

# Brewster-Pigeon Run Greenfield 69 kV Line & Station

## General Information

Proposing entity name	The redacted content contains proprietary and company confidential information the Proposing Entity requests be held from public view.
Company proposal ID	Proposal 3 (Brewster-Pigeon Run)
PJM Proposal ID	380
Project title	Brewster-Pigeon Run Greenfield 69 kV Line & Station
Project description	Designated Entity Statement of Intent: The Proposing Entity seeks consideration as the Designated Entity for the Project. If selected, the Proposing Entity reserves the right to assign the Project to any of its affiliate(s) if circumstances deem appropriate. Any future assignment to affiliate(s) would be with PJM-established entities. The Proposing Entity does not foresee any potential assignment materially impacting the Project's constructability or schedule. Project Description Info: Build a greenfield 138/69 kV station "Pigeon Run" to tap the AEP owned South Canton – Apple Creek 138 kV line. Build Pigeon Run station as a 4-breaker station with a 90 MVA 138/69 kV transformer. Build a 4.2 mile greenfield 69 kV line from Brewster station to Pigeon Run station. Perform station work at Brewster to accommodate the new line. This project will satisfy AMPT's 3.2.7 Delivery Point Exposure Criteria by connecting a second independent source to the load delivery point at Brewster station. Tie-line Impact Info: The proposed greenfield 69 kV line will connect two PJM transmission owner zones: Area 202 ATSI (Brewster Station) and Area 205 AEP (Pigeon Run Station).
Project in-service date	06/2024
Tie-line impact	Yes
Interregional project	No
Is the proposer offering a binding cap on capital costs?	Yes

Additional benefits

## Project Components

1. Greenfield 69 kV Line

- 2. Pigeon Run Station 138 kV Cut-ins
- 3. Greenfield Station
- 4. Brewster Station Upgrade

### Greenfield Transmission Line Component

Component title	Greenfield 69 kV Line	
Point A	Brewster Station 69kV -239767	
Point B	Pigeon Run Station 69 kV - 78910	
Point C		
	<b>Normal ratings</b>	<b>Emergency ratings</b>
Summer (MVA)	93.000000	128.000000
Winter (MVA)	117.000000	144.000000
Conductor size and type	The new line will be constructed using 477 (26/7) ACSR Hawk conductor.	
Nominal voltage	AC	
Nominal voltage	The new line will be constructed as a 69kV AC line.	
Line construction type	Overhead	

## General route description

The Proposing Entity reviewed numerous route combinations evaluating each with respect to potential impacts to the surrounding communities, environment, constructability, operations and maintenance considerations, and cost effectiveness. Solutions were initially considered within a study area of 6mi<sup>2</sup> (see attached kmz), as the Proposed Solution utilized the proposed Pigeon Run Substation location (Proposing Entity) and the existing Brewster Substation. The Proposing Entity's Siting Team reviewed routes paralleling local roads, railroad lines, and parcel boundaries from the two project endpoints. Potential Routes were dismissed due to conflicts with the identified constraints in the study area. Major constraints include a U.S. Army Corps of Engineers (USACE) Levee, existing transmission lines, Fairless Schools, and several smaller constraints including cemeteries and habitable structures. Many of the identified constraints in the area were avoided or minimized by the Proposed Route. Starting at the existing Brewster Substation, the Proposed Route is approximately 4.2 miles in length and is located mainly along agricultural parcels (with scattered residential development) to the proposed Pigeon Run Substation. The Proposed Route generally parallels parcel boundaries instead of overbuilding distribution lines within road ROW, which would bring the new transmission line within proximity of several habitable structures and require tree clearing along roads. This conflict is apparent when the Routing Team reviewed utilizing Kings Hwy SE in Brewster, OH. Mt. Eaton St. SW has an existing 69kV transmission line and the Fairless School District athletic fields on the south side with a distribution line with several homes with mature trees along the north side. The Siting Team also reviewed potential routes along the Levee to the north of Brewster Substation but there are several homes that would be within the proposed 60' ROW and building a new transmission line within USACE property would likely not be approved. Another constraint was a large wetland complex, east of the USACE Levee, and along the Elm Run which could require substantial permitting requirements. The Proposed Route avoids the previously mentioned conflicts along Kings Hwy SE and Mt. Eaton St. SW by crossing a USACE Levee perpendicularly, a known desire from USACE, and then parallels parcel boundaries until crossing over Mt. Eaton St. SW to continue north, paralleling Baymere Ave SW.

## Terrain description

The Project terrain is predominately rolling agricultural lands with scattered residential in Stark County, Ohio. Elevation along the proposed route ranges from approximately 965 to 1,139 feet above sea level, with an average elevation of 1,033 feet.

#### Right-of-way width by segment

The proposed Brewster – Pigeon Run 69kV Line will require the acquisition of 4.21 miles of transmission line of 60' (30'/30') wide ROW. The project will begin at the existing Brewster Station in Stark County, Ohio and run in a northerly direction to the Proposing Entity's proposed Pigeon Run Station in Stark County, Ohio. The tabletop analysis found there were no public lands required for this Project. The private land use is predominantly agricultural and scattered residential that the tabletop analysis found and was verified through the Stark County Clerk's Office which classified/assessed the land use as agricultural and residential. The Proposing Entity will use proven land acquisition processes and approaches that have been successfully employed on projects over the years. Our initial land acquisition step is to verify current ownership by an examination of title, current property tax status, as well as document any liens, and or mortgages. We will also research the status of the subsurface estate, to determine whether it is severed from the surface. Once ownership is established, we will negotiate with landowners based on the fair market value of the property needed for the ROW easements. Market data studies and appraisals, both general and for specific tracts, will be conducted to establish values and a basis for acquisition negotiations. We will also pay for any crop damage and/or physical damage to property resulting from the construction and/or maintenance of the transmission line. Good Faith negotiations must be made with all landowners. Negotiations will be done in an ethical, non-confrontational and non-threatening manner with the landowners. The long term relationship with the landowners is paramount and will be kept in mind in all negotiations and honesty, integrity and professionalism will be displayed at all times. Negotiations will continue as long as practical to reach a voluntary agreement. If, and only if, it becomes evident that a voluntary fee purchase agreement between the Proposing Entity and the property owner cannot be reached, and other viable alternatives do not exist, the we may exercise the right of eminent domain to secure required property through condemnation proceedings.

#### Electrical transmission infrastructure crossings

The Project will involve one (1) electrical transmission infrastructure crossing under the existing South Canton - Star 345kV Line owned by American Transmission Systems, Inc. The location of the crossing is approximately 1,700 feet south and 400 east on Browndale Avenue SW where it intersects Elton Street SW in Stark County, Ohio. 400 43' 31.36" N, 81 35' 08.80"W The project will involve two (2) electrical transmission infrastructure crossing under the existing Brewster - Harmon 69kV Line. The location of the first crossing is approximately: 400 42' 21.16" N, 81 35' 29.18"W The location of the second crossing is approximately: 400 42' 19.70" N, 81 34' 52.46"W The Proposed Route crosses existing transmission lines in locations to minimize impacts to the existing transmission lines (e.g. midspan for crossing over a larger voltage line and near an existing structure if crossing under an existing transmission line).

#### Civil infrastructure/major waterway facility crossing plan

The Project will involve one (1) electrical transmission crossing over one (1) levee belonging to the United States of America approximately 350' east of the Incumbent's existing Brewster Station & 400' southwest of Kings Highway SE in Stark County, Ohio at 40deg42'-22.14"N; 81deg35'-30.30"W. The Proposing Entity will follow standard operating procedures and guidelines set forth by the U.S. Army Corps of Engineers for routing of electrical lines over levees. Required permitting will be obtained in a timely manner in order to avoid schedule delays. The Project will involve one (1) electrical transmission crossing over the existing rail line belonging to Wheeling & Lake Erie Railroad Company in Stark County, Ohio at 40deg42'-46.02"N; 81deg34'-26.60"W.

Environmental impacts

Existing land along the route is rural, agricultural, and adjacent to roadways. Elm Run, associated tributaries, and a very small portion of the Elm Run 100-year floodplain transects the line. Based on review of the National Wetland Inventory and aerial photographs, limited wetlands are located near Brewster Station. To ensure appropriate due diligence, desktop studies and records reviews will be conducted for wetlands and streams, threatened and endangered species, and cultural and archaeological resources. Additionally, a field level stream/wetland delineation, habitat survey for species identified by the records review, and cultural/archaeological resource study will be performed for the line route. Following field studies, data will be digitized and provided to Engineering so that pole locations and the station is sited to maximize avoidance of sensitive resources. For example, poles will be placed outside of or span wetlands, streams, and/or floodplains to the greatest extent possible. Existing access and roads will be utilized to access pole locations. If necessary, temporary access roads to pole locations will be identified and field surveyed for environmental and cultural/archaeological resources and will be adjusted to avoid or minimize impacts. For ground disturbance, a storm water pollution prevention plan will be developed that specifies practices to manage construction storm water runoff. The project will apply for an Ohio EPA general construction storm water permit. Application for a Stark County construction storm water permit will also be made. For temporary access and pole foundations within floodplains that cannot be avoided, an application for a floodplain permit will be made to the Stark County Soil and Water Conservation District. Physical impacts to streams are not anticipated. It is anticipated a Nationwide Permit from the Army Corps of Engineers and Section 401 Water Quality Certification from Ohio EPA will be required for temporary access and pole foundations within delineated wetlands. Timing of construction will be executed in accordance with U.S. Fish and Wildlife Service and Ohio Department of Natural Resources criteria.

Tower characteristics

The new 69kV line will require (48) tubular galvanized steel pole structures. The predominate structure type (26 structures) will be a tangent monopoles with braced post insulators arranged in an alternating configuration. Additionally, the line will also require (15) vertically configured running angle poles, and (7) deadend structures. The tangent pole structures will be supported by direct embedded foundations. The running angle pole structures will be supported by direct embedded foundations and guy and anchor systems. The deadend pole structures will be supported by a combination of direct embedded foundations with guy and anchor systems, and concrete pier foundations utilizing full length anchor bolts. A sketch of the structures is attached.

Construction responsibility

The redacted content contains proprietary and company confidential information the Proposing Entity requests be held from public view.

Additional comments

The redacted content contains proprietary and company confidential information the Proposing Entity requests be held from public view.

**Component Cost Details - In Current Year \$**

Engineering & design

The redacted content contains proprietary and company confidential information the Proposing Entity requests be held from public view.

Permitting / routing / siting	The redacted content contains proprietary and company confidential information the Proposing Entity requests be held from public view.
ROW / land acquisition	The redacted content contains proprietary and company confidential information the Proposing Entity requests be held from public view.
Materials & equipment	The redacted content contains proprietary and company confidential information the Proposing Entity requests be held from public view.
Construction & commissioning	The redacted content contains proprietary and company confidential information the Proposing Entity requests be held from public view.
Construction management	The redacted content contains proprietary and company confidential information the Proposing Entity requests be held from public view.
Overheads & miscellaneous costs	The redacted content contains proprietary and company confidential information the Proposing Entity requests be held from public view.
Contingency	The redacted content contains proprietary and company confidential information the Proposing Entity requests be held from public view.
Total component cost	\$4,893,173.00
Component cost (in-service year)	\$5,346,901.00

**Greenfield Transmission Line Component**

Component title	Pigeon Run Station 138 kV Cut-ins
Point A	South Canton Station 138 kV - 243092
Point B	Pigeon Run Station 138 kV - 123456
Point C	Apple Creek Station 138 kV - 242954

	<b>Normal ratings</b>	<b>Emergency ratings</b>
Summer (MVA)	205.000000	258.000000
Winter (MVA)	205.000000	258.000000
Conductor size and type	The new lines will be constructed using 556.6 (26/7) ACSR Dove conductor.	

Nominal voltage	AC
Nominal voltage	AC
Line construction type	Overhead
General route description	The Proposing Entity reviewed locations for the two (2) 138kV loops in and out of the proposed Pigeon Run Station from AEP's existing Torrey – Wooster 138kV line. The locations of the tie-lines were evaluated with respect to potential impacts to the surrounding communities, environment, constructability, operations and maintenance considerations, and cost effectiveness. The proposed tie-line locations and ROW are located within the same landowner as the proposed Pigeon Run Station location and will avoid tree clearing and other environmental impacts. The Ohio Power Siting Board (OPSB) regulate the 138kV structures into the proposed Pigeon Run Substation will require a Letter of Notification (LON) before construction may proceed.
Terrain description	The Project terrain is predominately rolling agricultural lands in Stark County, Ohio for two (2) 138kV loops in and out of the proposed Pigeon Run Station to AEP's existing Torrey – Wooster 138kV line. The station property and area of the 138kV tie-lines are generally flat with minimal elevation change.
Right-of-way width by segment	The component will involve no new right-of-way nor right-of-way expansion. The component pieces for the new two (2) 138kV loops in and out will be entirely located on the proposed Pigeon Run Station.
Electrical transmission infrastructure crossings	The Project will not involve any electrical transmission infrastructure crossings.
Civil infrastructure/major waterway facility crossing plan	The Project will not involve any civil infrastructure/major waterway facility crossings.
Environmental impacts	Existing land along the route is agricultural. Based on review of the National Wetland Inventory and aerial photographs, no wetlands or streams are located near the line. To ensure appropriate due diligence, desktop studies and records reviews will be conducted for wetlands and streams, threatened and endangered species, and cultural and archaeological resources. Additionally, a field level stream/wetland delineation, habitat survey for species identified by the records review, and cultural/archaeological resource study will be performed for the line route. Following field studies, data will be digitized and provided to Engineering so that pole locations are sited to maximize avoidance of sensitive resources. Existing access and roads will be utilized to access pole locations. If necessary, temporary access roads to pole locations will be identified and field surveyed for environmental and cultural/archaeological resources and will be adjusted to avoid or minimize impacts. For ground disturbance greater than 1 acre, a storm water pollution prevention plan will be developed that specifies practices to manage construction storm water runoff. The project will apply for an Ohio EPA general construction storm water permit. Application for a Stark County construction storm water permit will also be made.

Tower characteristics	The westernmost new 138kV tie line will require (1) tubular galvanized steel pole deadend structure. The easternmost 138kV tie line will require (2) tubular galvanized steel pole dead end structures. The vertically configured monopole structures will be supported by concrete pier foundations utilizing full length anchor bolts. The arrangement of the structures can be found in the attachments.
Construction responsibility	The redacted content contains proprietary and company confidential information the Proposing Entity requests be held from public view.
Additional comments	The redacted content contains proprietary and company confidential information the Proposing Entity requests be held from public view.
<b>Component Cost Details - In Current Year \$</b>	
Engineering & design	The redacted content contains proprietary and company confidential information the Proposing Entity requests be held from public view.
Permitting / routing / siting	The redacted content contains proprietary and company confidential information the Proposing Entity requests be held from public view.
ROW / land acquisition	The redacted content contains proprietary and company confidential information the Proposing Entity requests be held from public view.
Materials & equipment	The redacted content contains proprietary and company confidential information the Proposing Entity requests be held from public view.
Construction & commissioning	The redacted content contains proprietary and company confidential information the Proposing Entity requests be held from public view.
Construction management	The redacted content contains proprietary and company confidential information the Proposing Entity requests be held from public view.
Overheads & miscellaneous costs	The redacted content contains proprietary and company confidential information the Proposing Entity requests be held from public view.
Contingency	The redacted content contains proprietary and company confidential information the Proposing Entity requests be held from public view.
Total component cost	\$780,672.00
Component cost (in-service year)	\$853,061.00

**Greenfield Substation Component**



Component title	Greenfield Station
Substation name	Pigeon Run Station 138/69 kV - 123456/78910
Substation description	Construct a 138/69KV greenfield station having a 138KV main bus, 2-138KV lines with circuit breakers to interconnect the existing 138KV Apple Creek line and 138KV South Canton line, 1-138KV circuit breaker tap to a 138/69KV, 90MVA transformer, and a 69KV circuit breaker for a new 69KV line to the existing Brewster Station. The station will be established on a 400ft x 400ft property approximately located at GPS coordinates (40.747822, -81.584883) and have a fenced area of 210ft x 175ft. An additional 70ft x 260ft property area will be used for the drive access.
Nominal voltage	AC
Nominal voltage	AC

**Transformer Information**

	<b>Name</b>	<b>Capacity (MVA)</b>	
Transformer	T1	90 MVA	
	<b>High Side</b>	<b>Low Side</b>	<b>Tertiary</b>
Voltage (kV)	138	69	13.09

Major equipment description

Construct a 138/69KV greenfield station consisting of a 138KV box bay steel str. for the main bus, existing 138KV line connections, and new 138/69KV transformer connection; 3-138KV, 3000A, 40KA circuit breakers; 5-138KV, 3000A group-operated CB disc. switches; 2-sets of 3-138KV line CCVTs & steel str.; 1-set of 3-138KV bus CCVTs & steel str.; 2-138KV, 2000A line traps; 2-line tuners; 2-sets of 3-138KV line arresters; 1-138KV, 50KVA Power PT, arrester, and steel str. for the alternate AC power; 1-138/69KV, 90MVA autotransformer with a 13.09KV, 10MVA tertiary, arresters, and oil containment; 1-69KV, 3000A, 40KA circuit breaker; 1-69KV, 3000A group-operated CB disc. switch; 1-set of 3-69KV line CCVTs & steel str.; 1-set of 3-69KV billing metering CT/PT combo units & steel str.; 1-set of 3-69KV line arresters; one (1) H-frame style take-off tower steel str. for the new 69KV line; 1-12KV tertiary AC Power/PT str.; 3-12KV PTs and fused disc. switches; 1-12KV, 50KVA, phase-to-phase distribution transformer and fused disc. switches for the preferred AC power; 3-12KV arresters; 120/240VAC power system; 125VDC battery & charger and associated DC system; and associated bus jumpers, strain bus, insulators, foundations, yard lighting, control cables, conduits, cable trench, and equipment grounding. Install associated relay equipment in a new a 16ft x 18ft control house. The station will be established on a 400ft x 400ft property approximately located at GPS coordinates (40.747822, -81.584883) on flat agricultural land. The property will be graded for a fenced area of 210ft x 175ft and include 746ft of fence, 1-24ft gate, station stone, ground grid, and fence grounding. One (1) access road will be established and utilize an additional 70ft x 260ft property area. It is assumed that this property will be available for purchase, wetland mitigation will not be needed, and all necessary permits will be available. It is also assumed that all necessary outages will be available.

<b>Normal ratings</b>	<b>Emergency ratings</b>
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Summer (MVA)

90.000000	90.000000
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Winter (MVA)

90.000000	90.000000
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Environmental assessment

Land use at the proposed Pigeon Run Station is undeveloped/agricultural. Based on review of the National Wetland Inventory and aerial photographs, no streams or wetlands are located near the proposed station. To ensure appropriate due diligence, desktop studies and records reviews will be conducted for wetlands and streams, hazardous materials, threatened and endangered species, and cultural and archaeological resources. Additionally, a field level stream/wetland delineation, environmental site assessment, habitat survey for species identified by the records review, and cultural/archaeological resource study will be performed for the station parcel. Following field studies, data will be digitized and provided to Engineering so that the station is sited to maximize avoidance of sensitive resources. For ground disturbance, a storm water pollution prevention plan will be developed that specifies practices to manage construction storm water runoff. The project will apply for an Ohio EPA general construction storm water permit. Application for a Stark County construction storm water permit will also be made. Post-construction storm water controls will be implemented for the station as needed.

## Outreach plan

Public outreach is a critical component to the Proposing Entity's siting process, so efforts include properly informing the public; federal, state and local agencies; local governments; and other key stakeholders on the need for, and benefits of, this project. The Proposing Entity's approach to public outreach is to always be candid and transparent, and to offer a variety of tools and means for impacted parties to engage with our staff. Public outreach also involves collecting information about landowner properties, which we consider during the final siting process. Proactive and interactive communication strategies and tools are used to assist siting efforts by soliciting comments and concerns from persons and entities affected by the project. These strategies and tools also assist in garnering support for the line siting process, as well as promote clear communication to landowners during land/ROW acquisition. The Proposing Entity plans to host one (1) public open house meeting in Brewster, Ohio to engage with the community and collect feedback on the project. We plan to invite landowners within 1,000 feet of the proposed transmission line to attend the open house and provide them with an opportunity to review detailed maps and provide comments as it relates to the project and their property. These comments are a key component on refining the power line route. We also plan to inform the public via news release and reserve a notice in the local newspaper so community members can participate. We also plan to have an interactive website so the public can obtain the same information that's provided at the open house, submit their comments and receive regular and timely project updates. Open houses consist of multiple informational stations set as a workshop-style event, designed to educate the public on different aspects of the project, including: purpose, need, engineering, structure type, and the Land/ROW acquisitions process. While we are confident in the route selected, it's important to engage the public before initiating land/ROW acquisition. This process can identify unique items such as wells, geological formations and other features which must be considered in selecting the route to acquire land/ROW.

Land acquisition plan

The proposed Pigeon Run Station will be sited south of Sarbaugh Street SW, 0.56 of a mile west of Manchester Avenue SW (Highway 93) in Stark County, Ohio on undeveloped agricultural lands. The tabletop analysis found there were no public lands required for this Project. The private land use is agricultural as tabletop analysis found and was verified through the Stark County Clerk's Office which classified/assessed the land use as agricultural. The private land requirements include approximately 3.67 acres for the new station site/detention pond/grading and 0.42 of an acre of access road from Sarbaugh Street SW to the new station site. The total Project acreage is 4.09 acres to be purchased in fee. Station site and access road placement were chosen to minimize impacting farming operations. The Proposing Entity will use proven land acquisition processes and approaches that have been successfully employed on projects over the years. Our initial land acquisition step is to verify current ownership by an examination of title, current property tax status, as well as document any liens, and or mortgages. We will also research the status of the subsurface estate, to determine whether it is severed from the surface. Once ownership is established, we will negotiate with property owners based on the fair market value of the property needed for the station site and access road (both fee purchases). Market data studies and appraisals, both general and for specific tracts, will be conducted to establish values and a basis for acquisition negotiations. Good Faith negotiations must be made with all landowners. Negotiations will be done in an ethical, non-confrontational and non-threatening manner with the landowners. The long term relationship with the landowners is paramount and will be kept in mind in all negotiations and honesty, integrity and professionalism will be displayed at all times. Negotiations will continue as long as practical to reach a voluntary agreement. If, and only if, it becomes evident that a voluntary fee purchase agreement between the Proposing Entity and the property owner cannot be reached, and other viable alternatives do not exist, we may exercise the right of eminent domain to secure required property through condemnation proceedings.

Construction responsibility

The redacted content contains proprietary and company confidential information the Proposing Entity requests be held from public view.

Additional comments

**Component Cost Details - In Current Year \$**

Engineering & design

The redacted content contains proprietary and company confidential information the Proposing Entity requests be held from public view.

Permitting / routing / siting

The redacted content contains proprietary and company confidential information the Proposing Entity requests be held from public view.

ROW / land acquisition

The redacted content contains proprietary and company confidential information the Proposing Entity requests be held from public view.

Materials & equipment

The redacted content contains proprietary and company confidential information the Proposing Entity requests be held from public view.

Construction & commissioning	The redacted content contains proprietary and company confidential information the Proposing Entity requests be held from public view.
Construction management	The redacted content contains proprietary and company confidential information the Proposing Entity requests be held from public view.
Overheads & miscellaneous costs	The redacted content contains proprietary and company confidential information the Proposing Entity requests be held from public view.
Contingency	The redacted content contains proprietary and company confidential information the Proposing Entity requests be held from public view.
Total component cost	\$7,549,621.00
Component cost (in-service year)	\$8,249,675.00

### **Substation Upgrade Component**

Component title	Brewster Station Upgrade
Substation name	Brewster Station 69 kV - 239767
Substation zone	Area 202 ATSI – Zone 1234 FE-MASS
Substation upgrade scope	Retire portions of the existing 69 kV bus as Brewster station and install associated station equipment to terminate the greenfield 69 kV line from Pigeon Run station into the second 69 kV breaker position.

### **Transformer Information**

None	
New equipment description	Install 2-sets of 3-69KV line CCVTs & steel str.; 2-69KV bus CCVTs & steel str. to be located along the existing 69KV bus at two different locations; and associated bus jumpers, foundations, control cables, conduits, and equipment grounding. Install associated relay equipment in the existing control house. Expand the station fenced area 20ft to the east including 160ft of fencing, 3-20ft gates, station stone, ground grid expansion, and fence grounding. Remove approximately 120ft of fencing and 3-gates (existing East fencing).

Substation assumptions	This proposal assumes that the existing AC & DC systems will accommodate the new equipment, the existing control house has space for the new relay equipment, ground grid resistivity test data are available, soil boring logs and geotechnical report are available, all necessary outages will be available, and space for the proposed expansion of the station will be available along with space to install the equipment outlined in this description.
Real-estate description	The incumbent's existing Brewster Station fence will need expanding in an easterly direction in land presently owned by the incumbent. The fence expansion will not require any additional real estate to be purchased for the project in Stark County, Ohio.
Construction responsibility	The redacted content contains proprietary and company confidential information the Proposing Entity requests be held from public view.
Additional comments	
<b>Component Cost Details - In Current Year \$</b>	
Engineering & design	The redacted content contains proprietary and company confidential information the Proposing Entity requests be held from public view.
Permitting / routing / siting	The redacted content contains proprietary and company confidential information the Proposing Entity requests be held from public view.
ROW / land acquisition	The redacted content contains proprietary and company confidential information the Proposing Entity requests be held from public view.
Materials & equipment	The redacted content contains proprietary and company confidential information the Proposing Entity requests be held from public view.
Construction & commissioning	The redacted content contains proprietary and company confidential information the Proposing Entity requests be held from public view.
Construction management	The redacted content contains proprietary and company confidential information the Proposing Entity requests be held from public view.
Overheads & miscellaneous costs	The redacted content contains proprietary and company confidential information the Proposing Entity requests be held from public view.
Contingency	The redacted content contains proprietary and company confidential information the Proposing Entity requests be held from public view.
Total component cost	\$647,713.00

Component cost (in-service year)

\$707,773.00

## Congestion Drivers

None

## Existing Flowgates

FG #	From Bus No.	From Bus Name	To Bus No.	To Bus Name	CKT	Voltage	TO Zone	Analysis type
AMPT-O1	239767	02BREWSTR	239355	02HARMON	1	69	202	FERC 715

## New Flowgates

None

## Financial Information

Capital spend start date

01/2022

Construction start date

09/2022

Project Duration (In Months)

29

## Cost Containment Commitment

Cost cap (in current year)

The redacted content contains proprietary and company confidential information the Proposing Entity requests be held from public view.

Cost cap (in-service year)

The redacted content contains proprietary and company confidential information the Proposing Entity requests be held from public view.

## Components covered by cost containment

1. Greenfield 69 kV Line - Transource
2. Greenfield Station - Transource

## Cost elements covered by cost containment

Engineering & design	Yes
Permitting / routing / siting	Yes
ROW / land acquisition	Yes
Materials & equipment	Yes
Construction & commissioning	Yes
Construction management	Yes
Overheads & miscellaneous costs	Yes
Taxes	Yes
AFUDC	Yes
Escalation	Yes
Additional Information	Please see the cost commitment legal language upload document for further details. This cost containment legal language document is privileged and company confidential and redacted from public view due to company confidential information.
Is the proposer offering a binding cap on ROE?	Yes
Would this ROE cap apply to the determination of AFUDC?	Yes
Would the proposer seek to increase the proposed ROE if FERC finds that a higher ROE would not be unreasonable?	No
Engineering & design	Yes
Permitting / routing / siting	Yes
ROW / land acquisition	Yes
Materials & equipment	Yes
Construction & commissioning	Yes



Construction management	Yes
Overheads & miscellaneous costs	Yes
Taxes	Yes
AFUDC	Yes
Escalation	Yes
Additional Information	The redacted content contains proprietary and company confidential information the Proposing Entity requests be held from public view.
Is the proposer offering a Debt to Equity Ratio cap?	The redacted content contains proprietary and company confidential information the Proposing Entity requests be held from public view.

### **Additional comments**

PLEASE NOTE – due to a “timeout” issue during upload of large zip files (~38MB), the Proposing Entity split the large “Project analysis attachments” on the General Information page, Supporting Documents section, into two attachments per recommendation of PJM staff. File 1 of 2 is in the “Project analysis attachments” location, and File 2 of 2 is in the “Market efficiency simulation modeling files” location.