

Regional Transmission Expansion Planning Update

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PJM Transmission Planning

- Annual RTEP Planning
 - 2022 RTEP Window 3
- Scenario Planning and Special Studies
- OPSI Policy Scenario Study
- Offshore Wind Studies

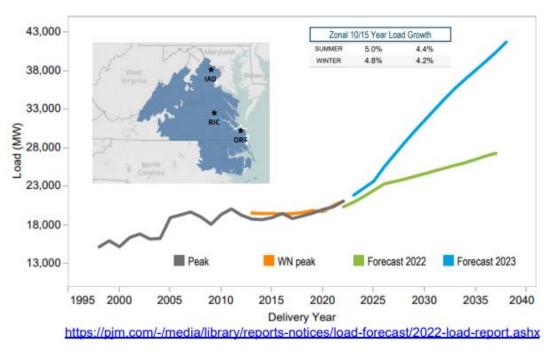


2022 RTEP Window 3



2022 Competitive Window 3 – Data Center Load Planning Update

- Earlier in 2022, PJM shared its forecast for 2022 and indicated high Data Center Load growth activity, particularly in Northern VA
- In July 2022, PJM directed an Immediate Need transmission project to enable the integration of the forecasted load within the Dominion Data Center Alley up to and including year 2025
- Since then, Data Center Loads within Northern Virginia has been increasing at an unprecedented rate (2022 Summer Peak recorded 21,156 MW – Forecast 20,424 MW)
- The 2028 timeframe load will require major transfer reinforcements into the Doubs/Northern Virginia region to support high flows and VAR requirements
- PJM is working towards opening a competitive window in early February 2023 to address the identified violations





2022 RTEP Window 3

• Window Opened; February 24, 2023

- PJM posted preliminary planning basecases on January 31st 2023
- Window Closing May 10, 2023

• Purpose:

- Address reliability needs in the Dominion and APS zones primarily associated with Data Center Load forecasts (up to 7,500 MWs by 2027-28)
- Seeking robust and flexible solutions to address the reliability needs in those specific areas



2022 RTEP Window 3 - Objective

- Develop robust, holistic and expandable solutions that address the 2027-28 baseline violations associated with:
 - Local constraints: resulting from directly serving the data center loads in APS and Dominion zones through the respective 230 kV networks and into the points of delivery:
 - Goose Creek- Ashburn Mars Wishing Star and Brambleton
 - Regional constraints resulting from imports into load center areas (500 kV primarily):
 - Doubs Goose Creek
 - Front Royal Morrisville Vint Hill Loudoun/Mosby
 - Meadow Brook Loudoun/Mosby
 - Morrisville Bristers Ox
 - Peach Bottom Conastone Brighton Doubs
 - Needed reactive power VAR reinforcements, both static and dynamic as deemed necessary, to address the reactive power needs of the system for the 2027-28 baseline scenario



2022 RTEP Window 3 - Requirements

- Holistic solutions are to be designed such that they are robust and expandable as the load grows within the area.
- A scalable solution ensures, at a minimum, near-term reliability needs are addressed while also enabling future expansion (beyond the 2027-28 baseline levels) as data center load increases in the Dominion and APS zones.
 - Consider flexibility, robustness and scalability of 2027-28-baseline solutions against the Interim 2027-28 Summer, Winter and Light Load basecases.
 - Evaluate proposals for their effectiveness towards existing reactive interfaces in the area, particularly those supporting the Dominion and APS zones.
 - Evaluate the effectiveness of the proposed solutions towards the transmission system load deliverability into the Dominion and APS zones (CETL).





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ISAC Update

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