

Subregional RTEP Committee – AMPT Supplemental Projects

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: AMPT-2026-001

Process Stage: Need Meeting 01/16/2026

Project Driver:

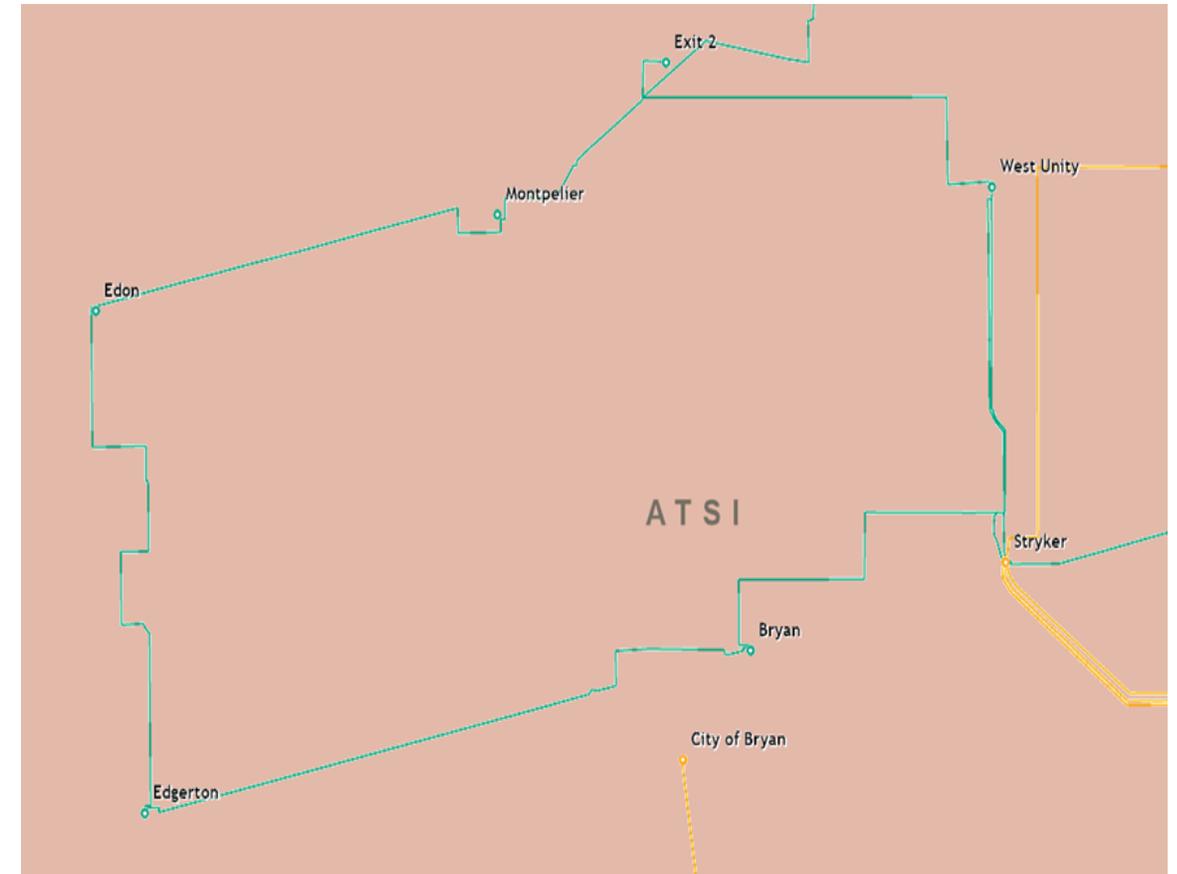
Customer Service
Infrastructure Resilience

Specific Assumption References:

- AMPT Transmission Facilities Interconnection Requirements document
- AMPT 2025 Local Planning Assumptions

Problem Statement:

Edgerton substation is served from FE's Bryan-Edgerton 69 kV circuit. A fault anywhere on this circuit drops all of Edgerton, with no restoration until the line is sectionalized or until repairs are made.



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

Need Number: AMPT-2025-005

Process Stage: Solution Meeting SRRTEP-W - 01/16/2026

Previously Presented: Need Meeting – 06/13/2025

Project Driver:

Equipment Condition/Performance/Risk
Operational Flexibility and Efficiency

Specific Assumption References:

- AMPT's Transmission Facilities Interconnection Requirements document
- AMPT Transmission 2025 Local Planning Assumptions

Problem Statement:

At AMPT's Niles Central 138 kV substation, a single breaker failure of the 138 kV tiebreaker results in the loss of all load within the Niles municipality. Existing legacy electromechanical relays are in need of replacement to reduce the risk of misoperations. The dead-end foundations for the 138 kV lines at Niles Central substation are corroding and at risk of failure.

Niles Central serves 63 MW of load, approximately 12,600 customers. The sub was constructed in 1975, and the R&C facilities are 50 years old.

AMPT Transmission Zone M3 Process Niles Central 138 kV substation





AMPT Transmission Zone M3 Process Niles Central 138 kV substation

Need Number: AMPT-2025-005

Process Stage: Solution Meeting SRRTEP-W - 01/16/2026

Proposed Solution:

Niles Central Substation:

- Reconfigure the existing Niles Central 138 kV station into a four (4) circuit breaker ring bus by installing one (1) new 138 kV circuit breaker and relocate the existing 138 kV CB "B-20" to create a new line terminal towards Niles (ATSI).
- Expand the two existing in-line bus configurations to create a ring bus configuration.
- Install five (5) new 138 kV circuit switchers on the high-side of the distribution transformers to ensure a transformer fault does not take out a portion of the 138 kV ring bus.
- Demolish switches, busses, and trenching due to age of these pieces of equipment.
- Upgrade the vintage protection systems (including new control house) to meet modern utility standards. **(Estimated Cost: \$11.7 M)**

McDonald Steel - Niles Central 138 kV Line:

- Reroute the existing McDonald Steel - Niles Central 138 kV line to terminate in a new position in the Niles Central 138 kV ring bus.
- Upgrade remote end relays and/or relay settings. **(Estimated Cost: \$2.4 M)**

Alternatives Considered:

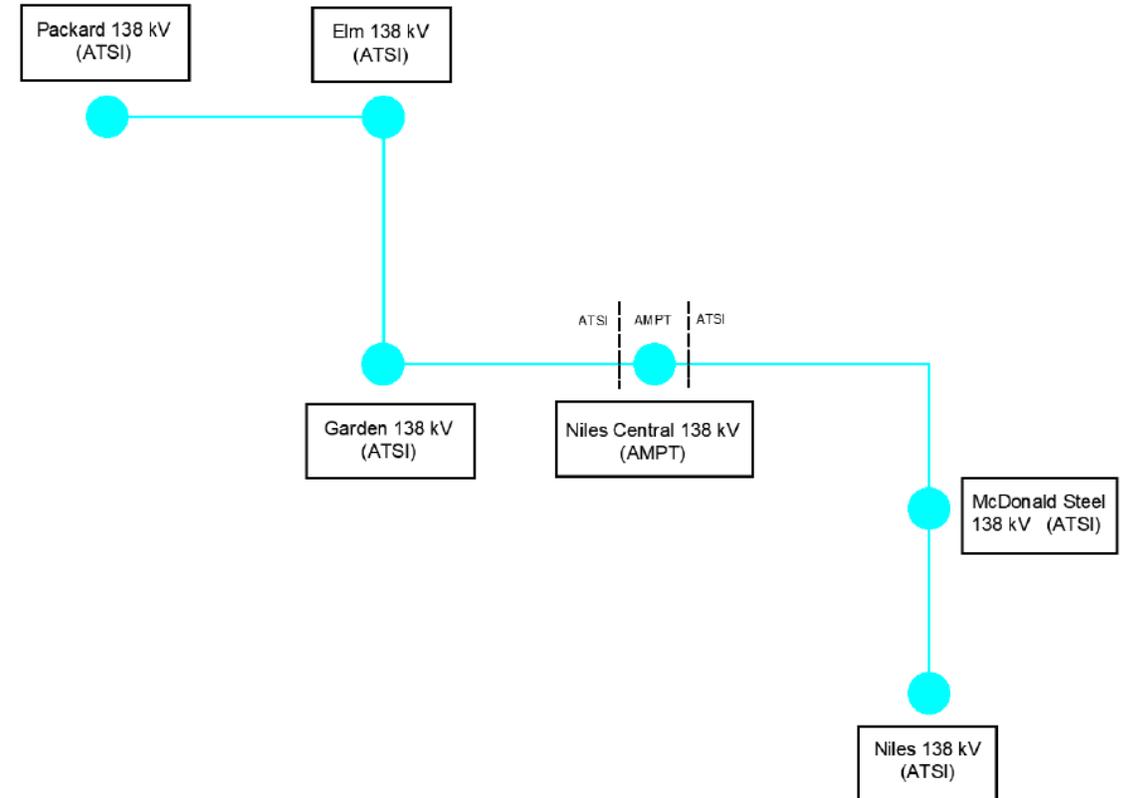
Rebuild entire 138 kV station as a new greenfield station. Not chosen due to cost.

Estimated Project Cost: \$14.1M

Projected In-Service: 08/01/2028

Project Status: Pre-Engineering

Model: 2024 RTEP model for 2029 Summer & Winter (50/50)



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

01/06/2026 – V1 – Original version posted to pjm.com