



Reliability Analysis Update

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Transmission Expansion Advisory Committee

March 8, 2022

First Review

Baseline Reliability Projects

Process Stage: First Review

Criteria: Winter Generation Deliverability

Assumption Reference: 2026 RTEP assumption

Model Used for Analysis: 2026 RTEP Winter retool case

Proposal Window Exclusion: None

Problem Statement:

The Dresden 345/138 kV No. 81 transformer is overloaded for an N-2 outage. Violations were posted as part of the 2021 Window 2: FG# GD-W2-W211, GD-W2-W214

Existing Facility Rating: 403SN/442SE, 420WN480WE MVA

Proposed Facility Rating: No change to transformer rating, 63 kA circuit breaker

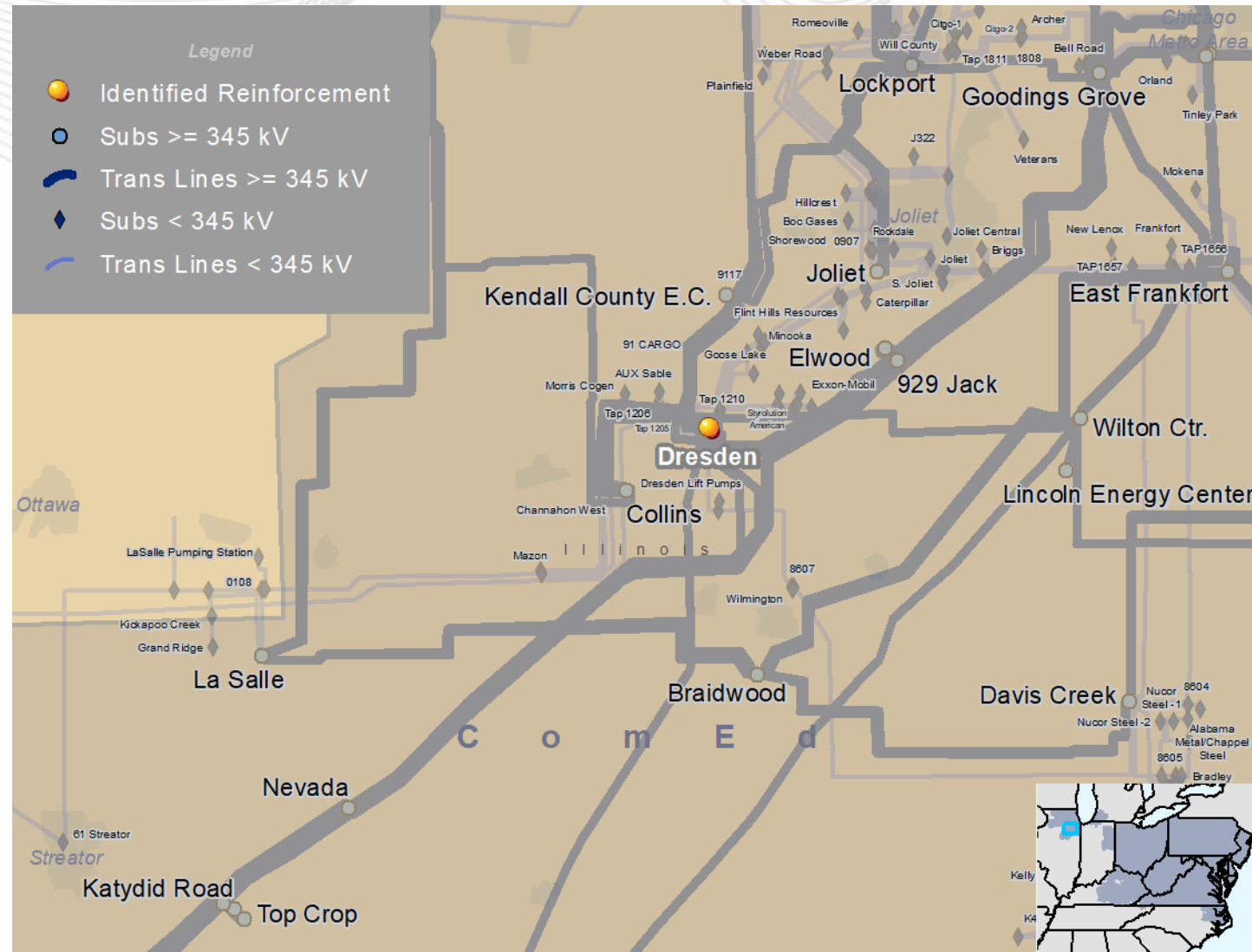
Proposed Solution:

Proposal ID 408 - Install 345 kV bus tie 5-20 circuit breaker in the ring at Dresden station in series with existing bus tie 5-6.

Estimated Cost: \$4.26 M

Alternatives: Proposal ID 442 - Interconnect the Katydid Road-Goodings Grove Blue and AB1-122-Mole Creek 345 kV circuits at a new East Spring 345 kV substation. (\$10.4 M)

Required In-Service: 12/1/2026



Second Review

Baseline Reliability Projects

Process Stage: Second Review

Criteria: Light Load Generation Deliverability and N-1

Assumption Reference: 2026 RTEP assumption

Model Used for Analysis: 2026 RTEP Summer case

Proposal Window Exclusion: None

Problem Statement:

The Shawville 230/115/17.2 kV transformer #2A is overloaded for multiple contingencies.

Violations were posted as part of the 2021 Window 1: FG# N1-LLT20, N1-LLT21, GD-LL45, GD-LL46

Existing Facility Rating: 114SN/149SE, 147WN/178WE MVA

Proposed Facility Rating: 422SN/471SE, 530WN/544WE MVA

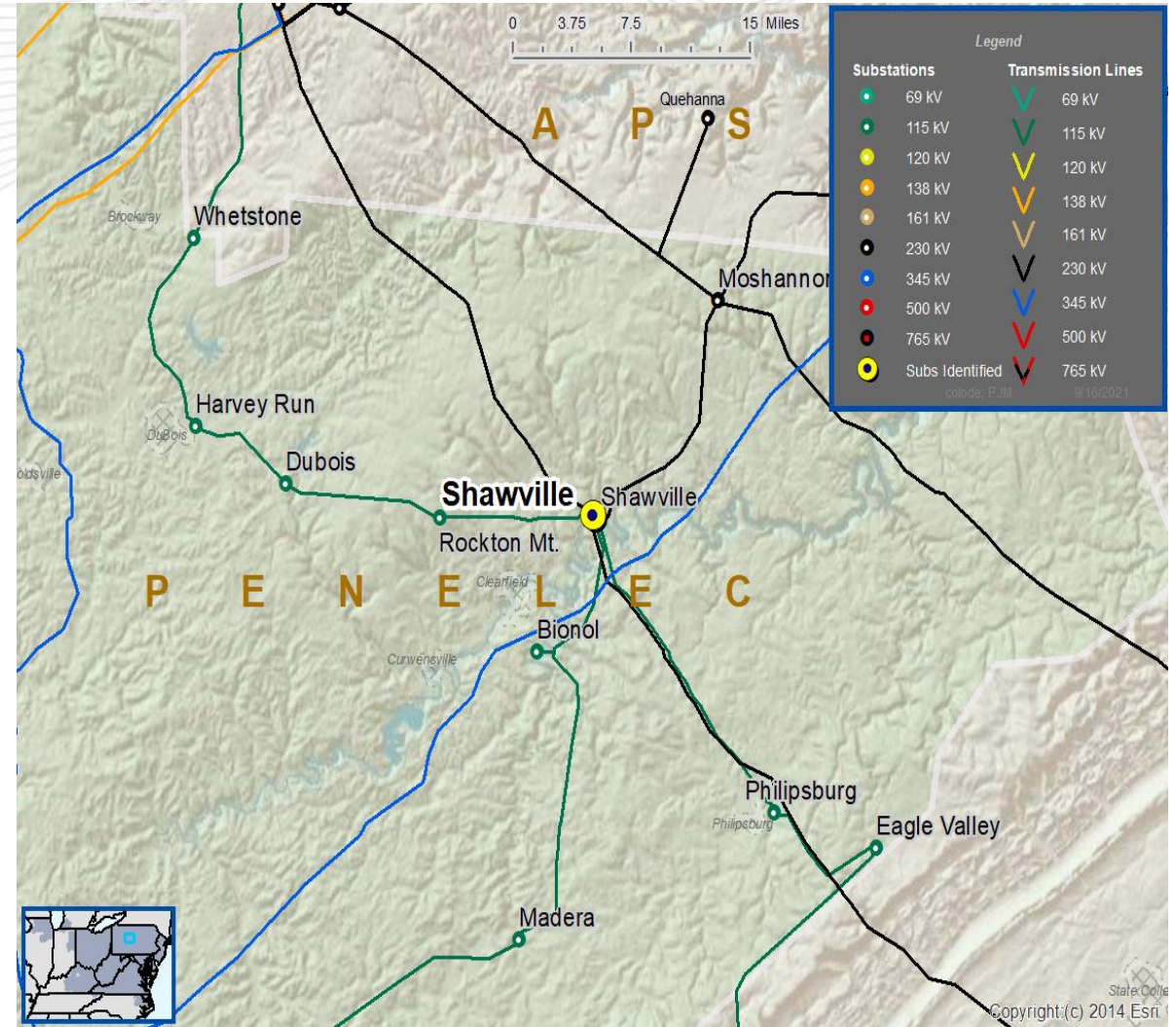
Recommended Solution:

Proposal ID 100 - Install a new 230/115 kV transformer and associated facilities. Replace the Plant's 2B 115-17.2 kV transformer with a larger 230/17.2 kV transformer. (B3708)

Estimated Cost: \$8.775 M

Alternatives: Proposal ID 306 - Replace the Shawville 2A 230/115-17.2 kV Transformer with a larger unit. (\$5.4 M)

Required In-Service: 6/1/2026





PJM RTEP 2021 Window 2



2022 RTEP

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Reliability Analysis Update



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1	3/3/2022	<ul style="list-style-type: none">• Original slides posted

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