



Sub Regional RTEP Committee PJM Mid-Atlantic Reliability Update

February 16, 2023

Second Review and scope change

Baseline Reliability Projects

Process Stage: First Review on 10/13/2022

Criteria: FERC Form 715

Assumption Reference: 2027 RTEP assumption

Model Used for Analysis: 2027 RTEP Summer and Winter

Proposal Window Exclusion: Below 200 kV Exclusion

Problem Statement: Voltage drop violation at Medford and South Hampton 69 kV stations for several N-1-1 contingencies.

Violations were posted as part of the 2022 Window 1:

FG# PSEG-VD4	FG# PSEG-VD8	FG# PSEG-VD17
FG# PSEG-VD5	FG# PSEG-VD9	FG# PSEG-VD18
FG# PSEG-VD6	FG# PSEG-VD15	FG# PSEG-VD19
FG# PSEG-VD7	FG# PSEG-VD16	FG# PSEG-VD20

Previously Proposed Solution:

Convert existing Medford 69kV Straight bus to Seven breaker ring bus, construct a new 69kV line from Medford to the Mount Holly station, and install a capacitor bank at Medford.

Estimated Cost: \$78.7 M

Alternatives

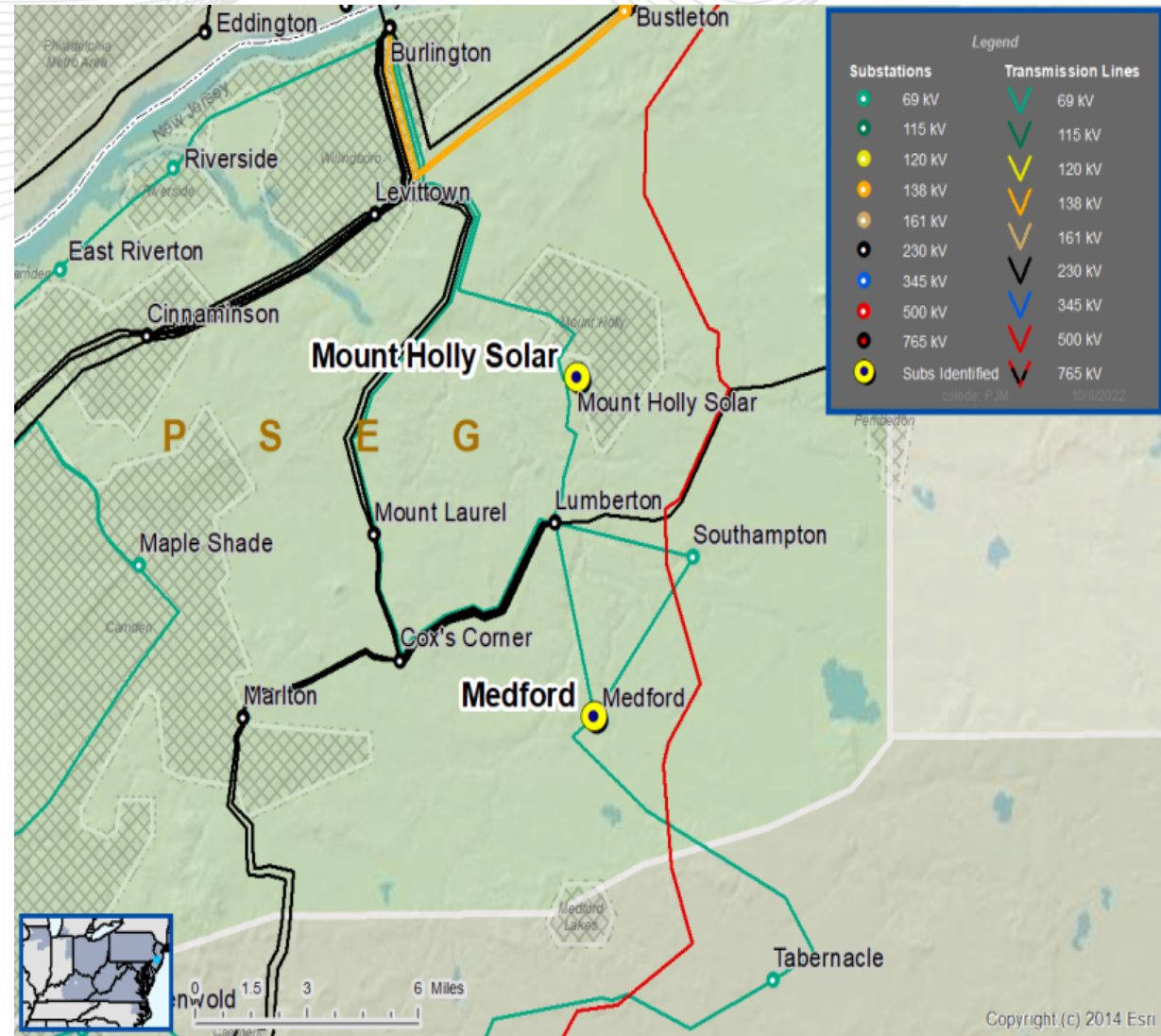
-Capacitor banks at Medford and Mount Holly:

- Current straight bus design at both stations cannot accommodate connection of capacitor banks in the appropriate locations to address all contingencies. Reported voltage drop is too great for capacitor banks at each location to be an effective solution.

-Convert existing Medford 69kV Straight bus to Seven breaker ring bus, construct a new 69kV line from Medford to the Maple Shade station

- circuit to Maple Shade has approximately seven extra miles and an additional highway crossing.

Required In-Service: 6/1/2027



Process Stage: Second Review

Criteria: FERC Form 715

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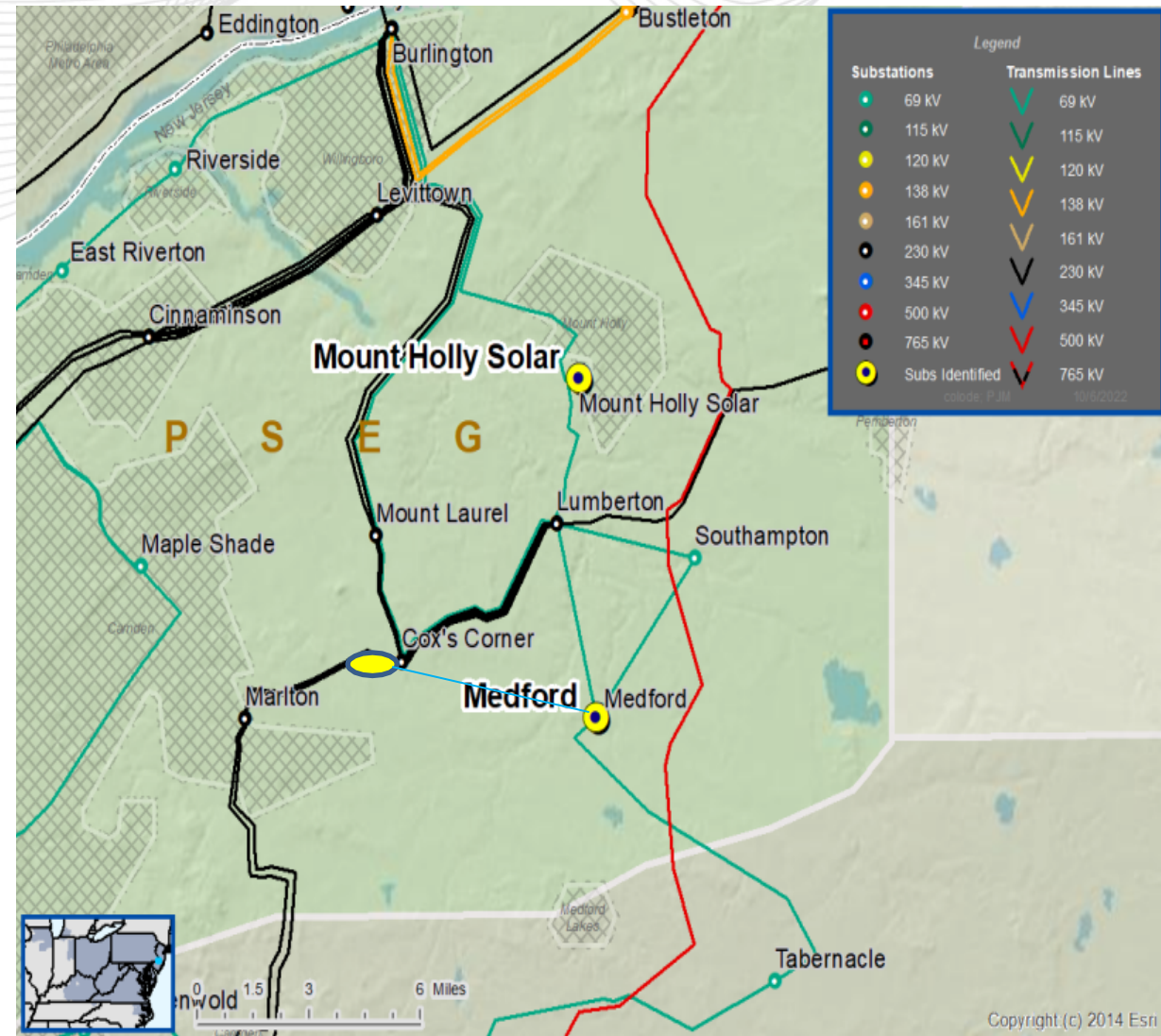
New Proposed Solution/Recommendation:

Convert existing Medford 69kV Straight bus to Seven breaker ring bus, construct a new 230/69kV transformer at Cox's Corner and a new line from Cox's Corner to Medford. (b3757)

Estimated Cost: \$101.5 M

Required In-Service: 6/1/2027

Projected In-Service: 6/1/2027



Questions?



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2023

- The Next 2023 Mid-Atlantic SRRTEP meetings are as followed
- 03/16
- 04/20
- 05/18
- 06/15
- 07/20
- 08/17
- 09/14
- 10/19
- 11/16
- 12/13



Revision History

V1 – 02/13/2023 – Original slides posted

V2 – 02/16/2023 – Added baseline ID on slide #4 and minor change on slide 3