Transmission Expansion Advisory Committee
DEOK Supplemental Projects

February 13, 2026

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-2025-006

Process Stage: Solutions Meeting 02/13/2026

Previously Presented: Needs Meeting 12/12/2025

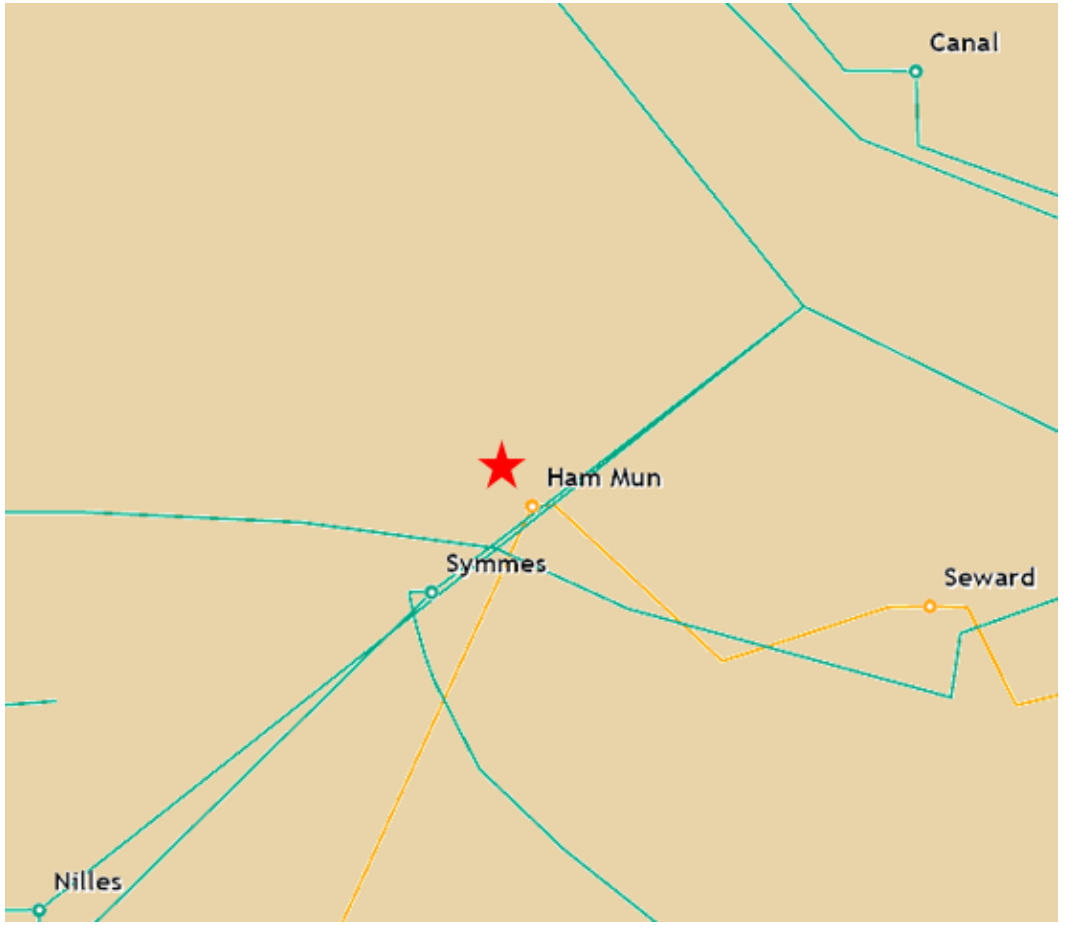
Project Driver: Customer Service

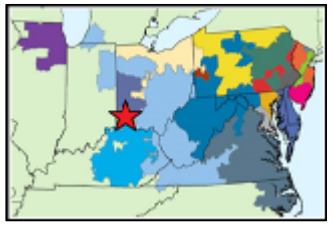
Specific Assumption Reference:

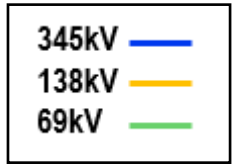
Duke Energy Ohio & Kentucky Local Planning Assumptions slide 6

Problem Statement:

The City of Hamilton has requested an increase in load to be supplied via their existing 138 kV interconnection with Duke Energy Ohio. The customer plans to increase their load by 240 MW in 2029.







DEOK Transmission Zone M-3 Process
New Customer Load Request

Need Number: DEOK-2025-006

Process Stage: Solutions Meeting 02/13/2026

Proposed Solution:

City of Hamilton Substation: Install two 3000 Ampere, 40 kA, 138 kV circuit breakers in the existing City of Hamilton Substation 138 kV ring bus to create a new line position. Install a 50 MVAr capacitor bank in City of Hamilton substation. Replace 1600 A wave traps at City of Hamilton with 2000 A. Replace 1590 kcmil AL bus conductor at City of Hamilton with double 954 kcmil AL bus conductor.

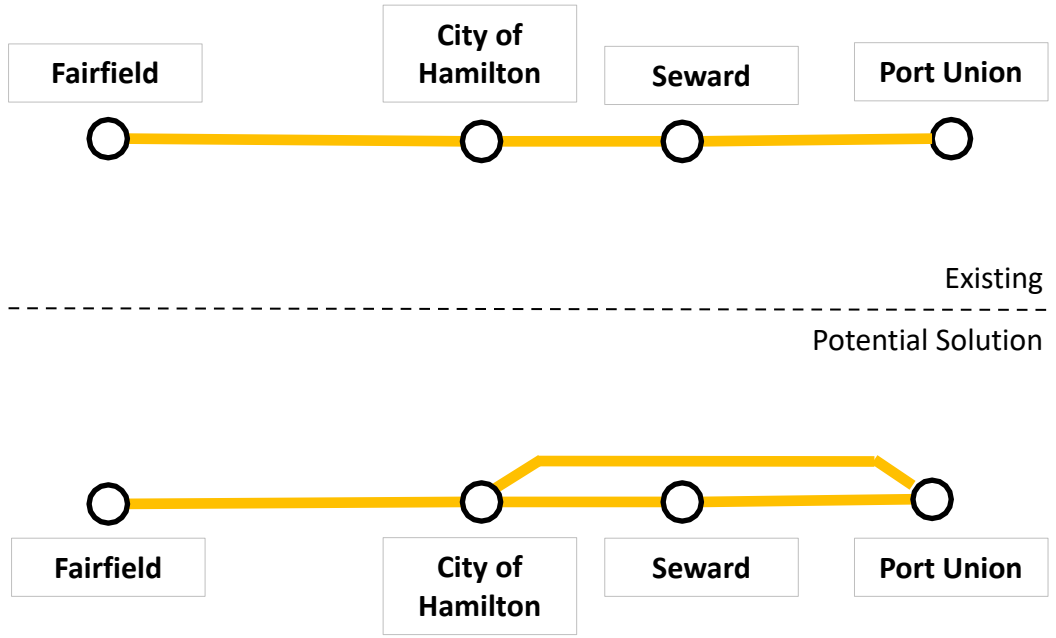
Port Union Substation: Install a 3000 Ampere, 63 kA, 138 kV circuit breaker in the existing Port Union Substation to create a new line position. Replace 1590 kcmil AL bus conductor at Port Union with double 954 kcmil AL bus conductor. Install new 138 kV circuit from Port Union to City of Hamilton, utilizing 954 kcmil ACSS conductor, approximately 5 miles.

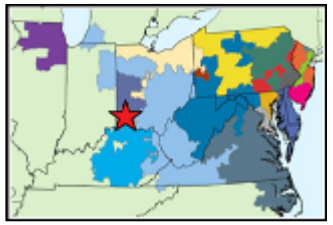
Fairfield Substation: Replace 1600 A wave trap at Fairfield with 2000 A. Rebuild 138 kV circuit from Fairfield to City of Hamilton with 954 kcmil ACSS conductor, approximately 6.0 miles.

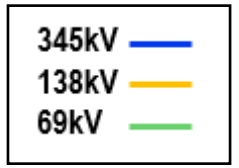
Seward Substation: Replace 1590 kcmil AL bus conductor at Seward with double 954 kcmil AL bus conductor. Rebuild 138 kV circuit from Seward to City of Hamilton with 954 kcmil ACSS conductor, approximately 1.9 miles. Rebuild 138 kV circuit from Seward to Port Union with 954 kcmil ACSS conductor, approximately 2.9 miles.

Alternatives Considered: N/A

Estimated Transmission Cost: $65.0M
Proposed In-Service Date: 12/31/2029
Project Status: Scoping
Model: 2025 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

1/29/2026 – V1 – Original version posted to pjm.com

2/13/2026 – V2