Rotating power outages

What are rotating power outages?
When high electricity demand outstrips supply, the ISO grid operators take a series of emergency actions to find every available megawatt of energy. If there is still insufficient supply to meet demand, the ISO’s grid operators may need to call for rotating power outages to protect the reliability of the power grid, both in California and in neighboring states.

Rotating outages, or controlled load sheds, are relatively short power disruptions that alternate throughout communities to reduce demand to match supply and maintain grid reliability. Planned outages help stretch available energy when supplies are short, and ensure the grid doesn’t collapse into uncontrolled and unplanned power failures, while limiting outages to the smallest group of customers in a more contained area for shorter periods of time.

What triggers the need for a rotating power outage?
Adequate energy supply can be impacted in several ways, primarily by high heat, which causes increased air conditioning use and drives up electricity demand. Other factors include unexpected power plant or transmission line outages caused by mechanical failure, wildfire, or constraint on transmission lines. Cloud cover and a lack of wind reduce solar and wind generation, affecting available supplies.

How are communities chosen for rotating power outages?
ISO operators are always monitoring the grid to be sure there are enough resources, but sometimes they must order a reduction in load. To do this, they direct a specific quantity to utilities that will keep the grid in balance. Utilities follow their own established plans designed to reduce power consumption in the most strategic areas to relieve stress on the grid while limiting the outage to the shortest possible time for any one group of customers.

What would happen if the ISO didn’t call for rotating power outages?
By shutting off power in a controlled and planned manner, the ISO can prevent uncontrolled events, such as cascading blackouts or unexpected outages that can sweep into neighboring grids and shut down power to the entire western states region. Those types of widespread outages have the potential to be much more devastating to the grid, cause far more public hardship, and can take days or weeks to restore.
How often do rotating power outages happen?
The ISO initiated rotating outages on Aug. 14 and Aug. 15, 2020. Before that, it had been almost two decades since outages were imposed due to energy shortages. For more information see our Grid History Report.

What’s the difference between rotating outages and the Public Safety Power Shutoffs (PSPS)?
Rotating power outages are initiated by the ISO when energy shortages are projected. PSPS outages are initiated by utilities during extreme weather or wildfire conditions to prevent equipment sparking a fire. Visit PrepareForPowerDown.com for more information on the PSPS program.

What can I do to prepare for or prevent rotating power outages?
When the grid is stressed, the ISO will issue a Flex Alert, a call for consumers to reduce electricity use from 4 p.m. to 9 p.m. Energy conservation during Flex Alerts is key to protecting grid reliability and preventing rotating outages. Visit FlexAlert.org to learn more and to sign up for notifications.
Check your utility website for outage maps and timelines, and for tips for preparing for power disruptions.