

Subregional RTEP Committee – Western Duquesne Light Supplemental Projects

May 17, 2024



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



DLCO Transmission Zone M-3 Process West Mifflin, PA

Need Number: DLC-2024-002

Process Stage: Needs Meeting – 3/15/2024

Solutions Meeting – 5/17/2024

Supplemental Project Driver(s):

- Customer Service
- Equipment Material Condition, Performance, and Risk

Specific Assumptions Reference:

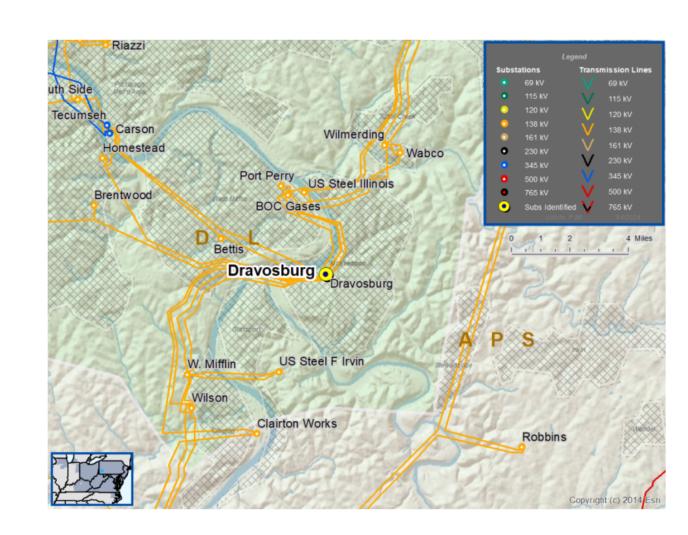
Slides 6 and 9 of the DLC 2024 Local Planning Assumptions.

Problem Statement:

Duquesne Light's Distribution Planning team has determined that Dravosburg Substation has limited capacity to serve new distribution load due to the size of the station's existing distribution transformers.

Duquesne Light's Asset Management team has determined that the Dravosburg #1 and #2 138-69 kV autotransformers have increased failure probability due to:

- Equipment Age (#1 138-69 kV autotransformer age: 64 years, #2 138-69 kV autotransformer age: 44 years)
- Obsolescence (Spare parts are not readily available)





Need Number: DLC-2024-002

Process Stage: Solution Meeting – 5/17/2024

Previously Presented: Needs Meeting – 3/15/2024

Proposed Solution:

Eliminate the 69 kV voltage level from Dravosburg Substation by replacing the two aged 138-69 kV autotransformers and the station's existing 69-23 kV transformers with two new 138-23 kV transformers. This elimination will require an extension of the 138 kV bus, the addition of 3 new 138 kV breakers, and the removal of the 69 kV bus and associated breakers.

Estimated Cost: \$8.5 M

Ancillary Benefits:

The proposed solution removes the last 69-23 kV transformers from the DLC system.

Alternatives Considered:

1. Maintain existing condition — Maintaining the existing condition of the equipment does not address the increased failure risk of the aged transformers and does not address Dravosburg Substation's limited capacity to serve new distribution load. Estimated Cost: N/A

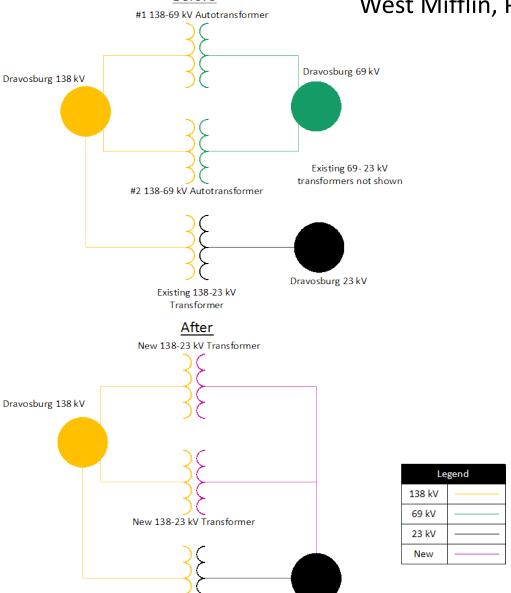
Projected In-Service: 1st Transformer June 2025, 2nd transformer December 2027

Project Status: Planning

DLCO Transmission Zone M-3 Process

Before West Mifflin, PA

Dravosburg 23 kV



Existing 138-23 kV Transformer



Appendix

High Level M-3 Meeting Schedule

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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

5/7/2024— V1 — Original version posted to pjm.com