

Transmission Expansion Advisory Committee DEOK Supplemental Projects

April 11, 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

Need Number: DEOK-2024-007

Process Stage: Solutions Meeting 04/11/2024

Previously Presented: Needs Meeting 09/20/2024

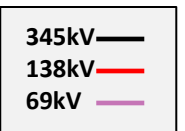
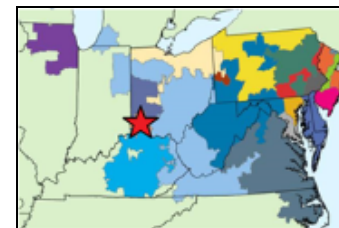
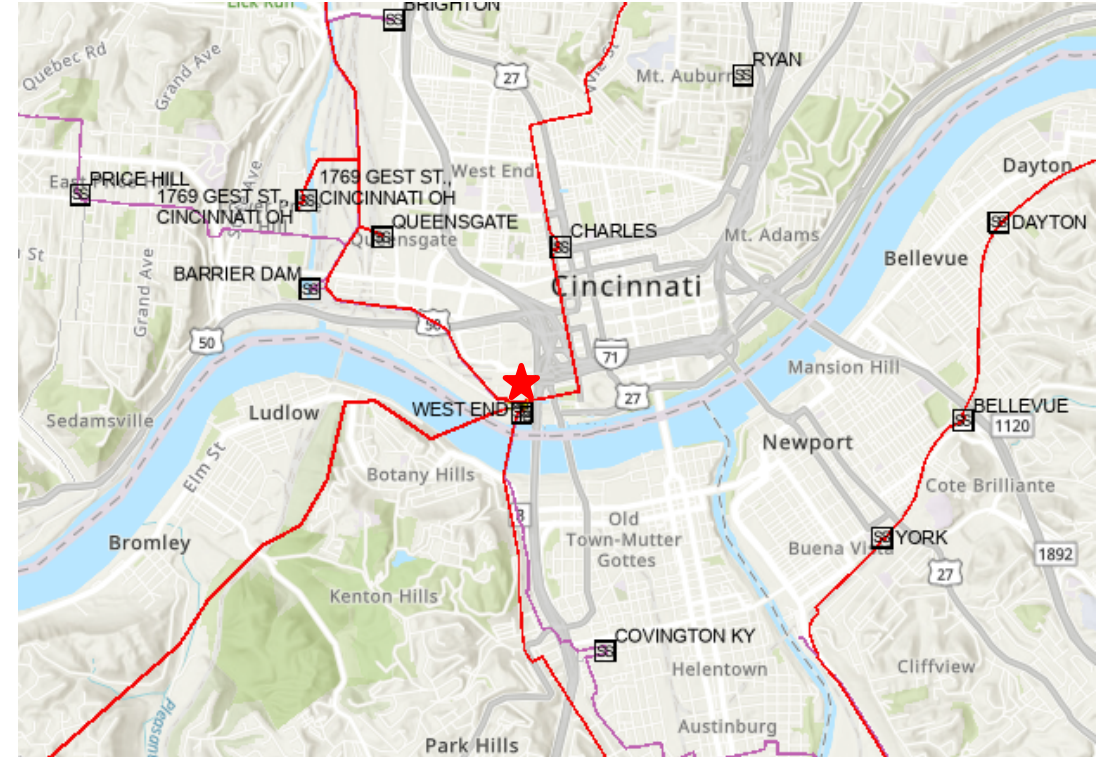
Project Driver: Customer Service

Specific Assumption Reference:

Duke Energy Ohio & Kentucky Local Planning Assumptions slide 6

Problem Statement:

Duke Energy Distribution has requested a new delivery point near Mehring Way in Cincinnati. The adjacent West End distribution substation supplies the downtown Cincinnati network and is being rebuilt. Radial feeders will be moved to buses in this new location to isolate them from the network feeders, increasing the reliability and voltage/VAR management of the downtown Cincinnati network.



Need Number: DEOK-2024-007

Process Stage: Solutions Meeting 04/11/2024

Previously Presented: Needs Meeting 09/20/2024

Project Driver: Customer Service

Specific Assumption Reference:

Duke Energy Ohio & Kentucky Local Planning Assumptions slide 6

Potential Solution:

Build a new 138 kV, 6-breaker ring bus substation named Front Street. Connect Front Street to West End with two feeders landing in non-adjacent positions, acting as a loop. In the remaining four positions install 138/13 kV, 33 MVA transformers to support four independent distribution bus sections each connecting three feeders and two switched 3.6 MVAR capacitors. At West End, install four 138 kV circuit breakers to create positions for the two feeders to Front. The feeders are each approximately 350 feet long, will be constructed of 954 ACSS conductor, and have capacities of 301/301 MVA summer, 378/378 MVA winter.

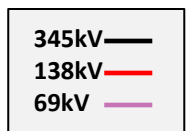
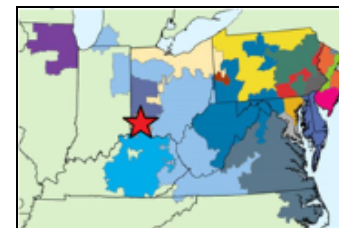
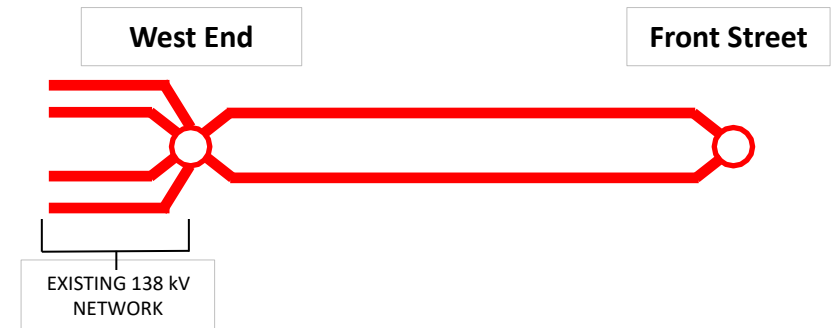
Alternatives: None

Estimated Transmission Cost: \$41,915,473

Proposed In-Service Date: 01-22-2030

Project Status: Engineering

Model: 2024 RTEP



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

4/1/2025 – V1 – Original version posted to pjm.com