



## Item 8: Interconnection and Grid Analysis Update

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Vice President, Interconnection and Grid Analysis

Board of Directors Meeting

June 1-2, 2026

### Purpose

Provide updates on key Interconnection and Grid Analysis topics.

### For information only

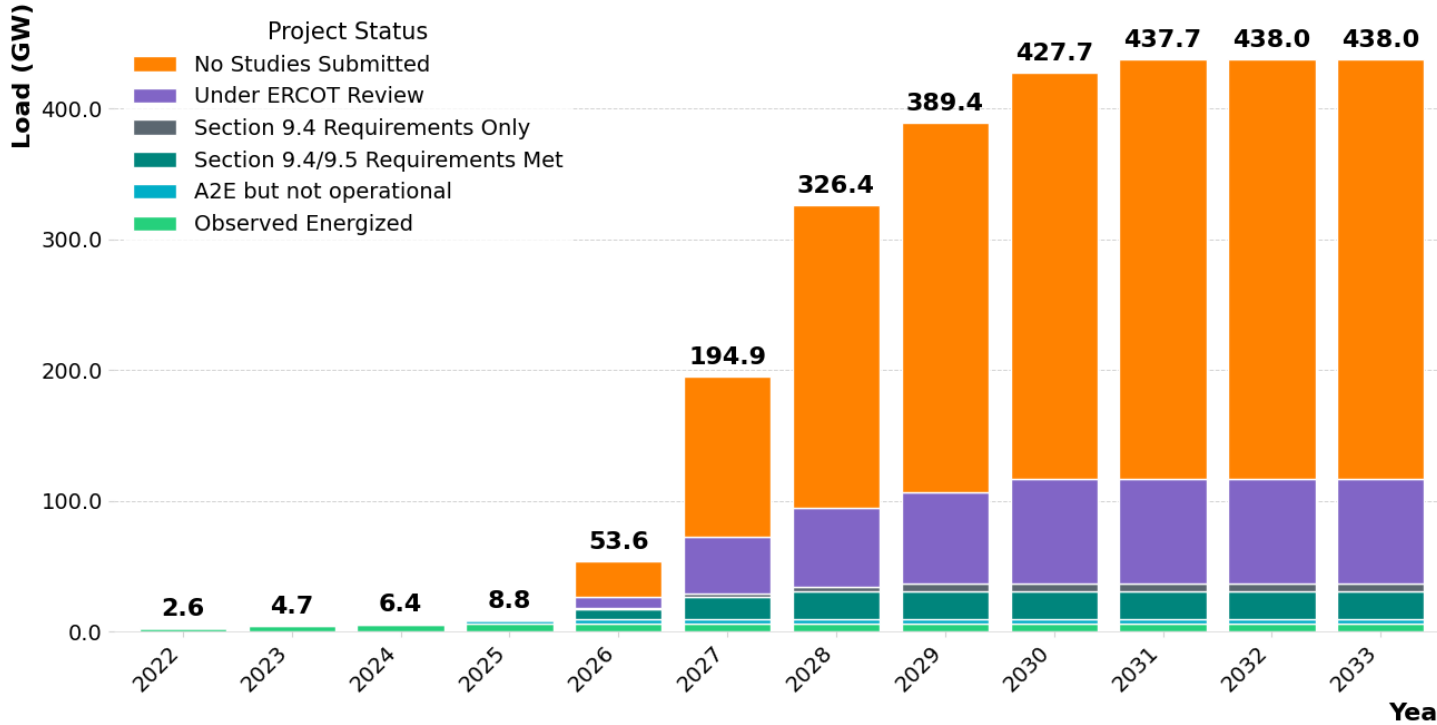
No action is requested; for discussion only.

### Key Takeaways

- ERCOT is tracking **~438 GW** of **Large Load** Interconnection requests and **~452 GW** of **Generation** Interconnection requests.
- **Pin Oak Peaking Energy Center**, a new **459 MW** gas generator in Freestone County, is the first Texas Energy Fund project to be approved for commercial operation.
- The latest Quarterly Stability Assessment includes **~4.0 GW** of new **Generation** and **~3.9 GW** of **Large Load** expected to energize in **Q4 2026**.
- ERCOT has begun the **NOGRR245-related Reliability Assessment** of potential requirement-exemption requests.

# Large Load Interconnection Requests

Actual and Projected Large Load Growth 2022-2033



Project Status	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
No Studies Submitted	0.0	0.0	0.0	0.0	26.9	122.6	232.3	282.9	311.1	321.1	321.4	321.4
Under ERCOT Review	0.0	0.0	0.0	0.0	8.9	43.3	60.1	70.0	80.2	80.2	80.2	80.2
Section 9.4 Requirements Only	0.0	0.0	0.0	0.0	0.4	2.5	3.7	5.8	5.8	5.8	5.8	5.8
Section 9.4/9.5 Requirements Met	0.0	0.0	0.0	0.0	8.3	17.4	21.4	21.7	21.7	21.7	21.7	21.7
A2E but not operational	0.0	0.3	1.4	3.0	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
Observed Energized	2.6	4.5	5.0	5.8	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
<b>Total (GW)</b>	<b>2.6</b>	<b>4.8</b>	<b>6.4</b>	<b>8.8</b>	<b>53.5</b>	<b>194.8</b>	<b>326.5</b>	<b>389.4</b>	<b>427.8</b>	<b>437.8</b>	<b>438.1</b>	<b>438.1</b>

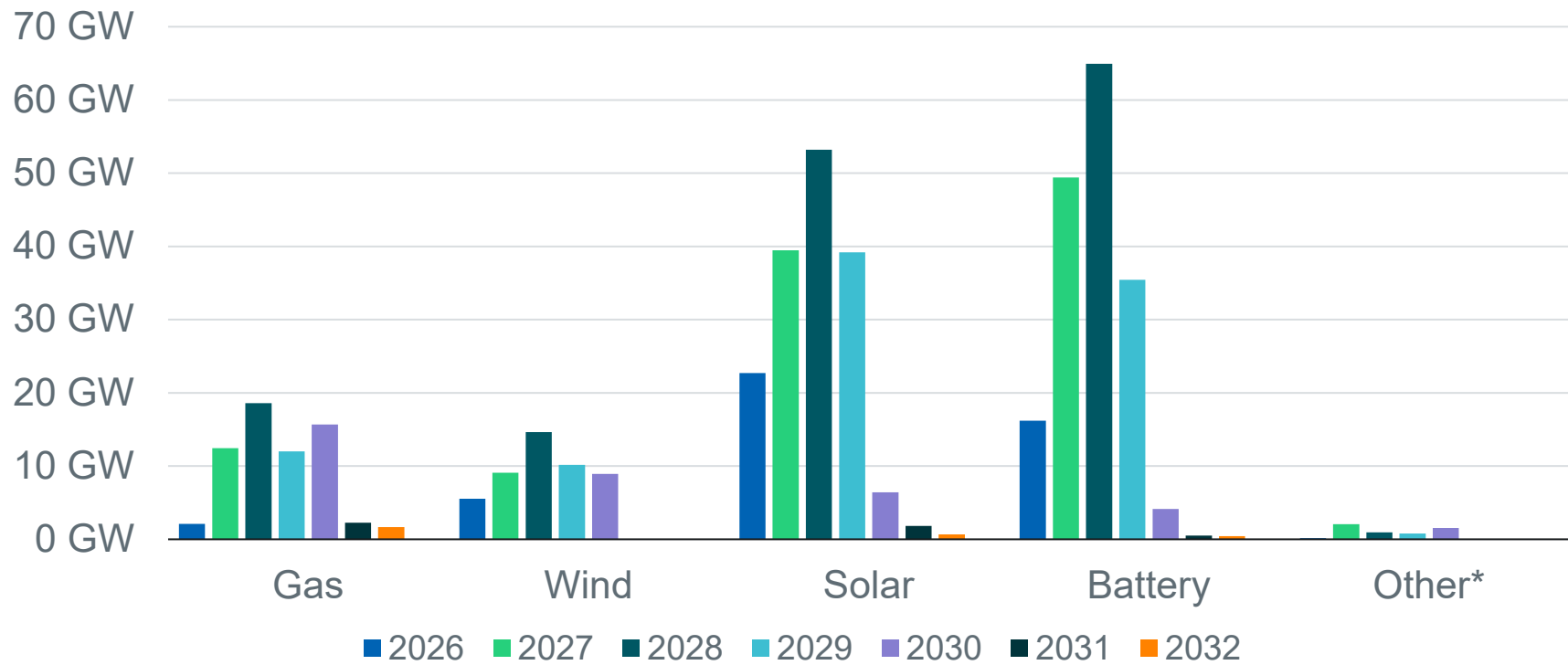
ERCOT is tracking 438 GW of Large Load Interconnection Requests through the current PGRR115-based process.

The vast majority of requests do not have any studies submitted.

This process will end on July 10, 2026, at which time ERCOT will switch to a batch-based interconnection process.

# Generation Interconnection Capacity by Fuel Type

Totals: Solar 163 GW (36.1%), Wind 48 GW (10.7%), Gas 65 GW (14.3%), Battery 171 GW / 411 GWh (37.8%), Other 5 GW (1.2%)

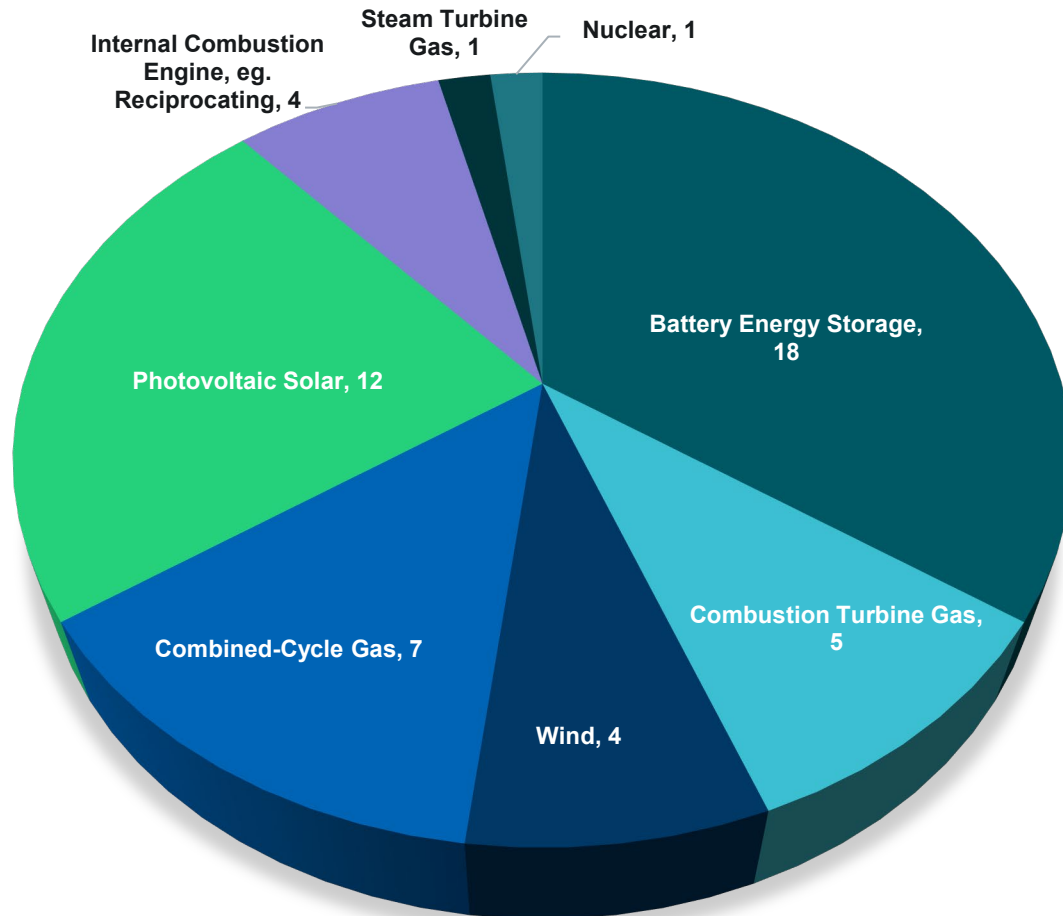


A break-out by zone can be found in the monthly Generator Interconnection Status (GIS) reports available on the ERCOT Resource Adequacy Page: <http://www.ercot.com/gridinfo/resource>

- Other includes petroleum coke (pet coke), hydroelectric, fuel oil, nuclear, geothermal energy, other miscellaneous fuels reported by developers, and fuel cells that use fuels other than natural gas.
- The GWh cited for active planned battery storage projects is an estimate of the aggregate nameplate energy rating based on data provided through Request for Information (RFI) submissions for projects with signed interconnection agreements. Using the RFI data, an average design duration for these projects is calculated and then multiplied by the nameplate capacity for all active projects to derive the total energy rating.

# Recent Generation Interconnection Activity

Applications Received in the last 60 days by Technology Type



**Key Takeaway:** Battery Energy Storage continues to be the most active generation type requesting interconnection studies, though various gas generation technologies have seen an uptick in requests.

# Pin Oak Peaking Energy Center 1 and 2 Are First Texas Energy Fund Projects to Receive Approval for Commercial Operation



Photo courtesy of Calpine/ Constellation Energy

Owner

**Calpine/ Constellation Energy**

TSP

**Oncor**

Technology

**Gas Combustion Turbine**

Total Capacity

**459 MW**

Location

**Freestone County**

# Quarterly Stability Assessment (QSA)

## What is the QSA?

### Definition

The QSA is a mandatory reliability study, required since 2018, that assesses grid stability prior to connecting new generation resources or Large Loads to the transmission system.

### Purpose

Sets operational stability limits to maintain reliable interconnection and operation of new Generation Resources and Large Loads to the ERCOT System.

### Who is affected?

All new generators and, starting February 2026, all Large Loads must be assessed in the QSA 5~8 months before Initial Synchronization and Initial Energization.

## UPCOMING PROPOSED CHANGES

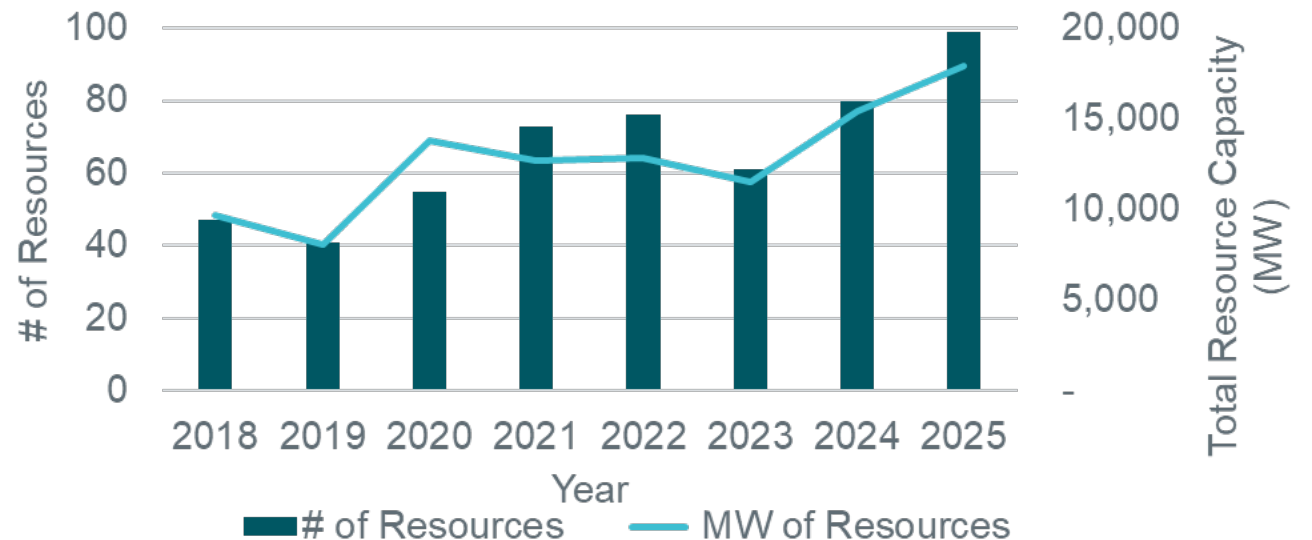
### 3 → 4 months per cycle

A 4-month cycle provides the time needed to accurately identify and establish operational limits, ensuring reliable connection of new Generation Resources and Large Loads.

## QSA Workload Has Doubled Since 2018

<b>100+ GW</b> New resources assessed	<b>2x</b> Projects and capacity increase	<b>6.5x</b> More stability constraints (4 → 26 GTCs)
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2018-2025 QSA

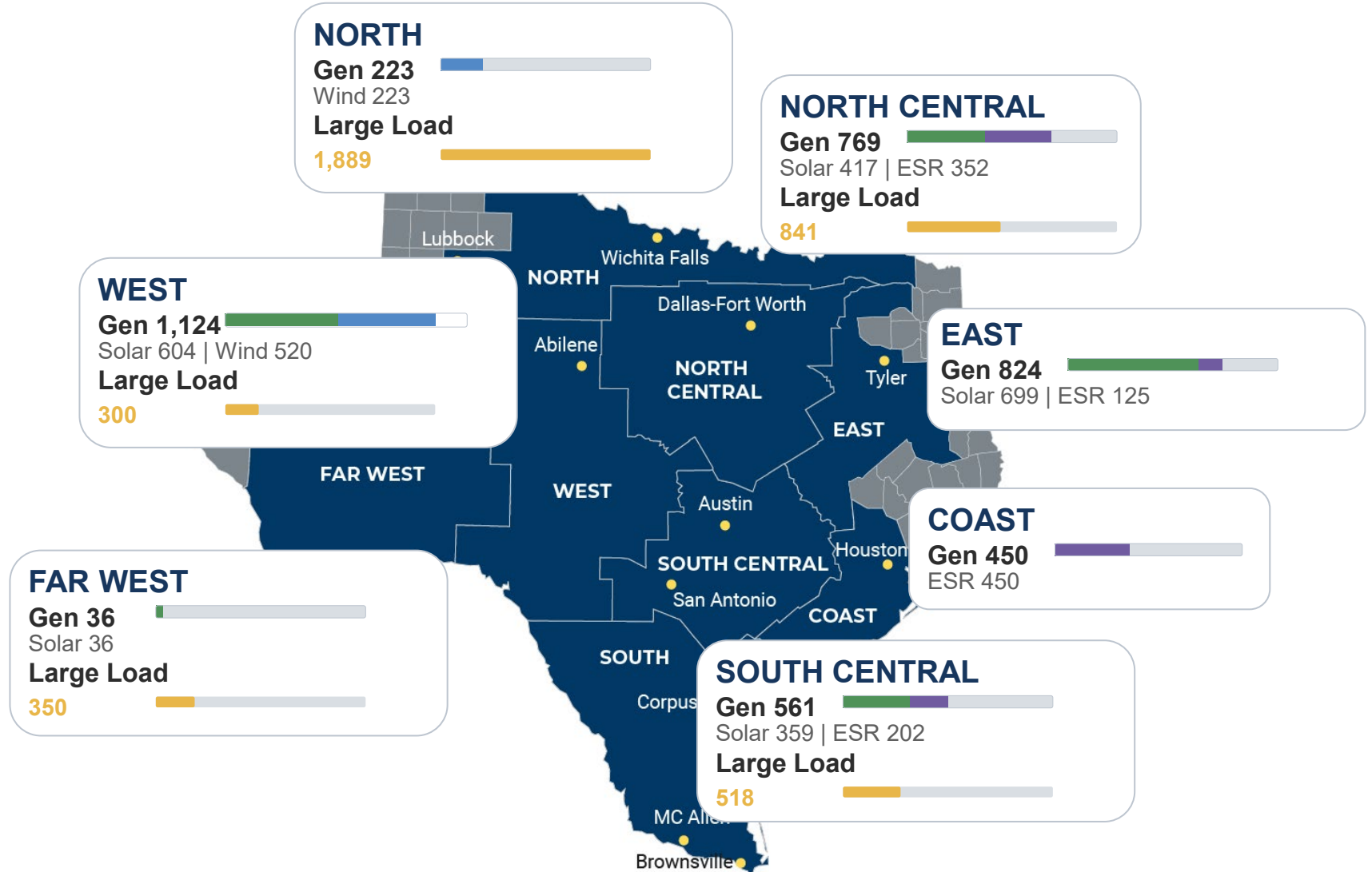


# Q4 2026 QSA Incoming Generation & Load Capacity (MW) - Weather Zone

**TOTAL GENERATION**  
**3,988 MW**  
Including Energy Storage Resources

**ESR ENERGY**  
**2,214 MWh**  
Energy Storage Resources

**TOTAL LARGE LOAD**  
**3,898 MW**  
Demand



# NOGRR245 Implementation Update

- **Background**
  - NOGRR245 set forth certain reliability requirements for Inverter Based Resources (IBRs).
  - Resource Entities (REs) could submit requests for an extension of time to meet the requirements and/or an exemption from the requirements.
- **Status of Extension/ Exemption Submissions (as of May 14, 2026)**
  - ERCOT is currently reviewing multiple model submissions received near April 30, 2026.
  - Notifications for approval or denial of Extension-Only requests are underway.
  - The Reliability Assessment of Exemption requests has begun for 45 IBRs, with initial steady-state screening in progress.
- **Next Step**
  - Continue Reliability Assessment activities.

**Key Takeaway:** ERCOT is advancing the Reliability Assessment to determine the potential impacts of granting requested exemptions to the IBR requirements set forth in NOGRR245.

## NOGRR245 Submission Status as of May 14, 2026

