



Sub Regional RTEP Committee PJM West

July 24, 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)

First Review

Baseline Reliability Projects



AEP Transmission Zone Baseline Beatty-Galloway UG Cable

Process Stage: First Review

Criteria: Planning Criteria Violation

Assumption Reference: FERC 715

Model Used for Analysis: Summer 2023 RTEP

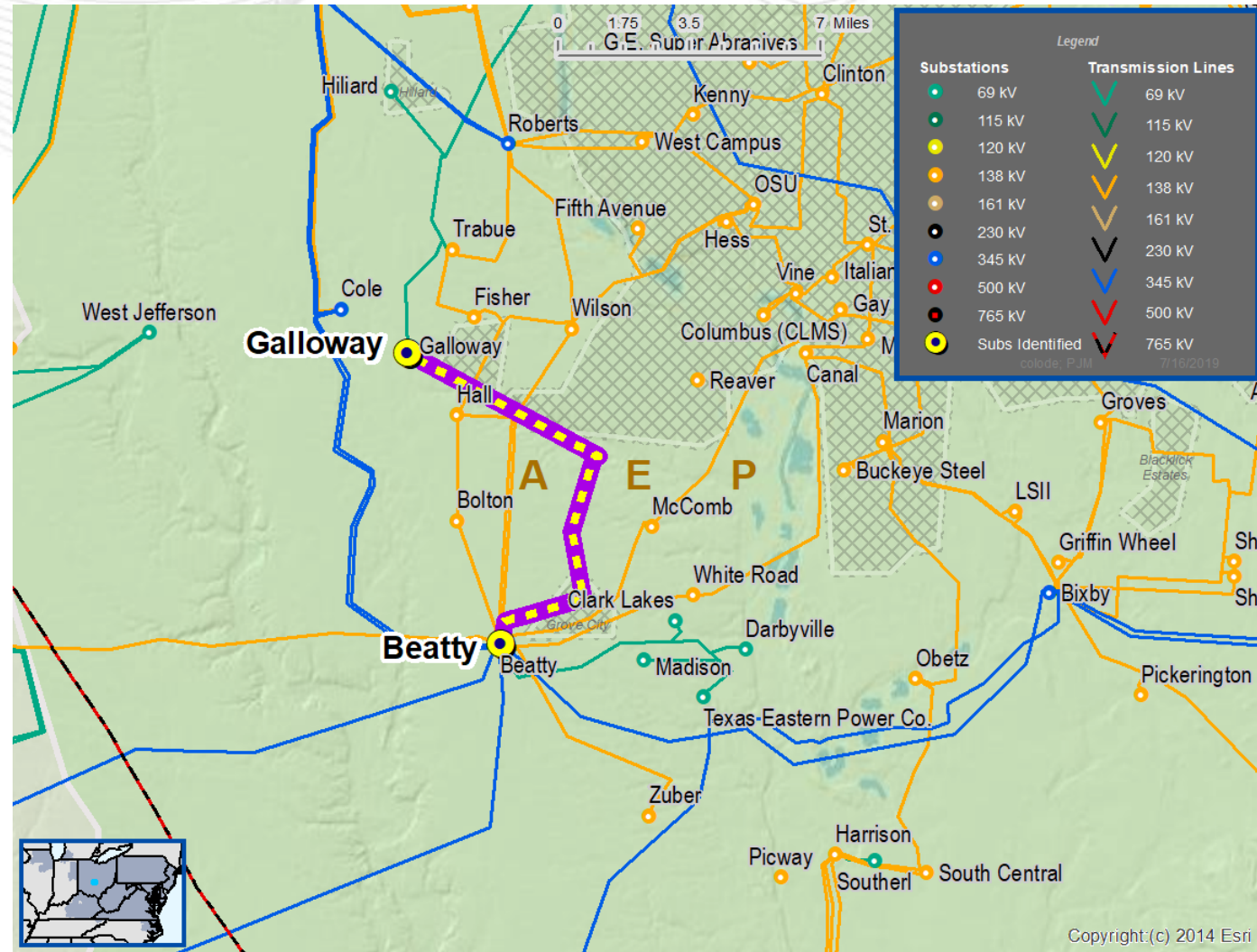
Proposal Window Exclusion: Below 200 kV & FERC 715 (TO Criteria)

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) \$5.3 M



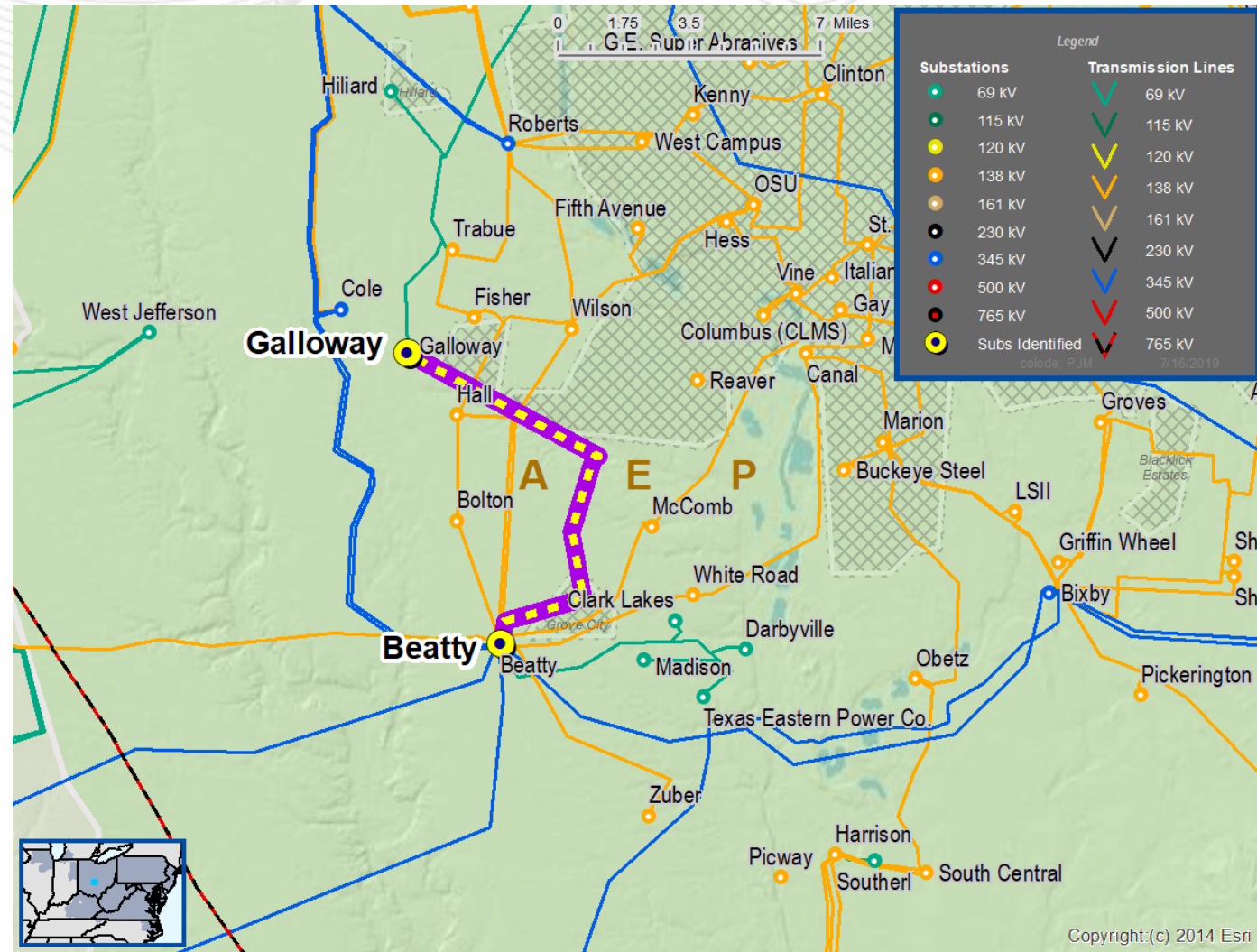
AEP Transmission Zone Baseline Beatty-Galloway UG Cable

Alternatives:

Alternative Description: Reroute ~2.0 miles 69kV line away from airport utilizing overhead conductor such that the underground cable is no longer required. The section of line would need to be rerouted substantially in order to alleviate FAA concerns associated with the nearby airport. The area of southwest Columbus in which the reroute would occur is highly developed making significant impact on the surrounding population difficult to avoid. The siting issues associated with this alternative would challenge its feasibility from a constructability perspective.

Alternative Cost: \$8 M

Required In-Service: 6/1/2023



Next Steps

Upcoming Western SRRTEP Dates

West	Start	End
8/29/2019	9:00	1:00

Questions?



Revision History

7/17/2019 – V1 – Original version posted to pjm.com

8/5/2019 – V2

- Slide #4, Add additional contingency that causes the violation
- Slide #5, Corrected the Required IS date