ERCOT Trending Topics

ERCOT's New Batch Connection Process for Large Electricity Users

In this Trending Topic, we explain how ERCOT is handling more demand from large electricity users than ever before, how ERCOT will become the first grid operator in the nation to approve connection requests for large users like data centers in batches, and how ERCOT is providing new connection options that will help keep the grid stable for Texans.

KEY POINTS:

- **ERCOT is tracking more than 438,000 megawatts (MW) of new connection requests from large users like data centers**
- **ERCOT developed a new batch study process to ensure large electricity users only connect in quantities and locations the Texas transmission grid can support**
- **The new process was created through a robust stakeholder engagement**
- **New connection pathways will have data centers working to keep the grid stable for the rest of the state**
- **"Batch Zero," the first group of users, begins in July 2026**

FACTS:

Background

Texas is experiencing an unprecedented surge in demand for electricity. Data centers, cryptocurrency operations, and large industrial plants are requesting to connect to the ERCOT grid at a rate never seen before.

As of mid-2026, large users totaling more than 438,000 MW of proposed demand had entered ERCOT's connection queue. Nearly 90% of those requests were from data centers. To put that in perspective, ERCOT's all-time peak demand record is 85,508 MW set on August 10, 2023.

> ERCOT defines a large user as a single site with a peak electricity demand of more than 75 MW. That same amount of electricity can power 18,750 homes during ERCOT peak hours.

As large users rushed to connect to the grid, ERCOT staff discovered the historical method of studying these connection requests one at a time needed to change. The addition of each new large project affected and could potentially invalidate studies for projects that were farther along in the connection process. The problem triggered costly restudies that delayed completion timelines.

ERCOT staff began working on a framework to connect large users through a system-wide batch process that studies all eligible applicants together. The new framework allows ERCOT to assess how all the projects interact with each other and with the existing grid, producing a single, coordinated picture of what transmission upgrades are needed. ERCOT is the first Independent System Operator (ISO) in the nation to use a batch process for studying and allocating grid capacity to new large users en masse.

How ERCOT's Batch Process Works: From Application to Connection

1. PROJECTS ENTER BATCH

Eligible large projects (75 MW or greater) enter batch process together.

2. COORDINATED STUDY

ERCOT studies all eligible projects as a group to understand grid needs and transmission capacity.

3. TRANSMISSION ALLOCATION

Transmission capacity is allocated based on what the grid can reliably support.

4. TRANSMISSION PLAN

ERCOT develops and publishes a transmission plan to identify needed grid updates.

5. RELIABLE CONNECTIONS

Large users connect with confidence while maintaining grid stability for homes, businesses, and communities.

What is “Batch Zero” and why is it groundbreaking?

"Batch Zero" is the name for the first group of large-user applicants to go through the new process.

The process is laid out in two new rules: Planning Guide Revision Request 145 (PGRR145) governs the application and study process; Nodal Protocol Revision Request 1325 (NPRR1325) covers broader market rules. Together they define the necessary reliability studies, a single commitment period for the users, and a transmission plan that can be implemented upon new user financial commitment.

The rules took shape through one of the most comprehensive stakeholder engagement efforts in ERCOT's history. Over several months, ERCOT held more than 80 meetings — including one-on-one interviews, public workshops, and committee sessions. Workshops drew an average of about 500 participants each. ERCOT staff reviewed nearly 200 survey responses and addressed more than 290 written comments.

The Stakeholder Process Behind the Framework

80+

Number of meetings with stakeholders[1]

~500

Average participants per workshop[2]

~200

Survey responses collected and analyzed

290+

Comments addressed (related to PGRR145)

As a result, ERCOT's Technical Advisory Committee, a body made up of industry stakeholders, unanimously recommended the new rules to ERCOT's Board of Directors, which adopted them on June 2, 2026. The rules became final when the Public Utility Commission of Texas approved them on June 18, 2026.

Base Load: Projects that completed prior Large Load Interconnection Studies (LLIS) meeting defined criteria, projects already included in approved Regional Planning Group (RPG) studies, and several other categories of previously evaluated projects are eligible to enter Batch Zero. Many will be incorporated as "base load," meaning the amount of electric capacity allocated from prior work is effectively preserved for those projects.

Studied Load: Other projects will enter Batch Zero as a "studied load," meaning that project's electricity allocation hasn't been predetermined. These are projects that have some of the study process completed. Electricity allocations will be determined through a system-wide study based on what the transmission grid can reliably support once all eligible projects are assessed together. A studied load may receive its full requested capacity, a partial allocation, or may need to wait until a subsequent batch, if the grid cannot accommodate it at the time.

Excluded Load: Projects that do not qualify to be Base Load or Studied Load in Batch Zero will be required to wait for a future batch study.

Footnotes:

1 Including 1-on-1 interviews, workshops, large load working groups, the Protocol Revision Subcommittee (PRS), the Reliability and Operations Subcommittee (ROS), the Technical Advisory Committee (TAC meetings)

2 Including both online and in-person participants

ERCOT understands that not all connection requests result in built projects. Therefore, developers will be presented with a commitment deadline currently planned for June 2027 for projects in Batch Zero to post financial security for their development and prove they have appropriate site control needed to build.

Can projects connect faster if they "bring their own generation" or agree to be flexible with their electricity demand?

Yes. Besides streamlining the study process, the Batch Zero framework introduces two new optional pathways for large customers who want to connect in ways designed to reduce pressure on the transmission grid. They are the Withdrawal-Limited Private Use Network (WLPUN) and the Provisional Controllable Load Resource (PCLR) pathways to connection.

WLPUN is for large customers who plan to build their own on-site power generation, such as natural gas turbines, solar panels, or other sources. By generating some of their own electricity, these customers reduce the amount they need to draw from the grid. The batch framework recognizes that contribution and allows their on-site generation to offset the amount of transmission capacity they require, making it easier to connect at higher load levels.

PCLR is for large customers that are willing to let ERCOT reduce their power consumption during periods of localized stress on the grid. The customers agree to embed the controllable load into ERCOT's dispatching system and let ERCOT curtail their power use when transmission constraints arise in their area. In exchange, the customers can access a portion of the grid ahead of a full transmission buildout. Think of it as a reliability partnership: the customer can consume more power during hours when the local grid is moving freely, and ERCOT gains a new tool to automatically reduce that power draw to help solve localized congestion issues when they occur.

What's next?
Implementation of the Batch Zero framework began immediately following the PUCT's June 18, 2026, approval.

- July 10, 2026 — Deadline for projects wanting to be part of Batch Zero to submit required technical studies and documentation
- August 7, 2026 — ERCOT notifies applicants of project classification (base load, studied load, or excluded)
- Spring 2027 — ERCOT provides each Batch Zero large user with the amount of electricity that can reliably be allocated for their project
- Second Quarter 2027 — Deadline for proof of developer commitment
- Fall 2027 — A final transmission plan allocating the load and prescribing updates is published

Applications for the next batch study, Batch 1, will be accepted beginning in Summer 2027.