

Subregional RTEP Committee – DLCO Supplemental Projects

April 21, 2023

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: DLC-2023-001

Process Stage: Solutions Meeting – 4/21/2023

Previously Presented: Needs Meeting – 3/17/2023

Supplemental Project Driver(s):

Customer Service and Infrastructure Resilience

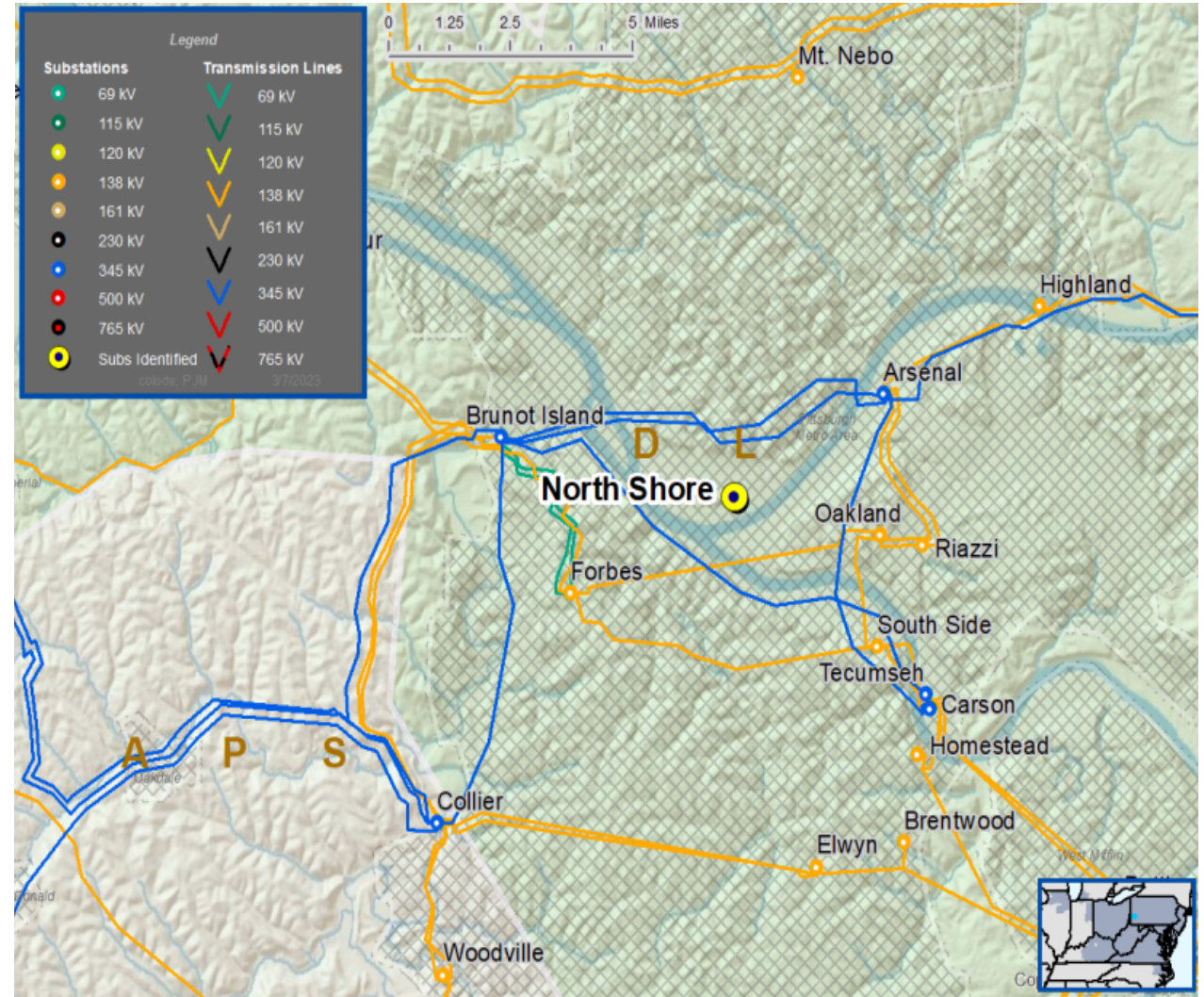
Specific Assumptions Reference:

Slides 9 and 10 of the DLC 2023 Local Planning Assumptions.

Problem Statement:

Load growth in Pittsburgh’s North Shore and surrounding areas driven by new customer connection requests have presented concerns regarding DLC’s existing distribution infrastructure and its ability to serve its customers. There is also a need to add an additional transmission source to supply Pittsburgh’s Downtown Network. As such, additional capacity and resiliency is needed to provide adequate distribution service to these areas.

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Process Stage: Solutions Meeting – 4/21/2023

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Potential Solution:

Establish new Ridge 138kV substation in the Northside neighborhood of Pittsburgh. Ridge is to supply the immediate electrical demands of new customer connections and provide an additional transmission source for North Shore and Downtown Area customers. Ridge is planned to be a six (6) breaker ring bus with three (3) 138/23 kV transformers.

Alternatives Considered:

1. **No Changes/ Do Nothing** – This is not a recommended alternative. Failing to address the need would prevent DLC from providing service to the new customer connection requests and result in distribution system reliability/resiliency concerns with DLC’s downtown area, including a number of critical customers. Estimated Alternative Solution #1 Cost: N/A

2. **Radial 138kV Solution** – DLC considered serving the new customer connections via new transmission sources from existing DLC substations. However, this would not address downtown resiliency needs and would be impractical due to city ROW constraints. Estimated Alternative Solution #2 Cost: N/A

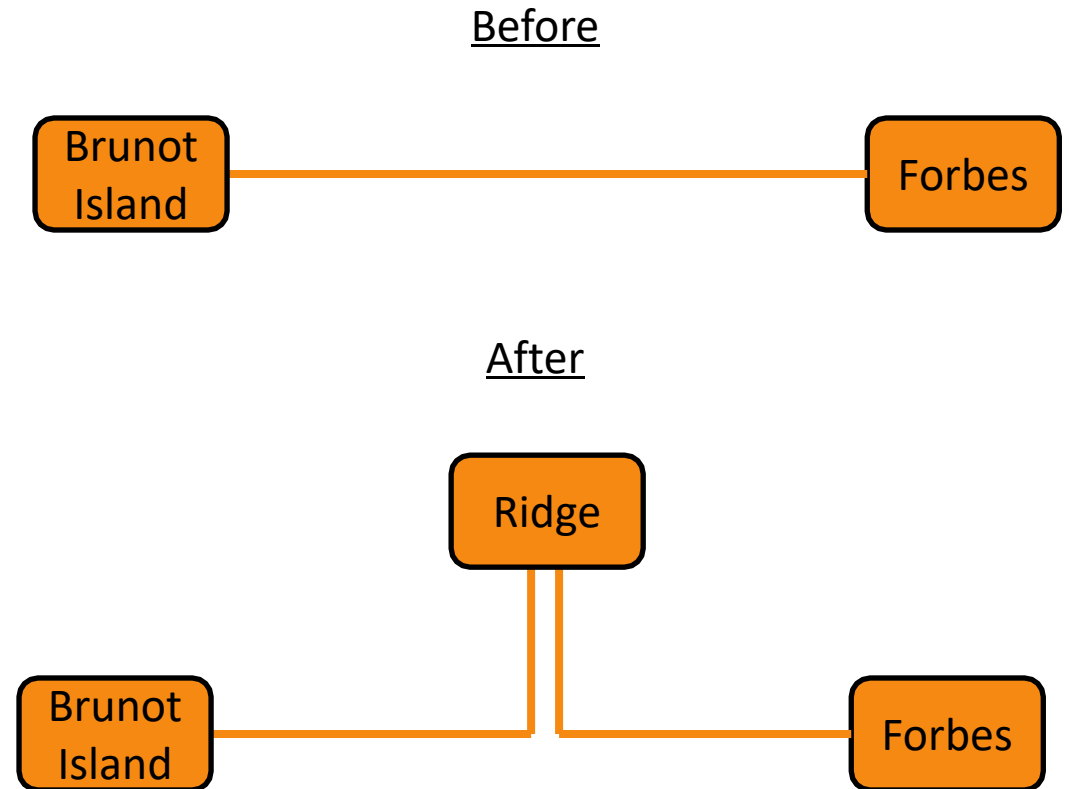
3. **Smaller ring bus** – DLC considered a smaller ring bus with two 138/23 kV transformers. This alternative would not meet reliability requirements for long-term capacity needs. Estimated Alternative Solution #3 Cost: \$95M

Estimated Project Cost: \$100M

Projected In-Service: 1/1/2026

Supplemental Project ID:

Project Status: Preliminary Engineering



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/xx/2023– V1 – Original version posted to pjm.com

4/24/2023 – V2 – Updated potential solution language and replaced maps with simplified one-line diagram.