

Subregional RTEP Committee - Western FirstEnergy Supplemental Projects

June 13, 2025

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

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Need #	Transmission Line / Substation Locations	Existing Line Rating (SN / SE / WN / WE)	Existing Conductor Rating (SN / SE / WN / WE)
APS-2024-098	Bethel Park – St Clair 138 kV Line	292 / 306 / 306 / 306	308 / 376 / 349 / 445
APS-2024-099	Cherry Run – Warfordsburg 138 kV Line	299 / 360 / 349 / 422	308 / 376 / 349 / 445
	Warfordsburg – McConnellsburg 138 kV Line	299 / 358 / 349 / 410	308 / 376 / 349 / 445
APS-2024-100	Harwick – Houseville 138 kV Line	284 / 287 / 287 / 287	284 / 351 / 336 / 432
APS-2025-015	Tidd - Carnegie 138 kV Line	187 / 240 / 247 / 270	221 / 268 / 250 / 317
	Carnegie - Weirton 138 kV Line	221 / 268 / 250 / 306	221 / 268 / 250 / 317

Proposed Solution:

Need #	Transmission Line / Substation Locations	New MVA Line Rating (SN / SE / WN / WE)	Scope of Work	Estimated Cost (\$ M)	Target ISD
APS-2024-098	Bethel Park – St Clair 138 kV Line	308 / 376 / 349 / 445	<ul style="list-style-type: none"> At Bethel Park Substation, replace circuit breaker, disconnect switches, line turner and coax, CCVT, substation conductor, metering, line trap and relaying At St Clair Substation, replace circuit breaker, disconnect switches, line turner and coax, CCVT, substation and bus conductors, line trap and relaying 	\$4.5	7/27/2029
APS-2024-099	Cherry Run – Warfordsburg 138 kV Line	308 / 376 / 349 / 445	<ul style="list-style-type: none"> At Cherry Run Substation, replace circuit breaker, disconnect switches, line turner and coax, CVT, substation conductor and relaying 	\$2.5	7/13/2029
	Warfordsburg – McConnellsburg 138 kV Line	308 / 376 / 349 / 445	<ul style="list-style-type: none"> At Warfordsburg Substation, replace disconnect switches, and relaying At McConnellsburg Substation, replace circuit breaker, disconnect switches, line turner, CCVT, substation conductor and relaying 		

Proposed Solution:

Need #	Transmission Line / Substation Locations	New MVA Line Rating (SN / SE / WN / WE)	Scope of Work	Estimated Cost (\$ M)	Target ISD
APS-2024-100	Harwick – Houseville 138 kV Line	284 / 351 / 336 / 432	<ul style="list-style-type: none"> At Harwick Substation, replace circuit breaker, disconnect switches, line trap, line turner and coax, substation and bus conductors and relaying At Houseville Substation, replace disconnect switches, line trap, line turner and coax, CVT, substation conductor and relaying 	\$3.4	12/31/2027
APS-2025-015	Tidd - Carnegie 138 kV Line*	221 / 268 / 250 / 317	<ul style="list-style-type: none"> At Carnegie Substation, replace disconnect switches, CVTs and relaying 	\$1.9	12/31/2029
	Carnegie - Weirton 138 kV Line	221 / 268 / 250 / 317	<ul style="list-style-type: none"> At Weirton Substation, replace wave trap, substation conductor, line turner and coax, CVT and relaying 		

*This is a tie line with AEP. The ratings shown are reflective of FirstEnergy ratings only.

Alternatives Considered: Maintain equipment in existing condition with elevated risk of equipment misoperation.

Project Status: Conceptual

Model: 2024 RTEP model for 2029 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

06/03/2025– V1 – Original version posted to pjm.com