# Sub Regional RTEP Committee: Western AMPT Supplemental Projects

## AMPT Projects in ATSI Transmission Zone M3 Process

City of Oberlin, Ohio

Cancelation of Need: AMPT-2022-003

Need Number: AMPT-2022-003

**Process Stage: Need Meeting** 

Supplemental Project Driver(s): Operational Flexibility & Efficiency

Specific Assumption Reference(s): Slide 8 of the AMPT 2022 Local Planning

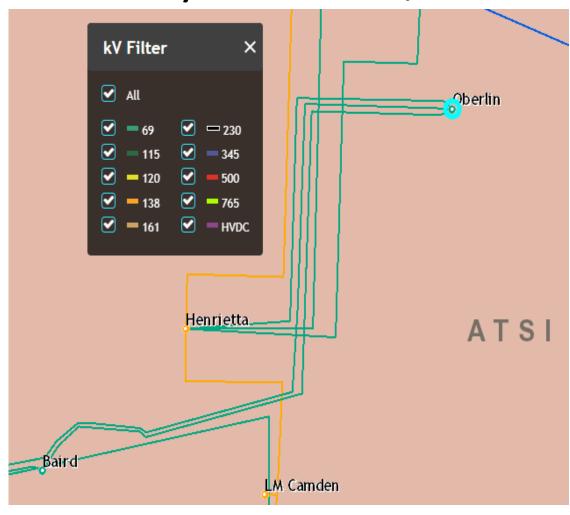
Assumptions.

#### **Problem Statement:**

The City of Oberlin receives its power supply from two ATSI 69 kV transmission lines (Oberlin Shinrock and Henrietta Oberlin), which share the same tower structures for 1.6 miles. A tower outage presents a single point of failure that jeopardizes reliability for the City.

The current peak load at Pioneer is 22 MW. During fault or maintenance situations which requires taking out the transmission tower, the City of Oberlin remains out of power for a considerable amount of time. There is no ability to transfer load away via distribution. The City of Oberlin has requested a new delivery point for reliability.

**Reason for Cancellation:** The City of Oberlin is working with ATSI to address the identified reliability concern.



### Changes for Existing Supplemental Projects

## AMPT Projects in ATSI Transmission Zone: Supplemental Amherst, OH

Previously Presented: 2/18/2022, 11/19/2021 SRRTEP

#### **Reason for Revision:**

Design was adjusted to allow for a 50kA general Short Circuit Rating with breaker specifications being increased to 63kA. This required re-work of the transmission line design

Need Number: AMPT-2021-005

**Process Stage:** Submission of Supplemental Project for Inclusion in the Local Plan

**Previously Presented:** 

Solution Meeting – 2/18/2022, Need Meeting – 11/19/2021

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

**Specific Assumption Reference(s):** AMPT Transmission Facilities Interconnection Requirements

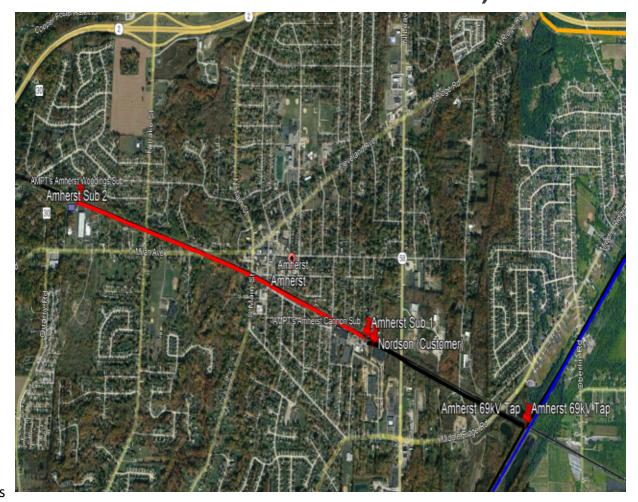
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#### **Problem Statement:**

AMPT's Amherst Tap is an approximately 1.85 mile segment of a 2.85 mile radial tap supplied from ATSI's Henrietta-Johnson 69 kV line. Two stations are served off the Tap — Woodings and Cannon.

The City of Amherst has requested a 2<sup>nd</sup> supply to support the load (approximately 28 MVA). The radial supply presents a single point of failure that jeopardizes reliability for the City.

AMPT's Transmission Facilities Interconnection Requirements specify looped facilities for loads exceeding 5 MVA or 35 MW-mile thresholds.



## AMPT Projects in ATSI Transmission Zone: Supplemental Amherst, OH

Need Number: AMPT-2021-005

**Process Stage:** Submission of Supplemental Project for Inclusion in the Local Plan **Previously Presented:** Solution Meeting – 2/18/2022, Need Meeting – 11/19/2021

Supplemental Project Driver(s): Customer Service

#### **Proposed Solution:**

AMPT Identified Scope (\$14 M)

- Construct a greenfield 138 kV double circuit line for approximately 0.4 miles using 954 54/7 kcmil ACSS conductor and tap into the existing Beaver-Black River (ATSI) 138 kV line. (\$1.53 M)
- At Woodings (Amherst Sub #2) 69/12 kV Substation Expand the sub with the installation of three (3) 138 kV circuit breakers; Install one (1) 138/69/12kV 130 MVA transformer; upgrade the 69 kV bus to 2000A, install two (2) 69 kV circuit breakers (\$8.8 M)
- At Cannon (Sub #1) 69/12 kV Sub Install one (1) 69 kV breaker towards Nordson; Replace 600A bus disc switch with one rated at 1200A (\$0.92 M)

#### FE Identified Scope (2.8 M)

- Design/Construct Tap Structure(s) at tap location
- Replace relays at Black River substation
- Complete fiber connection at Beaver and Black River substation

#### **Alternatives Considered:**

Rebuild existing 69 kV line between Woodings and Cannon substation to 69 kV double circuit configuration.

• This option was not selected as a tower outage would still interrupt all the load in the area, temporary facilities would be required during construction, and limited additional ROW.

#### **Ancillary Benefits:**

This project to be sequenced prior to FE's project to build the new Dewey 69 kV Substation (s1948). This project will accommodate that work to be completed without the need for temporary facilities.

Total Estimated Transmission Cost: \$11.25 M \$16.8 M (includes \$2.8M of FE scope)

Projected In-Service: 12/31/2023
Supplemental Project ID: s2671

**Project Status:** Engineering



## Appendix

## High Level M-3 Meeting Schedule

<b>Assum</b>	ptions
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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**

11/08/2022 – V1 – Original version posted to pjm.com