Reliability Analysis Update

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PJM Transmission Planning

Transmission Expansion Advisory Committee
April 2, 2024

Outline

- 2023 Window 2 updates
- 2024 Window 1 updates
- 2024 OSW 2.0 window updates
- NJOSW 1.0 project update

2023 RTEP Window 2 Updates

Baseline Reliability Projects

2023 Window 2 update

- 2023 Window 2 opened on March 6th
- Will be closed on April 5th
- Window Statistics will be posted before the April 30th TEAC

2024 RTEP Window 1 Updates

Baseline Reliability Projects

2024 Window 1 – Progress and Timeline Update

- Current schedule
  - Internal initial 2029 model review ongoing targeting completion April 10th
  - Preliminary model posting and updates to models on as needed basis – starting mid April 2024
  - Post preliminary PJM analysis releases starting from the end of April
  - Requesting FERC Form 715 analysis results from transmission owners by the 3rd week of May
  - Targeting open 2024 RTEP proposal window 1 in the mid of July

2024 NJ OSW 2.0 Window Updates

Baseline Reliability Projects

NJ OSW 2.0 Update

- NJ SAA 2.0 Window – Planned to open in July for 90 days
  - Will use an 8-year RTEP case focusing on NJ SAA OSW integration impacts
    - Deliverability of full 7,500 MWs of SAA 1.0 capability (remaining 3,742 MW beyond the 2028-29 level) of generation from SAA 1.0 expected to be in service 2031-2032 (reliability)
    - New 3,500 MW of generation requested with SAA 2.0 expected in service starting 2033 (public policy)
  - Solutions will focus on meeting both needs and opportunities for multi-driver solutions
  - Targeting NJ BPU will accept solutions in Spring 2025.
  - Solutions presented to the PJM Board targeted for July 2025

NJ OSW 1.0 Project Updates

Baseline Reliability Projects

NJ SAA Project Update

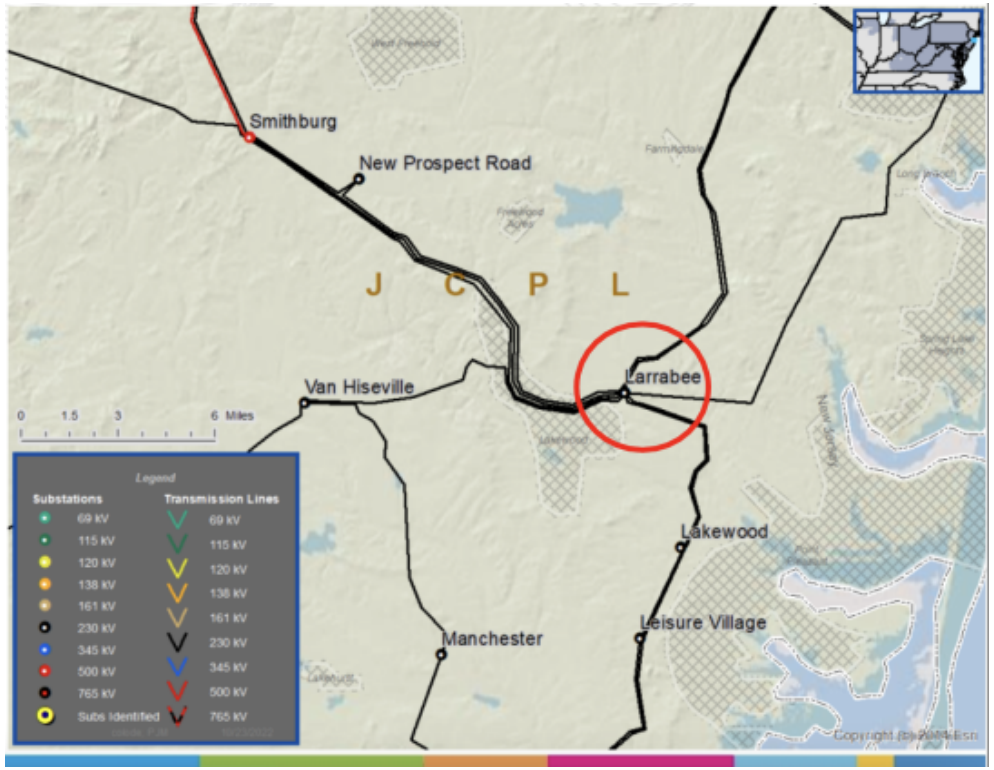
NJ SAA Project b3737.22

Designated Entity: MAOD

- Existing Scope for b3737.22:
  - Construct the Larrabee Collector Station (LCS) AC switchyard, composed of a 230 kV 3 x breaker and a half substation with a nominal current rating of 4000 A and four single phase 500/230 kV 450 MVA autotransformers to step up the voltage for connection to the Smithburg substation
  - Procure land adjacent to the AC switchyard, and prepare the site for construction of future AC to DC converters for future interconnection of DC circuits from offshore wind generation. Land should be suitable to accommodate installation of 4 individual converters to accommodate circuits with equivalent rating of 1400 MVA at 400 kV
  - Prebuild extension work and three sets of AC collector lines from the LCS to the offshore wind converter station areas.
  - Required IS Date: 12/31/2027
  - Estimated Cost: $216.3M
- Amended Scope for b3737.22:
  - Increase Sizing of Autotransformers: Increase sizing of four single phase 500/230 kV autotransformers at LCS from 450 MVA to 480 MVA to meet reactive power requirements

Estimated Cost Increase: $800,000

Required IS Date: Remains 12/31/2027



NJBPU Approval:

NJBPU approved this modification in transformer sizing from 450 MVA to 480 MVA, by order issued on March 20, 2024, in Docket No. QO20100630.

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Reliability Analysis Update

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Revision History

Version No.	Date	Description
1	3/28/2024	• Original slides posted

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