

Immediate Need Assessment: Cut '5034' 500 kV line in and out of Bramah

Second Read

Disclaimer: While materials are current at the time of publishing, applicable requirements may change. PJM Governing Documents control.

- PJM and the New Jersey Board of Public Utilities (NJBPU) have reached an agreement to wind-down the NJ SAA Agreement via a Mutual Termination Agreement (MTA), through which:
 - Most of the SAA Projects will be terminated and removed from the RTEP; and
 - Six SAA Projects will remain in the RTEP
- The MTA provides that if the termination of any of the projects identified for cancellation results in reliability violations, PJM will address those violations consistent with established RTEP processes

- PJM filed the MTA at FERC on April 23, 2026 (Docket No. [ER26-2294](#)); and FERC accepted the MTA on [June 22, 2026](#)
- In connection with anticipated FERC acceptance of the MTA, PJM has initiated analyses to evaluate potential reliability impacts associated with the anticipated cancellation of the identified SAA Projects
- PJM has determined that the cancellation of SAA Project b3737.50 would create reliability and operational concerns associated with the timely energization and operation of the retained Bramah substation and related regional upgrades
 - The Bramah substation has a DEA required in-service date of Dec. 31, 2027 and a projected in-service date of Oct. 14, 2027

- The identified reliability need is a direct result of the anticipated post-termination transmission system configuration associated with the MTA
 - PJM could not have identified the reliability need until PJM had a sufficiently defined basis to analyze the reliability impacts of the proposed SAA Project cancellations
- PJM has determined that the identified reliability need requires a solution with an in-service date within three years or less to support the timely completion and energization of the retained regional facilities



PECO Transmission Zone: Cut-in the '5034' 500 kV line in and out of the Bramah (North Delta) 500 kV Substation

Process Stage: Need Driver & First Read

Assumption Reference: 2025 RTEP Assumptions

Models Used for Analysis: 2028 & 2030 Base Cases

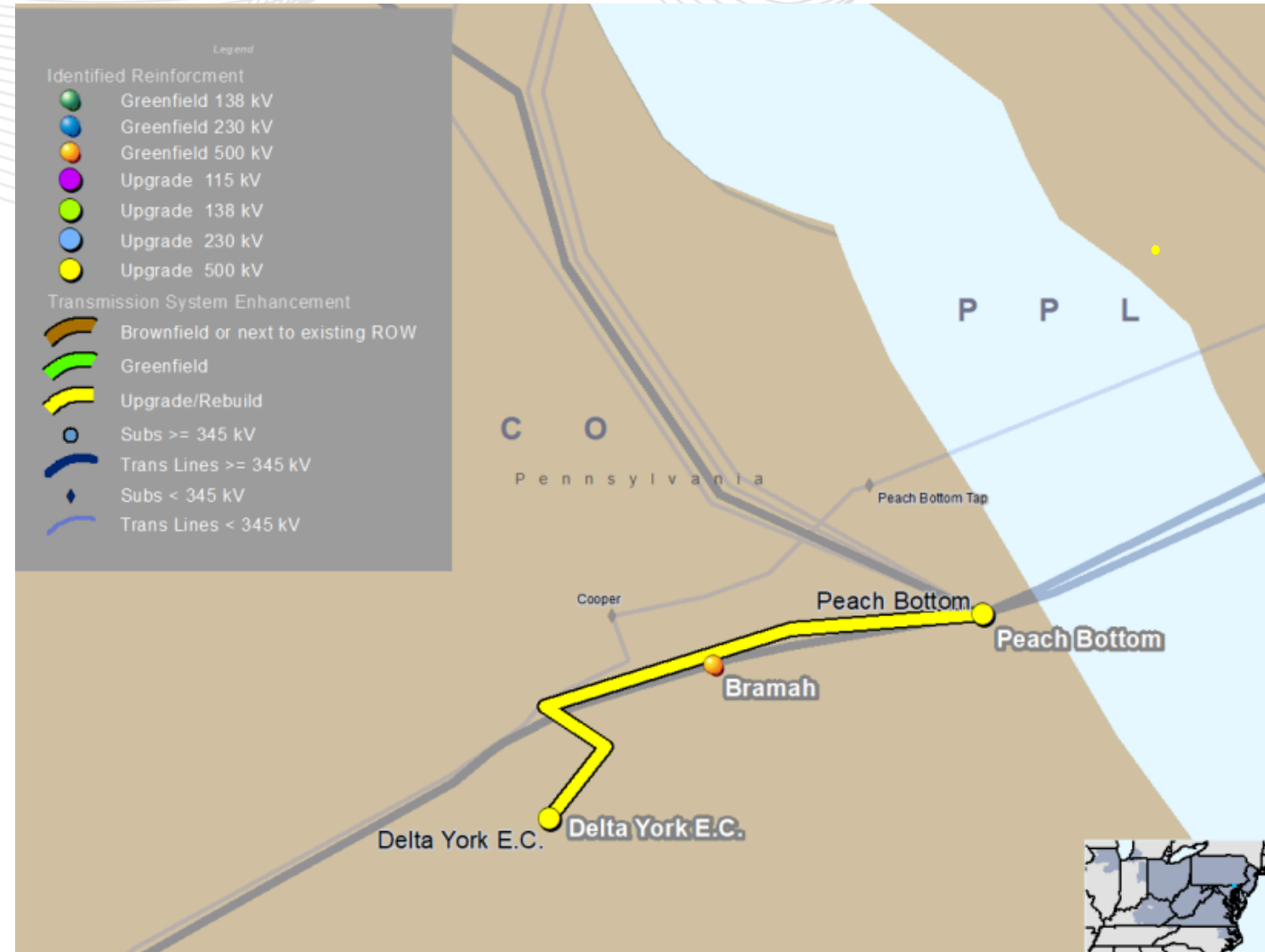
Proposal Window Exclusion: Immediate Need

Problem Statement:

NJ SAA Project b3737.50 involves bringing the Peach Bottom-Delta York 500 '5034' kV line "in and out" of Bramah substation by partially demolishing the 5034 line to construct a new Peach Bottom – Bramah – Delta York 500 kV line, with 0.87 miles of cut-in and cut-out lines. (**Projected In-Service Date:** 10/14/2027, **Estimated Cost:** \$12M)

Cancellation of the b3737.50 project will result in the removal of the 500 kV line termination into Bramah that is intended to energize the Bramah substation resulting in a delay to the Bramah substation in-service date, as there are no other 500 kV line terminations into Bramah substation that will be in-service in the required timeframe. A delay is impactful because the Bramah substation project is required to mitigate generator deliverability violations in the Peach Bottom – Conastone area that are observed in the RTEP study cases starting in 2028.

In summary, PJM has identified a reliability-driven need associated with transmission system configuration after the termination of the b3737.50 project.



PECO Transmission Zone: Cut-in the '5034' 500 kV line in and out of the Bramah (North Delta) 500 kV Substation

Proposed Solution*:

B4089.1 and B4089.2: Construct transmission facilities necessary to support the timely energization of the Bramah substation by bringing the Peach Bottom-Delta York 500 '5034' kV line "in and out" of Bramah substation by partially demolishing the 5034 line to construct a new Peach Bottom – Bramah – Delta York 500 kV line, with 0.87 miles of cut-in and cut-out lines.

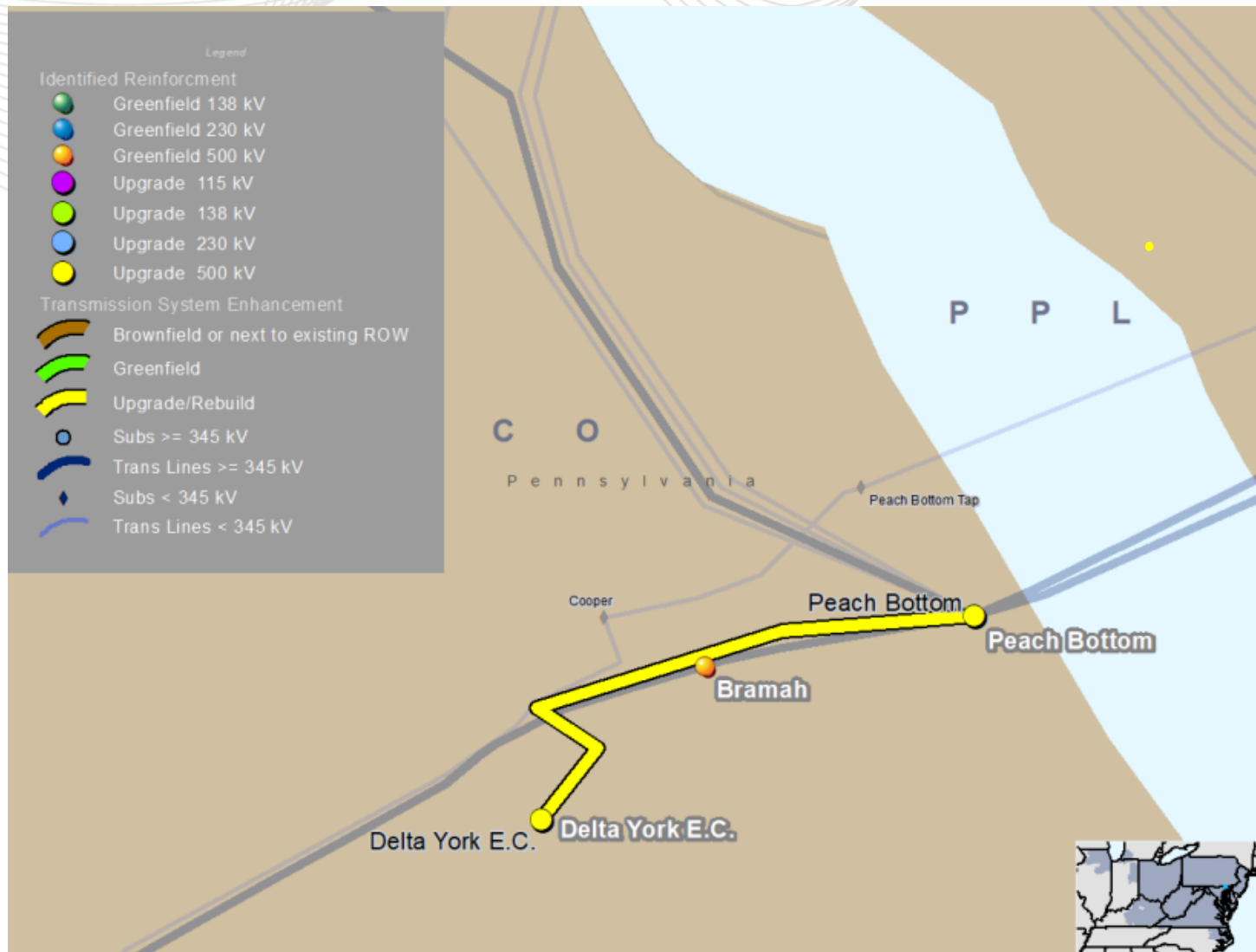
Estimated Cost: \$12M

Alternatives:

PJM has not identified any other feasible alternative capable of meeting the required in-service timing. This proposed solution ensures efficient utilization of existing ROWs to enhance the capability of the Peach Bottom-Conastone 500kV corridor, enables the Brandon Shores deactivation mitigation projects, and connects the Delta York station to the upgraded 500kV corridor at Bramah.

Required IS Date: 10/14/2027

Projected IS Date: 10/14/2027



- PJM has identified that the cancellation of b3737.50 will cause an immediate reliability need requiring timely completion of transmission upgrades associated with the energization of the Bramah substation (projected to go in-service in October 2027)
- PJM has not identified any other transmission or non-transmission solutions that would sufficiently address the immediate reliability need
- PJM has determined to designate PECO with construction responsibility for the proposed solution, without a window, to address the immediate reliability need

- Need Statement posted under the June 2, 2026 and July 7, 2026 TEAC materials as an Informational item.
- PJM welcomes all stakeholders input and comments on its “Immediate Need Assessment.”

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'5034' 500 kV Line Immediate Need Assessment



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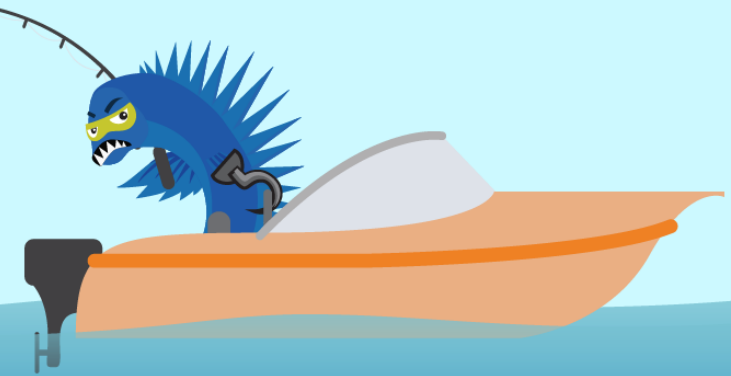
Version No.	Date	Description
1	June 26, 2026	Initial slides posted

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