

Energy Conservation

Energy conservation is a widely used industry tool that can help an electric grid by lowering demand for a specific period of time, which is typically late afternoon into evening in the summer, and often morning and evening in winter. Conservation helps grid operators keep their electric system balanced and running reliably. ERCOT only asks for conservation when it is needed to bolster system reliability.

ERCOT's conservation requests ask Texas businesses and residents to take small actions to reduce their electricity use for a specific period of peak demand time, if safe to do so. These actions include turning off unnecessary lights, adjusting air conditioning/heat by a degree or two, and postponing the use of large appliances, such as washers, dryers, and dishwashers, to reduce the amount of electricity being consumed.

Conservation does not automatically mean there will be an energy emergency, rather that ERCOT is entering a period of high demand with the potential for lower operating reserves. Grid operators, such as ERCOT, keep additional supply, or operating reserves, available to respond in a short time frame when needed.

During a call for conservation, ERCOT is also using additional tools to manage the grid reliably, including using reserve power, calling upon reductions by large electric customers that have volunteered to lower their energy use, and bringing more generation online sooner.

Energy-saving tips are available on ERCOT's [Texas Advisory and Notification System \(TXANS\) webpage](#). Texans should never put their health or safety at risk during a request for energy conservation and should only reduce electrical use if it's safe to do so.

Conservation Q&A

What causes ERCOT to request conservation?

If the cushion between available electric generation supply and customer use gets too small, ERCOT may seek conservation to help increase its operating reserves. ERCOT may issue a Voluntary Conservation Notice or Conservation Appeal asking Texas businesses and residents within the ERCOT region to help reduce demand. Check with your local retail electric provider if you aren't sure if you are part of the ERCOT grid.

Typically, tight grid conditions can be caused by a variety of factors, including high electric use combined with low renewable output (wind and solar) and/or high generation outages. Unexpected changes in the forecast for energy use or weather can also create the need for energy conservation.

When Does ERCOT Issue a Voluntary Conservation Notice?

A Voluntary Conservation Notice is a call for Texans to voluntarily reduce energy usage during peak demand periods, if safe to do so. Conservation is a common tool used throughout the industry to support grid reliability. As ERCOT continues to monitor conditions, forecasts may determine the need for ERCOT to issue a Voluntary Conservation Notice.

When Does ERCOT Issue a Conservation Appeal?

A Conservation Appeal is an elevated request for Texans to reduce their energy use during peak demand

periods when there is a potential to enter emergency operations due to lower reserves. Help from Texans to conserve electricity use, if safe to do so, will assist grid reliability.

How much does conservation help?

Conservation does help grid operators worldwide. ERCOT has seen time and time again that small actions to conserve electricity make a big difference. The amount of energy saved depends on the type of situation. In the last two years, voluntary conservation by Texans has reduced energy use by approximately 500 MW each time. Since ERCOT doesn't have meters on the businesses and residents, it can be hard to calculate the exact number of megawatts reduced, but the impact is evident on the [demand curve](#) when conservation actions are taken.

How long does a conservation request last?

The length of conservation depends on the forecasted grid conditions, which include demand, weather, generation output, and generation outages. In the past, they have ranged from hours on a single day to multiple days.

Recent calls for conservation have lasted for a few hours during peak demand time (i.e., August 27, 2023, from 4 - 9 p.m. and January 16, 2024, from 6 - 9 a.m.).

In some cases, localized conservation may be needed to balance supply and customer demand. In 2016, a localized request for conservation occurred in the Rio Grande Valley (RGV).

How does conservation help grid operators?

It's an effective way to increase the operational reserve margin between available electric supply and customer use.

How many times has ERCOT used conservation for grid reliability?

ERCOT has requested conservation more than 65 times since 2008.

How does ERCOT issue a Voluntary Conservation Notice?

ERCOT works in coordination with the Public Utility Commission and state leadership to issue a Voluntary Conservation Notice or a Conservation Appeal. External communication channels include news releases, social media, ERCOT's [Texas Advisory and Notification System \(TXANS\)](#), ERCOT.com, and the ERCOT mobile app. ERCOT also communicates directly with Market Participants and encourages them to amplify its messages.

Conservation was requested by ERCOT more than 65 times (as of January 16, 2024):

- Jan. 15,16, 2024
- Sept. 6, 7, 2023
- Aug. 17, 20, 24, 25, 26, 27, 29, 30, 2023
- June 20, 2023
- July 11, 13, 2022
- June 14, 15, 16, 17, 18, 2021
- April 13, 2021
- Feb. 14, 15, 16, 17, 18, 2021
- Sept. 4, 5, 6, 2019
- Aug. 13, 15, 2019
- Oct. 3, 5, 6, 7, & 10, 2016 (RGV)
- Oct. 13, 2015 (RGV)
- Aug. 13, 2015
- July 30, 2015
- June 3, 4, 5, 2015 (RGV)
- Nov. 11, 2014
- Oct. 8, 2014 (RGV)
- March 2, 3, 4, 2014
- Feb. 6, 2014
- Jan. 5, 2014
- Aug. 1, 2, 3, 4, 5, 23, 24, 28, 2011
- July 14, 2011
- June 27, 2011
- Feb. 2, 3, 8, 9, 10, 2011
- Aug. 5, 2009
- July 8, 2009
- June 18, 2008