



Sub Regional RTEP Committee PJM West

August 29, 2019

- The following definitions explain the basis for excluding flowgates and/or projects from the competitive planning process and designating projects to the incumbent Transmission Owner.
- Flowgates/projects excluded from competition will include the underlined language on the corresponding slide.
 - Immediate Need Exclusion: Due to the immediate need of the violation (3 years or less), the timing required for an RTEP proposal window is infeasible. As a result, the local Transmission Owner will be the Designated Entity - Operating Agreement, Schedule 6 § 1.5.8(m)
 - Below 200kV Exclusion: Due to the lower voltage level of the identified violation(s), the driver(s) for this project are excluded from the competitive proposal window process. As a result, the local Transmission Owner will be the Designated Entity - Operating Agreement, Schedule 6 § 1.5.8(n)
 - FERC 715 (TO Criteria) Exclusion: Due to the violation need of this project resulting solely from FERC 715 TO Reliability Criteria, the driver(s) for this project are excluded from the competitive proposal window process. As a result, the local Transmission Owner will be the Designated Entity - Operating Agreement, Schedule 6 § 1.5.8(o)
 - Substation Equipment Exclusion: Due to identification of the limiting element(s) as substation equipment, the driver(s) for this project are excluded from the competitive proposal window process. As a result, the local Transmission Owner will be the Designated Entity - Operating Agreement, Schedule 6 § 1.5.8(p)



AEP Transmission Zone Baseline Reliability

AEP Transmission Owner Criteria Violation (Cost Increase) Previously Presented: 4/21/2017 SRTEAC

Problem Statement:

Low Voltage (0.883 pu) and voltage drop (17% worst drop) violations at South Upper Sandusky, Harpster, Ridgedale, South Morral, Meeker, and Decliff 69kV buses for the outage of the Upper Sandusky 69kV bus in the 2021 RTEP case. The Harpster area has had over 670,000 customer minutes of interruptions over the past three years, including 360,000 minutes on the Harpster-Decliff line. – Marion, Ohio

Recommended Solution: Construct new 138/69/34kV station and 1-34kV circuit (designed for 69kV) from new station to Decliff station, approximately 4.5 miles, with 556 ACSR conductor (51 MVA rating). (B2794)

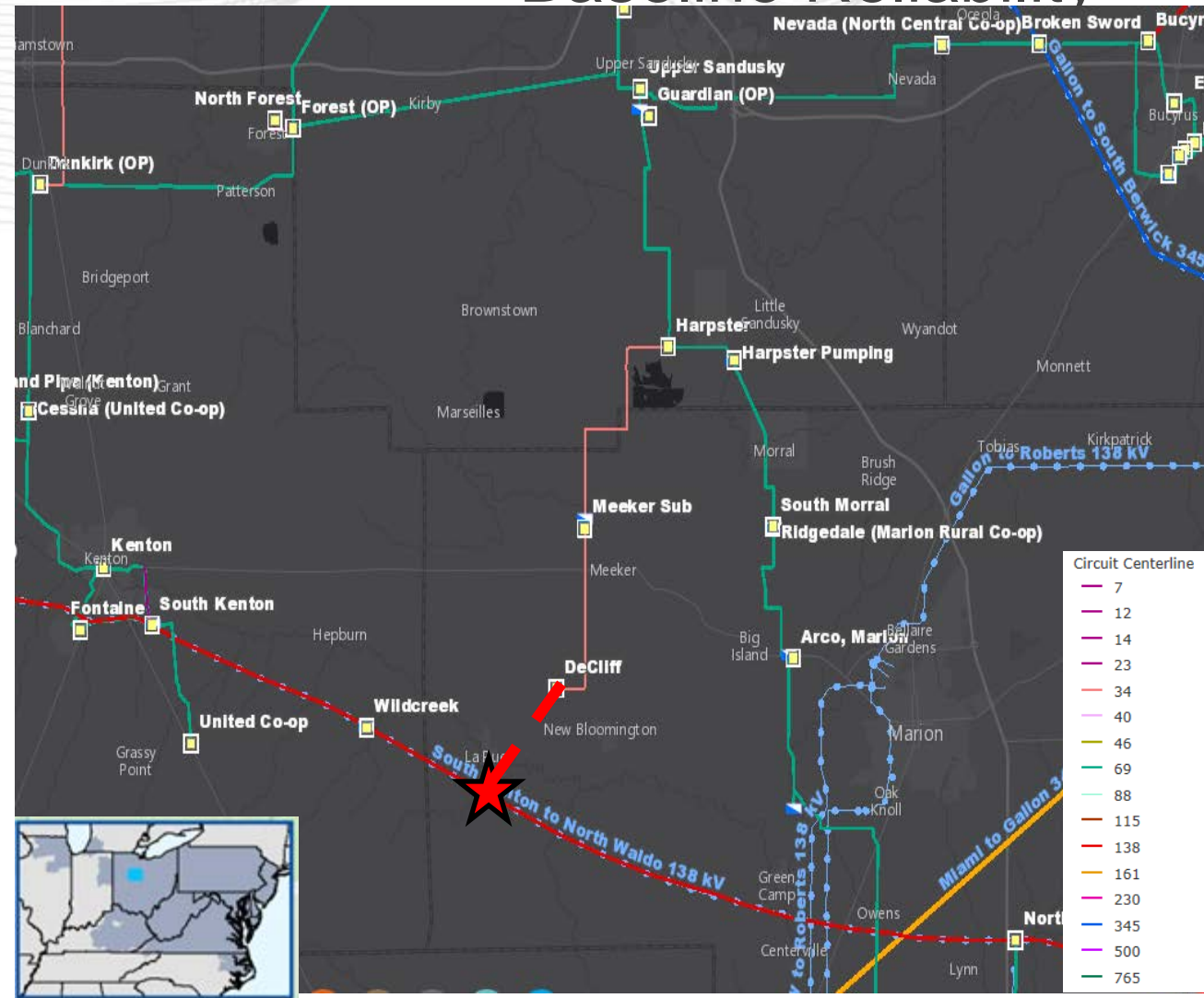
Estimated Project Cost: ~~\$12.65M~~ \$28.9M

Increase in costs include:

- Transmission line length increased after completion of more detailed scoping analysis. Detailed design increased number of dead end structures required, along with an escalation in labor costs. \$4.4M
- Station site selection resulted in a large increase in required civil/land mitigation and detailed scoping design increased costs. \$6.0M
- Other cost increases are due to required remote end relaying upgrades to accommodate new source/relays and ROW and property costs exceeding original estimates. \$5.85M

Required IS Date: 6/1/2021

Status: Scoping



Second Review

Baseline Reliability Projects

AEP Transmission Zone Baseline Beatty-Galloway UG Cable

Process Stage: Second Review

Criteria: TO Planning Criteria Violation

Assumption Reference: FERC 715

Model Used for Analysis: Summer 2023 RTEP

Proposal Window Exclusion: FERC 715 (TO Criteria)

Problem Statement:

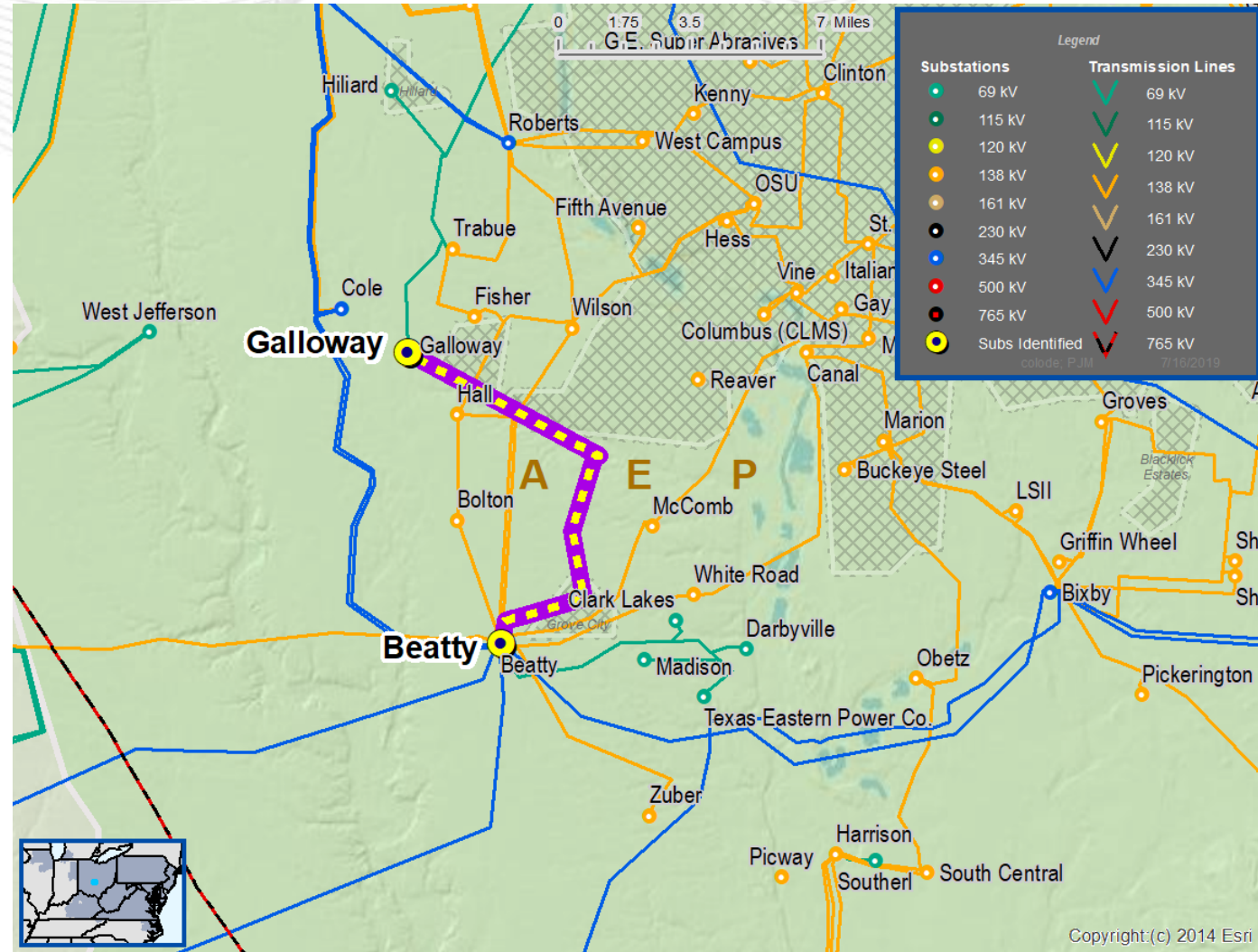
The 69 kV underground cable between Beatty and Galloway will overload to 116% of its normal rating (52 MVA) for the loss of the Trabue 138/69 kV transformer #3 or Nautilus – Trabue 69 kV circuit under N-1-0 analysis in the 2023 RTEP summer case. (118% in 2024 RTEP summer case)

Proposed Solution:

Replace approx. 0.7 miles existing 1960's vintage 69kV cable between Beatty & Galloway with 4000 kcmil XLPE Cable. (75/75/94/94 MVA) (b3210)

Estimated Cost: \$5.3 M

Required In-Service: 6/1/2023



Next Steps



Upcoming Western SRRTEP Dates

West	Start	End
9/25/2019	9:00	1:00

Questions?





Revision History

8/22/2019 – V1 – Original version posted to pjm.com