

Energy Emergency Alert (EEA) Tools

ERCOT has a series of emergency procedures that may be used when operating reserves drop below specified levels. These procedures are designed to protect the reliability of the electric system as a whole and prevent an uncontrolled system-wide outage.

When ERCOT issues an EEA, it is able to take advantage of additional resources that are only available during scarcity conditions. ERCOT currently has around 2,800 MW of additional capacity available when it enters into EEA status. Resources include demand response that is procured specifically for these types of conditions, use of resources that are normally set aside to provide operating reserves, additional generation or imports from neighboring regions, and voluntary conservation by consumers.

If all of the EEA tools listed above are insufficient, rotating outages are required to help preserve the reliability of the system as a whole. However, rotating outages have only been implemented three times in the history of ERCOT.

EEA tools for winter 2021

Tools deployed by ERCOT

- **Load Resources (~1,570 MW)** – This is a portion of the Ancillary Service product known as Responsive Reserve Service (RRS), which is provided by large industrial customers. RRS is interruptible demand that is available immediately if there is sudden generation loss and frequency declines, but these customers are also available to be interrupted in the event of an EEA.
- **Emergency Response Service (ERS) (1,027 MW)** – ERS is provided by commercial and small industrial customers who submit bids to ERCOT to serve as interruptible customers on a seasonal basis. Some small generators also qualify to provide ERS, and multiple small customers can sign up collectively to provide the service.
- **TDSP Voltage Reduction (100-200 MW)** – Several utilities have the capability to temporarily lower voltage levels on distribution feeders in order to reduce the overall energy use of their customers.

Other resources that may be available

- **DC-Tie Imports (850 MW expected, with a maximum of 1,220 MW)** – If available, ERCOT can request any remaining capacity on the DC-Ties.
- **Switchable Generation (up to 734 MW)** – There are several units that can provide power into ERCOT or into the adjacent Eastern Interconnection. A number of these units have a contractual obligation to serve customers in SPP and MISO but can be called upon to provide emergency assistance.
- **Demand Response (DR)** – There are additional demand response programs that are voluntarily administered by companies who participate in the ERCOT market, as well as price responsive demand efforts.

ERCOT Energy Emergency Alert (EEA) Steps

ERCOT has around 2,800 MW of additional capacity available to deploy when it enters EEA status. Some steps may occur simultaneously.



These steps do not include additional demand response programs that are voluntarily administered by companies who participate in the ERCOT market.