

Subregional RTEP Committee – Western FirstEnergy Supplemental Projects

April 16, 2021

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: APS-2021-001

Process State: Solution Meeting 4/16/2021

Previously Presented: Need Meeting 2/17/2021

Project Driver:

*Equipment Material Condition, Performance and Risk
Operational Flexibility and Efficiency*

Specific Assumption Reference:

Global Factors

- System reliability and performance

Add/Expand Bus Configuration

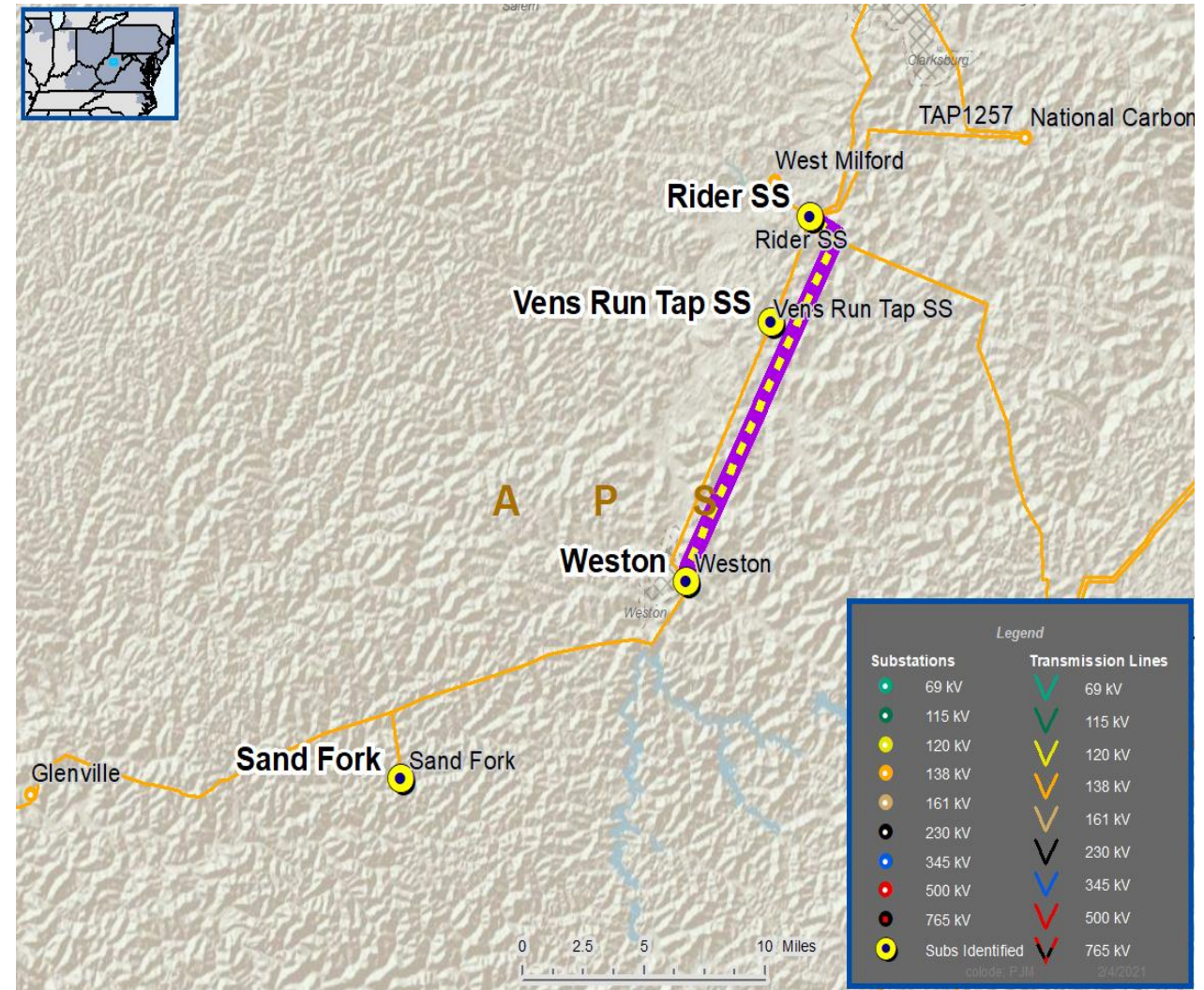
- Capability to perform substation maintenance

Permanent Reactive Device Installations

- Non-BES transmission systems facilities evaluation identifies the need for a permanent reactive device

Problem Statement:

Due to the load addition at Vens Run (s2293), a maintenance outage of the Rider to Vens Run 138 kV line followed by the loss of the Weston 138 kV capacitor results in low voltage at Weston, Vens Run, and Sand Fork 138 kV substations (0.89 p.u.).



Need Number: APS-2021-001

Process State: Solution Meeting 4/16/2021

Previously Presented: Need Meeting 2/17/2021

Proposed Solution:

At Glenville SS:

- Extend the 138 kV bus
- Install 26.4 MVAR 138 kV Capacitor
- Install 138 kV Capacitor switcher

Alternatives Considered:

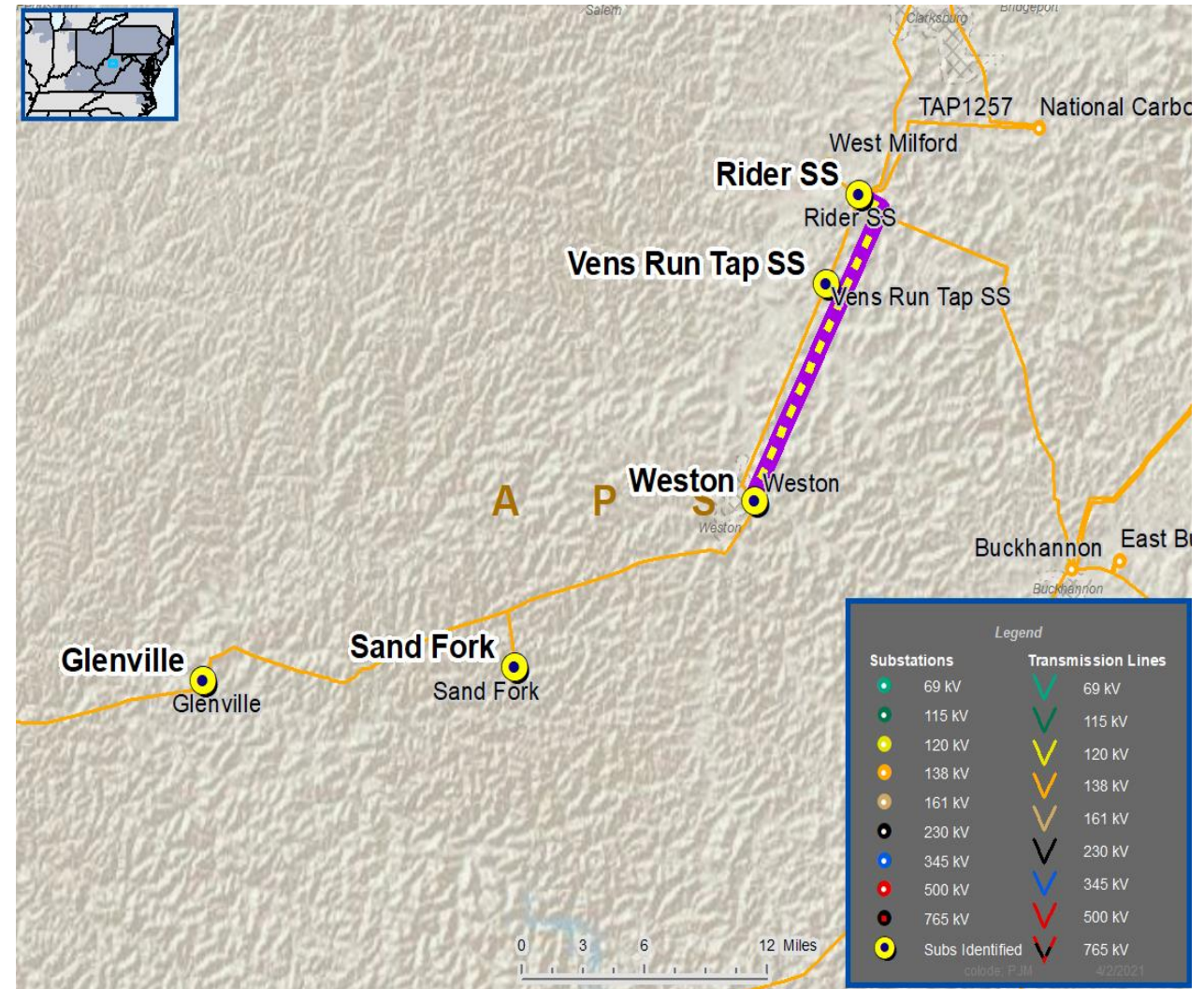
- None

Estimated Project Cost: \$1.3M

Projected In-Service: 6/01/2021

Project Status: Conceptual

Model: 2020 RTEP model for 2025 Summer (50/50)



Need Number: APS-2021-002

Process State: Solution Meeting 4/16/2021

Previously Presented: Need Meeting 2/17/2021

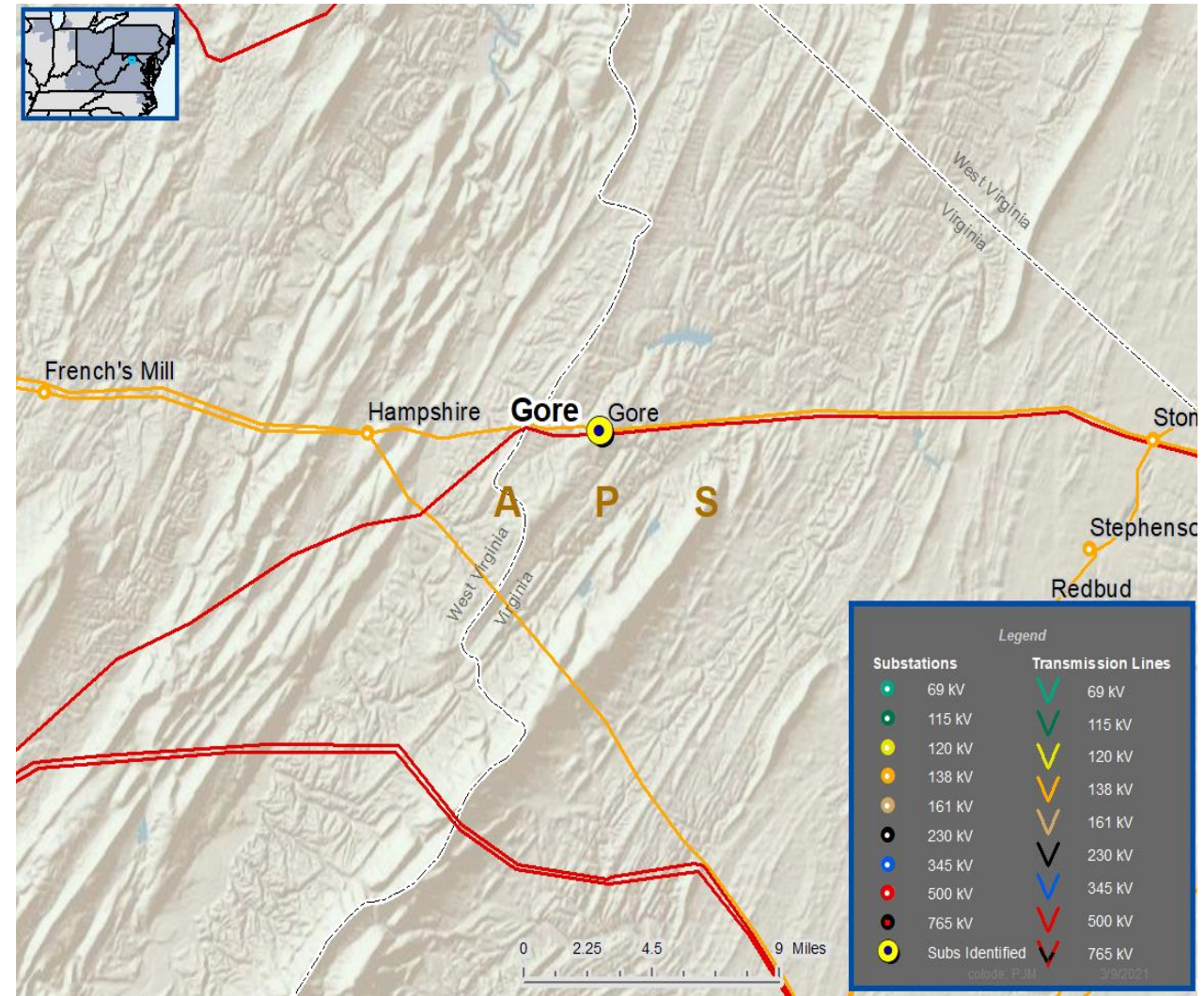
Project Driver:
Customer Service

Specific Assumption Reference:

Existing wholesale customer connection request will be evaluated per FirstEnergy's "Requirements for Transmission Connected Facilities" document and "Transmission Planning Criteria" document.

Problem Statement:

Existing Wholesale Customer Connection – Gore substation expansion to accommodate existing wholesale customer station upgrades.



Need Number: APS-2021-002

Process State: Solution Meeting 4/16/2021

Previously Presented: Need Meeting 2/17/2021

Proposed Solution:

At Gore:

- Install 138 kV breaker on the Stonewall terminal
- Remove existing Stonewall 138 kV line switch
- Adjust relaying

At Stonewall

- Adjust relaying

Alternatives Considered:

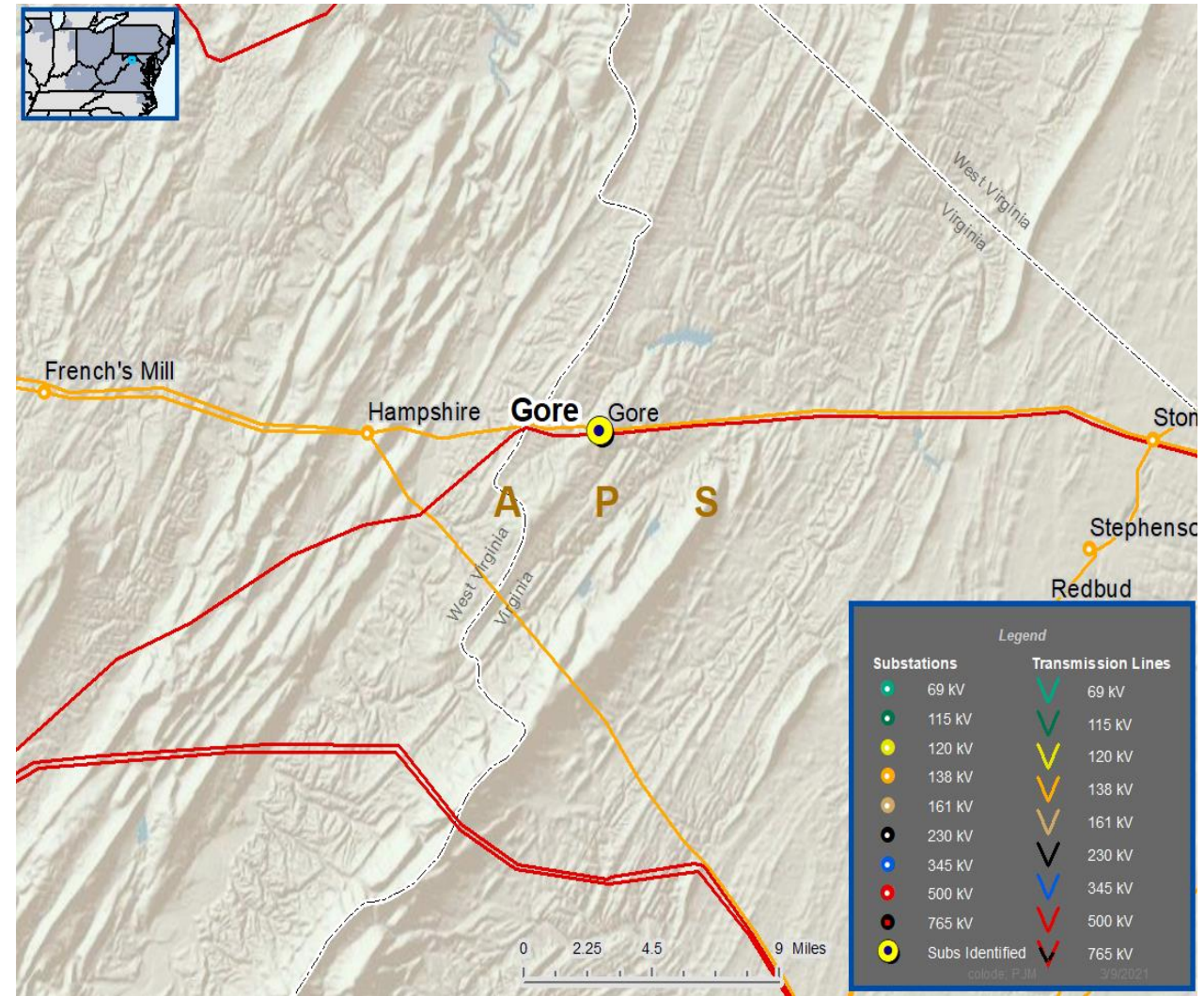
- None

Estimated Project Cost: \$0.0M (Reimbursable)

Projected In-Service: 5/01/2021

Project Status: In Construction

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

04/06/2021 – V1 – Original version posted to pjm.com