Rotating power outages are now possible to protect grid

Energy Emergency Alert (EEA) 3 declared; next step is to begin outages

FOLSOM, Calif. – The California Independent System Operator (ISO) has issued an Energy Emergency Alert (EEA) 3, effective at 5:17 p.m. tonight, as electricity supplies run low in the face of record heat and demand. If necessary, the grid operator can now order rotating power outages to lower demand and stabilize the system.

If outages are initiated, consumers can expect to receive notifications from power providers on areas affected and time duration.

Earlier today, ISO had already declared an Energy Emergency Alert (EEA) 2 for 4 p.m. to 9 p.m. tonight, which signals to participants to bid more energy into the market, and allows the ISO to tap into emergency demand response programs that provide financial incentives for reducing energy use.

As grid conditions worsened, energy supplies were determined to be insufficient to cover demand and reserves, and an EEA 3 was declared. Controlled power outages are now imminent or in process according to each utility’s emergency plan.

Tonight’s peak electricity demand is currently forecast at more than 52,000 megawatts (MW), a new historic all-time high for the grid, as the state endured the hottest day in this prolonged, record-breaking heat wave.

If needed, ISO could order utilities to begin rotating power outages to maintain stability of the electric grid. If that occurs, consumers should expect communications – either phone, text or email – from their utilities notifying them of outage areas and likely durations.

Rotating power outages, or small-scale, contained, controlled interruptions in power, can help maintain reliability and avoid cascading blackouts. When the ISO determines that supplies are not sufficient to meet demand, it can issue an EEA 3, and then if reserves are exhausted, it would order utilities to begin outages to bring demand back in line with available supplies.
Outages are a significant inconvenience to those affected, but it's preferable to manage emergencies in a controlled manner rather than let it cause a wider spread, longer lasting disruption.

Power interruptions are kept as brief as possible and utilities rotate them through their customer base so that no one area has prolonged outages. Utilities make the determination of how best to spread and rotate the outages across their customer base, with the goal of limiting their duration as much as possible.

For two days in August 2020, planned outages affecting about 800,000 homes and businesses lasted anywhere from 15 minutes to about 2½ hours, marking the first time outages were ordered in California due to insufficient supplies in nearly 20 years.

Planned outages are implemented when all the other emergency tools on hand for the ISO, utilities and state agencies have been used and supplies are still insufficient to cover demand. Consumers are encouraged to check their utility websites for outage maps and preparation tips:

- PG&E
- SCE
- SDG&E

Rotating power outages are called to protect the reliability of the California ISO’s grid and in neighboring balancing authorities. Reducing demand to match supply maintains grid reliability and ensures the system doesn’t collapse into uncontrolled, unplanned power failures, possibly across the West.

The ISO will work closely with California utilities and neighboring power systems to restore the power grid to full capacity as quickly as possible. As portions of the grid come back online, local utilities will then coordinate power restoration to consumers.

For more information, see our Rotating Power Outages fact sheet.

To learn more about EEA designations, view the Emergency Notifications fact sheet. For the most up-to-date information on emergencies, follow grid conditions in real time on ISO’s Today’s Outlook, download the free ISO Today mobile app, and follow us on Twitter at @California_ISO.
The California Independent System Operator (ISO) is a nonprofit public benefit corporation dedicated, with its partners, to continuous improvement and secure operation of a reliable grid operated for the benefit of consumers. It provides comprehensive grid planning, open and nondiscriminatory access to one of the largest networks of high-voltage transmission power lines in the world, and operates a $9 billion competitive electricity market. Recognizing the importance of the global climate challenge, the ISO is at the forefront of integrating renewable power and advanced technologies that will help provide a sustainable energy future efficiently and cleanly.

The Western Energy Imbalance Market (WEIM) is a real-time wholesale energy trading market that enables participants anywhere in the West to buy and sell energy when needed. The WEIM Governing Body is the governing authority designed by regional stakeholders and has shared authority with the ISO Board of Governors to resolve rules specific to participation in the WEIM.