

# Subregional RTEP Committee – Western FirstEnergy Supplemental Projects

July 21, 2023

# Needs

Stakeholders must submit any comments within 10 days of this meeting in order to provide time necessary to consider these comments prior to the next phase of the M-3 process

**Need Number:** ATSI-2023-015  
**Process State:** Need Meeting – 07/21/2023

**Supplemental Project Driver(s):**  
*Operational Flexibility and Efficiency*  
*Equipment Performance and Risk*  
*Infrastructure Resilience*

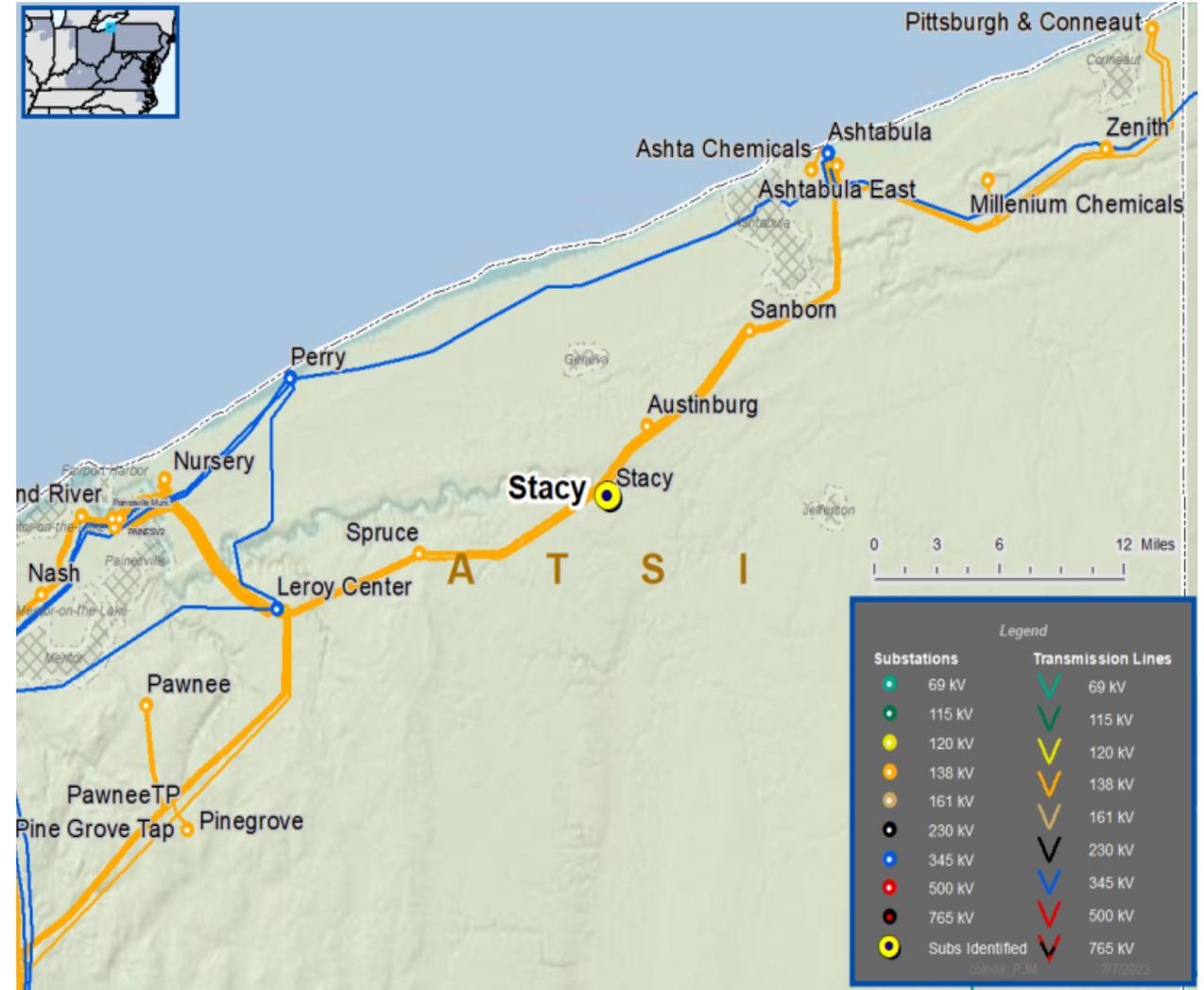
**Specific Assumption Reference(s)**

Global Factors

- System Reliability and Performance
- Load at risk in planning and operational scenarios
- Loss of substation bus adversely affects transmission system performance
- Contingency constrained facilities

**Problem Statement**

- Stacy Substation is fed via Leroy Center – Stacy Q3 138 kV and Ashtabula – Stacy Q3 138 kV Lines and feeds approximately 9,647 customers. Stacy’s non-coincident 2021 and 2022 peak load was approximately 89 MVA and 87 MVA, respectively.
- All load and customers are lost for a common-tower contingency.
- Under peak load conditions, low voltage (potential voltage collapse) occurs at Stacy Substation under several contingency scenarios (n-1, n-1-1, and common mode).
- 36 kV load transfer capability under emergency conditions is very limited in the area



# Solutions

Stakeholders must submit any comments within 10 days of this meeting in order to provide time necessary to consider these comments prior to the next phase of the M-3 process



# ATSI Transmission Zone M-3 Process Carlisle - Woodford 69 kV Line Customer Connection

**Need Number:** ATSI-2023-005  
**Process Stage:** Solution Meeting – 07/21/2023  
**Previously Presented:** Need Meeting – 5/19/2023

**Project Driver(s):**  
*Customer Service*

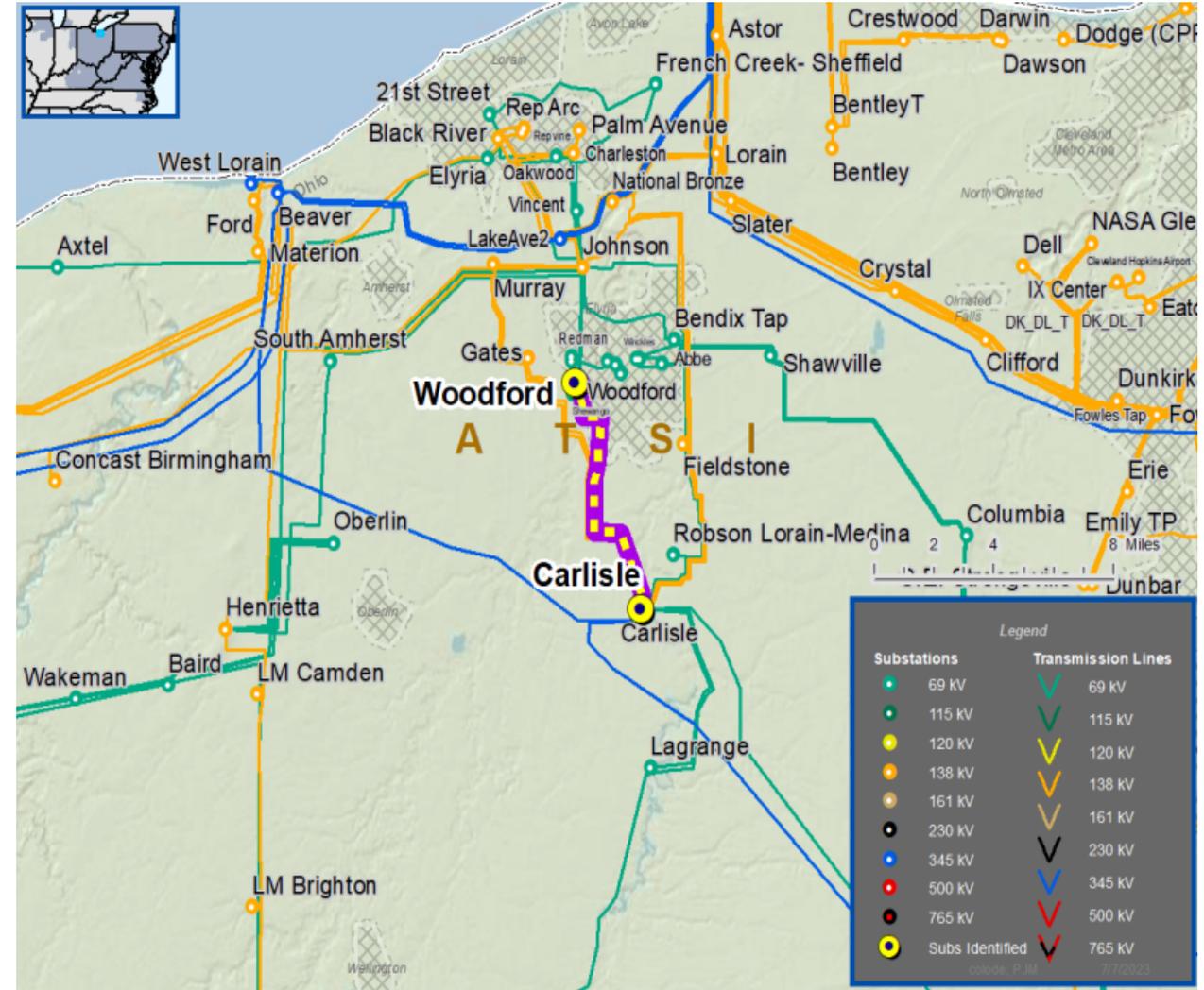
### Specific Assumption Reference(s)

Customer connection request will be evaluated per FirstEnergy’s “Requirements for Transmission Connected Facilities” document and “Transmission Planning Criteria” document.

### Problem Statement

Customer Connection – Customer is requesting to reconnect service at an existing 69 kV delivery point on the Carlisle – Woodford 69 kV Line. The anticipated load of the new customer connection is 6 MVA.

Requested in-service date is 11/17/2023





# ATSI Transmission Zone M-3 Process Carlisle - Woodford 69 kV Line Customer Connection

**Need Number:** ATSI-2023-005  
**Process Stage:** Solution Meeting – 07/21/2023  
**Previously Presented:** Need Meeting – 5/19/2023

**Proposed Solution:**

**69 kV Transmission Line Tap Reconnection**

- Install two main-line SCADA controlled switch
- Install one tap-line SCADA controlled switch

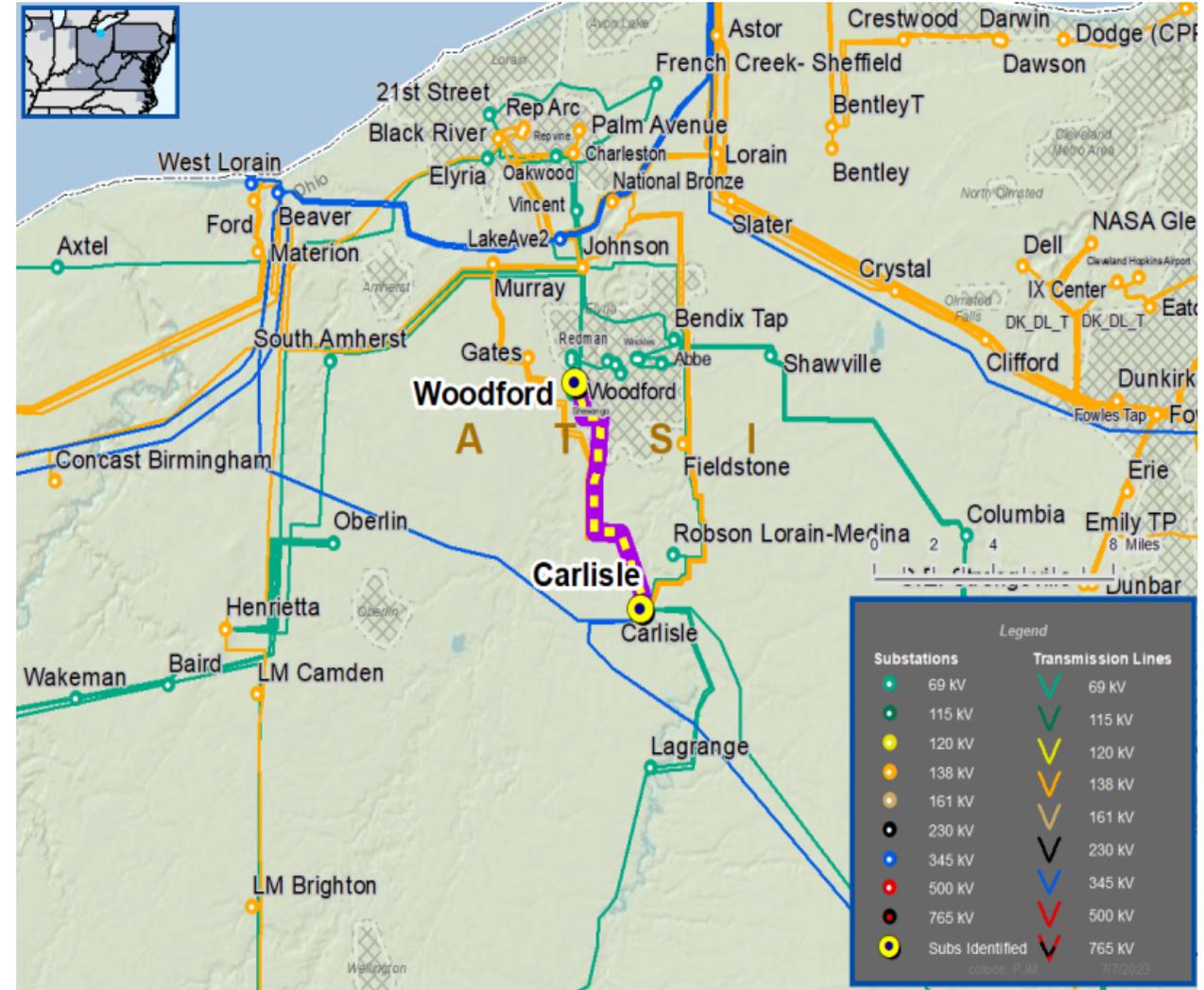
**Alternatives Considered:**

- No feasible alternatives to meet customer’s request

**Estimated Project Cost:** \$1.3M

**Projected In-Service:** 11/17/2023

**Status:** Engineering



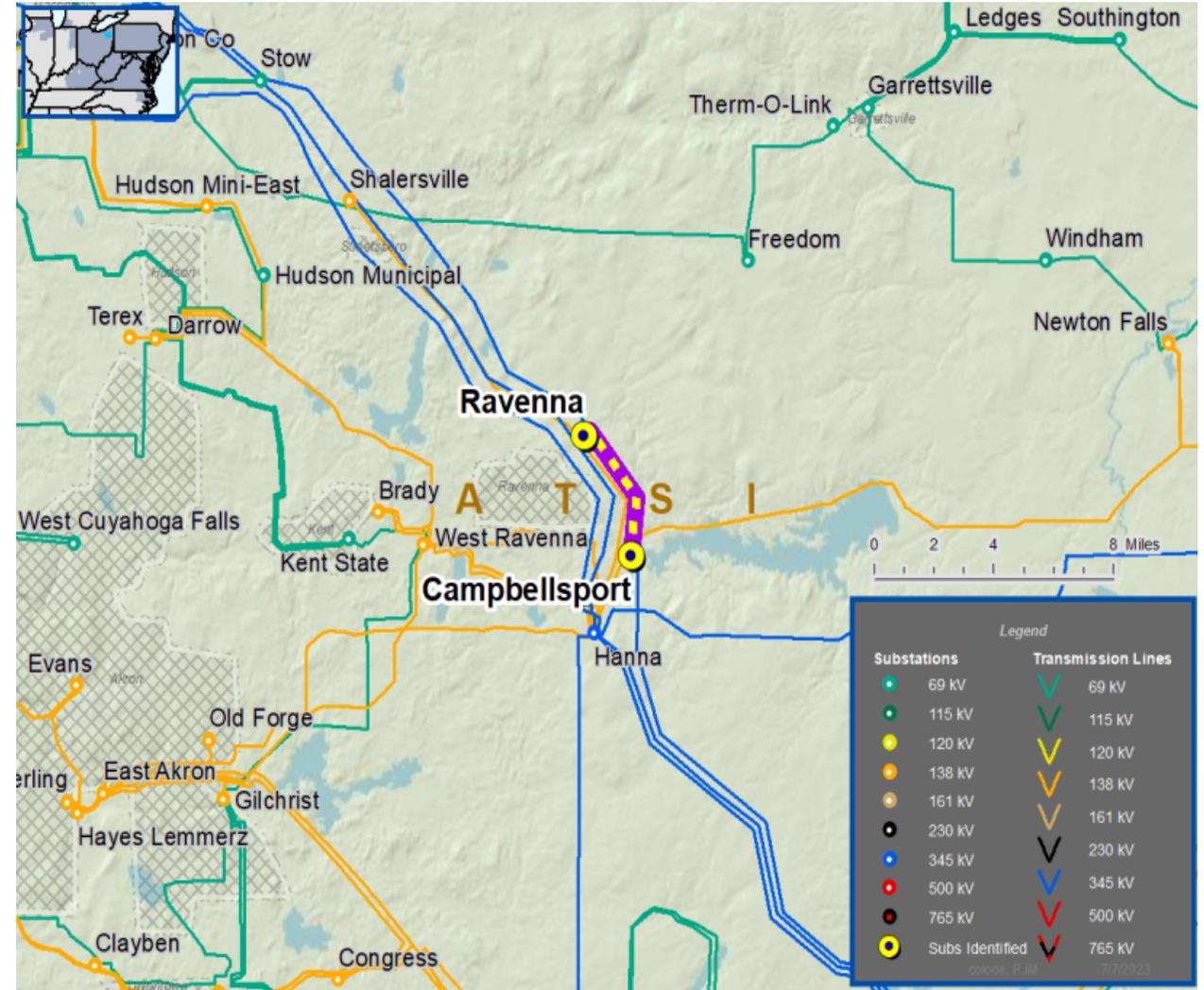
**Need Number:** ATSI-2023-006  
**Process Stage:** Solution Meeting – 07/21/2023  
**Previously Presented:** Need Meeting – 05/19/2023

**Supplemental Project Driver(s):**  
*Customer Service*

**Specific Assumption Reference(s):**  
 New customer connection request will be evaluated per FirstEnergy’s “Requirements for Transmission Connected Facilities” document and “Transmission Planning Criteria” document.

**Problem Statement**  
 New Customer Connection – Customer requested 69 kV transmission service for approximately 9.6 MVA of total load near the Campbellsport – Ravenna No 1 69 kV Line.

**Requested In-Service Date:**  
 April 28, 2024



**Need Number:** ATSI-2023-006  
**Process Stage:** Solution Meeting – 07/21/2023  
**Previously Presented:** Need Meeting – 05/19/2023

**Proposed Solution:**  
**69 kV Transmission Line Tap**

- Install three SCADA controlled load-break switches
- Construct approximately 0.4 miles of transmission line using 477 kcmil ACSR 26/7 conductor from tap point to Customer substation
- Relay settings revised at Ravenna and Campbellsport

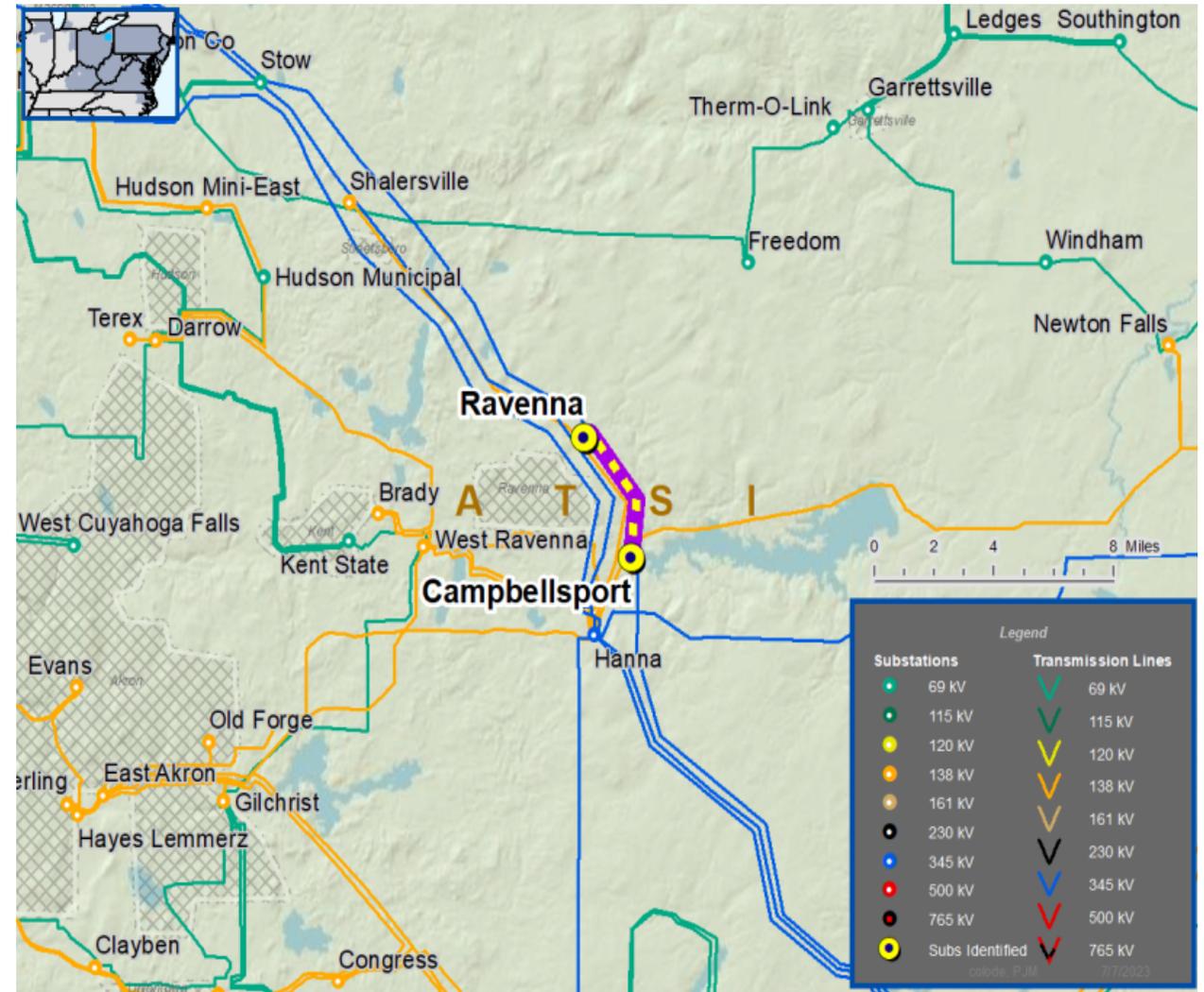
**Alternatives Considered:**

- No alternative solutions

**Estimated Project Cost:** \$0.8M

**Projected In-Service:** 04/08/2024

**Status:** Project Initiation



# Appendix

# High Level M-3 Meeting Schedule

Assumptions	Activity	Timing
	Posting of TO Assumptions Meeting information	20 days before Assumptions Meeting
	Stakeholder comments	10 days after Assumptions Meeting
Needs	Activity	Timing
	TOs and Stakeholders Post Needs Meeting slides	10 days before Needs Meeting
	Stakeholder comments	10 days after Needs Meeting
Solutions	Activity	Timing
	TOs and Stakeholders Post Solutions Meeting slides	10 days before Solutions Meeting
	Stakeholder comments	10 days after Solutions Meeting
Submission of Supplemental Projects & Local Plan	Activity	Timing
	Do No Harm (DNH) analysis for selected solution	Prior to posting selected solution
	Post selected solution(s)	Following completion of DNH analysis
	Stakeholder comments	10 days prior to Local Plan Submission for integration into RTEP
	Local Plan submitted to PJM for integration into RTEP	Following review and consideration of comments received after posting of selected solutions

# Revision History

7/11/2023– V1 – Original version posted to pjm.com