

Critical Events

To understand why and when a Critical Event is called, it's helpful to understand the intent of the SmartHours program.

The SmartHours program was designed to reduce OG&E's summer peak day demand (in megawatts) by as much as possible in order to defer building any new fossil-fired generation until at least the year 2020. Achieving this goal involves a partnership with our customers in which they receive a much lower price during off-peak periods as an incentive to reduce their energy use during the peak demand periods (weekdays from 2 – 7 p.m.), when they receive a variable price.

In order to maintain the heavily discounted **off-peak** price of \$.05/kwh (at least 148 of the 168 hours in a week, sometimes more if a federal holiday falls during the week), OG&E must engage its SmartHours customers in reducing the peak demand so that their contribution to the peak is less; calling CEs is an important part of achieving the necessary reduction in customer demand.

CEs are called by a team of OG&E personnel who use predictive models and historical data from various factors to determine as closely as possible when monthly and system demand will be highest. The team meets several days a week – often daily. Their task is similar to what meteorologists face; they're human and can't predict the future, but they use models and data to come as close as possible.

The variable **peak** prices within the program (currently \$.05/kWh for the low rate, \$.09/kWh for the standard rate, \$.18/kWh for the high rate and \$.42/kWh for the critical rate*) are determined by a formula in the SmartHours (VPP) tariff, which you can find on our website. [Click here](#) to go there now.

*These costs include fuel charges, and the prices in the tariff do not include fuel.

Critical Events (CE) are usually called for the time period from 4 – 6 p.m. when customer demand is expected to be high. OG&E is trying to reduce the peaks every summer, and regardless of temperatures, every summer has a peak demand.

Keep in mind, this team must consider the following data for OG&E's entire service area of 30,000 square miles, serving 825,000 customers across Oklahoma and western Arkansas:

- Load forecasting data – the expected demand on OG&E's system, determined using models and historical data
- Meteorological data – weather patterns including forecasted temperature, heat index, residual/latent heat (the cumulative effect of heat on buildings or residences), precipitation chances, wind speeds.
- Other factors not for public availability due to federal regulations and market effects.

As you can see, it's not a perfect science, but the CEs are a crucial element to reducing load and maintaining the heavily discounted off-peak price in the SmartHours program. More than 99 percent of customers enrolled in SmartHours are saving money.

SmartHours customers have collectively saved 140 MWs (and growing) in three years. Now that's Positive Energy Together!