

ERCOT's use of Energy Conservation

Energy conservation is a common grid management tool. It is used by grid operators worldwide to keep electric systems reliable. Simply put, a conservation request asks consumers to take small actions that reduce their electricity use. These include turning off unnecessary lights and temporarily avoiding the use of large appliances to reduce the amount of electricity being consumed on the grid. Conservation is an effective way to help balance generation supply and customer demand. ERCOT only calls for conservation when it is needed to bolster system reliability.

To ensure reliable power for Texans and Texas businesses, ERCOT is managing the power grid more conservatively than ever before. Part of this approach includes issuing conservation requests sooner. Our goal is to prevent potential emergency conditions from occurring on the grid. Conservation does not automatically mean there will be an energy emergency—it is a tool used by ERCOT to keep the grid reliable for customers.

Conservation tips are available on the Public Utility Commission's [Power to Save Texas website](#). Texans should never put their health or safety at risk during a request for energy conservation.

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 conservation request for the public to help reduce demand. Under specific emergency conditions, ERCOT will send an emergency alert announcement (EEA) to Market Participants for conservation.

Typically, tight grid conditions are driven by a combination of factors, including high electric use combined with low wind output and/or high generation outages. Unexpected changes in the forecast for energy use or weather can also create the need for energy conservation.

How much does conservation help?

ERCOT has seen time and time again that small actions to conserve energy make a big difference. The amount of energy saved depends on the type of situation. During the June 2021 conservation request Texans reduced energy use by approximately 500 MW. In addition, electricity market participants and Transmission/Distribution Service Providers reduced power by another 2,500 MW. One MW can power approximately 200 homes.

How long does a conservation request last?

The length of conservation requests and requests depend on the expected grid conditions. In the past, they have ranged from hours on a single day to multiple days. The June 2021 conservation request lasted for five days but was only in effect from 3 to 7 p.m. each day—the period of highest customer use in the summer. 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.

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 does ERCOT issue a conservation request?

ERCOT works in coordination with the PUC and state leadership to issue a conservation request. External communication channels include news releases, social media, ERCOT.com and the ERCOT mobile app. ERCOT also communicates directly with electricity market participants and encourages them to amplify its messages.

How many times has ERCOT used conservation for grid reliability?

ERCOT has issued more than 50 conservation requests between 2008 and July 2022.

Conservation appeals were issued on:

- 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