# **Power outages primer**

While providing reliable energy is a key goal of SDG&E, there are times when the power goes out. Often this is due to an accident or weather. However, some times it may be due to energy issues in the western U.S., the state or our region.

Here's a brief overview of the types of energy-issue outages and a summary of the various emergency stages that might be called by the California Independent System Operator (ISO).

## **Rolling Blackouts**

When the state faces severe energy shortages, the ISO can call on the state's utilities to enact rotating outages, also called rolling blackouts. These outages are controlled and help lower the demand for electricity so the state's electric system does not fail. With rolling blackouts there is typically advance notice of between 15 minutes to an hour. The outages may last between 60 and 90 minutes.

Rolling blackouts are put in place based on block and circuits for all customers. This information is found on your bill on the first page. Once you are involved in a rolling blackout, your block and circuit go to the bottom of the list.

Information on potential outages within SDG&E's service area can be found at <u>www.sdge.com/news/today\_electrical\_situation.shtml</u>. There are links on this page to the block and circuit rotation for rolling blackouts as well as a link to the ISO website. Safety information is also provided.

## **Transmission Outages**

A second type of major outage is a transmission outage. These are typically in a specific service area and are caused by electric transmission issues such as problems at a substation or extremely high-energy use resulting in overloaded circuits within a smaller area.

Unlike rolling blackouts, transmission outages often occur without any advance notice and are not controlled by the predetermined rotation of blocks and circuits. Also transmission outages are not time limited like rolling blackouts.

## Cal–ISO Called Stage Emergencies

Here is a brief summary of the stage emergencies called by the ISO. Please remember that for transmission related outages, there may not be time to call the various stage emergencies.

**Stage 1** -- A Stage 1 emergency is declared when the ISO determines the operating reserve will be 7% or less within the next two hours. Stage 1 does not require interruption of service. Energy conservation is suggested at this stage.

**Stage 2** -- A Stage 2 emergency is declared when the ISO determines the operating reserve will be less than 5% within the next two hours. At this stage,

customers who have agreed to be interrupted in case of a Stage 2 emergency may be asked to curtail their operations. Other customers do not have their service interrupted. Energy conservation is important at this stage.

**Stage 3** -- A Stage 3 emergency is declared when the ISO determines the operating reserve will be less than 1-1/2% within the next two hours. Stage 3 is the most severe emergency and rolling blackouts are possible. Energy conservation is vital at this stage.

### **Outage Preparation**

While SDG&E strives to provide reliable energy service at all times, unforeseen circumstances may cause outages. For this reason it is best to be prepared. Information on outage preparation can be found at <u>http://www.sdge.com/outages/</u>.