

Subregional RTEP Committee – Western FirstEnergy Supplemental Projects

March 17, 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: APS-2023-004

Process Stage: Need Meeting 03/17/2023

Project Driver:

Equipment Material Condition, Performance and Risk

Specific Assumption Reference:

Line Condition Rebuild/Replacement

- Age/condition of wood pole transmission line structures
- System characteristics including lightning and grounding performance, galloping overlap, insulation coordination, structural capacity needs, clearance margins, and future needs (e.g., fiber path)

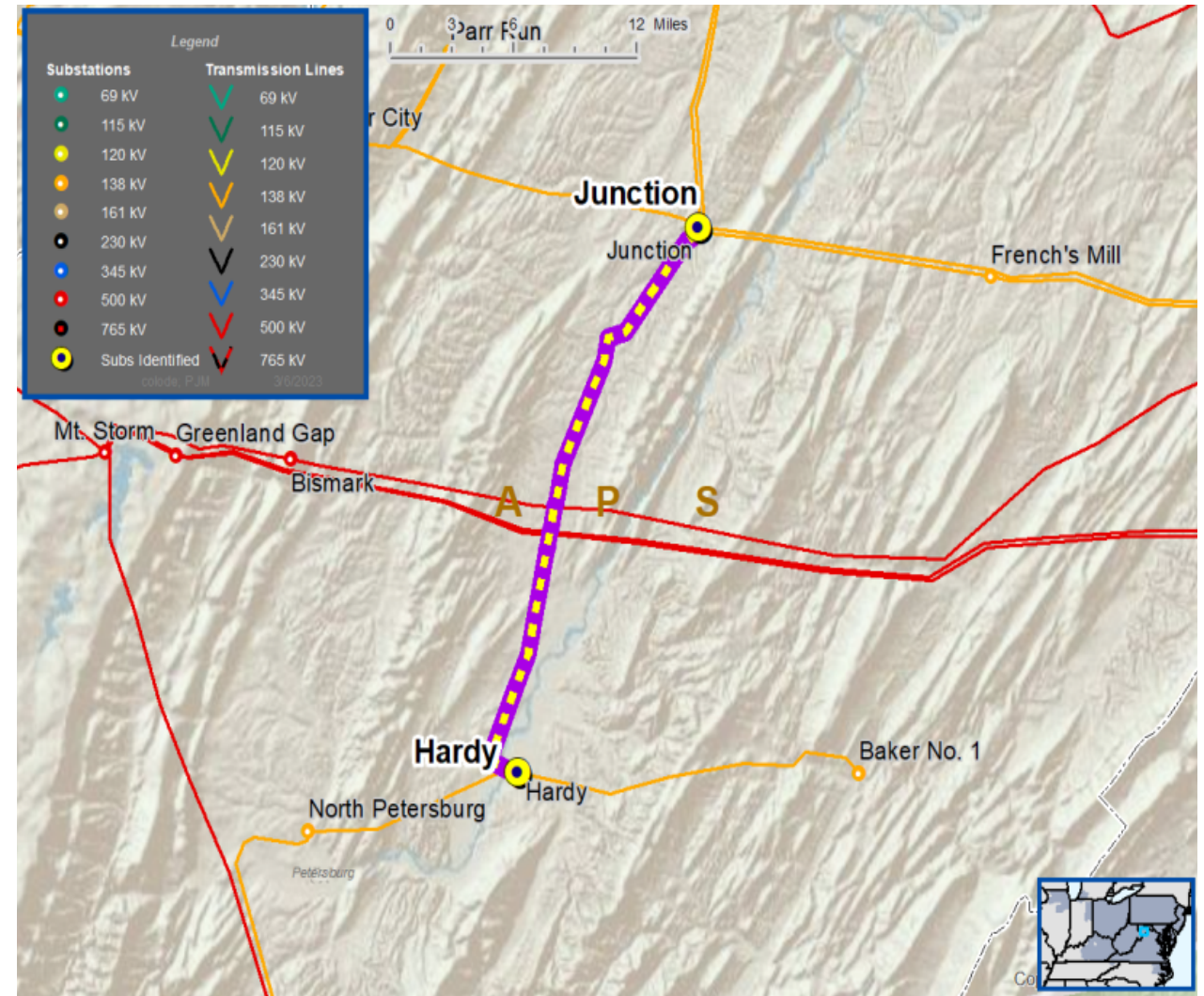
System Performance Projects Global Factors

- Substation/line equipment limits

Problem Statement:

The Hardy – Junction 138 kV Line is exhibiting deterioration

- Total line distance is approximately 21.5 miles.



Need Number: APS-2023-005

Process Stage: Need Meeting 03/17/2023

Project Driver:

Equipment Material Condition, Performance and Risk

Specific Assumption Reference:

Line Condition Rebuild/Replacement

- Age/condition of wood pole transmission line structures
- System characteristics including lightning and grounding performance, galloping overlap, insulation coordination, structural capacity needs, clearance margins, and future needs (e.g., fiber path)

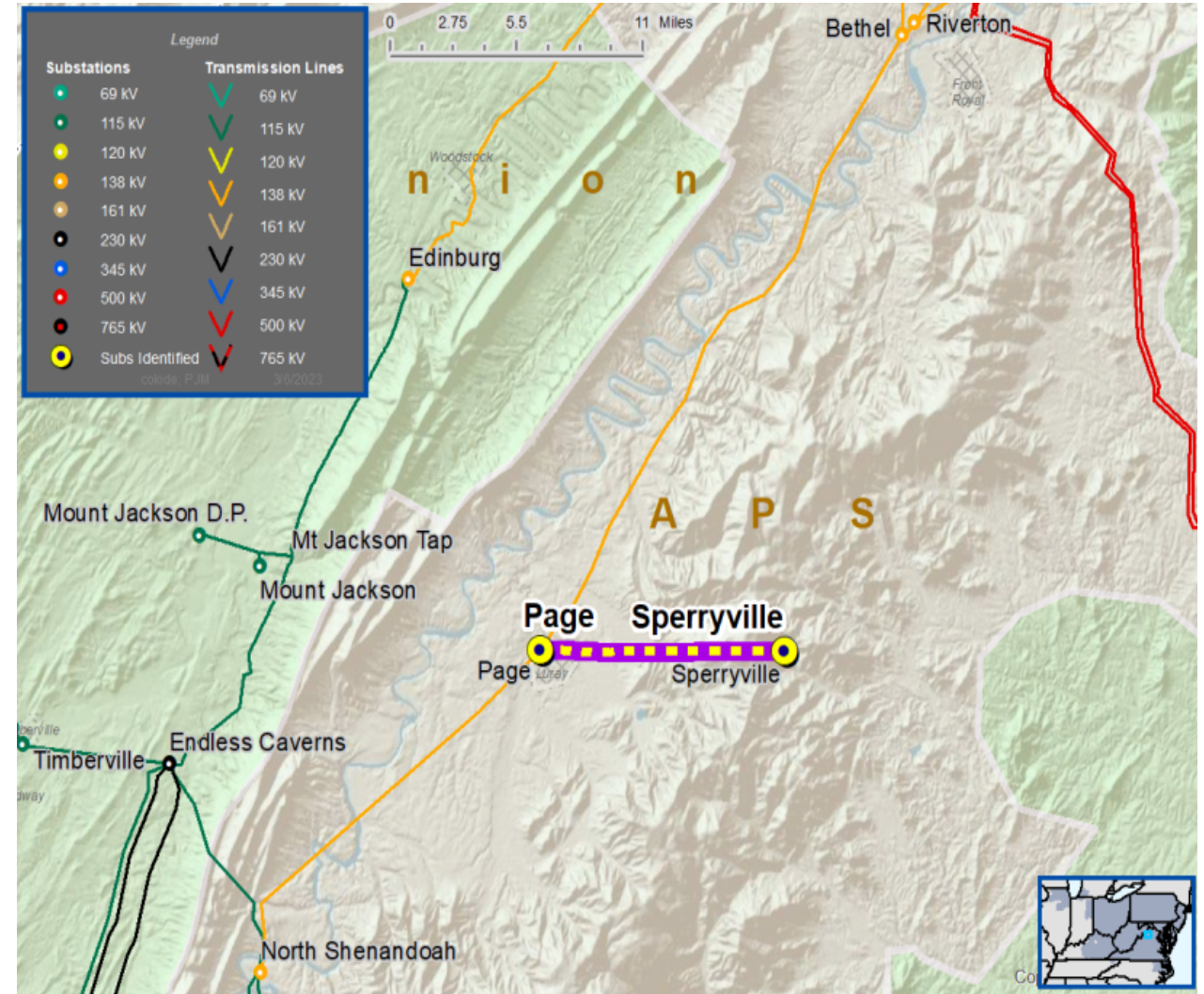
System Performance Projects Global Factors

- Substation/line equipment limits

Problem Statement:

The Page – Sperryville 138 kV Line is exhibiting deterioration and has significant outage history

- Total line distance is approximately 13.8 miles.
- There is significant exposure to unplanned outages due to equipment failures and off ROW trees. Since 2014, there have been 15 outages including 5 equipment failures and 7 off ROW fall-ins
- Existing equipment is approaching expected end of life
- The terrain is extremely challenging, limiting access and extending outage durations to the supported municipal interconnection. The locations and design of structures further impedes repairs.



Solution

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: APS-2021-011

Process Stage: Solution Meeting 03/17/2023

Previously Presented: Need Meeting 06/15/2021

Project Driver:

Customer Service

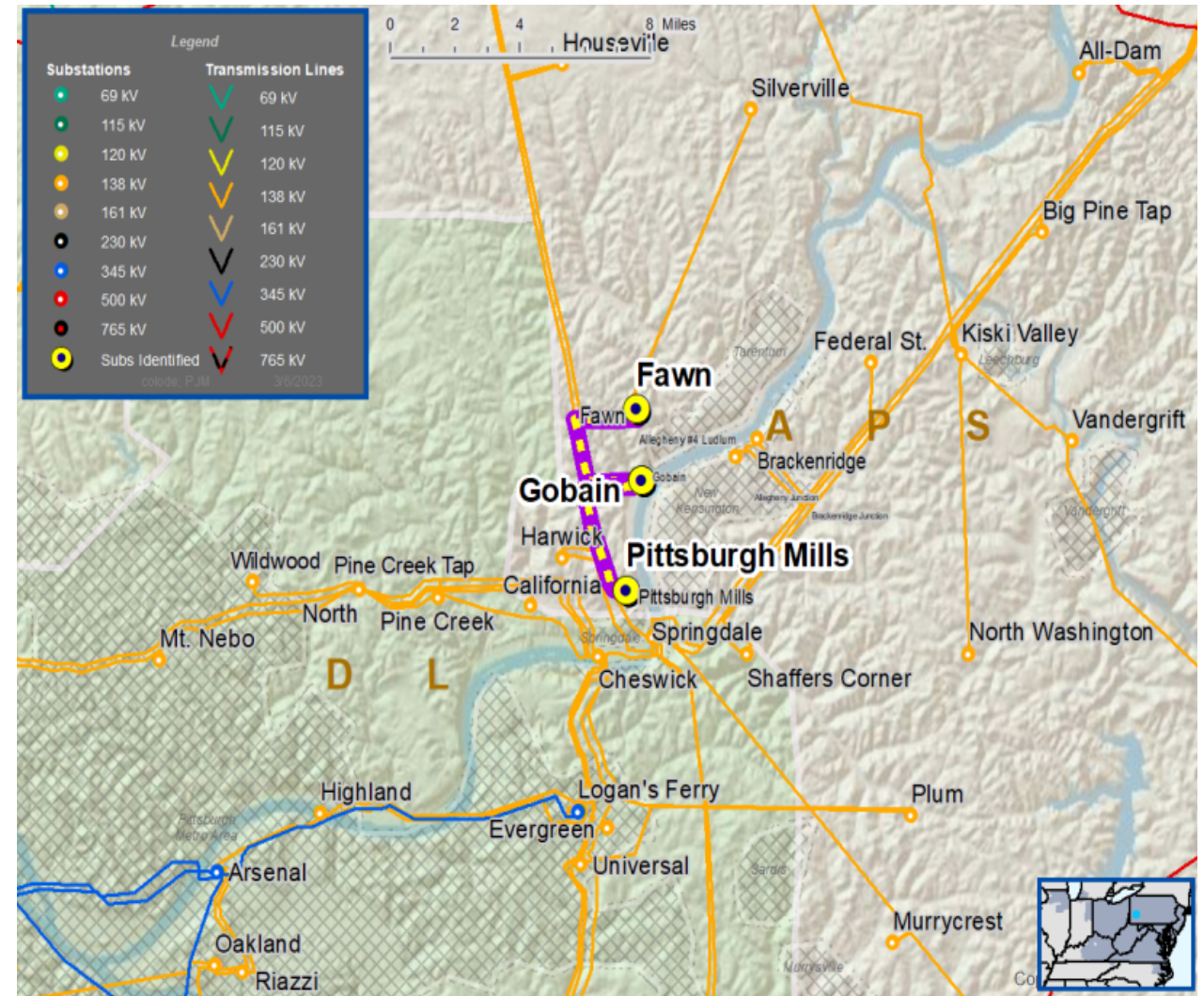
Specific Assumption Reference:

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

Problem Statement:

New Customer Connection – A customer requested 138 kV service to support 11 MVA of additional load at a site near Gobain 138 kV substation (New Kensington, PA) in the West Penn Power service territory.

Requested in-service date is 02/28/2023



Need Number: APS-2021-011

Process Stage: Solution Meeting 03/17/2023

Proposed Solution:

- Extend the Gobain 138 kV bus to provide a connection for a new distribution transformer

Alternatives Considered:

- Serve the customer via the 25 kV distribution system

Anticipated Rating Changes:

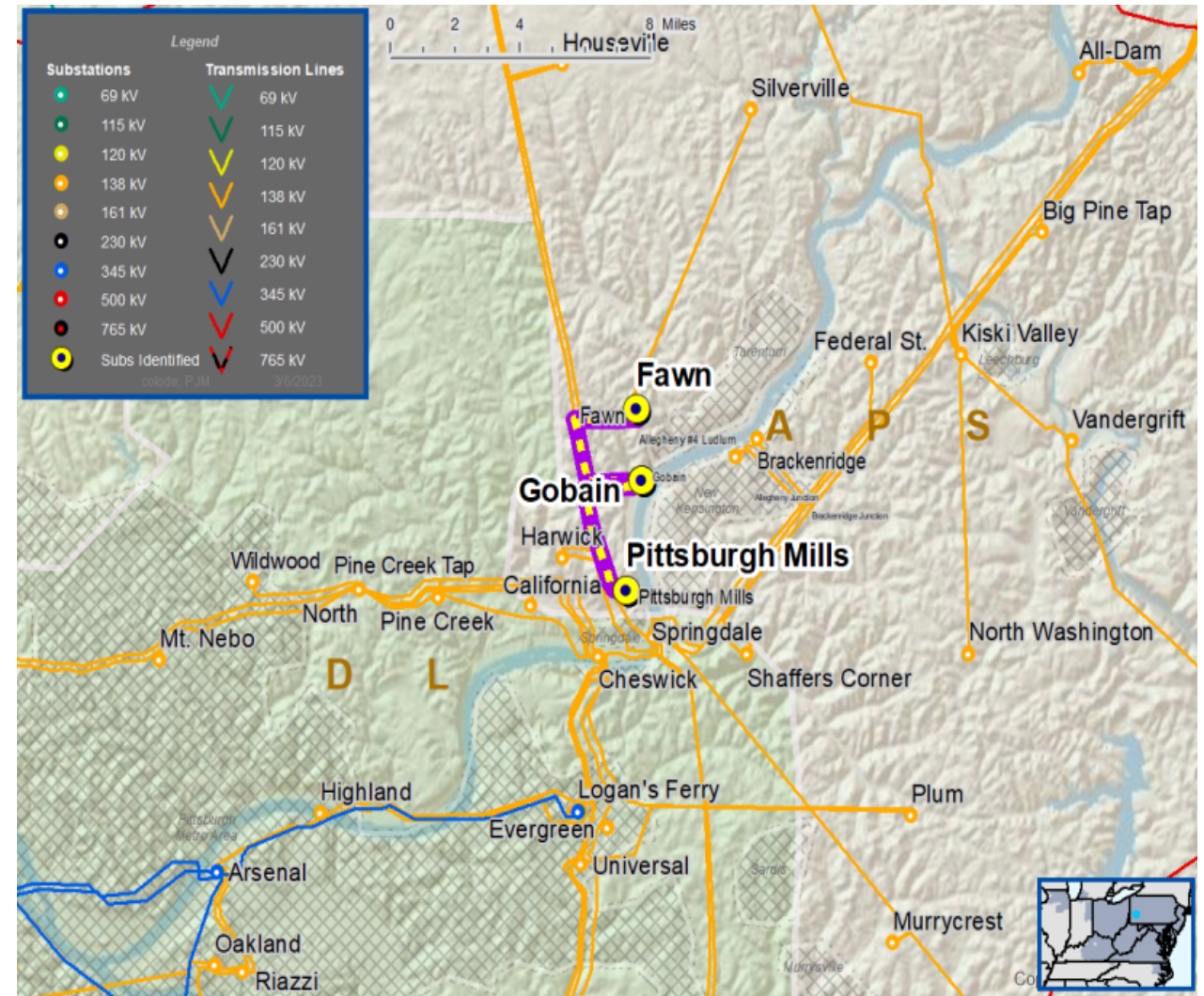
- None

Estimated Project Cost: \$0.5M

Projected In-Service: 06/16/2023

Project Status: Engineering

Model: 2020 RTEP model for 2025 Summer (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

3/xx/2022– V1 – Original version posted to pjm.com