

Transmission Expansion Advisory Committee –FirstEnergy (Penelec) Supplemental Projects

June 2, 2020

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: PN-2020-003

Process Stage: Solution Meeting 6/2/2020

Previously Presented:

Need Meeting 4/14/2020

Project Driver:

Equipment Material Condition, Performance and Risk

Specific Assumption Reference:

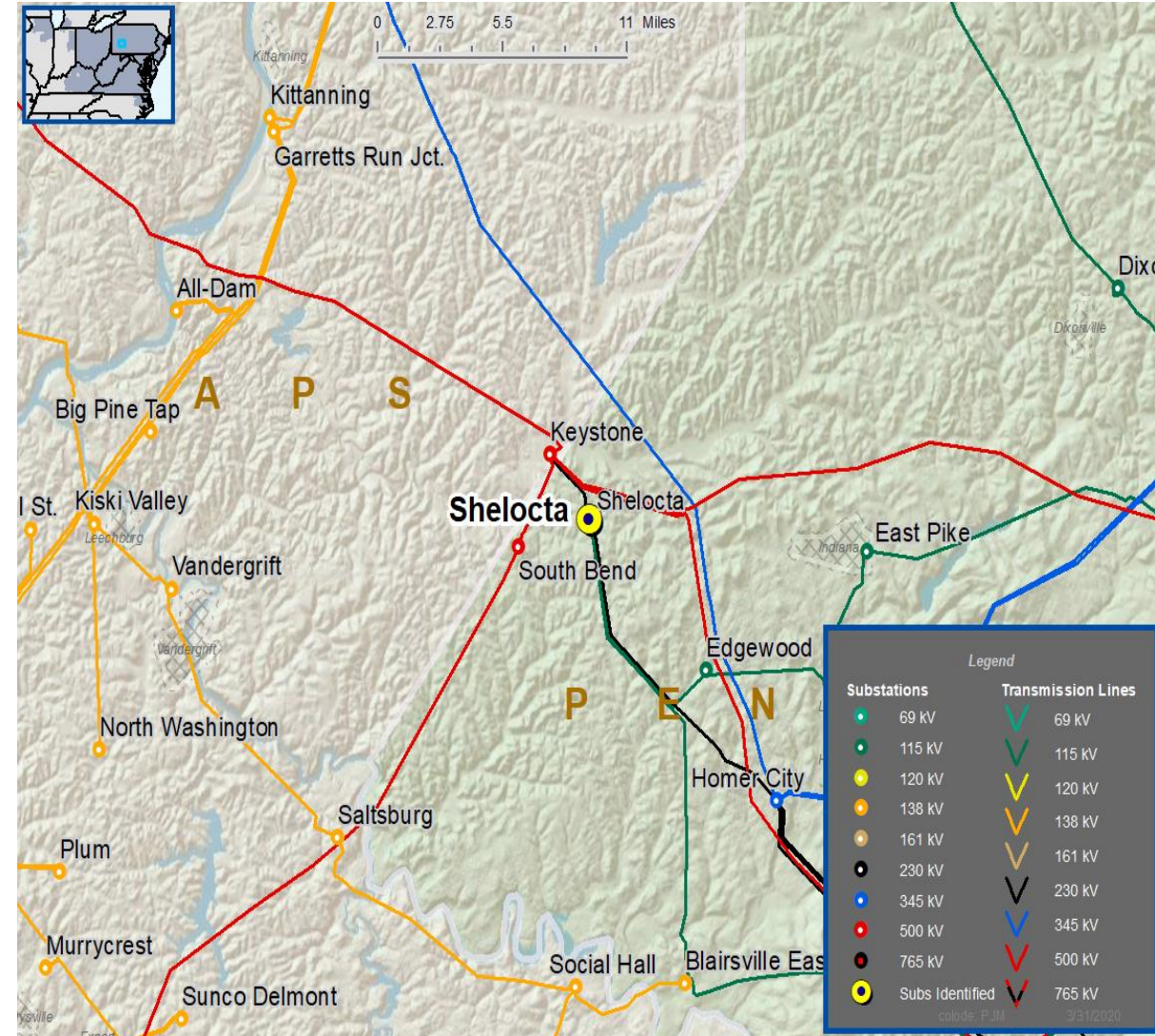
Add/Expand Bus Configuration

- Eliminate simultaneous outages to multiple networked elements

Problem Statement:

The Shelocta 230 kV bus is a three terminal line consisting of two 230 kV lines and a 230/115 kV transformer.

An N-1 outage results in the loss of all three networked elements.



Need Number: PN-2020-003

Process Stage: Solution Meeting 6/2/2020

Proposed Solution:

Shelocta 230 kV Substation:

- Construct three breaker ring bus

Keystone 230 kV Substation:

- Replace line trap

Homer City 230 kV Substation:

- Replace line trap

Transmission Line Ratings:

- Keystone – Shelocta 230 kV Line
 - Before Proposed Solution: 809 / 923 MVA (SN/SE)
 - After Proposed Solution: 809 / 980 MVA (SN/SE)
- Homer City – Shelocta 230 kV Line:
 - Before Proposed Solution: 809 / 923 MVA (SN/SE)
 - After Proposed Solution: 809 / 980 MVA (SN/SE)

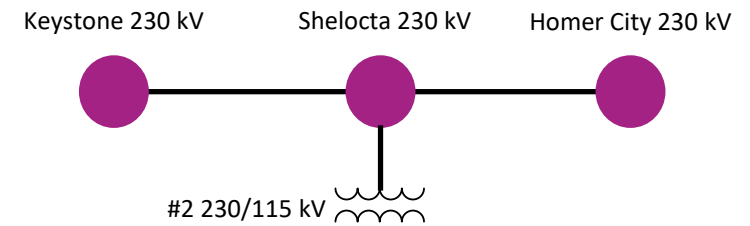
Alternatives Considered: None

Estimated Project Cost: \$6.7M

Projected In-Service: 6/1/2022

Project Status: Conceptual

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



Legend	
500 kV	
345 kV	
230 kV	
138 kV	
115 kV	
69 kV	
46 kV	
34.5 kV	
23 kV	
New	

Questions?



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

5/21/2020 – V1 – Original version posted to pjm.com