

# SRRTEP Committee: Western DLC Supplemental Projects

April 22, 2022

# Needs

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:** DUQ-2022-002

**Process Stage:** Needs Meeting (SRRTEP-W, 4/22/2022)

**Project Driver:** Equipment Material Condition, Performance, and Risk

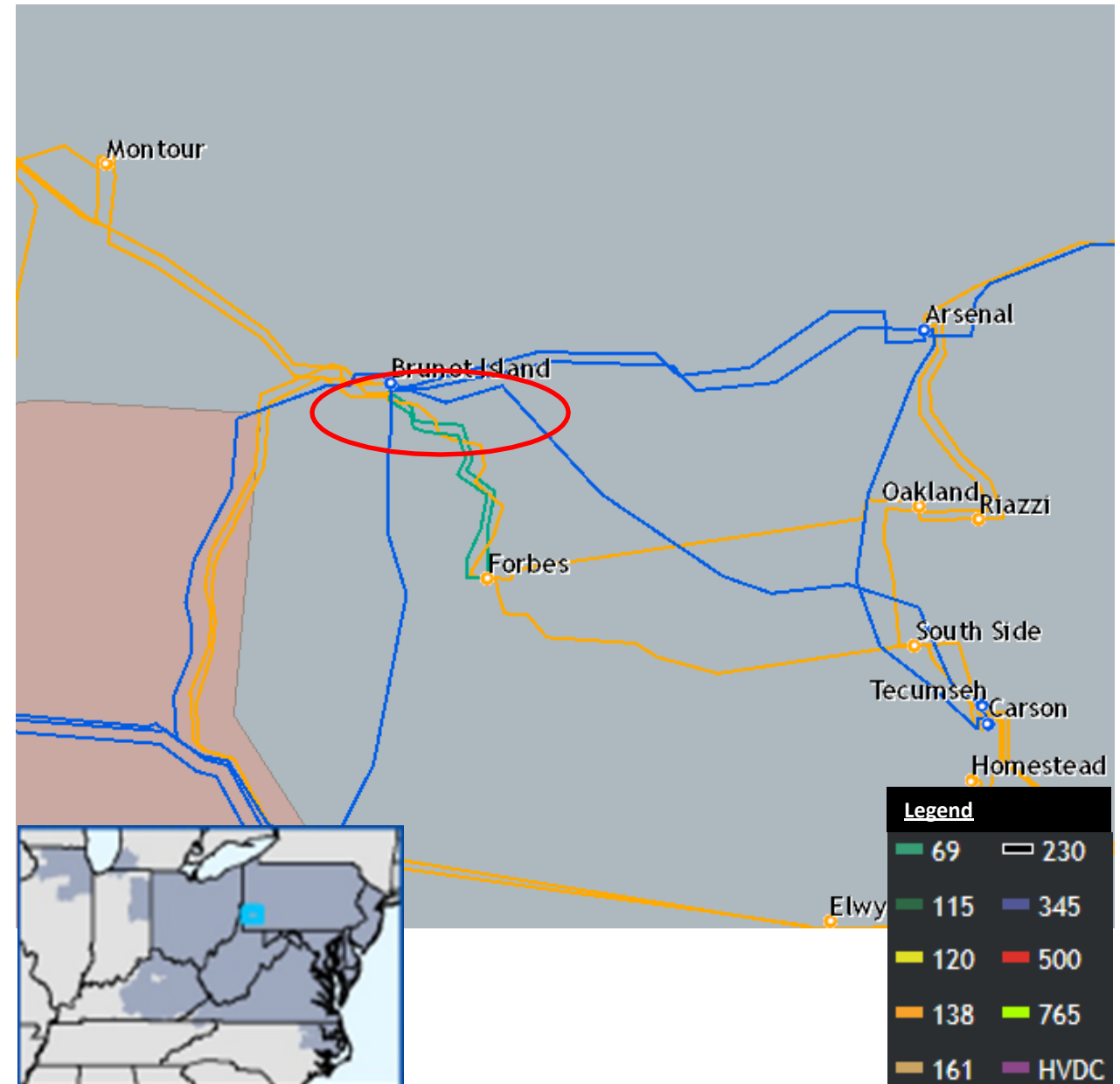
**Specific Assumption Reference:**

Transmission infrastructure replacements that are consistent with efficient asset management decisions

**Problem Statement:**

Two Brunot Island 138/69 kV Transformers have increased failure probability due to:

- Aging/deterioration (both transformers are past its expected service life: Transformer #1 is 52 years old; Transformer #2 is 68 years old).
- Oil leaks from various gauges, pumps, and radiators
- Sudden pressure relay is degraded



# 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-2022-001

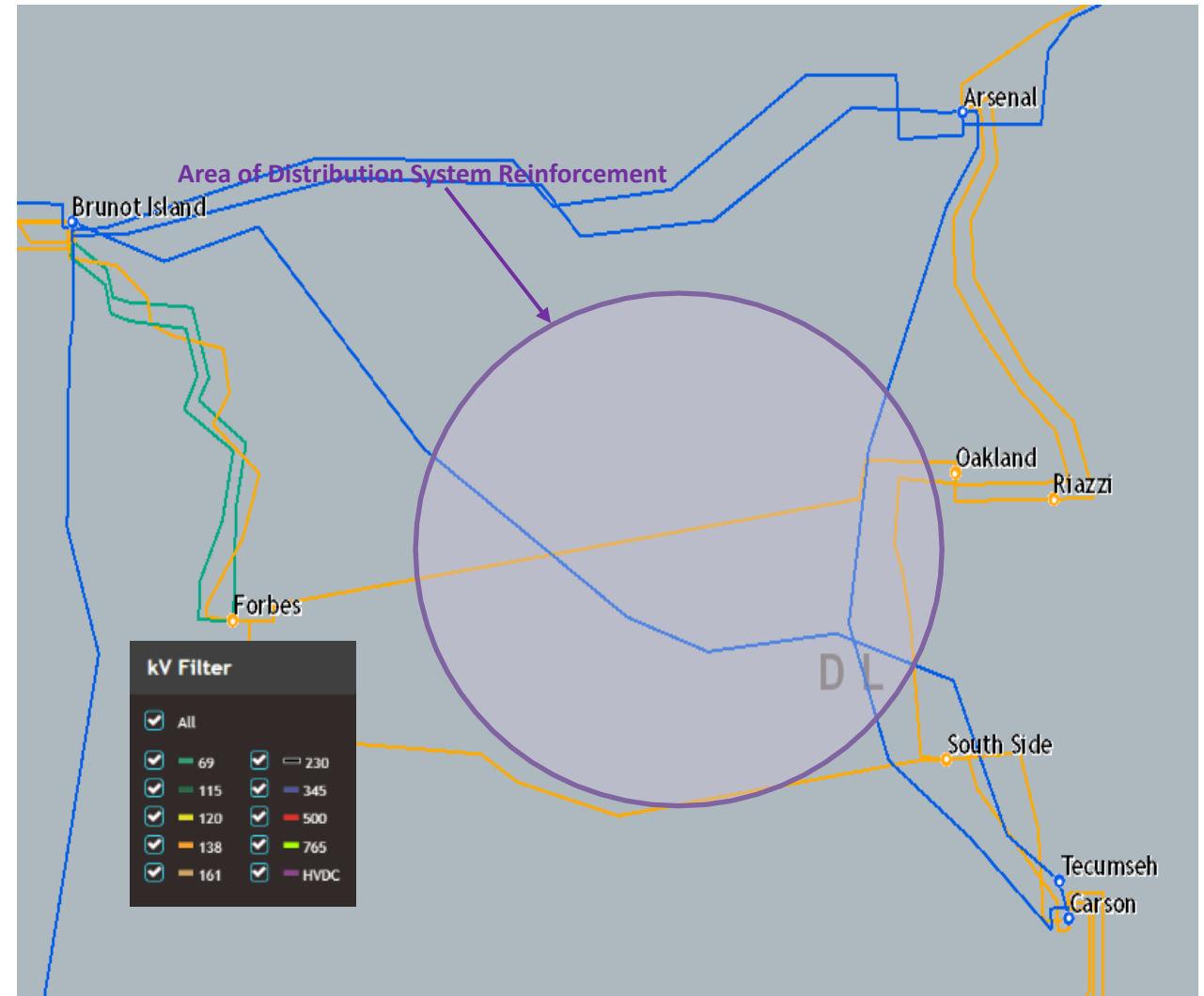
**Process Stage:** Needs Meeting (3/18/2022)

**Project Driver:** Infrastructure Resilience and Customer Service

**Specific Assumptions Reference:** Slide 9 and 10 of the DLC 2022 Local Planning Assumptions.

**Problem Statement:**

Load growth in Pittsburgh’s downtown area, and in its adjacent communities, has presented concerns regarding DLC’s existing distribution lines and its ability to serve its customers. As such, additional capacity and resiliency is needed to provide adequate distribution service to these areas.



# DLCO Transmission Zone M-3 Process Pittsburgh, PA

**Need Number:** DLC-2022-001

**Process Stage:** Solutions Meeting (4/22/2022)

**Potential Solution:**

Establish a new 138-23 kV Watson substation with a 138 kV 3000A GIS ring bus. New substation will provide additional distribution feeds to DLC’s downtown area which will increase capacity and provide increased resiliency. The existing Oakland–Forbes (Z-48) and Carson–Forbes (Z-86) 138 kV circuits will be looped through the new Watson 138 kV Substation to act as its transmission source. Four new 138 kV circuits will be created: Oakland–Watson (Z-48), Forbes–Watson (Z-85), Forbes–Watson (Z-86), and Carson–Watson (Z-89).

The Watson substation will provide load relief, increased service reliability, and resiliency to the distribution lines which provide service to Pittsburgh’s downtown area and nearby communities.

**Estimated Project Cost:** \$34M

**Alternatives Considered:**

1. **No Changes/ Do Nothing** – this is not a recommended alternative. Failing to address this issue would result in distribution system reliability and resiliency concerns with DLC’s downtown area, including a number of critical customers.

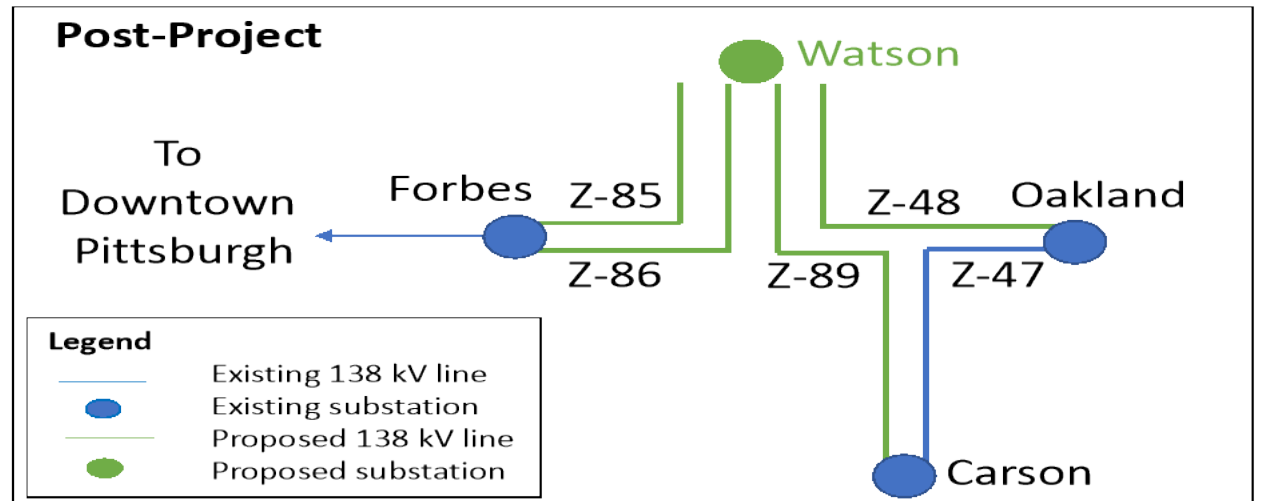
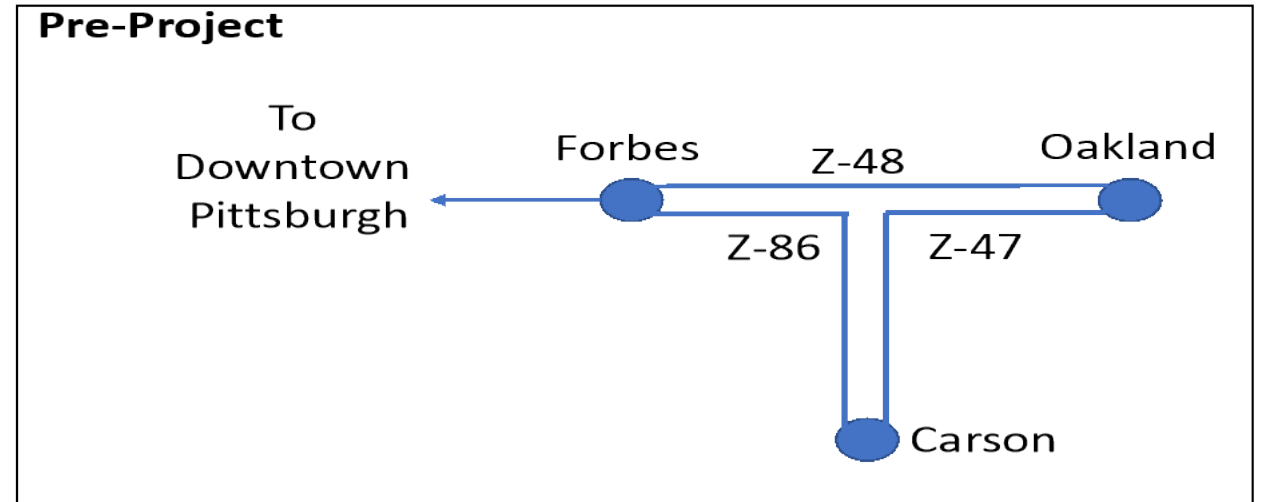
**Estimated Alternative Solution #1 Cost:** N/A

2. **Build breaker and a half bus configuration of Watson Substation** – this alternative is more costly as it would require more land, equipment, and involve complex relaying protection relaying and control.

**Estimated Alternative Solution #2 Cost:** \$54M

**Projected In-Service:** 6/2025

**Project Status:** In Progress



# 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

04/13/2022 – V1 – Original version posted to pjm.com