

# Fact Sheet

## Barre Peaker Unit Project

January 2007

Important community information concerning a proposed Southern California Edison Company project in your area

### SCE PROPOSES A NEW “PEAKER” GENERATING UNIT IN THE CITY OF STANTON.

SCE is proposing to install an electric generating unit called a “peaker” on SCE-owned property in Stanton. This peaker will be capable of producing approximately 45 megawatts (MW) of electricity to serve the local area during periods when the electrical system needs additional power. The proposed peaker is projected to be online to serve SCE customers by mid-summer 2007 and will be located on the grounds of SCE’s existing Barre Substation.

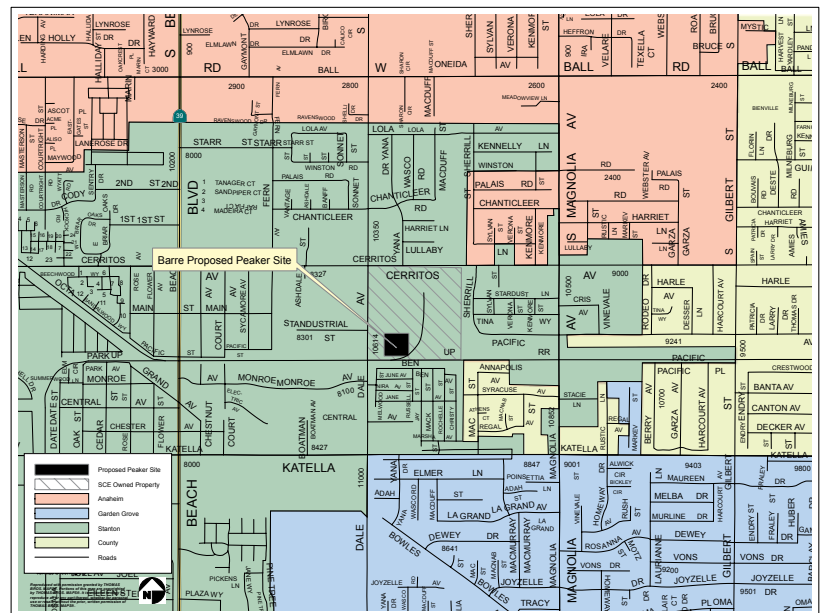


Figure 1

### WHY IS THE PROJECT NEEDED?

SCE is taking this action in response to a directive issued in August 2006 by California Public Utilities Commission (CPUC) President Michael Peevey, which was prompted in part by this past summer’s heat storm. This ruling directs SCE to implement additional conservation and energy efficiency programs and to put in place up to 250 MW of new utility-owned generation that can be online in time for summer 2007.

As part of SCE’s response to the CPUC directive, SCE is proposing to build five peaker plants throughout its service territory in Southern California.

The proposed Stanton peaker will increase the power supply to the local community and provide an important service called “voltage support” to the local distribution network. Unlike large power plants, which are typically constructed in remote locations and connected to the statewide grid at very high voltages, this peaker unit will be connected to the local distribution grid where it will supply electricity to local homes and businesses. As directed by

the CPUC, the peaker will also help keep local distribution voltages and frequencies at normal levels during times of system strain or imbalance. The peaker will operate primarily during periods of high electricity demand (such as on hot summer days, when the demand for air conditioning is at a peak), or when high-voltage transmission lines go out of service, or when another source of generation unexpectedly goes offline.

### PROJECT DESCRIPTION

The proposed peaker unit will be fueled by natural gas and is capable of generating approximately 45 MW of electricity (enough to serve approximately 30,000 homes) when the local electrical system needs power or local voltage support. Unlike most larger generators, the proposed peaker can be started and brought up to full power on as little as ten minutes’ notice. Because it can also be started without outside power from the electric grid, the peaker will further help to bring the electric system back online quickly and efficiently, in the event other power sources become unavailable.

The peaker unit consists of a state-of-the-art General Electric (GE) gas turbine generator coupled with state-of-the-art emission controls. These emission controls consist of a selective catalytic reduction (SCR) system and an oxidation catalyst, which will reduce emissions to levels that meet or are better than all applicable air quality emission standards. The SCR system uses ammonia

injection to minimize emissions of nitrogen oxides (NOx), which is a component of smog. To help protect health and safety, the unit will use only aqueous ammonia (ammonia diluted in water) at a concentration of 19% ammonia. For comparison, common household ammonia used for cleaning and other household purposes is approximately 5-10% ammonia.

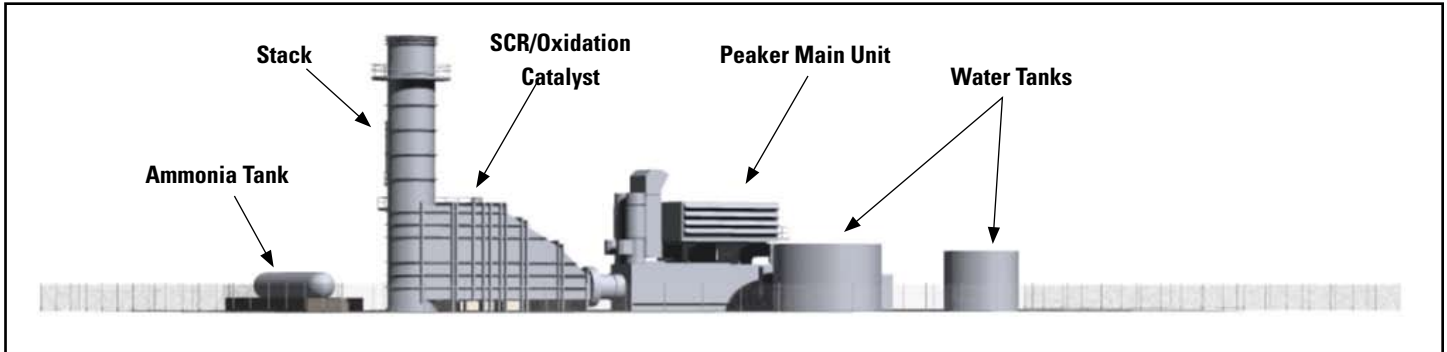


Figure 2



Figure 3A: Existing view from the southern border of Barre Substation, as seen from the mobile home park.



Figure 3B: Simulation of existing view from the southern border of Barre Substation as seen from the mobile home park.

The GE gas turbine generator package will be enclosed in a structure approximately 56 feet long x 14 feet wide x 32 feet tall. The SCR/Oxidation Catalyst will also be enclosed in a structure approximately 55 feet long x 15 feet wide x 31 feet tall that is attached to the turbine generator enclosure. An 80-foot-tall exhaust stack will be located at the end of the SCR/Oxidation Catalyst ductwork.

### PROJECT APPROVAL PROCESS

The South Coast Air Quality Management District (SCAQMD) will be the lead government agency for environmental review and approval of this project under the California Environmental Quality Act (CEQA) and California's air quality laws. The project will comply with all applicable federal, state, and local public safety and environmental rules and regulations. Because the CPUC ruling directs SCE to pursue completion of these units by summer 2007, SCE plans to proceed according to the following schedule:

<b>January 2007</b>	SCE will host an Open House to provide information to the community about the Project
<b>Spring 2007</b>	Regulatory review and approval of project
	Commence construction upon receipt of required approvals
<b>Summer 2007</b>	Complete project construction; Peaker available for operation

### PUBLIC OUTREACH AND COMMUNICATIONS

As part of its planning process, SCE will be talking to local residents, businesses, and city officials to identify questions people may have about the scope and benefits of the project, construction activities, or other items that might be of interest.

SCE will also hold a public open house in the City of Stanton. The open house will provide up-to-date information about the project



**Figure 4A: Existing view from the southwest side of Barre Substation, as seen from the corner of Standustrial St. and Dale Ave.**



**Figure 4B: Simulation of existing view from southwest side of Barre Substation, as seen from the corner of Standustrial St. and Dale Ave**

and answers to questions that residents and businesses may have. Invitations to the open house will be mailed to local city officials, other stakeholders, and property owners near the proposed site. SCE will also advertise the open house in local newspapers and send announcements to local media.

We look forward to working with you as we move forward on this important project to improve your local electric system. Please contact the SCE representative listed on the last page with any questions you may have.

## Questions and Answers

**Q. Where will the power generated by this peaker be used?**

**A.** The power will go into the local SCE distribution system, thereby strengthening the power grid within the city and in adjacent communities.

**Q. How will this peaker unit strengthen the power grid?**

**A.** This unit will increase the generation supply for local communities and provide an important service called “voltage support” to the local distribution network. Unlike large power plants, which are typically constructed in remote locations and connected to the statewide grid at very high voltages, the peaker unit will be connected to the lower-voltage local distribution grid. It will supply electricity to keep local distribution voltages and frequencies at normal levels during times of system strain or imbalance, such as during periods of prolonged high demand, or when a high-voltage transmission line or generating station unexpectedly goes offline. It can also be started very quickly—with as little as ten minutes’ notice—which will be critical at times when additional energy is needed.

**Q. How and why was this site chosen?**

**A.** The proposed site is considered one of the best locations to strengthen SCE’s local power grid. The location is also immediately adjacent to an existing electrical distribution substation, which minimizes the need for new power line construction. The location has enough space to build the peaker unit, and has access to a nearby natural gas pipeline to fuel the unit.

**Q. When will the unit operate?**

**A.** The peaker unit will typically run during hot summer weekdays when the local electrical system requires support due to very high load conditions. The peaker will operate at different times and for different lengths of time depending on the local need.

**Q. What, if any, are the environmental, safety, and noise considerations?**

**A.** SCE’s proposed peaker unit will comply with all applicable environmental, health, and safety regulations and laws.

State-of-the-art Best Available Control Technologies (BACT) will be used to control air emissions. The small amounts of emissions from this plant will not impact current clean air standards.

A selective catalytic reduction (SCR) system with ammonia injection will be used to control NOx emissions in the turbine exhaust. To help protect health and safety, the SCR system will use only aqueous ammonia (ammonia diluted in water), in a 19% concentration. The aqueous ammonia will be delivered to the facility in tank trucks about four times per year, and will be stored onsite in a 10,500-gallon tank. Ammonia storage and handling facilities will be equipped with multiple monitors and an alarm system. A containment structure will surround the tank and piping to help ensure safe operations. Similar or identical ammonia-injection systems are in use at other power plants throughout California and elsewhere in the U.S. and other countries.

The facility design will also employ effective noise mitigation to ensure minimal impact to the surrounding community, as well as compliance with all local noise ordinances. Noise reduction features may include any or all of the following: mufflers, block walls, or enclosures around equipment.

**Q. What will be the impacts from construction activities?**

**A.** Impacts from peaker construction should be minimal. Construction activities will be completed quickly, only lasting 3-4 months from start to finish. All activities will comply with local noise ordinances and heavy equipment will only be operated during the day. Construction workers will park on site, so there should be no impact to local parking. You may see construction equipment and material being delivered to the peaker site even though the project has not yet received all of its required approvals. This is done in order to be able to begin construction as soon as the required permits are issued and have the peaker ready to operate by this summer. Construction will not begin, however, until all approvals have been received.

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## Questions and Answers *Continued*

### Q. Will there be impacts to traffic?

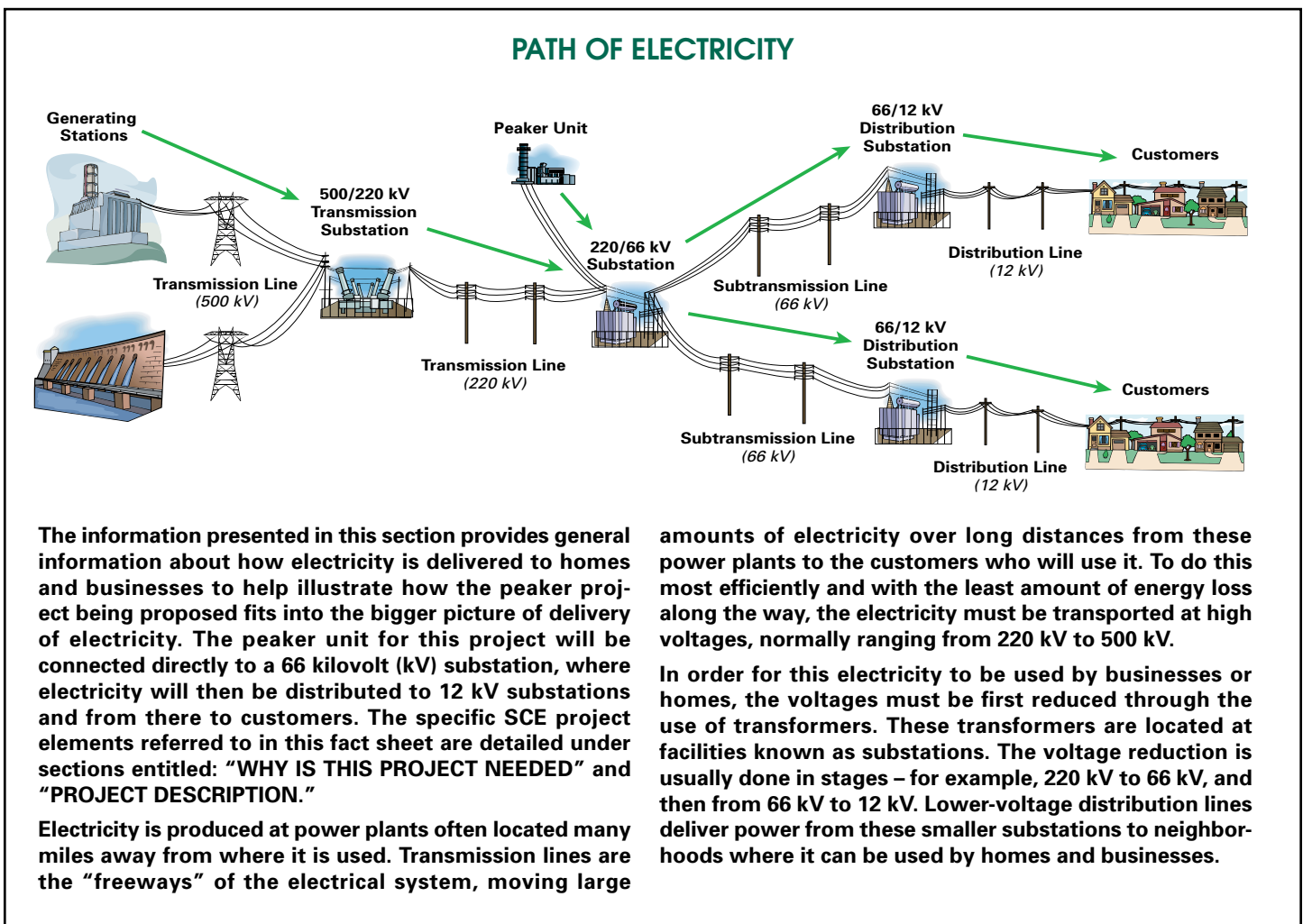
A. Large-equipment deliveries and pipeline construction activities will require short periods of road and/or traffic lane closures. SCE will comply with all local traffic regulations. Local residents will be notified in advance of the dates and times when construction activities will occur that may impact traffic. All activities will be completed as quickly as possible and should not last longer than a few days in any one location. To the extent possible, activities will be scheduled to minimize impacts to traffic.

### Q. Will the installation of the peaker unit increase my electric rates?

A. The CPUC will determine how the costs for providing peaker units will be allocated. However, costs will not fall solely on local customers.

### Q. Will the public have an opportunity to comment on the peaker project?

A. As part of the SCAQMD approval process, the public will have an opportunity to comment on the project. A copy of the draft environmental analysis for the project can be obtained from the SCAQMD website at <http://www.aqmd.gov/ceqa/nonaqmd.html> or by calling the SCAQMD Public Information Center at 909-396-2039. Comments relating to the analysis should be sent to Mr. Mike Krause either by mail c/o Planning/CEQA, 21865 Copley Drive, Diamond Bar, CA 91765-4178; by fax to 909-396-3324; or by e-mail to [mkrause@aqmd.gov](mailto:mkrause@aqmd.gov). Comments must be received no later than 5:00 pm on January 25, 2007.



The information presented in this section provides general information about how electricity is delivered to homes and businesses to help illustrate how the peaker project being proposed fits into the bigger picture of delivery of electricity. The peaker unit for this project will be connected directly to a 66 kilovolt (kV) substation, where electricity will then be distributed to 12 kV substations and from there to customers. The specific SCE project elements referred to in this fact sheet are detailed under sections entitled: "WHY IS THIS PROJECT NEEDED" and "PROJECT DESCRIPTION."

Electricity is produced at power plants often located many miles away from where it is used. Transmission lines are the "freeways" of the electrical system, moving large

amounts of electricity over long distances from these power plants to the customers who will use it. To do this most efficiently and with the least amount of energy loss along the way, the electricity must be transported at high voltages, normally ranging from 220 kV to 500 kV.

In order for this electricity to be used by businesses or homes, the voltages must be first reduced through the use of transformers. These transformers are located at facilities known as substations. The voltage reduction is usually done in stages – for example, 220 kV to 66 kV, and then from 66 kV to 12 kV. Lower-voltage distribution lines deliver power from these smaller substations to neighborhoods where it can be used by homes and businesses.

## ADDITIONAL INFORMATION

*If you have questions or comments about this project or would like to be added to the project mailing list, please contact:*

**Jerome Dominguez, SCE Region Manager  
Barre Substation, City of Stanton  
(714) 895-0271**

*You can also visit the project website at:*  
**[www.sce.com/peakerprojects](http://www.sce.com/peakerprojects)**



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