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ADAPTING TO AN EVOLVING LOAD INTERCONNECTION QUEUE

BREAKOUT OPTION #1: ECOS OIL & GAS CAUCUS (O&GC) ON DATA CENTER SOLUTIONS - POWER

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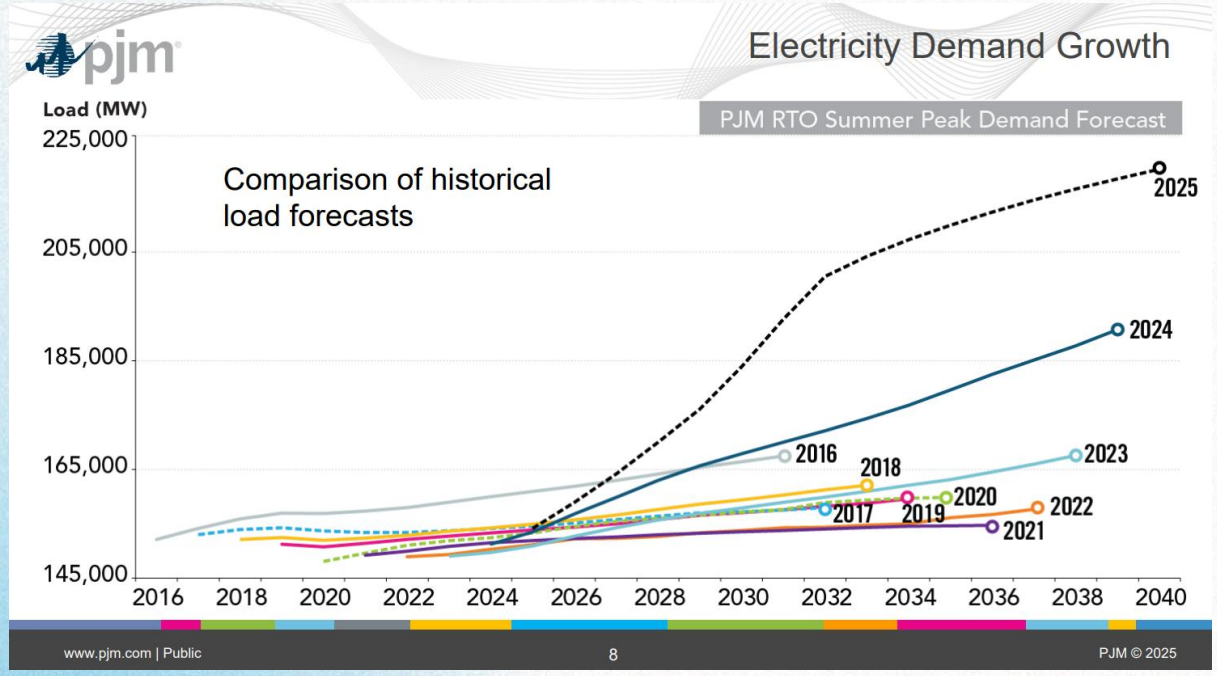
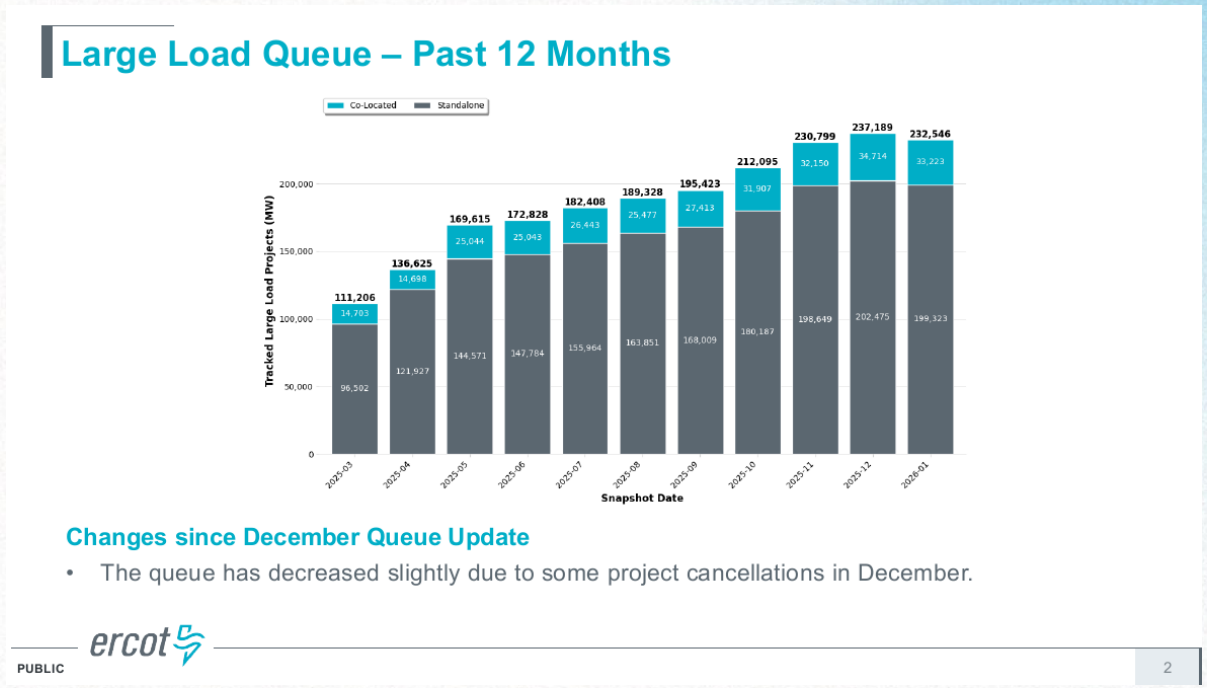
FORECASTS SHOW UPWARD PRESSURE ON LOAD GROWTH ACROSS THE U.S.

- ***Grid operators such as MISO, ERCOT, SPP and PJM all continue to increase their electricity demand forecasts, heavily driven by data center load.***



Source: PJM Large Load Additions Workshop



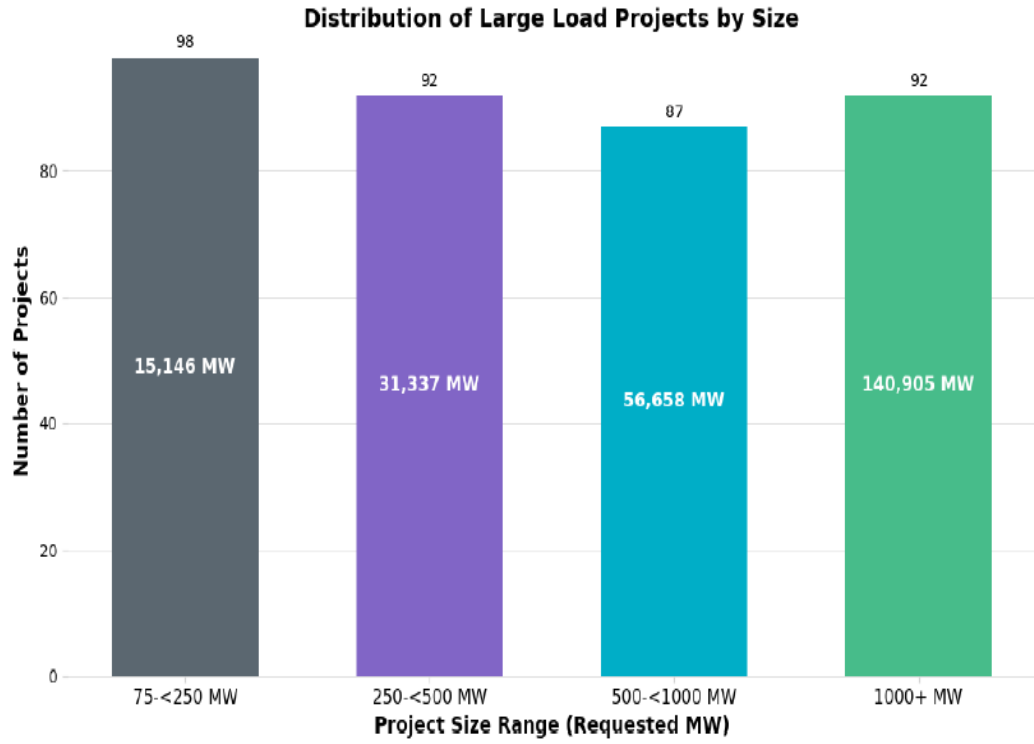
Source: ERCOT LLWG Report

A SHIFTING LOAD QUEUE BRINGS NEW CHALLENGES

Today's large loads differ drastically from historical large loads seeking to connect to the grid; thus, creating unique challenges and driving reform in grid operator and utility processes.

- **Unprecedented Project Sizes (1GW+)**
  - Historically, a 200 MW load would be considered very large
- **Timeline Mismatches Make Planning Difficult**
  - Load (1.5+yrs); Transmission Build (5-10 yrs); Generation (4+ yrs)
- **Queue Management**
  - High Volume/Uncertainty of Loads
- **New Technical Concerns Raised**
  - Load Ride-through Proposals
  - New Modeling Requirements
- **Defining "Large Load" is Challenging**
  - Thresholds vary from 10MW to 75MW

Large Load Project Distribution - Size



Source: ERCOT LLWG Report

WHAT IS THE IMPACT FOR LOADS SEEKING TO CONNECT?

- **Delayed Energization**
  - 5+ years in some instances
- **Long Study Times**
  - The high volume of load requests and withdrawals contribute to constant re-studies. The result is slow communication to end-use customers of what the cost and timeline is for them to connect.
- **Fluid Policies**
  - As stakeholders work through the necessary changes, a load seeking to connect is exposed to several, potentially high-cost, impacts from ongoing proposals.
    - Potential high upfront interconnection fees and upgrade costs (some non-refundable)
    - Possible operation restrictions (ride-through requirements, curtailments, etc.)
  - Unstable rules can impact the ability to evaluate project feasibility and, in some cases, deter projects from coming online.

SOLUTION-BASED APPROACH

The market must adapt to the evolving load interconnection queue. The ability to timely connect large customers ensures load growth helps to absorb the cost of new infrastructure.

BRING YOUR OWN GENERATION & DEMAND RESPONSE

- Ensure a path forward that allows for large loads to bring their own generation online in a timely manner either through self-gen or with a partner developer.
  - This is often the fastest way for a large load customer to connect, and it is beneficial to the grid.
- Incentivize participation in demand response from large loads. The cheapest MW is the one the grid never has to serve!

INFRASTRUCTURE & TECHNOLOGY

- Utilize advanced grid technology as appropriate to maximize the operation and use of the existing system.
- Deliver timely build out of the approved transmission projects.
- Take a holistic approach to safeguarding reliability, including the appropriate use of grid stability products and batteries.

REGULATORY & POLICY

- Continue efforts to improve queue management for both loads and generation.
- Ensure the levers work for all load types.
- Utilize cost causation principles in both determining interconnection charges and the cost allocation of infrastructure.
- Encourage engagement from a diverse group of stakeholders to produce the best solutions.