

Sub Regional RTEP Committee: Western Dayton Supplemental Projects

February 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: Dayton-2023-001

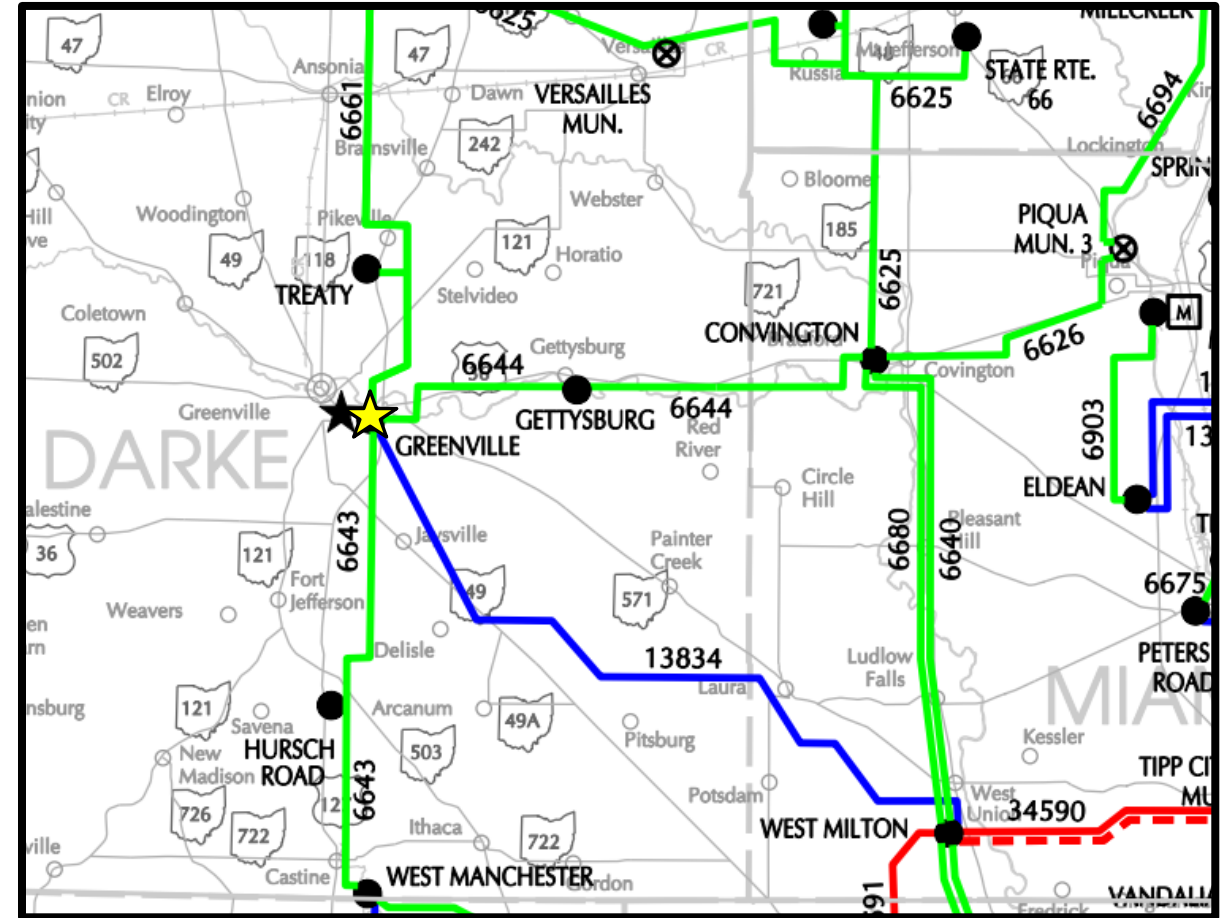
Process Stage: Need Meeting 2/17/2023

Project Driver: Reliability

Specific Assumption Reference: Dayton Local Plan Assumptions (Slide 5)

Problem Statement:

- Dayton and PJM planning have worked on local stability studies and identified an issue with the clearing time associated with certain Greenville 69kV circuit breakers.
- Critical clearing times for faults at Greenville 69kV resulting in additional loss of Greenville-West Milton 138kV and Greenville 69/12kV Bk-3 is approximately 6.5 cycles.
- The current breakers at Greenville are older oil breakers with a 7-cycle clearing time, Dayton’s standard breaker is able to clear faults in 5 cycles.



Need Number: Dayton-2023-002

Process Stage: Submission of Supplemental Need, 2/17/2023

Project Driver: Equipment Material Condition, Performance and Risk; Operational Flexibility and Efficiency

Specific Assumption Reference: Dayton Local Plan Assumptions (Slide 5)

Problem Statement:

- Greenfield sub is currently a two-breaker substation that services two transmission lines (6662 and 6649) and two distribution delivery points
 - The existing breakers at Greenfield are legacy oil breakers from the 1950's that have a history of poor reliability
 - Currently a single breaker failure at Greenfield sub can result in the loss of one transmission line and service to both distribution delivery points
- AES Ohio's 6649 transmission line is 13.43-mile 69kV line built in 1967 with wood poles.
 - This line has a history of poor reliability
 - There have been a total of 10 permanent outages over the last 5 years
- AES Ohio's 6662 transmission line is 4.56-mile 69kV line built in 1967 with wood poles.

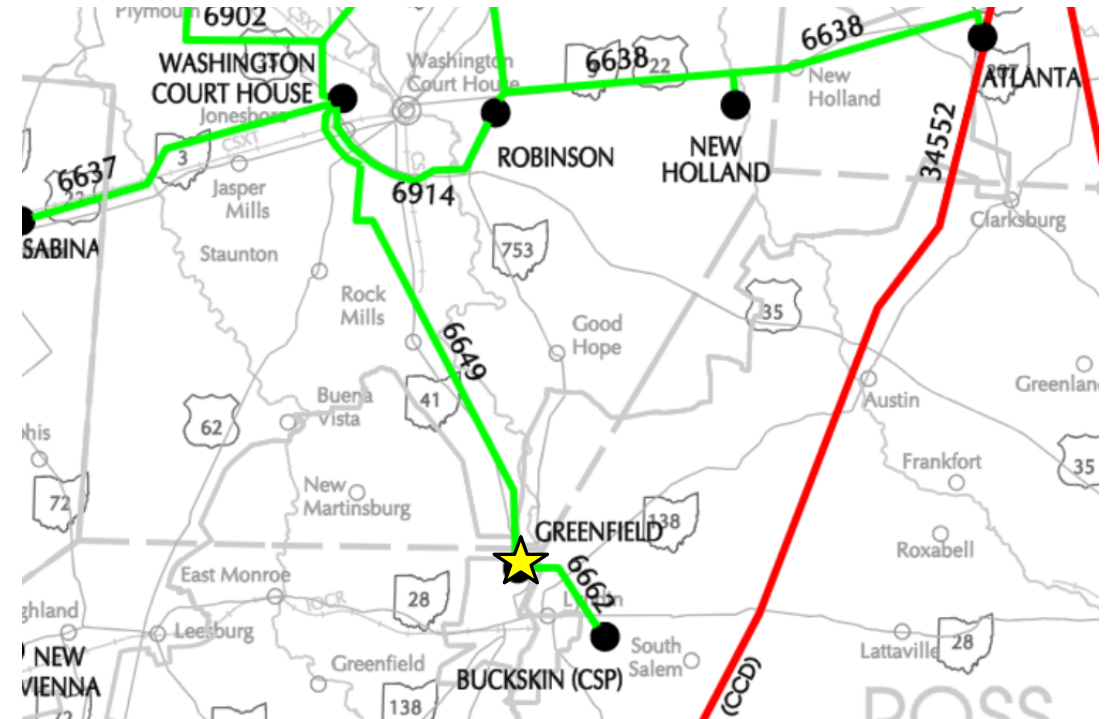
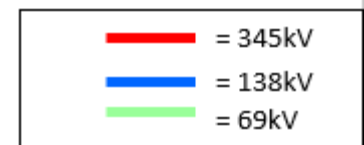


Figure 1 : Area Map



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

2/7/2022 – V1 – Original version posted to pjm.com