

Subregional RTEP Committee – Western Duquesne Light Supplemental Projects

March 14, 2025

Solutionss

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 Carson Substation Breakers

Need Number: DLC-2025-001

Process Stage: Needs Meeting – 02/14/2025
Solutions Meeting – 03/14/2025

Supplemental Project Driver(s):

- Equipment Material Condition, Performance, and Risk

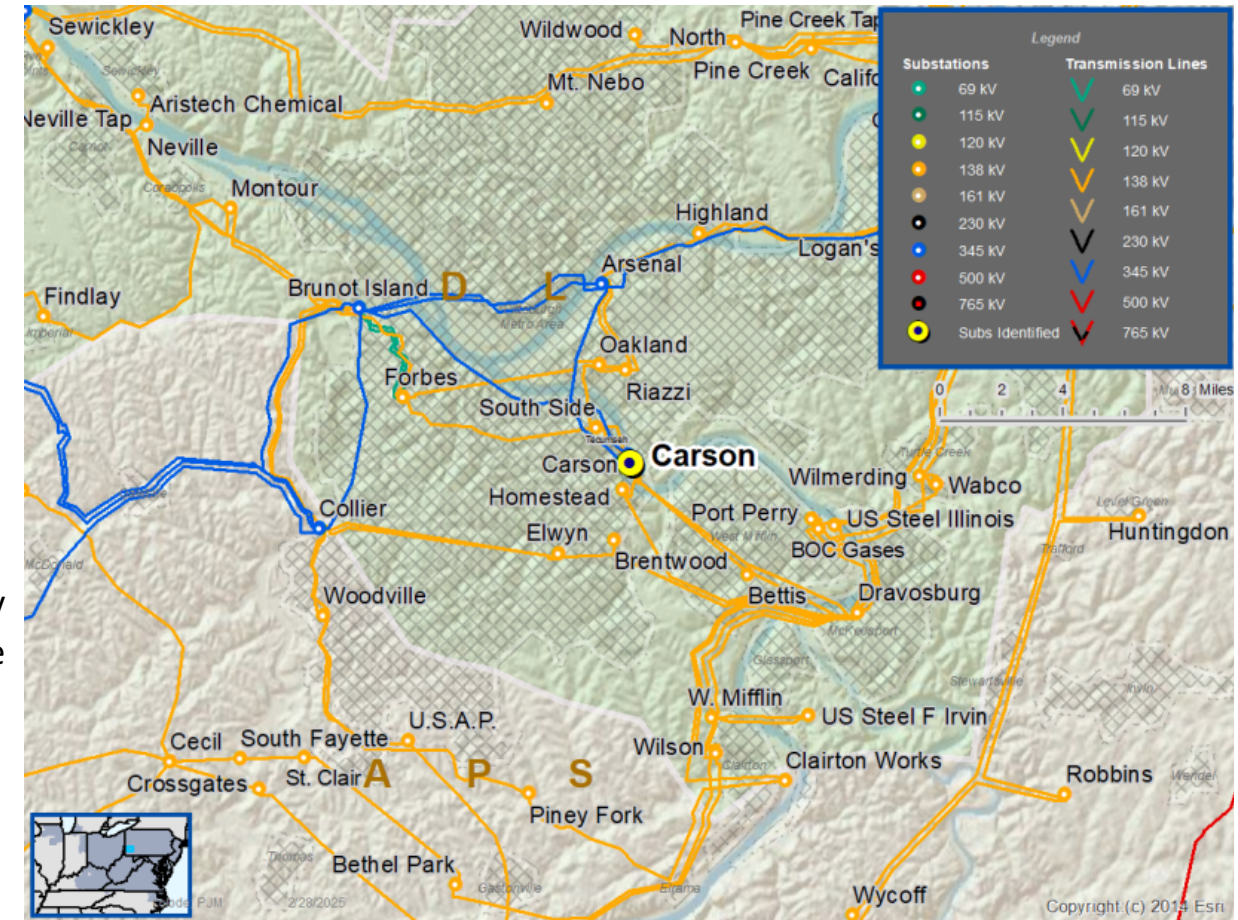
Specific Assumptions Reference:

Slide 6 of the DLC 2025 Local Planning Assumptions.

Problem Statement:

Duquesne Light's Asset Management team has determined two 138 kV oil breakers at Carson Substation have increased failure probability due to:

- Equipment Age (both 47 years)
- Obsolescence (Spare parts are not readily available)



DLCO Transmission Zone M-3 Process Carson Substation Breakers

Need Number: DLC-2025-001

Process Stage: Needs Meeting – 02/14/2025
Solutions Meeting – 03/14/2025

Proposed Solution:

Replace two aged 138kV oil breakers with modern breakers

Estimated Cost: \$1.6 M

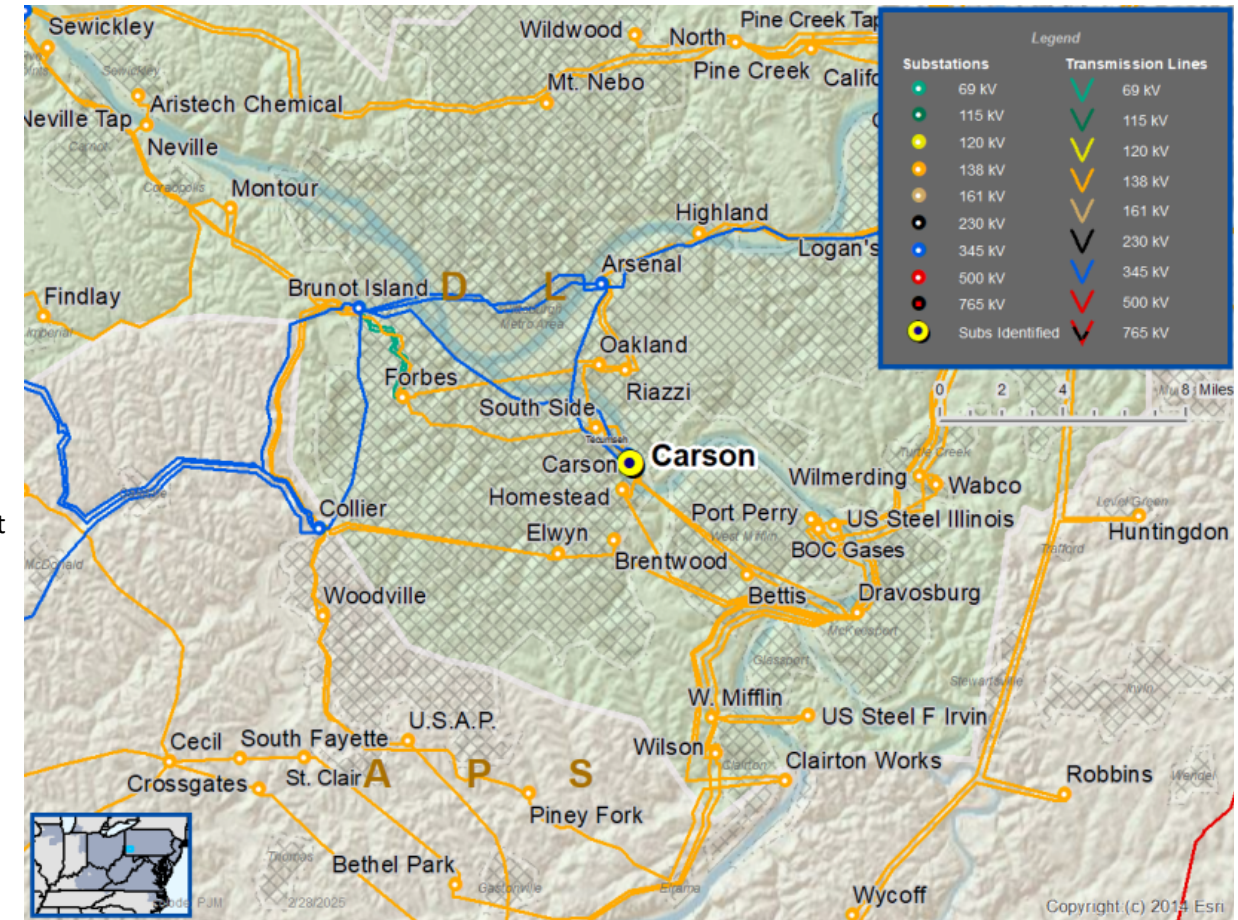
Alternatives Considered:

Maintain existing condition – Maintaining the existing condition of the equipment does not address the increased failure risk of the aged breakers

Projected In-Service: 12/31/2025

Project Status: Planning

Model: 2023 RTEP model for 2028 Summer (50/50)



DLCO Transmission Zone M-3 Process Dravosburg Substation Breaker

Need Number: DLC-2025-002

Process Stage: Needs Meeting – 02/14/2025
Solutions Meeting – 03/14/2025

Supplemental Project Driver(s):

- Equipment Material Condition, Performance, and Risk

Specific Assumptions Reference:

Slide 6 of the DLC 2025 Local Planning Assumptions.

Problem Statement:

Duquesne Light's Asset Management team has determined that one 138kV oil circuit breaker at Dravosburg Substation has increased failure probability due to:

- Equipment Age (47 years)
- Obsolescence (Spare parts are not readily available)



DLCO Transmission Zone M-3 Process Dravosburg Substation Breaker

Need Number: DLC-2025-002

Process Stage: Needs Meeting – 02/14/2025
Solutions Meeting – 03/14/2025

Proposed Solution:

Replace one aged 138kV breaker with a modern breaker

Estimated Cost: \$0.8 M

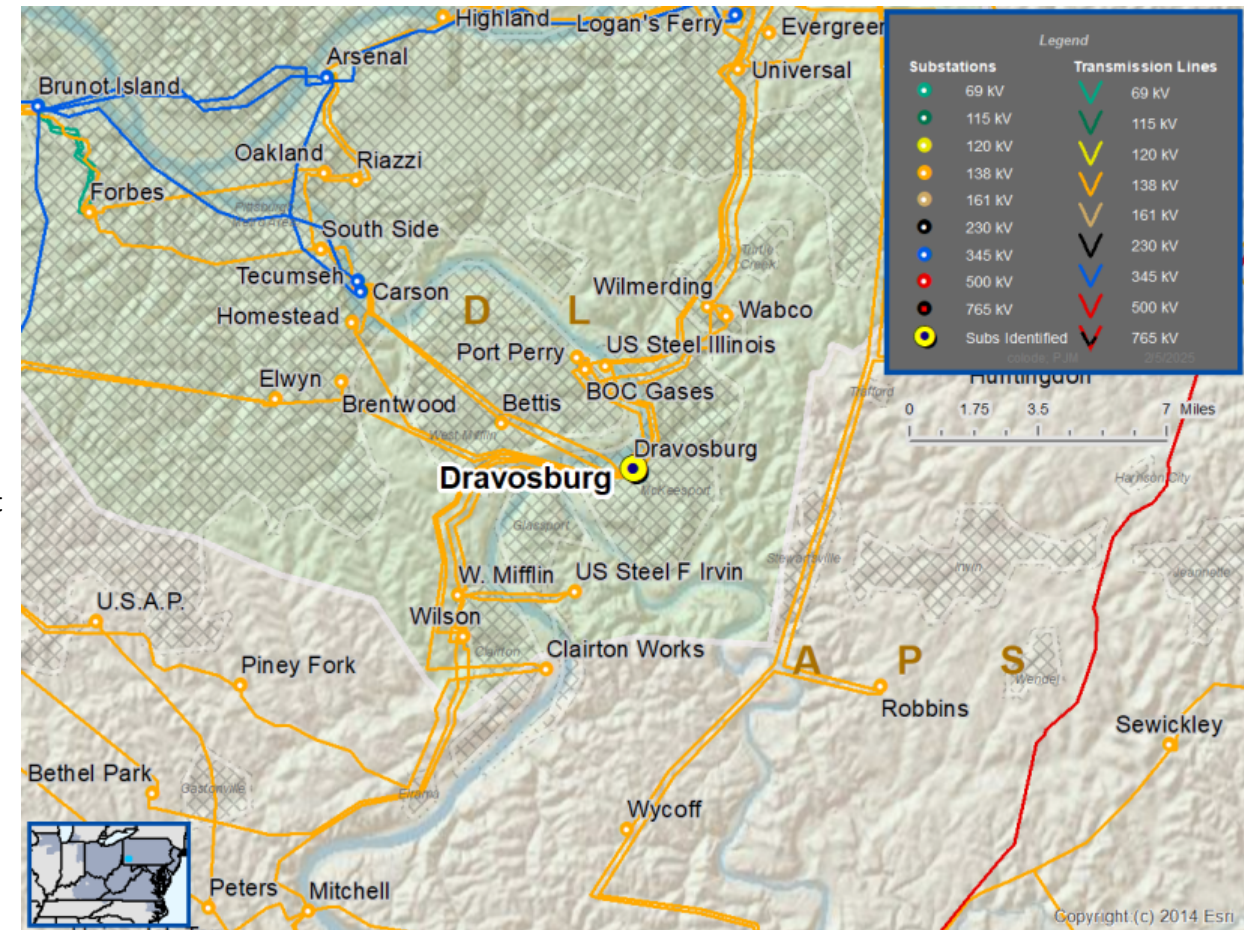
Alternatives Considered:

Maintain existing condition – Maintaining the existing condition of the equipment does not address the increased failure risk of the aged breaker

Projected In-Service: 12/31/2025

Project Status: Planning

Model: 2023 RTEP model for 2028 Summer (50/50)



DLCO Transmission Zone M-3 Process Findlay Substation Breaker

Need Number: DLC-2025-003

Process Stage: Needs Meeting – 02/14/2025
Solutions Meeting – 03/14/2025

Supplemental Project Driver(s):

- Equipment Material Condition, Performance, and Risk

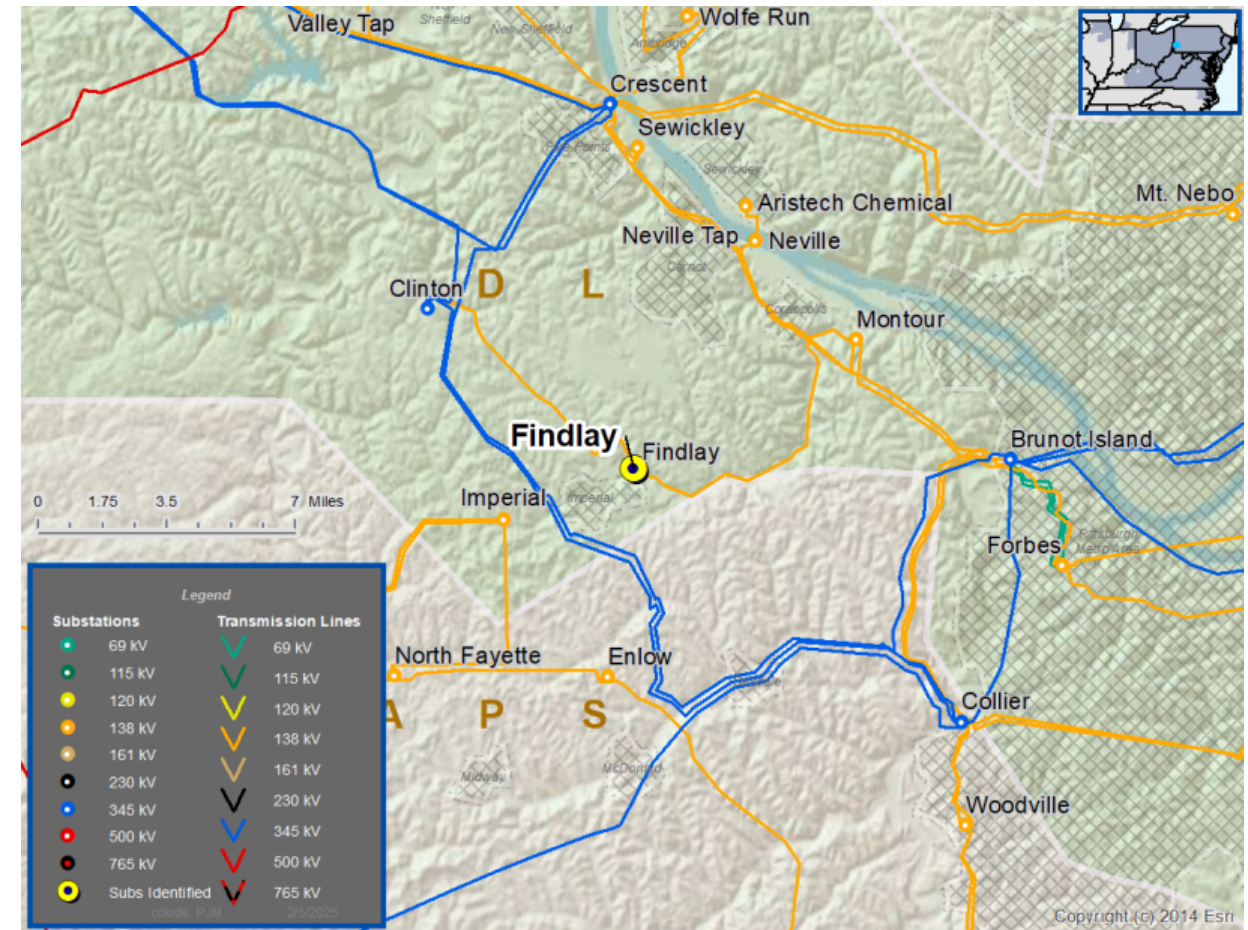
Specific Assumptions Reference:

Slide 6 of the DLC 2025 Local Planning Assumptions.

Problem Statement:

Duquesne Light's Asset Management team has determined one 138kV oil circuit breaker at Findlay Substation has increased failure probability due to:

- Equipment Age (34 years)
- Obsolescence (Spare parts are not readily available)
- Failed bushing power factor test



DLCO Transmission Zone M-3 Process Findlay Substation Breaker

Need Number: DLC-2025-003

Process Stage: Needs Meeting – 02/14/2025
Solutions Meeting – 03/14/2025

Proposed Solution:

Replace one aged 138kV breaker with a modern breaker

Estimated Cost: \$0.8 M

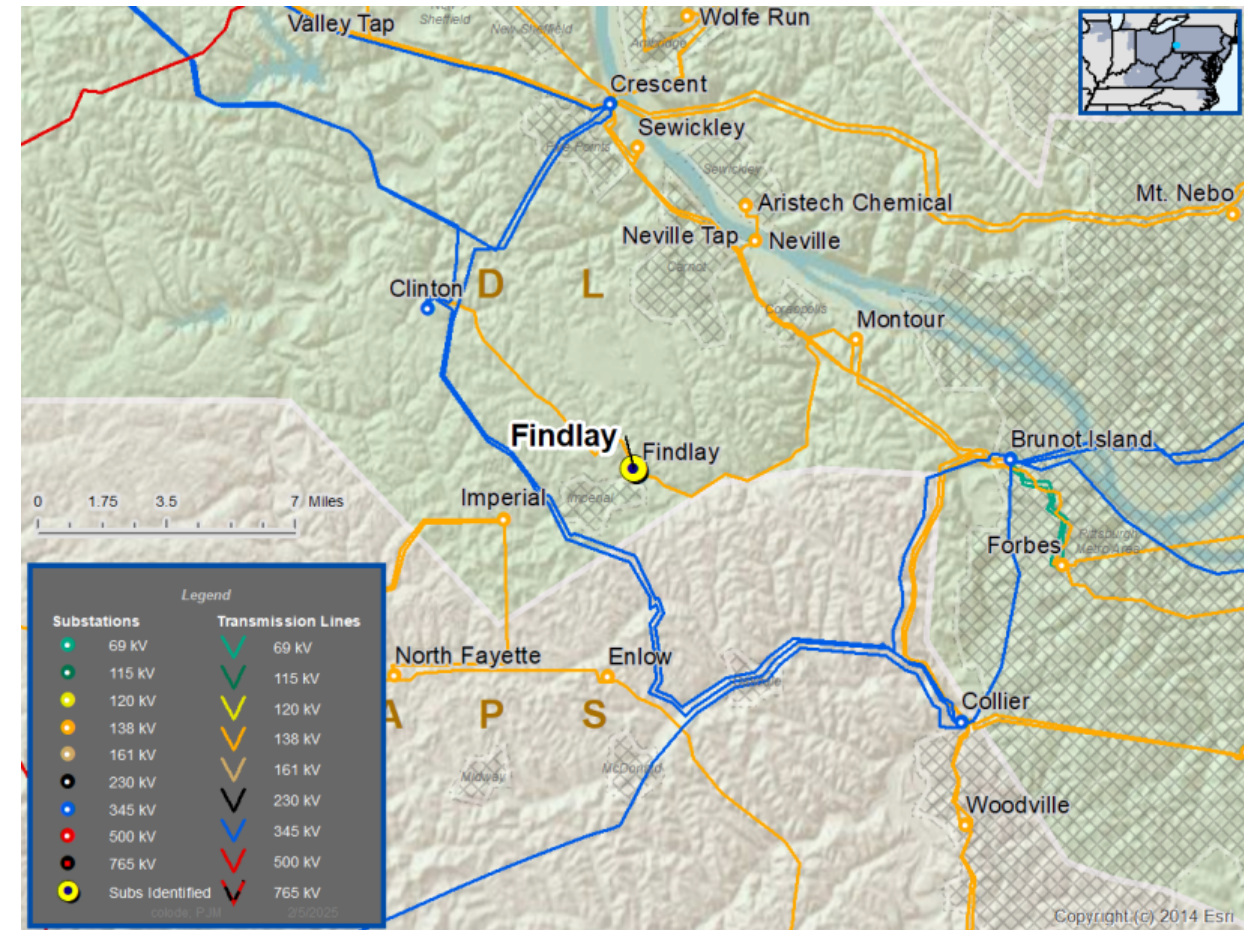
Alternatives Considered:

Maintain existing condition – Maintaining the existing condition of the equipment does not address the increased failure risk of the aged breaker

Projected In-Service: 12/31/2025

Project Status: Planning

Model: 2023 RTEP model for 2028 Summer (50/50)



DLCO Transmission Zone M-3 Process Neville Substation Breaker

Need Number: DLC-2025-004

Process Stage: Needs Meeting – 02/14/2025
Solutions Meeting – 03/14/2025

Supplemental Project Driver(s):

- Equipment Material Condition, Performance, and Risk

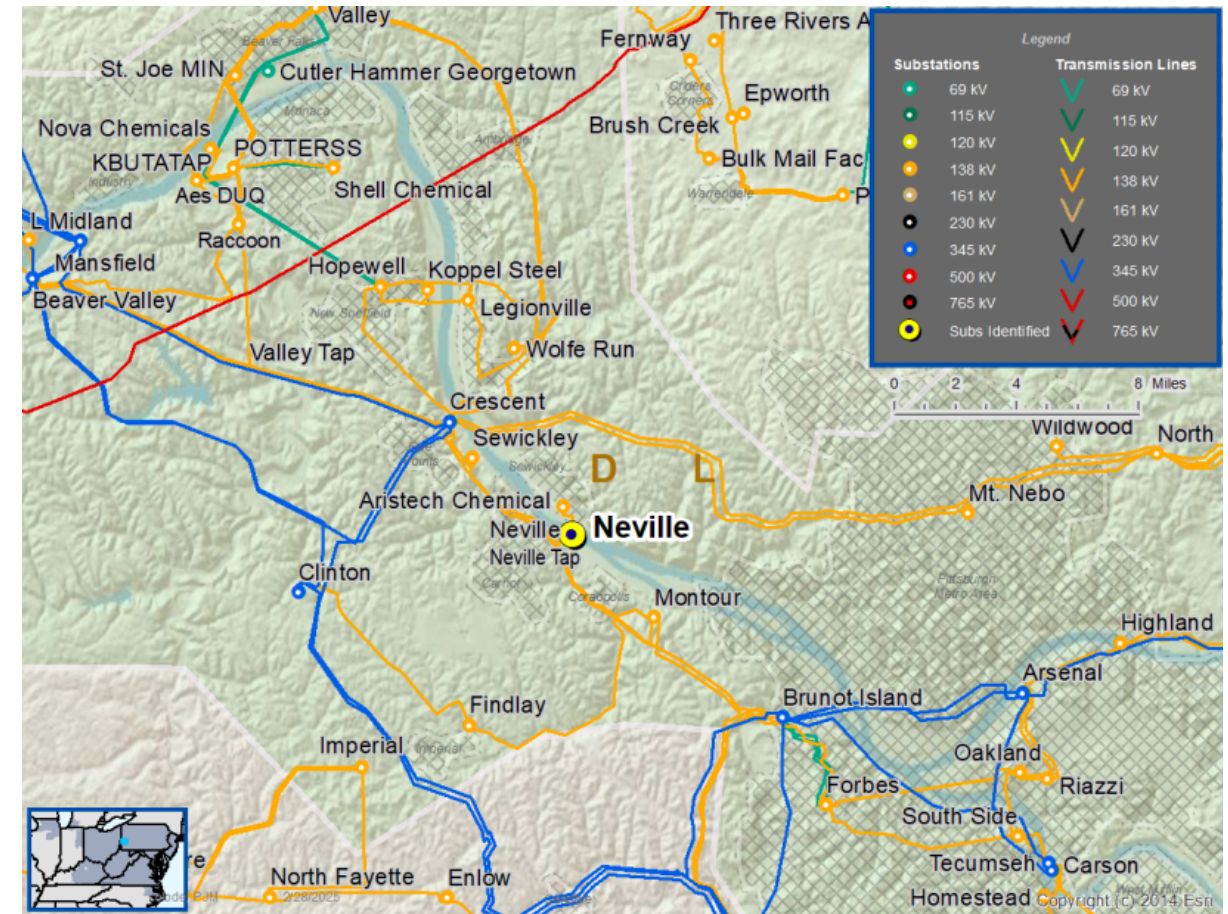
Specific Assumptions Reference:

Slide 6 of the DLC 2025 Local Planning Assumptions.

Problem Statement:

Duquesne Light's Asset Management team has determined one oil circuit breaker at Neville Substation has increased failure probability due to:

- Equipment Age (55 years)
- Obsolescence (Spare parts are not readily available)



DLCO Transmission Zone M-3 Process Neville Substation Breaker

Need Number: DLC-2025-004

Process Stage: Needs Meeting – 02/14/2025
Solutions Meeting – 03/14/2025

Proposed Solution:

Replace one aged 138kV breaker with a modern breaker

Estimated Cost: \$0.8 M

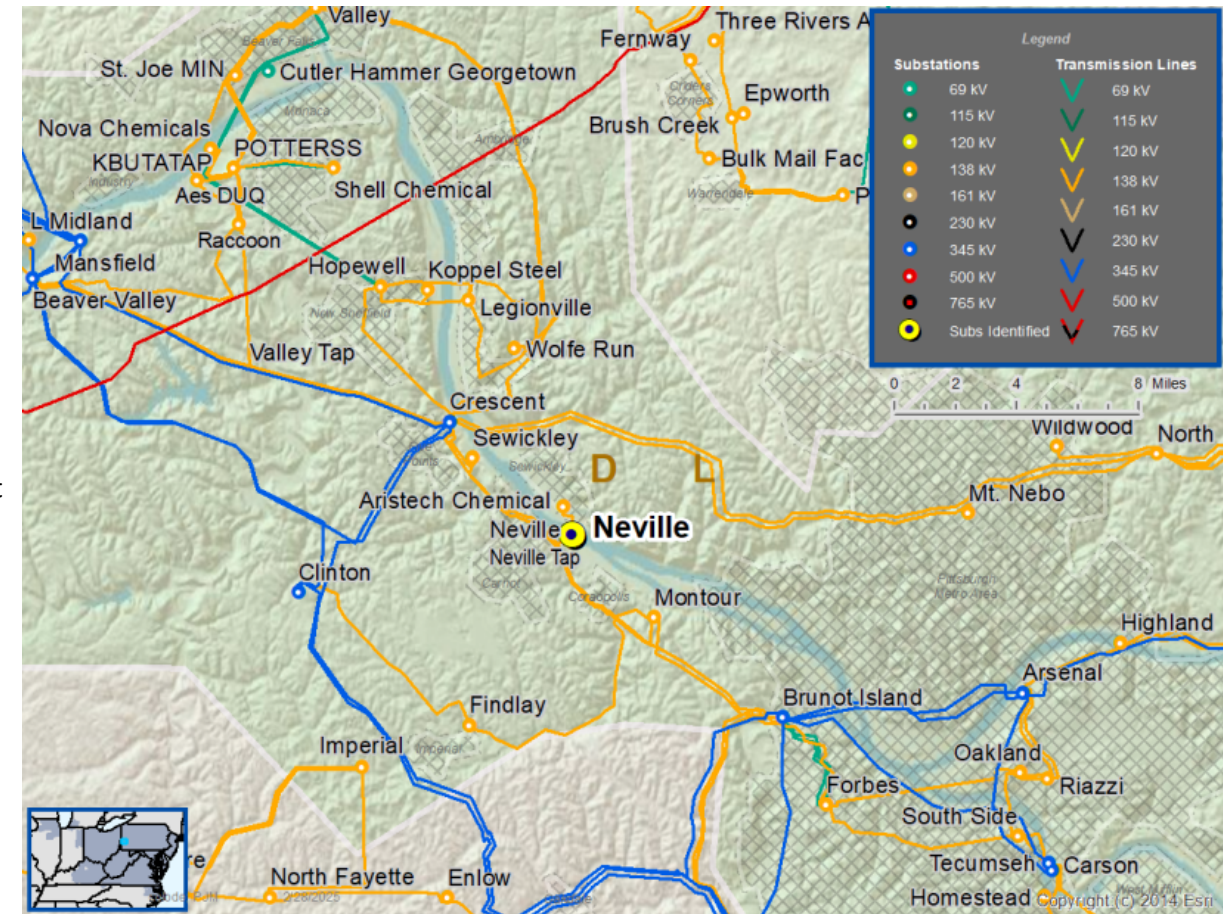
Alternatives Considered:

Maintain existing condition – Maintaining the existing condition of the equipment does not address the increased failure risk of the aged breaker.

Projected In-Service: 12/31/2025

Project Status: Planning

Model: 2023 RTEP model for 2028 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

3/xx/2025– V1 – Original version posted to pjm.com