



Sub Regional RTEP Committee PJM West

February 21, 2020

Project Correction



AEP Transmission Zone: Baseline Project

Previously Presented: 8/31/2018 SRRTPEP, 9/28/2018 SRRTPEP

Generator Deliverability and Common Mode Outage (Winter)

Below 200 kV

Problem Statement:

- The Logtown – North Delphos 138 kV line is overloaded for multiple contingencies in the winter case. (FG# GD-W290, GD-W291, GD-W39 and GD-W40)

Recommended Solution:

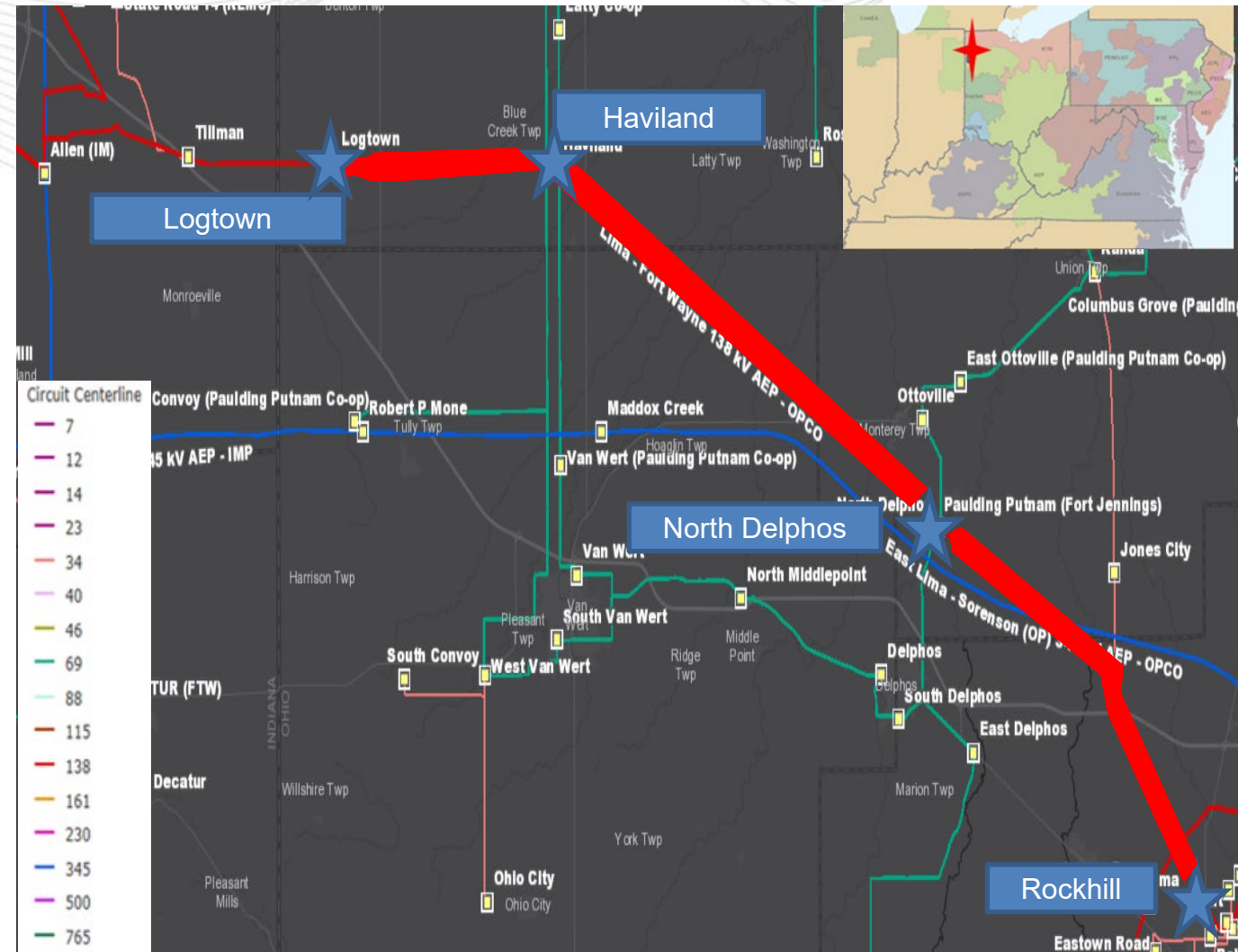
- Convert S1563.2-1 into baseline (**B3036**)
- ~~S1563.2: North Delphos – Rockhill 138 kV: Rebuild 15.4 miles of double circuit 138 kV line utilizing 1033 ACSR 1033 ACSR conductor (296 MVA rating)~~
- S1563.1: Haviland – North Delphos 138kV: Rebuild 15.6 miles of double circuit 138kV line utilizing 1033 ACSR conductor (296 MVA rating)**

Estimated Project Cost : ~~\$24.5 M~~ **\$24.3M**

Required IS Date: 12/1/2023

Projected IS date: 12/18/2020

Status: Engineering



First Review



DLC Duquesne Transmission Zone Baseline Crescent 138 kV Breaker “2-5 TIE”

Process Stage: First Review

Criteria: over duty breaker

Assumption Reference: PJM Planning Criteria

Model Used for Analysis: 2024 Short Circuit Model

Proposal Window Exclusion: Below 200 kV

Problem Statement:

The Crescent 138 kV oil-type breaker “2-5 TIE” is found to be over duty following a model review and correction to short circuit base case.

Existing Facility Rating: 12000 MVA

Proposed Solution:

The “2-5 TIE” breaker shall remain opened and out of service until it can be replaced with a DLC standard 138kV 63 kA breaker

- **Estimated Cost: \$0.35 M**

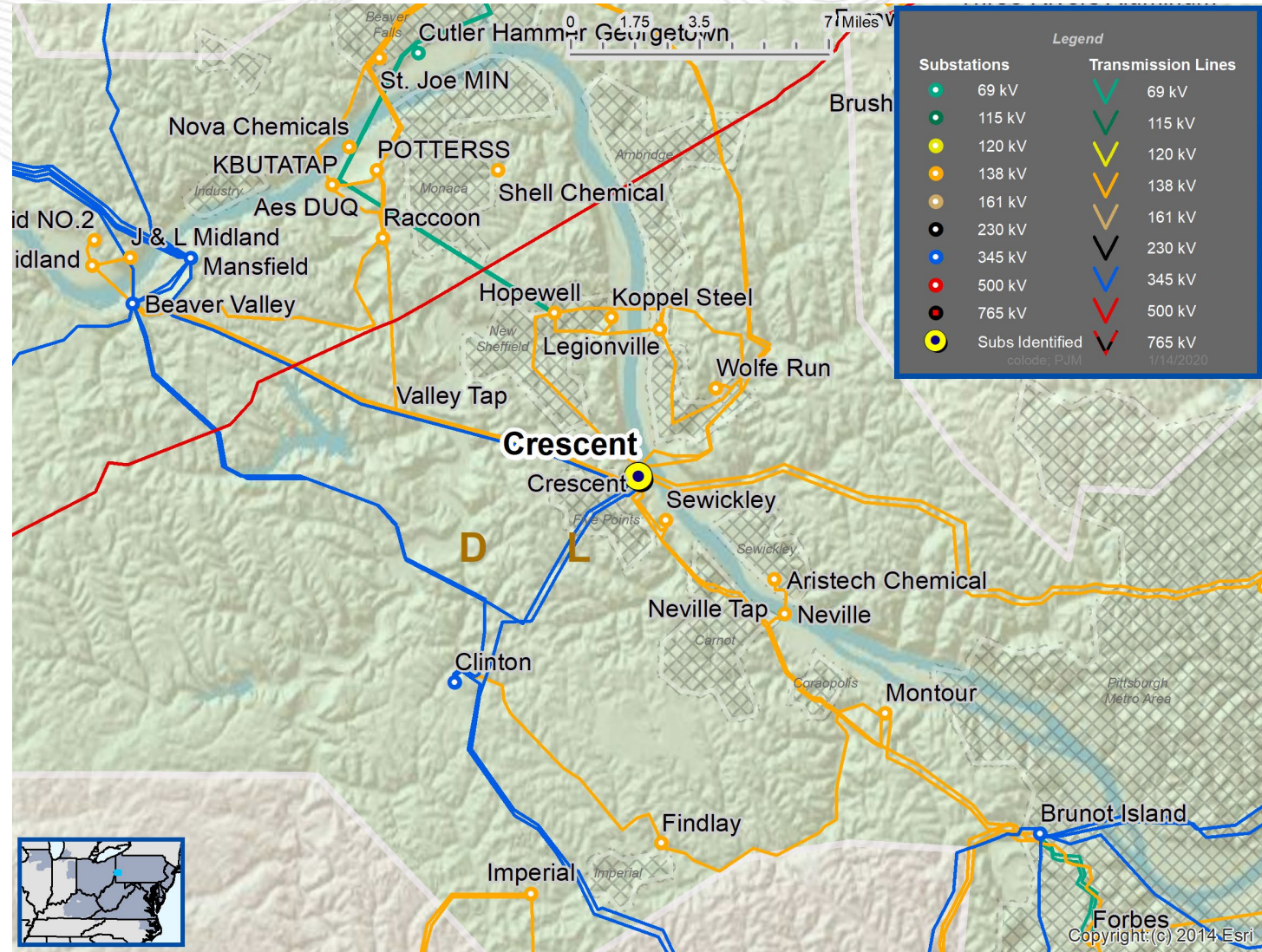
Alternatives:

1. None

- **Estimated Cost: N/A**

Required In-Service Date: 01/31/2020

In-Service Date: 01/31/2020



Recommended Solution



DLC Duquesne Transmission Zone Baseline Dravosburg 138 kV Breaker “Z-78 Logans Ferry”

Process Stage: Recommended Solution

Criteria: over duty breaker

Assumption Reference: PJM Planning Criteria

Model Used for Analysis: 2024 Short Circuit Model

Proposal Window Exclusion: Below 200 kV

Problem Statement:

The Dravosburg 138 kV breaker “Z-78 Logans Ferry” becomes over duty due to the project b3011 (Construct new Route 51 substation and connect 10 138 kV lines to new substation)

Existing Facility Rating: 15000 MVA

Preliminary Facility Rating: 63KA

Proposed Solution:

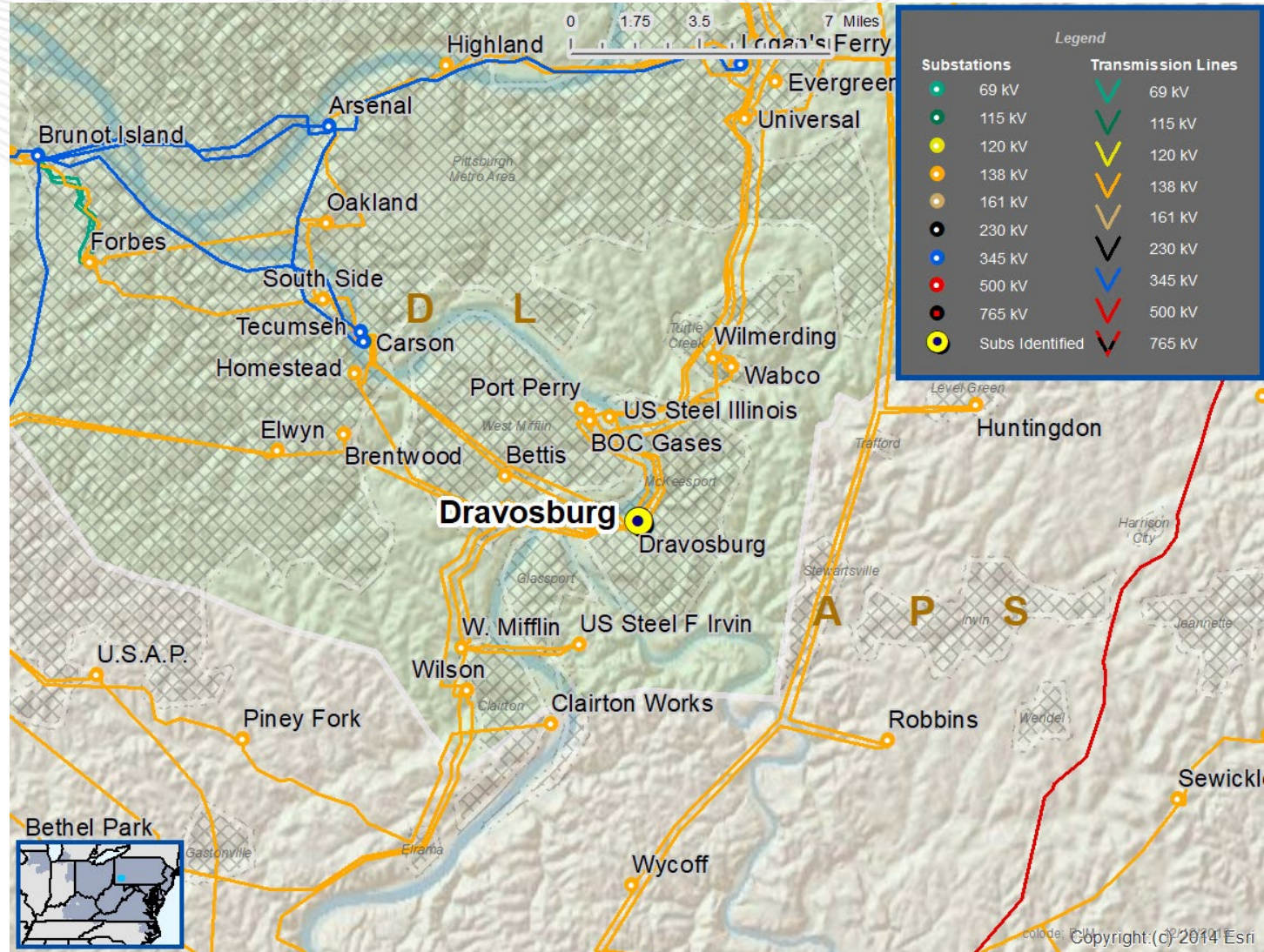
B3011.8: Replace the Dravosburg 138 kV breaker “Z-78 Logans Ferry” with a 63 kA breaker

Estimated Cost: \$0.9 M

Required In-Service Date: 6/1/2021

Projected In-Service Date: 6/1/2021

Previously Presented: 1/17/2020 SRRTEP



Questions?



- V1 – 2/14/2020 – Original slides posted
- V2 – 2/20/2020 – Slide #3, Confirmed project status