PSE&G Load Forecast Adjustment Request

Presentation for the PJM Load Analysis Subcommittee

09/10/2025

PSE&G Requests Adjustment to the 2026 PJM Load Forecast for PS Zone

- An accurate load forecast is crucial to ensuring grid reliability in the near-term and long-term.
- PSE&G requests adjustments to PJM's 2026 load forecast to improve the accuracy of the load forecast.
- PJM's forecast must reflect evolving energy demand trends driven by New Jersey data centers growth and ports electrification/expansion.
  - **Data Centers Load Growth:** Significant increases in PS zone compared to prior years are being experienced due to expansion of the existing data centers, new data center load requests, and the feasibility study requests.
  - **Ports Electrification:** Major projects to electrify operations at ports will drive new energy demands.

Data Centers Load Forecast

- PSE&G currently has 39 data center sites with a summer peak demand of 394MW.
- Data centers are significant users of on-peak electricity, since they are more energy intensive than the average commercial activity, data centers are not captured by the PJM econometric based load forecast model framework.
- Expansions of existing data centers, new data center load requests, and feasibility study requests from data center customers, are driving an increase in load forecast.
- For each new load and feasibility study request, PSE&G assessed a likelihood percentage (0% to 100%) using the factors below:
    - Capacity Review Agreement
    - Customer readiness
    - Construction complexity
    - Equipment lead time / availability
    - Site control
    - Overall customer commitment, etc.
    - Financial Commitments towards projects
    - Proof of equipment procurement
- This approach factors in the likelihood of realization of Data Center projects.

Data Centers Load Forecast, Cont'd.

- PSE&G developed a 20-year forecast through 2046 comprised of:

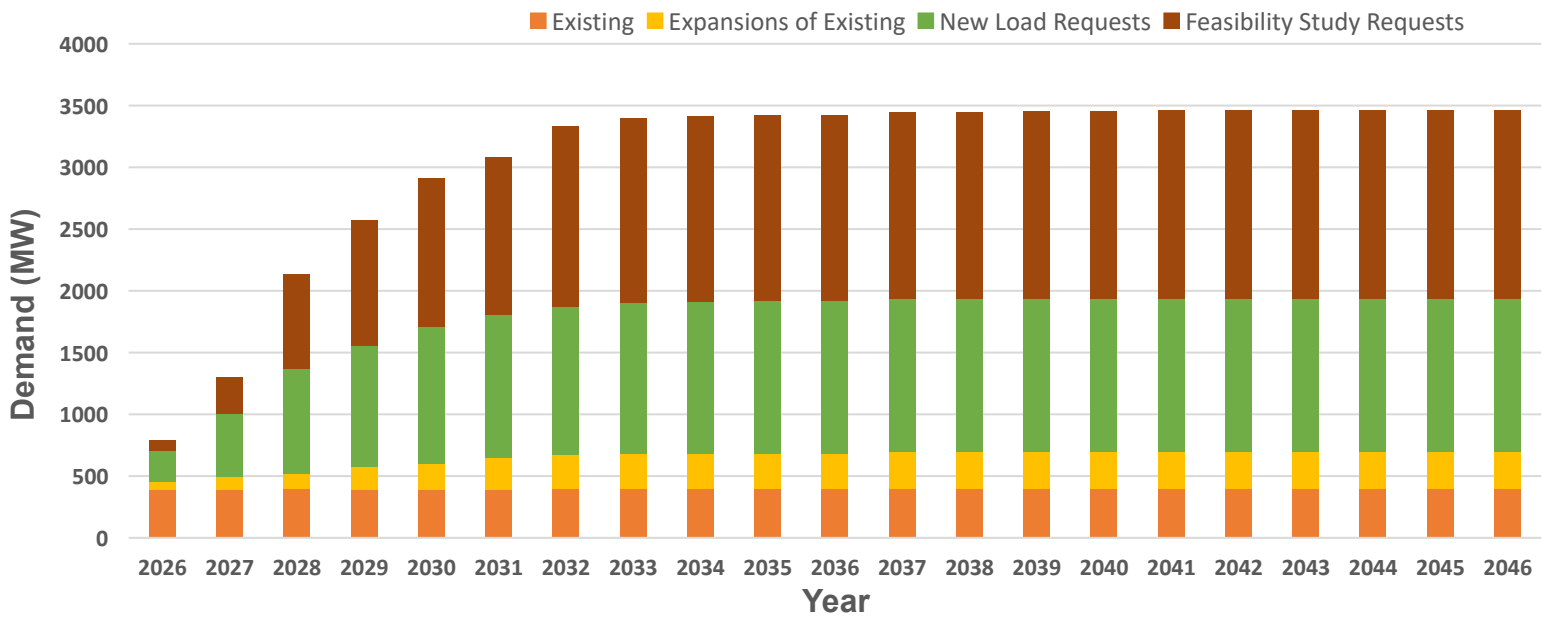
➢ **New Data Centers load requests:**

- The analysis uses completion likelihood of 100% for the new data centers.
- For each new data center project, Demand and Capacity was received.
- The average Demand/Capacity ratio turned out to be approximately 75%.

➢ **Feasibility Study requests:**

- Assumed completion likelihood of 50%.
- Assumed demand to capacity ratio of 75%.

➢ **Data Center Demand:**



Ports Electrification

- The Clean Ports Program in the Inflation Reduction Act includes $3 billion in funding to plan, purchase or install zero-emission port equipment or technology at the nation's ports[1]. The electrification of ports is seen as a keyway to reduce air pollutants and address public health and environmental impacts on surrounding communities.

- The Port Authority of New York and New Jersey (PANYNJ) has begun planning to electrify the Ports of Newark, Elizabeth and Bayonne to achieve the goal of net zero carbon emissions by 2050[2].

- This load increase is not captured by the PJM Load Forecasting Model's economic drivers.

Year	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
Demand (MW)[3]	4	30	48	52	65	69	74	79	93	98	103	108	113	118	151	151	152	152	153	176	176

1: United States Environmental Protection Agency, "Clean Ports Program", https://www.epa.gov/newsreleases/epa-announces-historic-400m-clean-ports-investment-new-jersey
2: Squires, Anna," NREL Leads the Charge to Electric Trucks at Port of New York and New Jersey", National Renewable Energy Laboratory, January 30, 2023
3: Includes requests from South Jersey Port in Camden, NJ

PSEG

Thank *you*