compact Fluorescent Bulbs	15	0–32.8	0–0.1	0–0.6
Compact Fluorescent Bulb Ballast	1	8.5–23.5	0–0.1	0 -0.1
Computers, Desktop	3	3.8–68.9	0–1.1	0.1–0.5
Computers, Laptop	4	0–5.1	0	0–0.1
Digital Cameras	3	0	0	0
Digital Photo Frames	5	0	0	0
Digital Video Recorders	4	0–29.6	0–0.2	0
Dimmer Switches	4	11.5–32.1	0–0.8	0–0.8
DVD Players	5	0–28.9	0–0.5	0
Electric Lawn Mower	1	1939	156	14.1
Electric Leaf Blowers	4	272–4642	17.1 - 155	28.3–61.5
Electric Toothbrushes	5	3.6–742	0–4.8	3.6 - 742
Electric Toothbrush Chargers	5	0–4.2	0	0
External Hard Drives	4	0.6–1.7	0	0
Gaming Consoles	10	0–215	0–0.5	0–0.6
GPS, Handheld	5	0–0.1	0	0

Table 8-4. Magnetic Fields from Household Electrical Appliances and Devices				
Appliance Type	**Number of Devices**	**Magnetic Field (mG)**		
		1.2 inches (0.1 feet)	**12 inches (1.0 feet)**	**User Distance**
Hobby Tools	2	126–438	1.4–2.4	1.4–438
Hot Glue Guns	3	0–0.9	0	0
LCD Computer Monitors	4	0–4.5	0	0
LCD Televisions	4	1.1–3.9	0–2.5	0–0.6
Massagers/Massage Chairs	3	81.9–500	0.6–2.3	214–500
MP3 Players	5	0	0	0
Noise Cancellation Headphones	1	0	0	0
Paper Shredders	4	11.0–4841	0.5–102	0.5–33.4
Plasma Televisions	2	45.1–73.6	1.4–2.2	0–0.1
Power Tools–Corded	3	784–982	8.8–31.3	46.8 - 123
Power Tools–Cordless	6	9.0–227	0–2.2	0–13.7
Printers	5	0.1–6.2	0–0.3	0–0.3
Scanners	3	0.6–6.7	0–0.3	0
Security System Panels	3	0–0.3	0	0
Tankless Hot Water Heater	1	10.1–21.9	1.2	0.2
Track Lighting	5	0.2–4.0	0–0.3	0
Vacuum Cleaners, Personal/Car	3	75.5–2226	0.6–23.3	0.1–23.1
Wireless Game Controllers	11	0	0	0
Wireless Routers	4	0–0.5	0	0–0.3

Key: AC = alternative current; DVD = digital video disc; GPS = global positioning system; LCD = liquid crystal display; mG = milligauss

As part of the National Energy Policy Act of 1992, the U.S. Congress enacted the Electric and Magnetic Fields Research and Public Information Dissemination (EMF RAPID) program. The National Institute of Environmental Health Sciences (NIEHS) was charged with overseeing the health research and conducting an EMF risk evaluation. In its final report to Congress, issued in 1999, NIEHS concluded that power-frequency "EMF exposure cannot be recognized at this time as entirely safe because of weak scientific evidence that exposure may pose a leukemia hazard." Nonetheless, the report stated that "this finding is insufficient to warrant aggressive regulatory concern" (NIEHS 1999).

In 2001, the Standing Committee on Epidemiology of International Commission on Non-Ionizing Radiation Protection (ICNIRP) wrote in its review of the epidemiologic literature on EMF and health:

"given the methodological uncertainties and in many cases inconsistencies of the existing epidemiologic literature, there is no chronic disease outcome for which an etiological [causal] relation to EMF exposure can be regarded as established" (ICNIRP 2001).

Also, in 2001, International Agency for Research on Cancer (IARC) published the results of an EMF health risk evaluation conducted by an expert scientific working group, which concluded that power-frequency "magnetic fields are 'possibly carcinogenic to humans,' based on consistent statistical associations of high level residential magnetic fields with a doubling of risk of childhood leukemia" (IARC 2001). IARC assigns its "possibly carcinogenic to humans" classification (Group 2B) if there is "limited evidence" of carcinogenicity in both humans and experimental animals, or if there is "sufficient evidence" in animals, but "inadequate evidence" in humans. Group 2B includes some 285 "agents," such as coffee, pickled vegetables, carpentry, textile manufacturing and gasoline, among others.

A comprehensive assessment of the EMF health risks was published by the World Health Organization (WHO) in 2007. In its assessment, WHO wrote:

"Scientific evidence suggesting that every day, chronic, low-intensity (above 0.3–0.4 μT [microteslas]) [3–4 mG] power-frequency magnetic field exposure poses a possible health risk is based on epidemiological studies demonstrating a consistent pattern of increased risk for childhood leukemia" (WHO 2007).

It added, however, that "virtually all of the laboratory evidence and the mechanistic evidence fail to support a relationship between low-level ELF [extremely low frequency] magnetic fields and changes in biological function or disease status. Thus, on balance, the evidence is not strong enough to be considered causal, but sufficiently strong to remain a concern."

Regarding acute effects, WHO noted, "Acute biological effects have been established for exposure to ELF EMFs in the frequency range up to 100 kHz that may have adverse consequences on health. Therefore, exposure limits are needed. International guidelines exist that have addressed this issue. Compliance with these guidelines provides adequate protection for acute effects" (WHO 2007).

In summary, some studies have reported an association between long-term magnetic field exposure and particular types of health effects, while other studies have not. The nature of the reported association remains uncertain as no known mechanism or laboratory animal data exists to support the cause-and-effect relationship.

In view of the scientific evidence, the IEEE and other organizations have established guidelines limiting EMF exposure for workers in a controlled environment and for the public. These guidelines focus on

prevention of acute neural stimulation. No limits have been established to address potential long-term EMF effects, as the guideline organizations consider the scientific evidence insufficient to form the basis for such action. For power-frequency EMF, IEEE Standard C95.1™-2019 recommends the following limits as shown in **Table 8-5**:

Table 8-5. Recommended Power Frequency EMF Limits

	General Public	Controlled Environment
Electric Field Limit (kV/m)	5.0	20.0*
Magnetic Field Limit (mG)	9,040	27,100
*10.0 kV/m within power line ROW		

Key: EMF = electric and magnetic field; kV/m = kilovolts per meter; mG = milligauss; ROW = right-of-way

To address public concerns about EMF, the Canadian government updated its website in 2012 with the latest knowledge on the subject. It contains the following statements on the EMF health-related risks: "Health Canada does not consider that any precautionary measures are needed regarding daily exposures to EMFs at ELFs. There is no conclusive evidence of any harm caused by exposures at levels found in Canadian homes and schools, including those located just outside the boundaries of power line corridors" (Health Canada 2012). Similarly, in 2013, the updated website of the WHO concludes: "to date there is no evidence to conclude that exposure to low-level electromagnetic fields is harmful to human health" (WHO 2013).

The Company has been following the EMF scientific developments worldwide, participating in and sponsoring EMF studies, and communicating with customers and employees on the subject. In addition, the Company is a member of EPRI, an independent, non-profit organization sponsoring and coordinating EMF epidemiological, laboratory, and exposure studies.

(c) Description of the Company's Consideration of EMF Strength Levels

The Company did not consider design alternatives due to EMF and their strength levels. Transmission lines, when energized, generate EMF. Laboratory studies have failed to establish a strong correlation between exposure to EMF and effects on human health. However, some people are concerned that EMF has impacts on human health. Due to these concerns, EMF associated with the new circuits was calculated in **Table 8-5** above. The EMF was computed assuming the highest possible EMF values that could exist along the proposed transmission line. Normal daily EMF levels will operate below these maximum load conditions. Based on studies from the National Institutes of Health, the magnetic field (measured in milliGauss, or mG) associated with emergency loading at the highest EMF value for this transmission line is lower than those

associated with normal household appliances. For additional information regarding EMF, the National Institute of Health has posted information on their website:

https://www.niehs.nih.gov/health/materials/electric_and_magnetic_fields_associated_with_the_use_of_electric_power_questions_and_answers_english_508.pdf

(d) EMF Public Inquiries Policy

Information on EMFs is available on AEP Ohio's website at https://www.aepohio.com/info/projects/emf/. This information describes the basics of electromagnetic field theory, scientific research activities, and EMF exposures encountered in everyday life. Similar material will be made available for those affected by the construction activities during this Project.

The Company occasionally receives requests from customers for EMF measurements on their properties. These measurements are provided free of charge to the customers.

(B) ECOLOGICAL INFORMATION

Ecological resources within the Project area were identified via field pedestrian surveys, desktop reviews, and agency coordination, as described in further detail below.

(1) Ecological Resources in the Project Area

(a) Ecological Resources Map

Figure 8-3 depicts the Project's 1,000-foot buffer at 1:12,000 scale, including the proposed centerline/ROW, route corridor, wildlife areas, nature preserves or other conservation areas, surface waters, and highly erodible soils or slopes of 12 percent or greater. **Figure 8-4** depicts the Project's Environmental Survey Corridor (ESC), which is generally 400-foot-wide, at 1:6,000 scale, including the proposed centerline, 200-foot-wide ROW, route corridor, vegetation communities, and delineated features (clipped to the ESC).

(i) Limits of Disturbance

The Project's Limits of Disturbance (LOD) is defined as the proposed 200-foot-wide ROW, which totals approximately 1,244 acres. Vegetative communities identified within the Project's ESC are presented in **Figure 8-4** and **Table 8-9,** below. Land use classifications within 1,000 feet of the Project are presented in **Figure 8-5** and in **Table 8-13** below.

(ii) Undeveloped Land

Undeveloped land, comprising coniferous and successional hardwood woodland, old fields, and open space land, covers a combined 73.1 percent of the ROW (see **Table 8-7,** below). During construction, woody vegetation will be removed from the ROW, and periodic clearing will occur during operation and maintenance of the Project. No other adverse impacts to undeveloped/vacant are anticipated because of the Project.

(iii) Wildlife Areas, Nature Preserves, and Conservation Areas

On June 2, 2026, the ODNR, Division of Wildlife (DOW) replied to an email request for NHD records of wildlife areas, nature preserves, and conservations areas. The ODNR response indicated no managed areas are within a 1-mile radius of the Project. Additionally, no federal wildlife refuges, wilderness areas, or critical habitat is within the vicinity of the Project, as indicated in the U.S. Fish and Wildlife Service (USFWS) response, dated May 8, 2026. Copies of the agency's responses are provided in **Appendix 8-2**.

(iv) Surface Water

Raccoon Creek (S-BG-4-11), a state scenic river, is the predominant surface water crossed by the Project. Within the Project area, Raccoon Creek generally flows north to south to converge with the Ohio River.

Overall, the Project's ESC contains 353 streams totaling 165,213 linear feet, 191 ephemeral streams, 123 intermittent streams, and 39 perennial streams. Named streams include: Little Salt Creek (S-BG-1-58), Sugarcamp Creek (S-BG-1-60), Fourmile Creek (S-BG-1-126), Big Run (S-BG-1-129), McDowell Creek (S-BG-1-135), Little Kyger Creek (S-BG-2-1), Turkey Run (S-BG-2-12 and S-BG-5-62), White Oak Creek (S-BG-2-15), Little Raccoon Creek (S-BG-4-1), Little White Oak Creek (S-BG-5-20), Campaign Creek (S-BG-5-29), Kyger Creek (S-BG-5-59), Kyger Run (S-BG-5-95), Jacko Run (S-BG-5-98), Sand Run (S-BG-5-111), Little Scioto River (S-BG-6-1), and Dutch Run (S-BG-7-103).

Of the 353 streams within the Environmental Survey Report (ESR), the Project's 200-foot-wide ROW contains 287 streams, as summarized in **Table 8-6**.

(v) Highly Erodible Soils and Slopes of 12 Percent or Greater

Based on U.S. Department of Agricultural (USDA) Natural Resources Conservation Service (NRCS), highly erodible soils and slopes of 12 percent or greater are mapped throughout most of the Project area (see **Figure 8-3**). Approximately 59 percent (1,065 acres) of the ESC contains slopes exceeding 12 percent; of which, approximately 97 percent (1,029 acres) are considered severely eroded. Within the 200-ft ROW, 58 percent of the NRCS soils have slopes of 12 percent or greater. Most of the soils within the ESC have a low hydric rating (96 percent).

(vi) Areas of Proposed Vegetative Clearing

The Project's proposed 200-foot ROW will be cleared initially prior to construction and during routine maintenance per the Company's Vegetation Clearing Management Plan. The anticipated impacts to vegetative communities within the proposed 200-foot ROW are shown in **Table 8-8**, below, in the portion of this Application addressing Adm.Code 4906-4-08 (B)(2)(a)(iii).

All clearing activities in wetlands and riparian corridors will be completed by non-mechanized clearing methods.

(vii) Naturally Occurring Woody and Herbaceous Vegetation

Woody and herbaceous vegetation was identified along the Project during the field reconnaissance (March 3, 2026, to June 16, 2026). As discussed in **Appendix 8-3**, the Project's approximately 400-foot-wide ESC crosses a mix of agricultural land, urban areas, landscaped areas, old fields, scrub/shrub, successional hardwood and coniferous woodlands, ponds, wetlands, and streams. A variety of woody and herbaceous lands, as described below in the portions of this Application addressing Adm.Code 4906-4-08(B)(1)(b)(iii) and Adm.Code 4906-4-08(B)(2)(a)(iii), are present within the Project's proposed 200-foot-wide ROW. Vegetated land cover was initially digitized using imagery from ESRI obtained from geographic information systems (GIS) and later adjusted during field surveys to ensure land use accuracy. Vegetated land cover can be seen visually from aerial photography provided on **Figure 8-4**.

(viii) Sensitive Habitat Areas

Based on coordination with the ODNR-DOW and the USFWS and subsequent field reviews, the Project's ESC provides suitable habitat for two federal endangered bat species, both of which are also state endangered species, and two more state endangered species. A total of 39 perennial streams, including one state scenic river (Raccoon Creek), cross the Project and were identified to provide potentially suitable habitat for four state and federal endangered freshwater mussel species. Suitable habitat for the timber rattlesnake, a state endangered species, was also identified within the Project's ESC. Additionally, during environmental surveys, a confirmed active bald eagle (*Haliaeetus leucocephalus*) nest was identified within 660 feet of the Preferred Route, near Johnson Road in Jackson County (see **Appendix 8-3**).

An evaluation of construction impacts and mitigation procedures are described in the portion of this Application addressing Adm.Code 4906-4-08(B)(2)(a) below.

(b) Field Survey Results

Between March–June 2026, the Company conducted a study to assess the potential effects of construction and operation of the proposed Project on the ecology of the Project area. Available GIS data and published

literature was reviewed for a 1,000-foot survey area on either side of the proposed centerline of the Project. Subsequently, a field survey of ecological habitat and features was performed within the Project's 400-foot-wide ESC.

The purpose of the field survey was to assess whether wetlands and other "waters of the United States." exist within the Environmental Survey Area. During the field survey, the physical boundaries of observed water features were recorded using a Global Positioning System (GPS) unit rated for sub-meter accuracy. The GPS data were imported into ArcMap GIS software, where the data were then reviewed and edited for accuracy.

Prior to conducting field surveys, digital and published county NRCS soil surveys, USFWS National Wetlands Inventory (NWI) maps, and USGS 7.5-minute topographic maps were reviewed to help identify the occurrence and location of potential wetland areas. These studies are discussed in the following sections and the Project's ESR is included in **Appendix 8-3**.

(i) Field Delineated Streams

Streams were identified using USGS topographic maps, aerial photography, and field reconnaissance. Stream evaluations were conducted for streams identified within the ESC. Representative photographs are provided in **Appendix 8-3**. Streams that drain areas greater than 1 square mile were assessed using the OEPA's Qualitative Habitat Evaluation Index (QHEI) method (Rankin 1989). Within the QHEI scoring convention, streams are classified based on their drainage area. QHEI streams that drain an area greater than 20 square miles are classified as "large streams," and streams that drain an area less than 20 square miles are classified as "headwater streams." QHEI-classified streams then receive a narrative rating based on their score. The narrative rating gives a general indication of aquatic assemblages that may be found at any given site. Five narrative ratings scale the 100-point scoring system. Very poor streams have a QHEI score less than 30. Poor streams have a QHEI score between 30 and 42. Fair streams have a QHEI score between 43 and 54. Good streams have a QHEI score between 55 and 69. Streams that have a QHEI score greater than or equal to 70 are classified as excellent. The evaluations were conducted at or near the proposed transmission line crossing of each stream.

Overall, the Company's consultant delineated 353 streams totaling 165,213 linear feet (lf) within the Project's ESC. This included 191 ephemeral streams totaling 70,513 lf, 123 intermittent streams totaling 69,123 lf, and 39 perennial streams totaling 25,577 lf. Recommendations for the crossing of Raccoon Creek (i.e., BMPs) were provided by ODNR in the environmental review, which are explained to further detail in the portion of this Application addressing Adm.Code 4906-4-08(B)(1)(c), and viewed in **Appendix 8-2**.

Nine tributaries were assessed using the QHEI methodology within the ESC (S-BG-1-25, S-BG-1-60, S-BG-1-61, S-BG-1-136, S-BG-2-70, S-BG-2-117, S-BG-4-1, S-BG-5-58, and S-BG-8-12), all of which are located

within the proposed 200-foot-wide ROW. Additionally, each stream is crossed by the Preferred Route centerline once. The QHEI evaluations were conducted at or near the proposed transmission line crossing of each stream.

Streams with a drainage basin of less than 1 square mile were evaluated using the OEPA's Headwater Habitat Evaluation Index (HHEI) method (OEPA 2020). The HHEI is a rapid field assessment method for physical habitat that can be used to appraise the biological potential of most Primary Headwater Habitat (PHWH) streams. Headwater streams are typically considered to be first- and second-order streams, meaning streams that have no upstream tributaries (or "branches") and those that have only first-order tributaries, respectively. Headwater streams are scored based on channel substrate composition, bankfull width, and maximum pool depth. Assessed areas result in a score (0 to 100) that is converted to a specific PHWH stream class. Streams that are scored from 0 to 29.9 are typically grouped into "Class 1 PHWH Streams,"30 to 69.9 are "Class 2 PHWH Streams," and 70 to 100 are "Class 3 PHWH Streams." There is flexibility and some "gray areas" in the scoring system: a stream can score relatively high, but actually belong in a lower class, and vice-versa. Evidence of anthropogenic alterations to the natural channel will result in a "Modified" qualifier for the stream.

Of the 353 streams, 328 (147,142 lf) were evaluated with the HHEI methodology and nine (5,793 lf) were evaluated with the QHEI methodology. Sixteen streams, totaling 12,278 lf, were not evaluated with either methodology because they had existing OEPA aquatic life use designations. All 162 delineated intermittent and perennial streams, totaling 94,700 lf, were identified as relatively permanent waters (RPWs) with a continuous surface water connection to a traditionally navigable waterway, and therefore likely subject to jurisdiction by the U.S. Army Corps of Engineers (USACE). All 191 delineated ephemeral streams were considered non-RPWs and are therefore not likely to be regulated by the USACE or OEPA. It should be noted that final determination of stream jurisdiction will be made by the USACE.

Delineated streams are shown on Pages 1-28 in **Figure 8-4**. Copies of the QHEI and HHEI evaluation forms for the streams assessed within the survey corridor of the routes are included in **Appendix 8-3**. As shown below in the portion of this Application addressing Adm.Code 4906-4-08(B)(2)(a)(i), **Table 1** in **Appendix 8-4** lists the attributes of each delineated stream within the Project Survey Corridor, including QHEI and/or HHEI score where appropriate, flow regime, bankfull width, stream length within the survey corridor, and stream length within the proposed maintained ROW, respectively.

In total, 353 streams measuring a combined 165,213 lf were identified within the Project's ESC. Of which, 287 streams are within the proposed 200-foot-wide ROW for a total length of 67,133 lf. Of the 287 streams within the Preferred Route 200-foot-wide ROW, 212 streams are crossed by the Preferred Route. Of the 212 streams crossed by the centerline, 206 streams cross the centerline once each and six streams cross the centerline more than once, for a total of 222 centerline crossings. Otherwise, 75 of the 287 streams are within the Preferred Route 200-foot-wide ROW but are not crossed by the Preferred Route centerline.

(ii) Field Delineated Wetlands

According to the USACE, wetlands are defined as areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation (hydrophytic) typically adapted for life in saturated (hydric) soil conditions.

The Company's consultant used the on-site methodology established by USACE 1987 Wetland Delineation Manual (1987 Manual) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region (Version 2.0)* (USACE 2010) to identify wetlands within the Project. Additionally, each identified wetland was evaluated in accordance with the Ohio Rapid Assessment Method (ORAM) developed by the OEPA (Mack 2001). Wetland categorizations were conducted in accordance with the latest quantitative score calibration procedure (Mack 2001). Prior to on-site delineation and evaluation wetlands, USFWS NWI maps and NRCS soil survey and hydric soil lists for Gallia, Jackson, and Pike counties were reviewed for areas within the 400-foot-wide ESC of the Project to identify potential wetlands. NWI areas are shown in **Figure 8-1** and summarized by wetland classification and habitat below in **Table 8-6**. The actual extent and type of field delineated wetlands along the route are discussed thereafter.

Table 8-6. NWI Wetlands Within the Project's Environmental Survey Corridor

NWI Wetland Description	NWI Code	NWI Habitat Type	Number of NWI Wetlands
Freshwater Emergent Wetland	PEM1A	Palustrine emergent, persistent, temporarily flooded	10
	PEM1C	Palustrine emergent, persistent, seasonally flooded	1
	PEM1Fx	Palustrine, excavated, semi-permanently flooded	1
Forested/Shrub Wetlands	PFO1/SS1A	Palustrine forested, temporarily flooded	1
	PFO1A	Palustrine forested, Temporarily flooded	6
	PSS1/EM1C	Palustrine scrub-shrub, Seasonally flooded	1

Table 8-6. NWI Wetlands Within the Project's Environmental Survey Corridor			
NWI Wetland Description	**NWI Code**	**NWI Habitat Type**	**Number of NWI Wetlands**
Ponded Wetlands Freshwater Pond	PUBFh	Palustrine forested, Broad-leaved deciduous, seasonally flooded	1
	PUBFx	Palustrine unconsolidated bottom, excavated, semi-permanently flooded	1
	PUBGh	Palustrine unconsolidated bottom, intermittently exposed water regime, diked/impounded	23
	PUBGx	Palustrine unconsolidated bottom, intermittently exposed, excavated	4
	PUBK	Palustrine unconsolidated bottom, artificial water regime	2
Riverine	R2UBH	Riverine, lower perennial, unconsolidated bottom, permanently flooded	1
	R4SBC	Riverine, intermittent, streambed, seasonally flooded	71
	R5UBH	Riverine, unknown perennial, unconsolidated bottom, permanently flooded	11
Total Number of Preferred Route NWI Wetlands Within the ESC:			**134**

Key: ESC = Environmental Survey Corridor; NWI = National Wetlands Inventory

The Company's consultant identified 111 wetlands totaling 57.73 acres in the Project's ESC: 57 palustrine emergent (PEM) wetlands, 8 palustrine scrub-shrub (PSS) wetlands, and 46 palustrine forested (PFO) wetlands**.**

Sixty-six of the 111 wetlands identified in the ESC are located within the Project's 200-foot-wide ROW, totaling 12.89 acres. Of these, 36 wetlands are crossed by the Preferred Route centerline, for a total length of 3,271 lf (see **Table 2** in **Appendix 8-4**).

Representative photographs of wetlands identified during the field reconnaissance and completed USACE and ORAM forms are included in **Appendix 8-3**. Field delineated wetlands within the survey corridor are mapped on Pages 1—28 in **Figure 8-4**, and a detailed summary of the delineated wetland impacts is presented on **Table 8-10** in the portion of this Application addressing Adm.Code 4906-4-08(B)(2)(a)(ii).

(iii) Vegetative Communities

Coniferous Woodland: Upland areas dominated by coniferous woody plants greater than 30 feet in height. Generally planted white pine or red pine. Approximately 46 acres (1.6 percent) of the Project ESC contains coniferous woodland.

Cultivated Cropland: Areas seasonally cultivated with row crops of corn (*Zea mays*) or soybeans (*Glycine max*). Approximately 110 acres (3.7 percent) of the Project's ESC contains cultivated cropland.

Developed, High Intensity: These areas consist of developed residential, industrial, and commercial land uses, including roads, buildings, and parking lots. These areas are devoid of significant vegetation. Approximately 42.5 acres (1.4 percent) of the Project's ESC contains developed, high-intensity land.

Developed, Low Intensity: Typically, low-density residential areas with small structures, limited impervious surfaces, and maintained vegetation. These areas are devoid of significant vegetation. Approximately 28.5 acres (1 percent) of the Project's ESC contains developed, low-intensity land.

Developed, Open Space: Developed areas, including residential and commercial properties, were observed within the ESC. These landscaped areas are frequently mowed or maintained grasses and forbs. Approximately 37 acres (1.3 percent) of the Project's ESC contains developed, open space land.

Old Field: This community type is an early stage of succession following disturbance. Old Field communities are generally short-lived, giving way progressively to shrub and forest communities unless periodically re-disturbed. Common plant species observed include Canada goldenrod (*Solidago canadensis*), Giant Foxtail (*Setaria faberi*), and timothy grass (*Poa annua*). Approximately 139 acres (4.7 percent) of the Project's ESC contains old field habitat.

Pasture/Hayfield: Active pastureland for agricultural grazing and actively tilled hayfields were observed both within and beyond the survey corridor for the Project, generally located adjacent to rural residential land uses. Approximately 475 acres (16.1 percent) of the Project's ESC contains pasture/hayfield habitat.

Scrub-Shrub: Scrub-Shrub habitats represent the successional stage between old field and second growth forest and often emerge in recently harvested forests responding to the lack of overhead canopy. Common plant species observed include Allegheny blackberry (*Rubus allegheniensis*), Russian olive (*Elaeagnus umbellata*), green ash (*Fraxinus pennsylvanica*), cottonwood (*Populus deltoides*), and Japanese honeysuckle (*Lonicera japonica*). Approximately 131.6 acres (4.5 percent) of the Project's ESC contains upland scrub-shrub habitat.

Successional Hardwood Woodland: Successional hardwood woodland habitats represent the younger life stages of second growth forest. Common species observed include cottonwood (*Populus deltoides*), green ash (*Fraxinus pennsylvanica*), black walnut (*Juglans nigra*), Osage orange (*Maclura pomifera*), and other deciduous trees. Approximately 1,869.5 acres (63.3 percent) of the Project's ESC contains upland successional hardwood woodland habitat.

Wetlands/Waterbodies: Wetlands and Waterbodies delineated within the ESC boundaries. Approximately 75 acres (2.5 percent) of the Project's ESC contains wetlands and waterbodies uses.

(iv) Field Delineated Lakes, Ponds, and Reservoirs

As shown below in **Table 8-7**, a total of 34 waterbodies, measuring a combined 10.72 acres, were observed within the Project's ESC. All 34 delineated waterbodies were identified as man-made ponds originating either from agricultural or industrial land uses, which do not possess a direct surface water connection to an RPW. Therefore, all delineated waterbodies will likely be considered non-jurisdictional by the USACE.

Seventeen of the 34 waterbodies are located within the proposed 200-foot ROW for a combined 3.76 acres. Of the 17 waterbodies located within the 200-foot ROW, eight are crossed by the Preferred Route centerline for a total of approximately 1,245 lf. Locations of ponds identified within the Preferred Route survey corridor are shown on **Figure 8-4**.

The delineated waterbodies will be aerially spanned by the new Baku–Gavin 765-kV Transmission Line. Impacts to ponds are not anticipated by the construction, operation, or maintenance of the proposed transmission line. Best Management Practices (BMPs), including utilization of silt fencing, will be used as appropriate during construction to minimize runoff siltation.

Table 8-7. Delineated Ponds Within the Project Survey Corridor				
Pond ID	**Page(s) in Figure 8-4**	**Acreage Within Environmental Survey Corridor**	**Acreage Within 200-foot ROW**	**Length of Centerline Crossing (lf)**
P-BG-1-1	14	< 0.01	0	0
P-BG-1-15	26	0.61	0	0
P-BG-1-19	16	0.36	0.36	138
P-BG-1-2	15	0.11	0	0
P-BG-1-7	16, 17	0.31	0.26	0
P-BG-1-8	16, 17	1.14	0.01	0
P-BG-2-1	27, 28	0.81	0.71	206
P-BG-2-12	28	0.10	0	0
P-BG-2-2	27	0.21	0.07	0
P-BG-2-3	27	0.07	0.07	71
P-BG-2-30b	13	0.36	0.36	169
P-BG-2-4	13	0.60	0.11	0
P-BG-2-5	13	0.37	0.05	0
P-BG-2-55	16, 17	0.09	0	0
P-BG-2-57	17	0.80	0.35	82
P-BG-2-60	17	0.45	0	0
P-BG-2-68	15	0.02	0	0
P-BG-2-69	15	0.06	0	0
P-BG-4-1	21	< 0.01	0	0
P-BG-5-10	4	0.25	0	0
P-BG-5-2	28	1.79	1.17	256
P-BG-5-3	28	0.49	0	0
P-BG-5-7	16	0.04	0	0
P-BG-8-10	1	0.09	0	0
P-BG-8-12	22	0.16	0	0
P-BG-8-13	6	0.02	0.01	0

Table 8-7. Delineated Ponds Within the Project Survey Corridor				
Pond ID	**Page(s) in Figure 8-4**	**Acreage Within Environmental Survey Corridor**	**Acreage Within 200-foot ROW**	**Length of Centerline Crossing (lf)**
P-BG-8-14	7	0.03	0	0
P-BG-8-22	5	0.29	0.05	264
P-BG-8-3	14	0.30	0	0
P-BG-8-7	6	0.02	0	0
P-BG-8-9	1	0.13	0.13	60
P-BG-9-1	4	0.04	0.01	0
P-BG-9-2	27	0.11	0.01	0
P-BG-9-3	17	0.51	0.01	0
Total:		**10.72**	**3.76**	**1,245**

Key: ID = identification; lf = linear feet; ROW = right-of-way

(c) Construction Impacts on Vegetation and Surface Waters

Construction Impacts on Vegetation

Vegetation community types identified during the ecological survey are listed above in the portion of this Application addressing Adm.Code 4906-4-08(B)(b)(iii) and summarized below on **Table 8-10** in the portion of this Application addressing Adm.Code 4906-4-08(B)(2)(a)(iii). The construction impacts on woody and herbaceous vegetation along the Project will be limited to clearing within the 200-foot ROW for the proposed transmission line and potentially along access roads. Specific locations for access roads will be identified at the time of the Company's transmission line easement acquisition process. However, where required, trees adjacent to the proposed transmission line ROW that are dead, dying, diseased, leaning, significantly encroaching or prone to failure, may require clearing to allow for safe operation of the transmission line. Vegetation wastes (such as tree limbs and trunks) generated during the construction phase will be windrowed or chipped and disposed of appropriately, depending on individual landowner requests. Construction impacts to agricultural land within the existing transmission ROW are expected to be temporary in nature and limited to vehicle access and temporary lay down activities.

The Project involves acquiring and establishing a new 200-foot ROW for the 51.3-mile-long Preferred Route, totaling approximately 1,244 acres. When possible, open areas were crossed in the design of the facility. However, tree clearing (totaling approximately 850 acres) will be required for the Project, due to the existing rural landscape. The approximate vegetation impacts along the Project ROW are summarized on **Table 8-10** in the portion of the Application addressing Adm.Code 4906-4-08(B)(2)(a)(iii).

Clearing of potential bat roost trees, if any, will occur during a restricted period from October 1 through March 31 to avoid any potential impact to summer tree-roosting bats. If tree clearing cannot occur during this period, appropriate coordination will occur with ODNR and USFWS. All vegetative waste (such as tree limbs and trunks) which is generated during the construction phase will be windrowed, chipped, and disposed of appropriately, or as negotiated with individual property owners.

Construction Impacts on Streams

Streams identified during the ecological survey are listed above infra the portion of this Application addressing Adm.Code 4906-4-08(B)(1)(b)(i) and summarized below on **Table 8-8** infra in the portion of this Application addressing Adm.Code 4906-4-08(B)(2)(a)(i). The Project's ESC contains 353 streams totaling 165,213 lf. Of the 353 streams within the ESC, 287 streams are within the Preferred Route 200-foot-wide ROW, and 212 of the 287 streams are crossed by the Preferred Route centerline. Of the 212 streams crossed by the centerline, 206 streams cross the centerline once each, and six streams cross the centerline more than once.

The Preferred Route crosses Raccoon Creek, a state scenic river. To help protect the creek's excellent water quality, the Company will implement BMPs prior to earth work and follow guidelines provided by ODNR via the Ohio Scenic Rivers Program (see **Table 8-15** and **Appendix 8-2**).

The Company will not conduct mechanized clearing within 25 feet of any stream and will only clear (via hand cutting techniques) those trees in this area that are tall enough to or have the potential to interfere with safe construction and operation of the line. None of the streams that occur along the Project ROW are expected to be filled or permanently impacted by the Project and will be aerially spanned. Access roads avoiding waterbodies were selected in most cases, however, some streams may have to be crossed by construction vehicles, where BMPs will be used. Existing culverts may be used, where available. If a new stream crossing were necessary and was impacted below ordinary high water, it would comply with one of the two proposed methods to cross streams: temporary access (air bridges) and temporary culvert stream crossings.

Temporary access (air bridges) is the first/preferred choice for crossing ephemeral, intermittent, and perennial streams. Regardless of the stream crossing method, disturbance of the stream will be kept to a minimum, stream bank vegetation will be preserved to the maximum extent practical, and the stream crossing width will be kept as narrow as possible. Clearing will be done by hand cutting rather than grubbing. Roots and stumps will be left in place to aid stabilization and accelerate revegetation. Sediment-laden runoff will be controlled to minimize flow from the access road directly into the stream. Silt fencing will be used as needed according to local topographic conditions. Proper permitting will be obtained prior to crossing any streams. Crossing methods for each stream will be addressed in detail in the SWPPP for the Project. The approved SWPPP will be provided to the OPSB under separate cover. Some of the access routes may be left in place for maintenance activity or at the request of the landowner.

Streams identified during the ecological survey are listed above in the portion of this Application addressing Adm.Code 4906-4-08(B)(b)(ii) and summarized below on **Table 8-9** in the portion of this Application addressing Adm.Code 4906-4-08(B)(2)(a)(ii). The Company will avoid the placement of structures within wetlands areas to the extent practicable. Disturbance of soils in wetland areas during construction will be minimized and no wetlands will be permanently filled along the Preferred Route. Based on current design, no preliminary structures are located within delineated wetlands. All clearing activities in wetlands will be completed by non-mechanized clearing methods. Operation of heavy equipment is not planned in any identified wetland areas. Woody vegetation in wetlands will be hand cut by chainsaws or other non-mechanized techniques.

Care will be taken where wetlands are located to avoid or minimize filling and sedimentation. Selective clearing will be required to remove woody vegetation in wetlands that might impede construction or interfere with operation of the transmission line.

BMPs, such as use of silt fences and construction matting, will be implemented as required during construction to control sedimentation. Sedimentation potential at wetlands should be minimal due to the structure placement and the fact that construction equipment will only cross wetlands if necessary and do so using construction matting.

(d) Literature Survey of the Plant and Animal Life Potentially Affected by the Facility

The Project area is primarily located in a rural setting dominated by wooded areas, with some scattered farmland and residences. The developed area is dominated by low-density residential land uses, industrial properties, and commercial properties, as well as existing utility or road ROW. The Project has potential habitat for protected wildlife species as well as commercial and recreational species.

Lists of protected species are typically based on their range within Gallia, Jackson and Pike counties, as reported in ODNR-DOW and USFWS county species distribution lists. Lists of commercial and recreational species were created using professional experience and the ODNR-DOW's 2025–2026 Hunting and Trapping Regulations (ODNR-DOW 2025). A list of game fish known to occur in Ohio was obtained from the ODNR-DOW Sport Fish of Ohio Identification Guide (ODNR-DOW 2012). Details on the expected impacts of construction, operation, maintenance, and mitigation procedures can be found following the threatened and endangered, commercial, and recreational species descriptions as follows.

(i) Commercial Species

Commercially important species along the Preferred Routes consist of those hunted or trapped for fur or other products from ODNR-DOW's 2025–2026 Hunting and Trapping Regulations (ODNR-DOW 2025), as listed below:

Beaver (*Castor canadensis*): Beavers occur in forested ponds, lakes, and rivers. In rivers, beavers make burrows with an underwater entrance in the riverbank. However, in streams, lakes, and ponds, beavers usually build dams that incorporate a lodge. Based on habitat present along the routes, beavers may inhabit the larger perennial streams identified along the Preferred Route (see **Table 1** in **Appendix 8-4**).

Coyote (*Canis latrans*): Historically, coyotes prefer open territory, but in Ohio, they have adapted to various habitat types and habitat fragmentation. Coyotes are a very adaptable species that has prospered despite the expanding presence of human impact. This species is likely found near or within the Project area but was not observed during field investigations.

Gray fox (*Urocyon cinereogentus*): Gray foxes prefer wooded areas and partially open brush with little human presence. Based on the habitat present along the routes, this species may occur near or within the

Project area. This species was not observed during field investigations; however, they are generally nocturnal animals.

Long-tailed weasel (*Mustela frenata*): The long-tailed weasel is an adaptable animal that can be found in terrestrial habitats near water. Based on habitat present along the routes, this species is likely found near or within the Project area, specifically within corridors of Margaret Creek along the Preferred Route. This species was not observed during field investigations; however, they are generally nocturnal animals.

Mink (*Mustela vison*): Mink are usually found near water, both running and standing. Minks prefer wooded or brush areas. This species likely occurs near or within the Project area, in proximity to Margaret Creek along the Preferred Route. Minks were not observed during field investigations.

Muskrat (*Ondatra zibethicus*): The muskrat is a large freshwater rodent known to inhabit wetlands, rivers, and ponds. This species may be present in the Project area, in proximity to Margaret Creek along the Preferred Route. Muskrats were not observed during field investigations.

Raccoon (*Procyon lotor*): The Raccoon is widespread in Ohio, even in many suburban and urban areas. Raccoons prefer wooded areas with water nearby. This nocturnal species was not observed during the field investigations but likely occurs within the Project area.

Red fox (*Vulpes vulpes*): The red fox inhabits a wide range of habitats in Ohio. This nocturnal species was not observed during field investigations but is likely present throughout the Project area.

River otter (*Lontra canadensis*): River otters live in aquatic habitats such as rivers, lakes, and marshes. They prefer tributaries of large, clean drainages where there is minimal human disturbance. This species may be present in the Project area in proximity to Margaret Creek along the Preferred Route. River otters were not observed during field investigations.

Striped skunk (*Mephitis mephitis*): The skunk is an adaptable animal that occupies both rural and suburban areas. Their dens may be located under buildings, in open fields, on hillsides, or under logs in wooded areas, which may have been self-created or formerly used by other animals. This primarily nocturnal species was not observed during the field investigations but is likely present within the Project area.

Virginia opossum (*Didelphis virginiana*): This marsupial's preferred habitat is an area interspersed with woods, wetlands, and farmland. However, they are an adaptable animal that can also be found in urban and suburban areas. This species was not observed during field investigations but is likely present within the Project area.

(ii) Recreational Species

Recreational terrestrial species consist of those hunted as game according to ODNR-DOW's 2025–2026 Hunting and Trapping Regulations (ODNR-DOW 2025). Recreational species expected to inhabit areas within the Project area include the following:

Fowl

American crow (*Corvus brachyrhynchos*): The American crow is found in all Ohio counties. They prefer habitats with open fields and trees. American crows were observed during the field investigations along the majority of the Preferred Route.

American woodcock (*Scolopax minor*): Woodcock prefer open, interspersed, early successional habitats with moist loam soils, which provide earthworms. The largest populations occur in northeast, north central, and central regions of Ohio. This species was not observed during field surveys but may occur within the Project area.

American coot (*Fulica americana*): Coots inhabit the shallows of freshwater lakes, ponds, or marshes. This species may occur within the Project area but was not observed during field investigations.

Goose: Several goose species can be found in Ohio, although typically during migration: Snow goose (*Anser caerulescens*), greater white-fronted goose (*Anser albifrons*), cackling goose (*Branta hutchinsii*), and brant (*Branta bernicla*). The Canada goose (*Branta canadensis*) is commonly found throughout Ohio, both as residents and migrants. Habitat for Canada goose was observed along the routes and Canada goose were the only wild goose species observed during field investigations.

Mourning Dove (*Zenaida macroura*): Mourning doves are found near rural and suburban residences, nesting in shrubs and trees. They are also frequent in rural farmlands nesting in fencerows and edge habitats. Habitat for this species is present throughout the Project area. This species was observed frequently during field surveys.

Mergansers: Several merganser species can be found in Ohio, such as the common merganser (*Mergus merganser*), red-breasted merganser (*Mergus serrator*), and hooded merganser (*Lophodytes cucullatus*). Habitat for these species is not likely present within the Project area due to the absence of large waterbodies. This species was not observed during field surveys.

Northern bobwhite quail (*Colinus virginianus*): The northern bobwhite quail is a forest edge species. This bird could exist in select locations along the routes; however, it was not observed during field investigations.

Rail: Several rail species can be found in Ohio, such as yellow rail (*Coturnicops noveboracensis*), black rail (*Laterallus jamaicensis*), king rail (*Rallus elegans*), and Virginia rail (*Rallus limicola*). Rails are found in densely vegetated wetlands and marshes. Suitable habitat for these species is present in select locations within the Project and surrounding area; however, these species were not observed during field surveys.

Ring-necked Pheasant (*Phasianus colchicus*): This species can be found primarily along agricultural edges. Pheasants succeed where farming is intensive if there is adequate undisturbed cover for nesting and sufficient food and cover during winter. This species may inhabit select locations along the routes; however, no pheasants were observed during field investigations.

Ruffed grouse (*Bonasa umbellus*): Grouse habitat includes mixed hardwood shrub and forest stands. Although the ruffed grouse was not observed during field surveys, there are limited locations within the Project area that contain potentially suitable habitat.

Teal: Several teal species could be found in Ohio, including cinnamon teal (*Anas cyanoptera*), green-winged teal (*Anas crecca*), and blue-winged teal (*Anas discors*). They are usually birds of fresh, shallow marshes and rivers instead of large lakes and bays. These species may occur within the larger perennial streams crossed by the Project; however, no teals were observed during field investigations.

Various Duck Species: Various duck species can be found in Ohio, most of which are present only during migration. The American black duck (*Anas rubripes*), redhead (*Aythya americana*), greater scaup (*Aythya marila*), lesser scaup (*Aythya affinis*), canvasback (*Aythya valisineria*), and northern pintail (*Anas acuta*) are usually only found in Ohio during migration and could be found near the Preferred Routes at that time. The mallard (*Anas platyrhynchos*) and wood duck (*Aix sponsa*) are two duck species that regularly reside and migrate through Ohio and may occur within the Project area.

- Mallard: Most mallards occupy extensive wetlands. However, they are very adaptable. Mallards can be found inhabiting small farm ponds, ditches with flowing water, streams, lakes, and ponds in urban areas. Suitable habitat for this species is present within the Project area. This species was not observed during field surveys.

- Wood Duck: The wood duck prefers mature riparian corridors, quiet backwaters of lakes, ponds bordered by large trees, and secluded wooded swamps. Habitat for this species may be present in limited locations along the routes. This species was not observed during field surveys.

Wild Turkey (*Meleagris gallopavo*): Wild turkeys are adaptable animals. Although they prefer mature forests, they can thrive in areas with as little as 15 percent forest cover. This species was not observed during the field survey.

Mammals

Eastern cottontail rabbit (*Sylvilagus floridanus*): This species is found in both rural and urban areas. They prefer open areas bordered by thickets or brush areas. While the species was not observed during the field investigations, suitable habitat is present along the Preferred Routes.

Gray, red, and fox squirrels (*Sciurus carolinensis, Tamiasurius hudsonicus*, and *Sciurus niger*, respectively): The fox squirrel is primarily an inhabitant of isolated woodlots 10 to 20 acres in size with a sparse understory. The eastern gray squirrel prefers more extensive woodland areas. The red squirrel prefers coniferous and mixed forests. Habitat suitable for fox and red squirrels is not present within the Project area. Gray squirrels and their suitable habitat were observed during the field surveys along both the Preferred Routes.

Feral Swine (*Sus scrofa*): Feral swine (wild boar) are not native to Ohio, but they have established breeding populations in several locations, occupying a wide variety of habitats, including forests, cropland, and shrubland. The greatest concentration of verified populations is generally limited to the unglaciated region of southeastern Ohio. This species was not observed during field investigations and is not likely to occur within the Project or surrounding area.

White-tailed deer (*Odocoileus virginianus*): White-tailed deer are found in rural and suburban areas. Indirect evidence was sighted and actual sightings of this species occurred during the field surveys along the Preferred Route.

Woodchuck (*Marmota monax*): Woodchucks (also commonly referred to as groundhogs) live in open grasslands, pastures, and woodlands. This species was not observed during field investigations; however, suitable woodland habitat is present in limited areas of the Project area.

Game Fish

Based on the hydrologic connectivity and the nature of the surface water habitats known to occur within the Project area, diverse game fish species are anticipated to inhabit some of the streams that are crossed by the routes. The ODNR-DOW Sport Fish of Ohio Identification Guide (ODNR-DOW 2012) was reviewed and narrowed to fish most likely to be found within the Project area based on professional judgment and experience. As such, the list of species presented in this section is not an exhaustive list of all species potentially present in the Project area. The listed species are known to be regionally common and likely to occur on a case-by-case basis within the surface water features proposed to be crossed or encroached. Neither aquatic species nor habitat surveys were completed as part of the field investigations.

Bluegill (*Lepomis macrochirus*): Bluegill are found throughout the state, preferring clear ponds and lakes with rooted vegetation. This species is not likely to occur in streams, palustrine unconsolidated bottom (PUB) wetlands, or ponds identified along the Preferred Route.

Bullhead Catfish (*Ameiurus sp.*): Bullhead catfish are common throughout the state. Brown bullheads prefer clean, clear water, while black bullheads can tolerate more turbid water. Yellow bullheads prefer areas with heavy vegetation. Bullhead catfish may occur in Margaret Creek, along the Preferred Route.

Common carp (*Cyprinus carpio*): Carp can be found throughout the state, preferring turbid waters rich in organic matter. The common carp may occur in Margaret Creek, along the Preferred Route.

Channel catfish (*Ictalurus punctatus*): Channel catfish are found throughout the state in large streams and lakes. Channel catfish prefer areas with deep water, clean gravel, and boulder substrates with low to moderate current. Suitable habitat for the channel catfish is present in Margaret Creek, along the Preferred Route.

Flathead catfish (*Pylodictis olivaris*): Flathead catfish are found in large rivers, a few inland lakes, and some reservoirs that are outside the Project area in Ohio. They prefer deep pools with slow current and cover. Flathead catfish may occur within Margaret Creek, along the Preferred Route.

Green sunfish (*Lepomis cyanellus*): Green sunfish are present in most lakes and streams throughout the state and are tolerant of turbid water. They are regularly associated with some type of structure, such as brush, vegetation, or rocks. This species is likely to occur in perennial streams along the routes.

Largemouth bass (*Micropterus salmoides*): Largemouth bass are found in ponds, lakes, and slow sluggish streams throughout the state. This species is likely to occur in Margaret Creek, along the Preferred Route.

Longear sunfish (*Lepomis megalotis*): Longear sunfish are found in streams and lakes throughout the state. They prefer sluggish, clear streams of moderate size with beds of aquatic vegetation. This species may occur in streams along the routes.

Redear sunfish (*Lepomis microlophus*): Redear sunfish are not native to Ohio. They are found primarily in clear, warm waters with vegetation. This species may occur in streams along the routes.

Rock bass (*Ambloplites rupestris*): Rock bass are widespread throughout the state. They prefer clear streams with coarse gravel and boulders. This species is likely to be found in streams along the Preferred Routes.

Smallmouth bass (*Micropterus dolomieu*): Smallmouth bass are often abundant in quarries and thrive in streams with gravel or rock bottoms with a visible current. This species is likely to occur in streams along the Preferred Routes.

Spotted bass (*Micropterus punctulatus*): Spotted bass occur in low gradient streams in southern Ohio. Spotted bass are likely to be found in the Project area.

White crappie (*Pomoxis annularis*): White crappie are widespread throughout the state. They are found primarily in large rivers and lakes. They are likely to be found in turbid waters with little vegetation. This species is likely to occur in streams along the Preferred Route.

(iii) Threatened and Endangered Species

The first phase of identifying protected species within the Project area involved a desktop review of federal and/or state-listed species known to occur in Gallia, Jackson, and Pike counties. In addition, coordination letters were submitted to the USFWS and ODNR-Office of Real Estate on April 29, 2026, soliciting comments on the Project (see **Appendix 8-2**). Coordination with ODNR also included research of the NHD historic records of state-listed species at or within a 1-mile radius of the Project.

As a result of this research and coordination with the agencies, the identified threatened and endangered species with ranges known to cross the Project area are described in further detail in the portion of this Application addressing Adm.Code 4906-4-08(B)(2)(a)(v).

(e) Field Surveys Conducted for Plant and Animal Species

The Project has been examined in the field and reviewed in aerial photographs by experienced biologists and environmental scientists. Additionally, the Company's consultant has coordinated with ODNR and USFWS. An existing bald eagle nest was identified and confirmed as active, which is located within 660 feet of the Preferred Route, near Johnson Road in Jackson County (approximate coordinate 38.960452°, -82.784025°).

ODNR indicated that the ESC is within the range of a state-list rare plant species, Godfrey's thoroughwort (*Eupatorium godfreyanum*). Due to the possible disruption of this species, a preconstruction survey of the proposed Project site, including all laydown areas, will be conducted to ensure that this plant and any other rare species within the proposed construction limits are avoided and not impacted. Long-term protection of rare flora species should also be considered and should include limiting the use of herbicidal spraying in their vicinity.

No other significant problem areas or critical habitats, which would require the use of the special mitigation measures for protected wildlife, have been identified. If such conditions are recognized later, the condition

will be mitigated appropriately on an individual basis through additional consultation with the applicable resource agencies.

(f) Additional Ecological Studies

The Company's consultant performed a desktop review for potential bat hibernacula within a 0.25-mile and 3-mile buffer of the Project, (see **Appendix 8-3**). Quadrangles spanning the Project corridor did depict caves, cliffs/ledges, or karst topography within a 0.25-mile radius of the ESC. However, caves and abandoned mines will not be disturbed during Project construction. According to the ODNR *Mines of Ohio Viewer*, several documented mine openings are located within a 0.25-mile radius of the ESC. The closest documented mine openings are associated with the abandoned underground David Matthews & Sam McCarthy Mine, located near approximate coordinate 38.9454°, -82.481°), within the ESC. Two additional mine openings were within the 0.25-mile radius and include the Lower Kittanning #5 and an unnamed Merco Mining Inc. Mine, as shown on **Figure 5** in **Appendix 8-3**. Additionally, no individual karst exposures were identified during the survey.

(2) Ecological Impacts During Construction

(a) Evaluation of Impacts to Ecological Resources During Construction

(i) Stream Impacts

The Company's consultant identified 353 streams totaling 165,213 linear feet (lf) within the ESC. Of which, 286 streams totaling 67,335 linear feet are within the proposed 200-foot-wide ROW (see **Appendix 8-3**). No in-water work is proposed for the Project, and the Baku–Gavin 765-kV Transmission Line Project will aerially span the delineated streams. Therefore, no permanent impacts are proposed for the delineated streams identified within the ESC.

Table 1 in **Appendix 8-4** lists the attributes of each delineated stream within the Project Survey Corridor, including the QHEI and/or HHEI score where appropriate, flow regime, bankfull width, stream length within the survey corridor, and stream length within the proposed maintained ROW, respectively. **Table 8-8**, below, provides a summary of the total stream metrics.

Table 8-8. Delineated Stream Summary					
Flow Type	**Number of Streams in ESC**	**Length (lf) in ESC**	**Number of Streams in ROW**	**Length (lf) in 200-ft ROW**	**Centerline Crossings**
Ephemeral	191	70,513	142	30,046	95
Intermittent	123	69,123	108	27,667	91
Perennial	39	25,577	37	9,622	35
Total:	**353**	**165,213**	**287**	**67,335**	**222**

Key: ESC = Environmental Survey Corridor; lf = linear feet; ROW = right-of-way

(ii) Wetland Impacts

The Company's consultant identified 111 wetlands totaling 57.73 acres within the Project's ESC. Of which, 66 are within the proposed 200-foot-wide ROW, totaling 12.89 acres.

Approximately 1.3 acres of delineated PFO wetlands will be permanently impacted by the Project since periodic clearing of woody vegetation within the proposed 200-foot-wide maintained ROW is required. During construction, temporary impacts to wetlands will occur in the form of timber matting for vehicle and equipment access. No permanent access roads are planned for the Project, and no wetlands will be permanently filled along the Preferred Route.

Table 2 in **Appendix 8-4** lists the attributes of each delineated wetland within the Project's Survey Corridor, including Cowardin wetland types, ORAM scores and categories, length crossed by the centerline, acreage within the ESC, and acreage within the proposed maintained 200-foot ROW. **Table 8-8**, below, provides a summary of the total wetland metrics.

Table 8-9. Delineated Wetland Summary				
Cowardin Class	**Number of Wetlands in ESC**	**Acreage within ESC**	**Number of Wetlands in ROW**	**Acreage within 200-ft ROW**
PEM	57	31.98	28	8.38
PSS	8	4.56	8	3.19
PFO	46	21.19	30	1.32
Total:	**111**	**57.73**	**66**	**12.89**

Key: ESC = Environmental Survey Corridor; ROW = right-of-way; PEM = palustrine emergent; PFO = palustrine forested; PSS = palustrine scrub-shrub

(iii) Impacts to Vegetative Communities

The construction impacts on woody and herbaceous vegetation along the Project will be limited to clearing within the 200-foot ROW for the proposed transmission line and potentially along access roads. Specific locations for access roads will be identified at the time of the Company's transmission line easement acquisition process. However, where required, trees adjacent to the proposed transmission line ROW that are dead, dying, diseased, leaning, significantly encroaching or prone to failure, may require clearing to allow for safe operation of the transmission line. Vegetation wastes (such as tree limbs and trunks) generated during the construction phase will be windrowed or chipped and disposed of appropriately, depending on individual landowner requests. Construction impacts to agricultural land within the existing transmission ROW are expected to be temporary in nature and limited to vehicle access and temporary lay down activities.

The Project predominantly involves the 200-foot ROW. When possible, open areas were crossed in the design of the facility. However, some forested areas will need to be cleared. As shown below in **Table 8-9**, the Project will require approximately 850 acres of forest clearing.

Clearing of potential bat roost trees, if any, will occur during a restricted period from October 1 through March 31 to avoid any potential impact to summer tree-roosting bats. If tree clearing cannot occur during this period, appropriate coordination will occur with ODNR and USFWS. All vegetative waste (such as tree limbs and trunks) which is generated during the construction phase will be windrowed, chipped, and disposed of appropriately, or otherwise at the request of the property owner.

Table 8-10. Approximate Vegetation Impacts Along the ROW

Vegetation Type	Length of Route (ft)	Length of Route (miles)	Acreage within 200-ft ROW
Coniferous Woodland	4,943	0.94	22.44
Cultivated Cropland	11,116	2.11	51.74
Developed, High Intensity	2,561	0.49	12.87
Developed, Low Intensity	2,264	0.43	11.12
Developed, Open Space	3,279	0.62	13.92
Old Field	7,086	1.34	34.59
Pasture/Hayfield	44,728	8.47	199.73
Scrub-Shrub	11,442	2.17	51.50
Successional Hardwood Forest	178,691	33.84	827.32
Wetlands and Waterbodies	4,796	0.91	19.16
Total	**270,906**	**51.31**	**1244.38**

Key: ft = feet; ROW = right-of-way

(iv) Minimizing Removal of Wood Vegetation and Forest Fragmentation

As shown in **Table 8-9,** above, a combined 850 acres of woody vegetation (coniferous woodland and successional hardwood forest) will be removed within the 200-foot ROW to ensure the safe operation of the Baku–Gavin 765-kV Transmission Line Project.

Paralleling portions of existing transmission lines was identified as a suitable siting opportunity for the Project. However, the steep and variable terrain necessitated several cross-country and diagonal alignments in which preliminary structure locations were spotted along ridgetops. Overall, approximately nine miles of the new 765-kV transmission line will be constructed parallel to existing transmission line corridors, thereby reducing forest fragmentation (see **Appendix 4-1**).

(v) Impacts to Wildlife

Based on the nature of the proposed Project activities, habitat characteristics of the surrounding vicinity, and mobility of various species, construction impacts to protected, commercial, or recreational species are not anticipated. The Company will coordinate with USFWS and ODNR regarding potential habitat impacts within restricted periods, if required. While portions of the transmission line corridor may need to be cleared for construction, the undeveloped land not disturbed by construction will retain its current vegetation composition and provide mobile species with available habitat in the surrounding area.

During the operation of the Project, any impacts on protected wildlife that may be present are anticipated to be minimal. While portions of the transmission line corridors will need to be cleared, the undeveloped land not disturbed by construction will retain its current vegetation composition. Periodic maintenance along the transmission line corridors is not expected to result in a significant impact to the local wildlife. Operational activities and periodic maintenance of the ROW are not anticipated to impact wildlife significantly due to the minimal permanent ground disturbance and available adjacent habitat available.

To avoid direct impacts to Indiana bat and northern long-eared roosting and foraging habitat, USFWS recommends that the removal of any trees greater than three inches diameter at breast height (dbh) only occur between October 1 and March 31 if no caves or abandoned mines are present and tree removal is unavoidable. Following this seasonal tree clearing recommendation should ensure that any effects to Indiana bats and northern long-eared bats, in addition to other state-listed bat species, are insignificant or discountable. The Company proposes to limit potential Indiana bat and northern long-eared bat habitat tree removal activities to those times outside of the summer roosting months for these species since three caves or abandoned mines were identified within 0.25 miles of the Project.

The Company proposes no in-water work for perennial streams between March 15 and June 30 to eliminate impacts to indigenous and protected aquatic species and their habitat. In-water work is not anticipated in a waterbody that would require a mussel survey for the federal and state-listed mussel species. Therefore,

no impacts to state-listed fish and mussel species are anticipated to occur as a result of the Project, as indicated by ODNR-DOW. Additionally, no potentially suitable habitat was identified within the Project's 400-foot-wide survey corridor for the state endangered amphibian species.

The Project area has been examined in the field and reviewed on aerial photographs by experienced biologists and environmental scientists. No significant problem areas or critical habitat, which would require the use of the special mitigation measures for protected wildlife, have been identified. If such conditions are recognized later, the condition will be mitigated appropriately on an individual basis through additional consultation with the applicable resource agencies.

The first phase of identifying protected species within the Project area involved a desktop review of federal- and/or state-listed species known to occur in Gallia, Jackson, and Pike counties. In addition, coordination letters were submitted to the USFWS and ODNR-Office of Real Estate on April 29, 2026, soliciting comments on the Project. Coordination with ODNR also included research of the NHD historic records of state-listed species at or within a 1-mile radius of the Project.

In their responses, dated May 8, 2026 (see **Appendix 8-2**), USFWS noted that the ESC is within the range of the Indiana bat (*Myotis sodalis*) and northern long-eared bat (*Myotis septentrionalis*) and is within the vicinity of at least one confirmed record of Indiana bat. USFWS has recommended that removal of any trees greater or equal to three inches diameter at breast height (dbh) be conducted between October 1 and March 31. USFWS indicated that records of Indiana bat occur in the vicinity of the ESC. Based on guidance in the 2025 *Ohio Division of Wildlife and U.S. Fish and Wildlife Service (OH-Field Office) Joint Guidance for Bat Surveys* (ODNR/USFWS 2025), the Company's consultant anticipates that ODNR and USFWS will not approve summer mist net surveys due to prior Indiana bat capture records located less than 5 miles from the ESC. However, other summer survey options may be available. Additional discussion of agency comments and habitat suitability for state- and federally listed bat species may be found below in Section 3.3.2.

In the ODNR response, dated June 2, 2026 (see **Appendix 8-2**), a review of the National Heritage Database identified several records of state- and/or federally listed species within a 1-mile radius of the Project. Using ODNR comments as guidance, WSP has provided observations of threatened and endangered species habitat within the vicinity of the ESC in **Table 3-5**. The ODNR Environmental Review has been included in Appendix J.

ODNR-DOW indicated that the Project is within the range of the Indiana bat, a state and federally endangered species; the northern long-eared bat, a state endangered and federally threatened species; the tricolored bat (*Perimyotis subflavus*), a state endangered species; and the little brown bat (*Myotis lucifugus*), a state endangered species. If suitable habitat and roost trees occur within the Project area, ODNR-DOW requests that these trees be conserved. If suitable habitat occurs in the Project area and trees

must be cut, ODNR-DOW requests that cutting occur between October 1 and March 31, conserving trees with loose, shaggy bark and/or crevices, holes, or cavities, as well as trees with DBH ≥ 20 inches if possible.

Based on the protocols identified in the *Range-Wide Indiana Bat & Northern Long-Eared Bat Survey Guidelines* (USFWS 2024) and the *Ohio Division of Wildlife and U.S. Fish and Wildlife Service (OH-Field Office) Joint Guidance for Bat Surveys* (ODNR/USFWS 2025), WSP performed a desktop review for potential hibernacula within the vicinity of the Project (see **Appendix 8-3**). Quadrangles spanning the Project corridor did depict caves, cliffs/ledges, or karst topography within a 0.25-mile radius of the ESC. However, caves and abandoned mines will not be disturbed during Project construction. According to the ODNR *Mines of Ohio Viewer*, several documented mine openings are located within a 0.25-mile radius of the ESC. The closest documented mine openings are associated with the abandoned underground David Matthews & Sam McCarthy Mine, located near approximate coordinate 38.9454°, -82.481°), within the ESC. Two additional mine openings were within the 0.25-mile radius and include the Lower Kittanning #5 and an unnamed Merco Mining Inc. Mine, as shown on Figure 5. Additionally, no individual karst exposures were identified during the survey.

ODNR has recommended that no in-water work occurs in perennial streams from March 15 through June 30 to avoid impacts to state-listed fish species. In-water work is not anticipated in any streams and therefore, impacts to state-listed fish species are not anticipated.

ODNR also indicated that the Project is within the range of one state- and/or federally listed amphibian species: midland mud salamander (*Pseudotriton montanus diastictus)* According to the ODNR-DOW response letter, based on the location and type of work proposed, the Project is not anticipated to impact this species or their habitat. Additionally, suitable habitat for this species was not observed within the Project.

ODNR indicated that the ESC is within the range of a state-list rare snake species, the timber rattlesnake. A preconstruction survey by an approved herpetologist will be completed in addition to a habitat suitability survey to determine if suitable habitat is present within the Project area. If suitable habitat is determined to be present, an avoidance/minimization plan will be developed by the herpetologist and implemented for the duration of the Project.

ODNR indicated that the ESC is within the range of a state-list rare plant species, Godfrey's thoroughwort. Due to the possible disruption of this species, a preconstruction survey of the proposed Project site, including all laydown areas, will be conducted to ensure that this plant and any other rare species within the proposed construction limits are avoided and not impacted. Long-term protection of rare flora species should also be considered and should include limiting the use of herbicidal spraying in their vicinity. Further correspondence with ODNR on July 21, 2026, indicated that the population of this species' record

was within the boundaries of the Arc of Appalachia nature preserve, which will be avoided entirely. Therefore, no additional coordination is required.

During environmental surveys, an active bald eagle nest was confirmed within 660 feet of the Preferred Route, near Johnson Road in Jackson County (approximate coordinate 38.960452°, -82.784025°). Experienced biologists evaluated the bald eagle nest on several occasions during the field surveys and determined that the historic and ongoing agricultural activities (i.e., heavy machinery and noise associated with cultivation) within the surrounding area are similar to that of the typical construction equipment and activities required for building a new 765-kV transmission line.

Other species listed through the NHD records were provided by ODNR, including 11 threatened species, six endangered species, eight potentially threatened species, and five species of concern (see **Appendix 8-3**)

Correspondence letters from USFWS and ODNR are included in **Appendix 8-2**. Current information on federal- and/or state-listed species obtained from agency correspondence is provided below in **Table 8-9**, in addition to observations of potentially suitable habitat and subsequent impact assessment information.

Table 8-11. ODNR and USFWS Listed Species Within the Project Area						
Common Name (Scientific Name)	**State Status**	**Federal Status**	**General Habitat Notes**	**Potential Habitat Observed in Study Area**	**Agency Comments**	**Impact Assessment**
Mammals						
Indiana bat (*Myotis sodalis*)	Endangered	Endangered	Winter hibernacula are provided by caves and mines. Summer roost habitat typically includes live or dead trees with exfoliating bark, crevices, or cavities that can be used for roosting. Open sub-canopy areas and flight corridors are important to allow maneuvering during foraging. Proximity to water sources provides a greater density of insect prey.	Yes (Summer)	USFWS has indicated that the ESC is in the vicinity of records of listed bat species. ODNR recommended a desktop habitat assessment for potential hibernacula within a 0.25-mile radius of the ESC. USFWS and ODNR comments recommended seasonal tree clearing dates (October 1 through March 31) to avoid adverse impacts to listed bat species	Suitable summer habitat was identified within the ESC. However, any tree clearing is expected to occur during the October 1 to March 31 clearing window. Potential hibernacula were identified within 0.25-miles of the ESC. However, due to the Project type, size, and location, adverse effects to listed bat species are not anticipated.
Northern long-eared bat (*Myotis septentrionalis*)	Endangered	Endangered				
Tricolored bat (*Perimyotis subflavus*)	Endangered	Not Listed				
Little brown bat (*Myotis lucifugus*)	Endangered	Not Listed				

Table 8-11. ODNR and USFWS Listed Species Within the Project Area						
Common Name (Scientific Name)	**State Status**	**Federal Status**	**General Habitat Notes**	**Potential Habitat Observed in Study Area**	**Agency Comments**	**Impact Assessment**
Mussels						
Little spectaclecase (*Villosa lienosa*)	Endangered	Not Listed	This mussel is typically found in small to medium rivers. It prefers sand or gravel where it can attach to rocks in moderately shallow water of moderate current.	Yes	ODNR indicated that due to the Project's size, type, and location construction activities are not likely to impact mussel species.	Potentially suitable habitat is present within the ESA. However, no in-water work is anticipated to occur. Therefore, impacts to mussel species are not anticipated.
Fish						
Spotted darter (*Etheostoma maculatum*)	Endangered	Not Listed	This species is found in medium-sized rivers and streams. They are typically found in areas of swift current at the top or bottom end of a riffle with many very large boulders or flat slabs of rock.	Yes	If no in-water work is proposed in a perennial stream. This Project is not likely to impact fish species.	Since no in-water work is anticipated, the Project is not likely to adversely impact fish species.
Ohio lamprey (*Icthyomyzon bdellium*)	Endangered	Not Listed	This species prefers free flowing streams and rivers in areas with gravel or sandy bottoms.			

Table 8-11. ODNR and USFWS Listed Species Within the Project Area						
Common Name (Scientific Name)	**State Status**	**Federal Status**	**General Habitat Notes**	**Potential Habitat Observed in Study Area**	**Agency Comments**	**Impact Assessment**
Lake chubsucker (*Erimyzon sucetta*)	Threatened	Not Listed	This species generally resides in clear, still water, shallow freshwaters. Mostly being found in lakes, ponds, and swamps.			
Amphibians						
Midland mud salamander (*Pseudotriton montanus diastictus*)	Threatened	Not Listed	Freshwater habitats exclusively below 700 meters of elevation, such as marshes and streams, which contain muddy regions where they can create their burrows or inhabit old crayfish holes	No	ODNR indicated that due to the location, and the type of habitat within the Project area, the type of work proposed, the Project is not likely to adversely impact the midland salamander species.	Based on ODNR comments, adverse impacts to salamander species or their habitat are not anticipated.
Reptiles						
Timber rattlesnake (*Crotalus horridus*)	Endangered	Species of Concern	The species lives in wooded areas with enough canopy gaps to provide sunlight for basking.	Yes	ODNR-DOW recommends an approved herpetologist conduct a habitat suitability survey to determine if suitable habitat is present within the Project area. If so, an	Suitable habitat was identified within the ESA. Timber rattlesnake surveys will be completed prior to construction and earthwork activities to avoid

Table 8-11. ODNR and USFWS Listed Species Within the Project Area						
Common Name (Scientific Name)	**State Status**	**Federal Status**	**General Habitat Notes**	**Potential Habitat Observed in Study Area**	**Agency Comments**	**Impact Assessment**
					avoidance/mitigation plan will need to be developed and implemented by the approved herpetologist.	impacting the protected species. An avoidance/mitigation plan will be developed prior to construction and earthwork activities and implemented for the duration of the Project.
Kirtland's snake (*Clonopus kirtlandii)*	Threatened	Not Listed	Open wetlands such as wet prairies, prairie fens, wet meadows and marshes, but they also occur in openings or along the edges of forested wetlands and floodplains.	Yes	Suitable habitat was observed within the Project ESC. However, ODNR stated that due to the location, habitat type, and work proposed, this Project is not likely to impact this species	Based on ODNR comments, adverse impacts to Kirtland's snake species or its habitat are not anticipated.
Birds						
Bald eagle *(Haliaeetus leucocephalus*)	Endangered	Delisted Protected by Migratory	Habitat consists of wetlands, swamps, and river systems, where food (primarily fish) is within 2 miles of the nest. Nests	Yes	Suitable habitat was observed within the ESC. Further coordination will need to occur prior to	Coordination with ODNR and USFWS will occur prior to construction activities to avoid

Table 8-11. ODNR and USFWS Listed Species Within the Project Area						
Common Name (Scientific Name)	**State Status**	**Federal Status**	**General Habitat Notes**	**Potential Habitat Observed in Study Area**	**Agency Comments**	**Impact Assessment**
		Bird Treaty Act and Bald & Golden Eagle Protection Act	are usually built in large, secluded trees.		construction and tree clearing.	and minimize adverse impacts to bald eagles and their nesting habitat.
Plants						
Godfrey's thoroughwort (*Eupatorium godfreyanum*)	Threatened	Not Listed	Habitat consists of dry to mesic woodlands, deciduous forest edges, and open or disturbed clearings, thriving in circumneutral to slightly acidic, well-drained soils.	Yes	A preconstruction survey of the proposed Project site, including all laydown areas, should be conducted to ensure that this plant and any other rare species within the proposed construction limits are avoided and not impacted. Long-term protection of rare flora species should also be considered and should include limiting the use of herbicidal spraying in their vicinity.	Further correspondence with ODNR indicated that the population of this species' record was within the boundaries of an Arc of Appalachia nature preserve, which will be avoided entirely. Therefore, no additional coordination is required (see **Appendix 8-2**).

Table 8-11. ODNR and USFWS Listed Species Within the Project Area						
Common Name (Scientific Name)	**State Status**	**Federal Status**	**General Habitat Notes**	**Potential Habitat Observed in Study Area**	**Agency Comments**	**Impact Assessment**
Scenic Rivers						
Raccoon Creek State Scenic River	Protected by the Ohio Scenic Rivers Program	N/A	Excellent water quality, scenic river	Yes	Implement Best Management Practices (BMPs) for construction activities prior to earthwork and maintain through the duration of the Project. See Ohio Scenic Rivers Program comments in the ODNR comments located in Appendix 8-2.	Implement BMPs prior to earth work and follow guidelines provided by ODNR via Ohio Scenic Rivers Program in Appendix 8-2.

Key: ESC = Environmental Survey Corridor; ODNR = Ohio Department of Resources; DOW = Division of Wildlife; N/A = not applicable; USFWS = U.S. Fish and Wildlife Service

(b) Mitigation Procedures

The following mitigation procedures will be used during construction, operation, and maintenance of the proposed Project to minimize the impact on vegetation and surface waters. A SWPPP will also be prepared and implemented and will be made available on-site during Project construction.

(i) Post-Construction Site Restoration and Stabilization

Seeding in non-wetland and non-agricultural areas is advantageous to control erosion on areas disturbed by construction activities. In lightly disturbed wetland areas, existing seed banks are quite often capable of quickly reestablishing vegetation that is compatible with the surrounding wetland. A SWPPP and BMPs will be implemented during construction to control erosion. Areas where soil has been disturbed will be seeded and mulched to prevent soil erosion and sedimentation.

Construction activities within wetlands may result in temporary, short-term impacts. Natural revegetation in any disturbed wetland areas will begin after construction crews have completed the installation activities. Wetland mitigation, to the extent necessary, will be addressed as part of the process of obtaining any necessary wetland permits.

In wetland areas, the disturbance will be minor. If any unanticipated significant disturbance occurs in wetlands, topsoil will be segregated and replaced so that the existing seed banks will be allowed to initially revegetate the areas. Additional seeding will only take place if the existing seed bank does not repopulate an area. These measures should preserve the aesthetic qualities along the route, prevent erosion, and promote habitat diversity.

(ii) Contingency Plan for Stream and Wetland Crossings

The Project does not include a stream or wetland crossing by horizontal directional drill.

(iii) Demarcation and Protection Methods

Wetlands, streams, and any other environmentally sensitive areas will be clearly staked, flagged or fenced in accordance with the SWPPP before any clearing to minimize incidental impacts. BMPs, such as use of silt fencing, orange barrier fencing, and other demarcation materials, will be implemented as required during construction.

(iv) Procedures for Inspection and Repair of Erosion Control Measures

BMPs, including silt fencing and other erosion control measures, will be inspected routinely to assure proper installation and function. Inspections will also be triggered by significant rainfall events to evaluate the need for repairs or adjustments in erosion control strategy.

(v) Vegetation Protection Methods

Vegetation that occurs within wetland areas may require periodic cutting. If this is needed, woody vegetation in wetland areas will be hand cut by chainsaws or other non-mechanized techniques. Cutting woody vegetation in wetlands and near stream banks will be limited to removal of only the cut back required to safely perform construction and continue operation of the transmission line. The Company will adhere to regulatory permit requirements and conditions that will be obtained or authorized for the Project, including specifying that no mechanized clearing of vegetation be performed within the prescribed distance of a wetland or waterbody as discussed below.

The Company will also follow specific measures to avoid and minimize the spread of invasive plant species. These include the cleaning of equipment (e.g., machinery, work boots, hand tools) prior to entering new areas so that invasive species are not spread to more pristine areas or higher-quality wetlands from off-site locations. Any equipment taken off-site will be cleaned prior to re-entry. These same practices will be applied to the use of timber and composite matting used for the purposes of access (i.e., mats brought from one location will be cleaned/washed before they are brought to more sensitive areas to minimize the potential spread of invasive species).

(vi) Clearing Methods

The Company will not conduct mechanized clearing within 25 feet of any stream and will only clear (using hand cutting techniques) those trees in these areas that are tall enough to or have the potential to interfere with safe and reliable construction and operation of the transmission line. Selective clearing will be required to remove woody vegetation in wetlands that might impede construction or interfere with operation of the transmission line. Where wooded wetlands occur within the ROW, the trees will be removed. Trees adjacent to the proposed transmission line ROW that are dead, diseased, leaning, significantly encroaching, or prone to failure may require clearing to allow for safe and reliable operation of the transmission line. All vegetative waste (such as tree limbs and trunks) that is generated during the construction phase will be windrowed or chipped and disposed of appropriately, depending on landowner requests.

(vii) Avoidance Measures for State or Federally Listed and Protected Species

Avoidance measures for state or federally listed and protected species are summarized above in **Table 8-9** in the portion of this Application addressing Adm.Code 4906-4-08(B)(2)(a)(v).

(viii) Stormwater Runoff Measures

BMPs, including use of silt fence or filter socks, will be used as appropriate during construction to minimize runoff and sedimentation of streams and wetlands. Measures to divert stormwater runoff away from fill slopes and other exposed surfaces will be outlined in the SWPPP.

(ix) Herbicide Use

If herbicide use is required, it would only be applied within the ROW by a licensed applicator registered with the USEPA and the appropriate state regulatory agency.

(3) Operation and Maintenance Impacts on Vegetation and Surface Water

(a) Construction Impact Evaluation of Undeveloped Areas

During construction, operation and maintenance of the transmission line along the Preferred Route, the impacts on vegetation are anticipated to be minor. Undeveloped, non-forested land will not be significantly disturbed by construction and should retain its current vegetation composition. Periodic cutting along the proposed 200-foot-wide transmission line ROW is not expected to result in a significant environmental impact on vegetation in these areas.

The potential impacts on woody and herbaceous vegetation along the Preferred Route will be limited to maintenance activities along the proposed transmission line ROW and access roads for safe and reliable operation of the transmission line. Trees adjacent to the proposed transmission line ROW that are dead, dying, diseased, leaning, significantly encroaching, or prone to failure may require clearing to allow for safe operation of the transmission line. Vegetative waste (such as tree limbs and trunks) that is generated during the construction phase will be windrowed or chipped and disposed of appropriately, depending on individual landowner requests.

(b) Description of Procedures During Operation of the Facility

(i) Procedures Utilized to Avoid, Minimize, and Mitigate Both Short- and Long-Term Impacts of Operation and Maintenance

Prior to completion of the Project, the Company will administer BMPs to stabilize the disturbed areas. Once the disturbed areas achieve 70 percent restoration, the Company will close out the SWPPP.

(ii) Methods for Protecting Streams, Wetlands, and Vegetation

Prior to completion of the Project, the Company will administer BMPs to stabilize the disturbed areas. Once the disturbed areas achieve 70 percent restoration, the Company will close out the SWPPP.

The Company will also follow specific measures to avoid and minimize the spread of invasive plant species. These include the cleaning of equipment (e.g., machinery, work boots, hand tools) prior to entering new areas so that invasive species are not spread to more pristine areas or higher-quality wetlands from off-site locations. Any equipment taken off-site will be cleaned prior to re-entry. These same practices will be applied to the use of timber and composite matting used for the purposes of access (i.e., mats brought from one location will be cleaned/washed before they are brought to more sensitive areas to minimize the potential spread of invasive species).

(iii) Herbicides Used for Maintenance

The Project's LOD are defined as the 200-foot-wide ROW. As part of the Project's restoration plan, the Company will revegetate the LOD with native seed mixes to prevent the growth and spread of invasive plants and/or noxious weeds.

Herbicide use is not anticipated for the operation and maintenance of the Baku–Gavin 765-kV Transmission Line. If herbicide use is required, it would only be applied within the ROW by a licensed applicator registered with the USEPA and the Ohio Department of Agriculture.

(c) Post-Construction Monitoring of Wildlife Impacts

Not applicable. No wildlife impacts are anticipated because of the Project.

(4) Mitigation Procedures

Construction activities within wetlands may result in temporary, short-term impacts. Natural revegetation in any disturbed wetland areas will begin after construction crews have completed the installation activities. Wetland mitigation, to the extent necessary, will be addressed as part of the process of obtaining any necessary wetland permits. Mitigation procedures occurring during the construction of the Project are detailed in the portion of this Application addressing Adm.Code 4906-4-08(B)(2)(b) above.

Once the Baku–Gavin 765-kV Transmission Line is operational, no significant impacts to streams or drainage channels are anticipated. Only periodic selective removal of vegetation that interferes with the operation of the transmission line will be required. No lakes, ponds, or reservoirs should be affected by the operation or maintenance of the Project.

Approximately 1.3 acres of delineated PFO wetlands will be permanently impacted by the Project since periodic clearing of woody vegetation within the proposed 200-foot-wide maintained ROW is required. It is not anticipated that such activities would result in erosion or water quality degradation. Maintenance cutting of woody vegetation in wetland areas will be hand cut by chainsaws or other non-mechanized techniques.

(5) Noxious Weeds

The Project's LOD is defined as the proposed 200-foot ROW, as well as access roads, pull pads, and fly yards/emergency landing zones. As part of the Project's restoration plan, the Company will revegetate the LOD with native seed mixes to prevent the growth and spread of invasive plants and/or noxious weeds.

(C) LAND USE AND COMMUNITY DEVELOPMENT

(1) Existing Land Use

(a) Land Use Map

Maps at 1:12,000 scale, including the area 1,000 feet on either side of the centerline (also referred to as the 2,000-foot corridor), are presented in **Figure 8-5** and include the following required information:

1. The proposed Project
2. Centerline and ROW
3. Existing general land use types provided from county parcel data, residences, cemeteries, and waterbodies
4. Structures, including residences, commercial centers or buildings, industrial buildings and installations, schools, hospitals, churches, civic buildings, and other occupied places
5. Incorporated areas and population centers
6. Road names

Figure 8-5 illustrates existing land use types at a parcel level, as classified by Pike, Jackson, and Gallia counties. To develop a more detailed understanding of current land use conditions, the Company's consultant conducted an independent review of recent aerial imagery within the 2,000-foot corridor surrounding the Project.

(b) Structures Near the Project

(i) Structures and Property Lines Within 200 Feet of the ROW

Within the proposed 200-foot ROW of the Preferred Route, there are 10 outbuildings (i.e., sheds, silos, barns, garages, carports), and one residence. These outbuildings will be removed/relocated outside of the proposed 200-foot ROW. However, the residence was identified as an allowable encroachment (see **Table 2** in **Appendix 8-5**). There are no commercial/industrial buildings, airfields, communications towers,

hospitals, helipads, parks/recreation areas, places of worship, quarries, or schools present in the ROW. In total, there are 334 properties and 216 landowners within the proposed 200-foot ROW.

Within 200 feet of the proposed ROW (or a 300-ft buffer of the Preferred Route centerline), there are two commercial/industrial buildings, one communications tower, four pools, 56 outbuildings, and 33 residences. There are no airfields, hospitals, helipads, parks/recreation areas, places of worship, quarries, or schools present within 300 feet of the Preferred Route centerline. In total, there are 437 properties and 266 landowners within 300 feet of the Preferred Route centerline. **Table 1** in **Appendix 8-5** lists the structures and properties within 200 feet of the ROW.

(ii) Structures and Property Lines Within 250 feet of the Project

Within 250 feet of the Preferred Route centerline, there is one commercial/industrial building, two residential pools, 21 outbuildings, and 15 residences. There are no airfields, communications towers, hospitals, helipads, parks/recreation areas, places of worship, quarries, or schools within 250 feet of the Preferred Route centerline. In total, there are 407 properties and 255 landowners within 250 feet of the Preferred Route centerline. **Table 2** in **Appendix 8-5** lists the total structures and properties within 250 feet of the Preferred Route and the proximity of the structures and properties to the nearest facility.

As mentioned above, 10 outbuildings will be removed/relocated outside of the proposed 200-foot ROW, and one residence was identified as an allowable encroachment. No other mitigation measures are required for the structures identified within 250 feet of the Project.

(iii) Leasing Status

The agreement types of each easement required for the Project are listed in **Appendix 8-5.**

(iv) Mitigation Procedures

Mitigation for the prohibition of the future installation of structures within the ROW and vegetative clearing and maintenance activities for the transmission line will be determined as part of the Company's acquisition of the ROW for this Project and as part of the negotiated settlement between the Company and the property owner, or as determined in appropriation proceedings. If any damages to property located in the transmission ROW occur from construction, operation, or maintenance of the proposed Project, the property will be repaired by the Company as necessary.

(c) Impact of Facility on Each Land Use

A detailed land use summary of the proposed ROW is shown in **Figure 8-5** and below in **Table 8-10**. Estimates (i.e., linear feet, acres, and percentages) of each land use crossed by the transmission centerline and within the 200-foot-wide ROW were generated using GIS. The estimates of each land use type being

crossed by the 200-foot-wide transmission line ROW were determined based on field reconnaissance, current aerial imagery, and national (USGS) databases.

The potential disturbance area during construction (vegetation clearing, pole installation, etc.) consists of the 200-foot-wide ROW. The 200-foot-wide permanent ROW will be restored through soil grading, seeding, and mulching, thus any permanent impact to the ROW is limited to removal of tall growing trees and other vegetation. Property owners may continue to use the ROW area for general uses that will not affect the safe and reliable operation of the transmission line, such as lawn maintenance, crop cultivation, and livestock grazing.

Table 8-12. Land Uses Crossed by the Project

Land Use	Preferred Route		ROW	
	Linear Feet	Percentage	Acres	Percentage
Agricultural	139,000.2	51.3%	634.9	51.0%
Cemetery	0	0.0%	0.2	0.02%
Commercial	7,219.90	2.7%	33.3	2.7%
Forest	20,089.20	7.4%	93.5	7.5%
Industrial	456.4	0.2%	2.2	0.2%
Public	312.9	0.1%	1.4	0.1%
Railroad/Roadway	2,441.60	0.9%	12.2	1.0%
Religious	133.4	0.05%	0.3	0.02%
Residential	45,733.60	16.9%	211.3	17.0%
Vacant	55,437.10	20.5%	254.8	20.5%
Total:	**270,824.3**	**100.0%**	**1,244.1**	**100%**

Key: ROW = right-of-way

Agricultural Land: Agricultural land is a predominant existing land use for the Project, covering 51.0 percent of the ROW and 51.3 percent of the Preferred Route. Permanent impacts to agricultural lands would be limited to the structure footprints as agricultural activity can continue within the proposed ROW after construction.

Cemetery: No cemeteries are crossed by the centerline of the Preferred Route. Within the proposed 200-foot ROW there are two cemeteries, making up only 0.02 percent of the total area covered. Where necessary,

the Company's will observe a 50-foot buffer around the cemeteries to minimize impacts, as explained below infra the portion of this Application addressing Adm.Code 4906-4-08(D)(2).

Commercial: Commercial designated land covers 2.7 percent of the linear route and 2.7 percent of the total ROW area. Over 99 percent of the total acreage of the Commercial designated land is in the area surrounding the Gavin Substation.

Forest: The Preferred Route covers 7.4 percent of the total route line with forested areas and totals 7.5 percent of the ROW area. A reduced presence in forested areas along the route could alleviate the total amount of tree clearing required. An estimated 3,057 ft of forested land parallels an existing transmission line, which could also reduce the necessary tree clearing.

Industrial: The only land classified as industrial is the parcel on which the Gavin Substation is located. This parcel covers 0.18 percent of the total acreage of the ROW and 0.2 percent of the Preferred Route linear footage. Previous development around the station has cleared much of the vegetation, which should allow for easier placement of structures.

Public: Public land makes up only 0.1 percent of the Preferred Route and ROW. One portion of the land is a part of a public park, while the other portion is land adjacent to a rail line.

Railroad/Roadway: This category includes all areas where an existing railroad or roadway is located. This land use covers only 0.9 percent of the ROW and 1 percent of the Preferred Route, as the route does not parallel any of the land categorized under these types. Four total rail lines are crossed, two active and two abandoned. Those parcels identified as road do not include all roadways that the route intersects, only 33 of the total 78 roads.

Religious: One parcel along the ROW was listed under religious, making up 0.1 percent of the total route length and 0.02 percent of the total ROW. Upon visual inspection of the aerial imagery, there does not seem to be any current structures in that area, besides a nearby cemetery, which might indicate a former religious site might have been demolished.

Residential: Residential land, including single-family and mobile homes, covers 16.9 percent of the total ROW and 16.9 percent of the Preferred Route. Forty-two of the 105 parcels are listed as vacant, which should ease any potential impacts to the route's construction.

Vacant: Vacant land covers 20.5 percent of the proposed ROW and 20.5 percent of the Preferred Route. The second largest land use group, there are no adverse impacts to undeveloped/vacant are anticipated because of the Project.

(d) Structures to Be Removed or Relocated

The potential removal of structures within the ROW was mitigated during the siting of the Project by designing a route that addresses existing encroachments to the extent feasible. However, 10 outbuildings will be removed/relocated outside of the proposed 200-foot ROW, and one residence was identified as an allowable encroachment.

(2) Wind Farm Maps

Not applicable.

(3) Setback Waivers

Not applicable.

(4) Land Use Plans

(a) Formally Adopted Plans for Future Use of the Project Area and Surrounding Lands

The Company's consultant reviewed publicly available land use planning documents and development information for Gallia, Jackson, and Pike counties, as well as applicable townships within the Project area. This review included county-level plans, economic development materials, and other publicly available information regarding planned or ongoing development activities that may influence future land use patterns within the Project area and surrounding lands.

Available planning documents within the Project area address land use, economic development, infrastructure, and community development objectives. In general, these plans emphasize economic revitalization, infrastructure investment, and the attraction of new industrial and commercial development, while supporting the continuation of existing rural and agricultural land uses.

Common themes identified across the reviewed materials include the following:

- Promotion of economic development through industrial site readiness and infrastructure improvements
- Redevelopment and reuse of previously developed or underutilized properties
- Enhancement of transportation and utility infrastructure to support future growth
- Preservation of agricultural lands and rural character, where appropriate

In addition to formally adopted plans, the Company's consultant reviewed publicly available sources to identify larger-scale development activity within the Project area that may reflect anticipated future land use trends.

(i) Gallia County

In Gallia County, development activity includes investment in industrial infrastructure and community redevelopment. A speculative industrial building is planned within the Dan Evans Industrial Park, representing an approximately $6.1 million investment in a 50,000-square-foot facility designed to accommodate manufacturing, warehousing, and logistics uses, with potential for future expansion.

The county has also received funding through the Appalachian Community Grant Program for projects including riverfront and downtown improvements in Gallipolis, healthcare-related facilities, and workforce-support infrastructure.

(ii) Jackson County

In Jackson County, development activity includes the construction of a speculative industrial building at the Salt Creek Industrial Park, representing an investment of approximately $3.6 million and intended to expand available industrial space within the region.

Additional activity includes a downtown revitalization project in the city of Jackson encompassing approximately 175 acres, which includes infrastructure improvements, environmental remediation, and development of public amenities to support economic redevelopment.

(iii) Pike County

Pike County is currently the focus of substantial development activity associated with the redevelopment of the former Portsmouth Gaseous Diffusion Plant site near Piketon. Planned and ongoing development includes a large-scale data center campus and associated energy generation facilities, representing a multi-phase investment expected to support significant construction activity and long-term employment.

Related development includes plans for an advanced nuclear energy facility and continued expansion of existing energy-related operations at the site, reinforcing the area's role as a regional energy and industrial center.

The reviewed planning documents and identified development activity indicate that the Project area is characterized by a combination of industrial development, infrastructure investment, and community redevelopment. These activities are generally concentrated in proximity to existing transportation corridors and previously developed or industrial areas.

(b) Concurrent or Secondary Uses of the Site

The proposed 200-foot ROW for the Baku–Gavin 765-kV Transmission Line is compatible with existing agricultural land uses.

Temporary impacts to agricultural land may occur during construction. However, permanent impacts to agricultural land will be limited to the footprints of the new steel structures and agricultural production can continue after the new Baku–Gavin 765-kV Transmission Line is operational.

(c) Impact of the Proposed Facility on Regional Development

The Project is the first phase of the Company's Piketon Area Improvements, which involve proposed additions to the power grid to provide power to a new customer facility in the area and create opportunities for future growth and community development. No negative impacts on regional development are foreseen for this Project.

(d) Compatibility of the Proposed Facility and the Anticipated Resultant Regional Development with Current Regional Plans

Available planning documents within Gallia, Jackson, and Pike counties identify goals and objectives related to economic development, infrastructure investment, land use management, and the protection of natural and agricultural resources. The following summarizes relevant plan elements and evaluates the compatibility of the proposed Project with those plans.

County and regional planning efforts within the Project area consistently emphasize the importance of supporting economic development through infrastructure improvements. These plans promote the expansion of industrial and commercial opportunities, particularly through the development of industrial parks and the enhancement of transportation and utility infrastructure. The proposed Project is consistent with these objectives, as it represents a major transmission infrastructure investment intended to support the safe and reliable delivery of electric power across the region and accommodate existing and future demand.

Planning documents also emphasize the preservation of agricultural lands and rural character, as well as the protection of natural resources. Where feasible, the Project has been sited to minimize impacts to these resources through route selection considerations, including the avoidance of densely developed areas and sensitive environmental features to the extent practicable. In addition, because the Project is a linear transmission facility, compatible land uses such as agriculture, open space, and certain commercial or industrial activities may continue within and adjacent to the ROW following construction.

Local and regional planning initiatives within the Project area also support redevelopment and reinvestment in previously developed or industrial areas. As discussed in Section (4)(a), ongoing development activity within Gallia and Jackson counties includes industrial park expansion and site readiness improvements, while Pike County is the focus of substantial energy and technology-related redevelopment at the former Portsmouth Gaseous Diffusion Plant site. The proposed Project is compatible with these development trends, as it will support the electrical infrastructure necessary to serve these types of uses.

Hazard mitigation and community planning efforts within the Project area focus on improving community resilience and infrastructure reliability. The proposed Project is consistent with these objectives, as it is designed to enhance the reliability of the regional transmission system.

Based on a review of available planning documents and identified development activity, no conflicts were identified between the proposed Project and current regional land use plans. The proposed Project is compatible with local and regional planning objectives and is expected to support their implementation by providing reliable electric transmission infrastructure to the Project area.

(e) Current Population of the Project Area

Table 8-13 presents population trends for jurisdictions located within 5 miles of the Project area, including Scioto, Meigs, Gallia, Jackson, and Pike counties, as well as the municipalities of Jackson, Middleport, Cheshire, and Vinton. Population data are based on U.S. Census Bureau decennial census counts and American Community Survey (ACS) estimates.

Population trends from 2010 to 2020 indicate that the counties within the Project area have generally experienced modest population declines. For example, Scioto County decreased from 79,499 in 2010 to 74,008 in 2020, while Gallia County and Meigs County experienced similar percentage declines over the same period. Jackson and Pike counties also experienced slight decreases or relatively stable population levels during this period.

More recent 2023 ACS estimates suggest that these trends have generally continued, with population levels remaining stable or declining slightly across the Project area counties. Current population estimates include approximately 71,365 for Scioto County, 29,162 for Gallia County, 32,588 for Jackson County, and 27,080 for Pike County, with Meigs County exhibiting a similar pattern of relatively low population density and limited growth.

Population density within the Project area is low relative to statewide averages, reflecting the predominantly rural character of the region. County-level population densities generally range from approximately 50 to 130 persons per square mile, which is consistent with rural land use patterns and limited urban development.

Municipalities located within 5 miles of the Project area are relatively small and have also experienced stable or declining population trends. The city of Jackson is the largest municipality within the Study Area, with a population of approximately 6,252 in 2020, while the villages of Middleport, Cheshire, and Vinton have populations of approximately 2,208, 123, and 236, respectively. These communities represent dispersed, small population centers within an otherwise rural landscape.

Long-term population projections for Ohio and Appalachian regions indicate the potential for continued population stagnation or decline over the next decade under current demographic trends. Based on these projections and observed trends within the Project area, population growth within the counties and municipalities located within 5 miles of the Project area are expected to remain limited over the next 10 years.

The construction and operation of the proposed Project are not expected to significantly influence local or regional population trends.

Table 8-13. Population of Ohio Jurisdictions Within 5 Miles of the Preferred Route

Jurisdiction	2010 Population	2020 Population	Percentage Population Change (2010–2020)	2020 Population per Square Mile	2026 ACS 5-Year Estimate	Projected 2031 Population
State						
Ohio	11,536,504	11,799,448	+2.3%	288.8	11,940,000	11,850,000
County						
Scioto	79,499	74,008	-6.9%	129	71,365	69,500
Meigs	23,770	22,210	-6.6%	51.6	21,600	21,000
Gallia	30,934	29,220	-5.5%	62.6	29,162	28,500
Jackson	33,294	32,653	-1.8%	77.7	32,588	32,300
Pike	28,709	27,088	-5.7%	61.5	27,060	26,700
Municipality						
Jackson	6,397	6,252	-2.3%	690.7	6,226	6,150
Middleport	2,530	2,208	-12.7%	1227.8	2,150	2,050
Cheshire	132	123	-6.8%	159.7	124	120
Vinton	254	236	-7.1%	210	230	225

Key: ACS = American Community Survey

(D) CULTURAL AND ARCHAEOLOGICAL RESOURCES

(1) Landmark Mapping

Based on the cultural resources desktop study, there are no scenic rivers or scenic routes/byways as defined by ODNR and/or the Ohio Department of Transportation or registered landmarks of historic, religious, archaeological, scenic, natural, or other cultural significance within 1,000 feet of the Preferred Route. Cultural resources already in public domain (places of worship and cemeteries) are identified in **Figure 8-6**.

(2) Cultural Reports and State Historic Preservation Office Correspondence

Cultural resource studies of the Project area were conducted on behalf of the Company. In addition to a background records check and literature review using data files from Ohio Historic Preservation Office (OHPO) for the Preferred Route, detailed History/Architectural Investigations and a Phase I Archaeological Investigation have been completed via pedestrian surveys. Copies of the reports detailing these efforts can be provided to the OPSB upon request but are not provided within the Application due to the sensitive nature of the locational information for archaeological sites.

The Company is currently coordinating with the OHPO to determine potential impacts to cultural resources. The results of the coordination with the State Historic Preservation Office will be provided to OPSB once it has been received.

(3) Evaluation of Impact on the Preservation of Cultural Resources

The Company's consultant conducted Archaeological and History/Architecture Investigations for the Project from March to July 2026 to identify archaeological sites, as well as sites or properties that are historically significant and evaluating the potentials impacts associated with such sites or properties in accordance with the OHPO Archaeology Guidelines (2022). Using a 1-mile Study Area to create an Area of Potential Effect (APE), the Company's consultant performed a literature review to identify archaeological sites, previously recorded resources, historic properties, cemeteries, and other features that could be regarded as historically significant and their associated potential impacts. The literature surveys were accompanied by pedestrian surveys to account for any uninventoried resources.

Archaeological Resources

The archaeological literature review for the Project identified nine archaeological sites that were found within or adjacent to the Project. Additionally, there are two prehistoric mound sites that are recommended for avoidance. There were 24 previously unrecorded sites identified during the archaeological investigations that were within the Project, as well as three previously recorded sites that were re-identified. None of these sites are considered to be significant resources, and they are not eligible for inclusion in the National

Register of Historic Places (NRHP) as they are not landmarks. However, one previously recorded site has previously been deemed eligible for the NRHP for a historic component. This site contains a historic period midden area surrounding a former house location that is to be avoided to the best extent possible. Otherwise, archaeological mitigation work will need to be conducted. Currently, the preliminary structure and access road locations identified for the Project avoid this area entirely.

Nine cemeteries were identified within or adjacent to the Project, including Gravel Hill Cemetery, Thomas Cemetery, Shields Cemetery, Carlisle Cemetery, Goble Cemetery, German Cemetery, Providence Cemetery, Scioto Cemetery, and Owl Creek Cemetery. The Company's consultant recommends that a 50-foot buffer should be observed around all cemeteries, except in instances where the cemetery has a clear and defined boundary, or where access roads follow public roadways/ROW.

Architectural Resources

The architectural literature review conducted for the Project identified 79 previously recorded Ohio Historic Inventory resources, three properties listed in the NRHP, two Determinations of Eligibility, and 81 Ohio Genealogical Society (OGS) cemeteries within the APE. Additionally, a professional architectural survey identified a total of 86 architectural resources that are 50 years of age or older, as well as two NRHP-listed properties and 12 OGS cemeteries within the APE. None of the cemeteries identified within the APE are considered to be eligible for listing in the NRHP. Building types and styles are consistent with patterns of settlement in the area and are mostly single-family residences and barns dating from approximately 1854 to 1975. Stylistically, the buildings are mostly vernacular (exhibiting no formal academic style) and mid-century modern. Four OGS cemeteries are within the Project area (Ellis, Mercer, Shields, and Thomas). Of which, one OGS Cemetery (Shields) is located within the proposed 200-foot ROW as well as the Providence Cemetery. One previously recorded resource is located inside the Project area that has been demolished or otherwise destroyed. Aside from the two NRHP-listed properties, there are no other architectural resources in the APE that are recommended for inclusion in the NRHP. Ultimately, an assessment of effects was conducted for each of the two NRHP-listed properties, which resulted in a finding of "adverse effect" for the Evans House (NRHP 84003692). As such, the Company will obtain the appropriate regulatory approvals before proceeding with any work.

(4) Recreation and Scenic Areas

A list of recreation and scenic areas identified within a 5-mile radius of the Project are listed below in **Table 8-11**.

Within a 5-mile radius of the Project, there are a multitude of parks and public event spaces. General Hartinger Park is an 8.3-acre park located 4.9 miles northeast of the existing Gavin Substation, and the Vinton Community Park is a 25.1-acre park located 0.5 miles north of the Project centerline. Additional

parks include the 6-acre Village of Centerville Baseball Fields and Recreation Areas located 4.4 miles south of the Project, the 5-acre Village of Chesire Park located 0.3 miles east of the Project, and the 3-acre Village of Middleport Local Park located 3.6 miles northeast of the Project. In total, there are approximately 765 acres of locally managed parks within a 5-mile vicinity of the Project area.

The city of Jackson specifically maintains six park spaces, four of which are within 5 miles of the Project: Manpower Park; the "City of Jackson Ball Fields," or Griff Field; Eddie Jones Park; and McKinley Park. Manpower Park, located 2.8 miles north of the Project centerline, is a 5-acre open space area designed primarily for outdoor events. The "City of Jackson Ball Fields," or "Griff Field," is a 6-acre two-field baseball/softball area along the intersection of High Street and Main Street in Jackson, roughly 3.7 miles north of the Project centerline. Eddie Jones Park lies 3.7 miles north of the Project centerline. This 29-acre park offers shelter houses for events, picnic tables, pickleball courts, bike/walking path access, and more. McKinley Park, located 3 miles north of the Project centerline, is a 0.2-acre historical open space park dedicated to President McKinley following his assassination.

Several golf courses were identified within 5 miles of the Project. The Big Beaver Creek Golf Club (BBCGC) is a 295-acre, 18-hole golf course located 4.8 miles north of the proposed Baku Substation. BBCGC is home to an abundance of diverse wildlife, including the American bald eagle, deer, owls, red foxes, and more. The Hidden Valley Country Club is an 84.4-acre, 9-hole golf course located 4.8 miles southeast of the existing Gavin Substation. This golf course, however, closed in 2012 and has not been in operation for the last 14 years. The Fair Greens Country Club is an 87.4-acre, 9-hole golf course located 4.4 miles north of the Project centerline. The Franklin Valley Golf Club is a 100.6-acre, 18-hole golf course located just 0.5 miles south of the Project centerline.

Another feature that is prominent within a 5-mile radius of the Project is boat ramps. The Leading Creek Ramp, located in the Village of Middleport, is an active public ramp along Leading Creek, connecting to the Ohio River, located 4.4 miles northeast of the existing Gavin Substation. The Hammertown Reservoir Ramp, located in the city of Jackson, is an active public boat ramp along Hammertown Lake, roughly 3.6 miles north of the Project centerline. The Tycoon Lake Ramp, located in Raccoon Township, is an active public boat ramp along Tycoon Lake, roughly 2.7 miles south of the Project centerline. The Village of Vinton Boat Ramp, located in the Village of Vinton, is an active public boat ramp along Raccoon Creek, just 0.7 miles north of the Project centerline. The Chesire Public Ramp and Chesire Boat Park, located in the Village of Chesire, is an active public boat ramp, parking, and recreation area along the Ohio River, just 0.6 miles east of the existing Gavin Substation. This boat ramp in particular serves as a paddleboard, canoe, and kayak-friendly point of entry for beginners.

Additional recreation features include the Old-Fashioned Penny Arcade located in Jackson, roughly 2.7 miles north of the Project centerline. This penny-video arcade consists of a multitude of $0.01 and $0.05-

to-play machines for entertainment. Another notable recreation feature includes the 19-acre Molly Lauman Girl Scout Camp, located approximately 4.4 miles southwest of the Project.

Approximately 1,693 acres of ODNR land is located within 5 miles of the Preferred Route, including the Broken Aro Wildlife Area (2.9 miles north), Brush Creek State Forest (2.9 miles west/southwest), Buckeye Furnace Wildlife Area (3.7 miles northeast), Cooper Hollow Wildlife Area (1.9 miles south), Flint Run Wildlife Area (3.5 miles north), Lake Katherine Dedicated Nature Preserve (3.9 miles northwest), Tycoon Lake Wildlife Area (2.3 miles south/southeast), and the Wilson Wetlands Wilderness Area (3.5 miles northwest). Each of the following areas is home to a unique variety of diverse fauna, flora, and geographic features, including magnolias, eastern hemlock, sweet gum, birch, and beech, native orchids, mountain laurel, Virginia pine, and oak. Unique features include dry ridge tops, ravines, and steep terrains.

Originally a part of the Shawnee State Forest, the deciduous hardwood Brush Creek State Forest located 2.9 miles west of the proposed Baku Substation has grown from 285 acres of land in 1928 to over 13,000 acres today. Most of the site consists of steep hillsides, deep hollows, and narrow ridge tops.

Based on ODNR correspondence, Raccoon Creek is a state scenic river in Huntington Township within Gallia County, which generally crosses the Project area from north to south. Additionally, within the central portion of the Project area, US-35 and C, H, & D Road comprise the Ohio Welsh Scenic Byway, which generally crosses from north to south. Because these two state scenic resources each generally cross from north to south between the Company's proposed Baku Substation and existing Gavin Substation, the Preferred Route will require one crossing of each (see **Table 8-14**). Because the Project is privately funded, it is exempt from the Ohio Scenic Rivers Law (ORC 1517.15). Still, the Company will adhere to appropriate BMPs for construction activities near Raccoon Creek, as specified by ODNR, to help protect its excellent water quality (see **Appendix 8-3**). No other State or National Wild and Scenic Rivers are located within the Study Area.

The Project is not anticipated to result in significant impacts to the identified recreational and scenic areas because the Baku–Gavin 765-kV Transmission Line will be rebuilt within and/or adjacent to existing ROW for the greatest extent practicable.

Table 8-14. Recreation and Scenic Areas Within 5 miles of the Preferred Route	
Resource Name	**Location in Relation to Project Area**
Big Beaver Creek Golf Club	4.8 miles northwest
Chesire Public Ramp/Boat Park	0.6 miles east
City of Jackson Ball Fields	3.7 miles north
Eddie Jones Park (city of Jackson)	3.7 miles north
Fair Greens Country Club	4.4 miles north
Franklin Valley Golf Club	0.5 miles south
General Hartinger Park	4.9 miles northeast
Hammertown Reservoir Ramp	3.6 miles north
Hidden Valley Country Club	4.8 miles southeast
Jackson Old Fashioned Penny Arcade	2.7 miles north
Leading Creek Ramp	4.4 miles northeast
Manpower Park	2.8 miles north
Mason County Fair	2.2 miles east/southeast
McClintic Wildlife Management Area (WV)	1.5 miles east
Mckinley Park	3.0 miles north
Molly Lauman Girl Scout Camp	4.4 miles southwest
ODNR Broken Aro Wildlife Area	2.9 miles north
ODNR Brush Creek State Forest	2.9 miles west/southwest
ODNR Buckeye Furnace Wildlife Area	3.7 miles northeast
ODNR Cooper Hollow Wildlife Area	1.9 miles south
ODNR Flint Run Wildlife Area	3.5 miles north
ODNR Lake Katherine Dedicated Nature Preserve	3.9 miles northwest
ODNR Tycoon Lake Wildlife Area	2.3 miles south/southeast
ODNR Wilson Wetlands Wilderness Area	3.5 miles northwest
Raccoon Creek (State Scenic River)	Crossed (1)
The Nature Conservancy Keystone Nature Preserve Site	3 miles north
Tycoon Lake Ramp	2.7 miles south/southeast
USFWS Ohio River Islands National Wildlife Refuge	0.7 mile east (in WV)

Table 8-14. Recreation and Scenic Areas Within 5 miles of the Preferred Route	
Resource Name	**Location in Relation to Project Area**
Village of Centerville Baseball Fields & Recreation Area	4.4 miles south
Village of Cheshire Park	0.3 mile east
Village of Middleport Local Park	3.6 miles northeast
Village of Vinton Boat Ramp	0.7 miles north/northeast
Vinton Community Park & Recreation Fields	0.5 miles north/northeast
Ohio Welsh Scenic Byway	Crossed (1)

Key: ODNR = Ohio Department of Natural Resources; USFWS = U.S. Fish and Wildlife Service; WV = West Virginia

(5) Mitigation Procedures

Based on the results of the desktop review and field surveys, no adverse impacts to known and recorded historic properties or recreation and scenic areas are anticipated because of the Project. Therefore, no mitigation procedures are required.

(6) Visual Impact of the Facility

The following paragraphs address the requirements of Adm.Code 4906-4-08(D)(6)(a-g) for the proposed Baku–Gavin 765-kV Transmission Line Project. The Company's consultant conducted a Visual Resource Assessment (VRA) for the Project, including renderings of the transmission line design, which is provided in **Appendix 8-6**. A summary of the VRA findings is described below.

On June 26, 2026, the Applicant requested a limited waiver of the 10-mile radius requirement contained in Adm.Code 4906-4-08(D)(6), which request remains pending as of the submittal date of this Application. The Applicant seeks Board approval to provide a visual impact assessment considering only a 5-mile radius from the Project area due to the actual measured impact of the Project and the load requirements and timeline of the customer. As Applicant explained in its Motion for Partial Waiver, the anticipated Project route is highly remote and wooded, featuring undulating hillsides and landscapes, such that the Project's steel structures will largely be screened by natural vegetation and topography. Additionally, a portion of the Project will be co-located in a transmission corridor already containing 138kV and 345-kV facilities, further reducing the incremental or "new" visual impact associated with the Project. Allowing a 5-mile Visual Study Area would most appropriately reflect the Project's anticipated visual impacts, while a 10-mile visual study would create undue data collection and analytical burdens without commensurate benefits. Accordingly, pending the Board's ruling on Applicant's Motion, this Application includes the results of a visual impact study for a 5-mile radius.

The ability to minimize visual impacts of the Project is influenced by engineering requirements, including structure design, height, span length, and ROW width necessary to meet applicable safety and clearance standards. Because the proposed Project is predominantly a cross-country greenfield transmission line, it will introduce a new linear visual feature across portions of the existing landscape. As a result, the siting process considered visual impacts through route selection, including avoiding densely populated areas, maximizing distance from residences where practicable, and minimizing proximity to identified sensitive receptors.

The Project area is characterized by a predominantly rural landscape consisting of forested terrain, agricultural lands, and dispersed residential development. Topography within the Study Area is variable, typical of the Appalachian Plateau region, and includes ridgelines, valleys, and rolling hills. These features influence visibility by creating alternating conditions of exposure and screening depending on viewer location and elevation.

Transmission facilities associated with this Project will constitute a visually noticeable element within the landscape due to their scale and linear nature. Visibility will vary depending on distance, topography, and line-of-sight conditions. Areas with open terrain or elevated vantage points are expected to experience greater visibility, while intervening terrain may reduce visibility in other locations.

(a) Visibility of the Project

A viewshed analysis was conducted to evaluate visibility of the Project within the Visual Study Area (VSA), consistent with the requirements of Adm.Code 4906-4-08(D)(6)(a). The analysis was performed under conservative viewing assumptions and evaluated potential visibility based on topography and existing landscape conditions. Separate viewshed analyses were developed with and without deciduous canopy conditions to evaluate Project visibility.

The viewshed analysis identified approximately 42.6 square miles of potential visibility within the approximately 553.7-square-mile VSA, representing approximately 7.7 percent of the Study Area. The remaining 92.3 percent of the VSA is not anticipated to have visibility of the Project due to intervening topography, vegetation, or existing structures.

Visibility is generally greatest within agricultural areas where open views are available. Approximately 5.79 percent of the VSA's total visibility occurs within agricultural landscape similarity zones (LSZs). Comparatively, visibility within developed, forested, open, and water LSZs is substantially lower, representing approximately 0.92 percent, 0.52 percent, 0.40 percent, and 0.07 percent of the VSA, respectively.

Visibility varies across the Project area. Jackson County contains the highest percentage of predicted visibility (3.66 percent of the VSA), followed by Pike County (1.66 percent) and Gallia County (1.63 percent).

Visibility within Scioto, Meigs, and Vinton counties is comparatively limited. Most predicted visibility occurs within rural agricultural settings rather than densely developed population centers.

At increasing distances from the transmission line, visibility decreases as the apparent scale of the structures is reduced and intervening topography and vegetation further limit line-of-sight conditions.

(b) Visibility from Sensitive Vantage Points

Sensitive vantage points evaluated during the VRA included residential areas, incorporated communities, scenic byways, recreational areas, parks, wildlife management areas, historic resources, cemeteries, waterways, and other identified visual resources within the VSA. A total of 580 visual and historic resources were inventoried, of which 126 resources (approximately 21 percent) were identified as having potential visibility of some portion of the Project.

Representative Key Observation Point simulations were developed from 15 public vantage points throughout the VSA, including locations within the city of Jackson, villages of Cheshire and Vinton, along US-35, U.S. Highway 23 (US-23), U.S. Highway 32 (US-32), State Route 7 (OH-7), and State Route 93 (OH-93), and from recreational, historic, and scenic resources. The simulations were selected to represent a range of viewing distances, viewer types, landscape settings, and resource sensitivities.

The VRA determined that visibility from most sensitive vantage points would result in negligible to low visual impacts due to distance, intervening topography, existing vegetation, and the presence of existing utility infrastructure within portions of the landscape. Scenic routes including the Welsh Scenic Byway (US-35) and Ohio River Scenic Byway (OH-7) may experience intermittent views of the Project. However, those views are generally brief and occur within landscapes where existing transportation and utility infrastructure is already present.

The VRA identified localized areas where visual contrast may be more noticeable, particularly at selected locations within Distance Zones 1 and 2, including portions of the Raccoon Creek Scenic River corridor, the Gavin Plant Recreation Hunting Area, Providence Cemetery, and the Johnson Road Covered Bridge. However, these effects were determined to be localized, and in many instances viewer populations are limited and views are constrained by existing landscape conditions.

Overall, the VRA concluded that visual effects from sensitive vantage points are generally limited and that most viewers would experience either partial, filtered, or fleeting views of the Project.

(c) Scenic Quality of the Existing Landscape

The existing landscape within the Study Area is characterized by a predominantly rural setting consisting of forested uplands, agricultural valleys, dispersed residential development, transportation corridors,

recreational lands, and existing utility infrastructure. The area lies within the Appalachian Plateau region and contains varied topography, including ridgelines, rolling hills, valleys, streams, and river corridors that contribute to the region's visual character.

Landscape Similarity Zone mapping prepared as part of the VRA indicates that approximately 59 percent of the VSA consists of forested land, 27 percent agricultural land, 10 percent developed land, 3 percent open land, and 1 percent water resources. Scenic quality within the Study Area is largely influenced by forested ridgelines, rural agricultural landscapes, waterways, and relatively low levels of urban development.

The VRA documented numerous scenic, recreational, natural, and cultural resources within the Study Area, including portions of the Ohio River Scenic Byway, Welsh Scenic Byway, Raccoon Creek Scenic River, Lewis and Clark National Historic Trail, state nature preserves, wildlife management areas, NRHP-listed resources, cemeteries, and local recreational facilities.

The proposed transmission line will introduce a new aboveground linear feature into portions of the landscape. However, the VRA determined that most of the visual change would occur within agricultural settings and areas already influenced by utility infrastructure. Existing forest cover, topographic relief, and the collocation of portions of the Project with existing transmission corridors reduce the overall visibility of the Project and help maintain the prevailing scenic character of much of the Study Area.

Based on the viewshed analysis, photo simulations, and evaluation of visual resources, the VRA concluded that the Project would not substantially diminish the scenic quality or overall visual character of the Study Area. Visual impacts are expected to be localized and generally compatible with existing land use patterns and infrastructure present within the region.

(E) AGRICULTURAL LAND AND DISTRICTS

(1) Agricultural Land Mapping

Figure 8-7 depicts agricultural land uses within the Project area, including agricultural district properties crossed by the 200-foot-wide ROW. No Ohio Department of Agriculture agricultural conservation easements or agricultural security areas are located within the Project area. Agricultural land use designations were obtained from county-level parcel data.

(2) Agricultural Information

(a) Acreage Impacted

Approximately 635 acres (or 51 percent of the proposed ROW) of agricultural land is crossed by the Project, as shown above in **Table 8-10**.

(b) Evaluation of Impact on Agricultural Land

(i) Field Operations

Temporary impacts to agricultural land may occur during construction. However, permanent impacts to agricultural land will generally be limited to the footprints of the steel structures and agricultural production can continue after the Baku–Gavin 765-kV Transmission Line is operational. Therefore, existing agricultural land use is regarded as compatible land use for the Project.

(ii) Irrigation

Prior to and during construction, all known irrigation systems will be located through coordination with landowners, field review, and utility locates. If any system is inadvertently damaged, the Applicant will repair it in a timely manner to ensure continued service.

Any damaged irrigation systems will be repaired at the Applicant's expense to at least original condition or modern equivalent. If the landowner requests non-repair, this will only be permitted if adjacent landowners and public ROWs are not affected. Following construction, a map of all repaired irrigation systems will be filed in the Project docket.

(iii) Field Drainage Systems

Prior to and during construction, all known field drainage systems will be located through coordination with landowners, field review, and utility locates. If any system is inadvertently damaged, the Applicant will repair it in a timely manner to ensure continued service.

Any damaged field drainage systems will be repaired at the Applicant's expense to at least original condition or modern equivalent. If the landowner requests non-repair, this will only be permitted if adjacent landowners and public ROWs are not affected. Following construction, a map of all repaired field drainage systems will be filed in the Project docket.

(iv) Soils

Permanent impacts to agricultural soils are limited to the new steel structure footprints. BMPs will be employed to reduce soil compaction and preserve soil quality during construction.

(v) Structures Used for Agricultural Operations

As previously stated in the portion of this Application addressing Adm.Code 4906-4-08(C)(1)(b), 10 outbuildings (e.g., barns and sheds) will be removed/relocated outside of the proposed 200-foot ROW.

(vi) Agricultural District Land

The Company coordinated with Gallia, Jackson, and Pike county auditors for agricultural district land information. Responses were received on June 10, 11, and 18, 2026, respectively.

As shown in **Figure 8-7**, 90 parcels enrolled in the agricultural district program are crossed by the Project. Of these properties, approximately 6.5 acres will be crossed by the proposed 200-foot ROW.

No significant permanent impacts are anticipated for agricultural district land crossed by the Project since it is limited to the footprints of the new steel structures. BMPs will be employed to reduce soil compaction and preserve soil quality during construction.

(c) Mitigation Procedures

Not applicable. Permanent impacts to agricultural land are limited to the new steel structure footprints.

(3) Drain Tile Considerations

The Applicant will work with landowners and field personnel to identify known drain tile systems prior to construction. Construction methods will be adjusted to avoid these systems where possible. If damage occurs, repairs will be completed promptly in coordination with the landowner to restore functionality.

Prior to and during construction, all known mains, laterals, and wells will be located through coordination with landowners, field review, and utility locates. If any system is inadvertently damaged, the Applicant will compensate the landowner so that repairs can be made in a timely manner to ensure continued service.

In agricultural areas, the Applicant will avoid or minimize impacts to functioning drain tile systems and soils to the extent practicable. BMPs will be employed to reduce soil compaction, preserve soil quality, and maintain tile function during construction, operation, and maintenance activities.

Any damaged drain tile systems will be repaired at the Applicant's expense to at least original condition or modern equivalent. If the landowner requests non-repair, this will only be permitted if adjacent landowners and public ROW are not affected. Following construction, a map of all repaired drain tile systems will be filed in the Project docket.

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Summary: Application In the Matter of the Application of AEP Ohio Transmission Company, Inc. for a Certificate of Environmental Compatibility and Public Need for the Baku-Gavin 765 kV Transmission Line Project (Application Part I of XXVII) (Public Version) electronically filed by Mr. Lawrence B. Hughes on behalf of AEP Ohio Transmission Company, Inc..