

## California Wildfires – Energy Infrastructure Impacts October 30, 2003

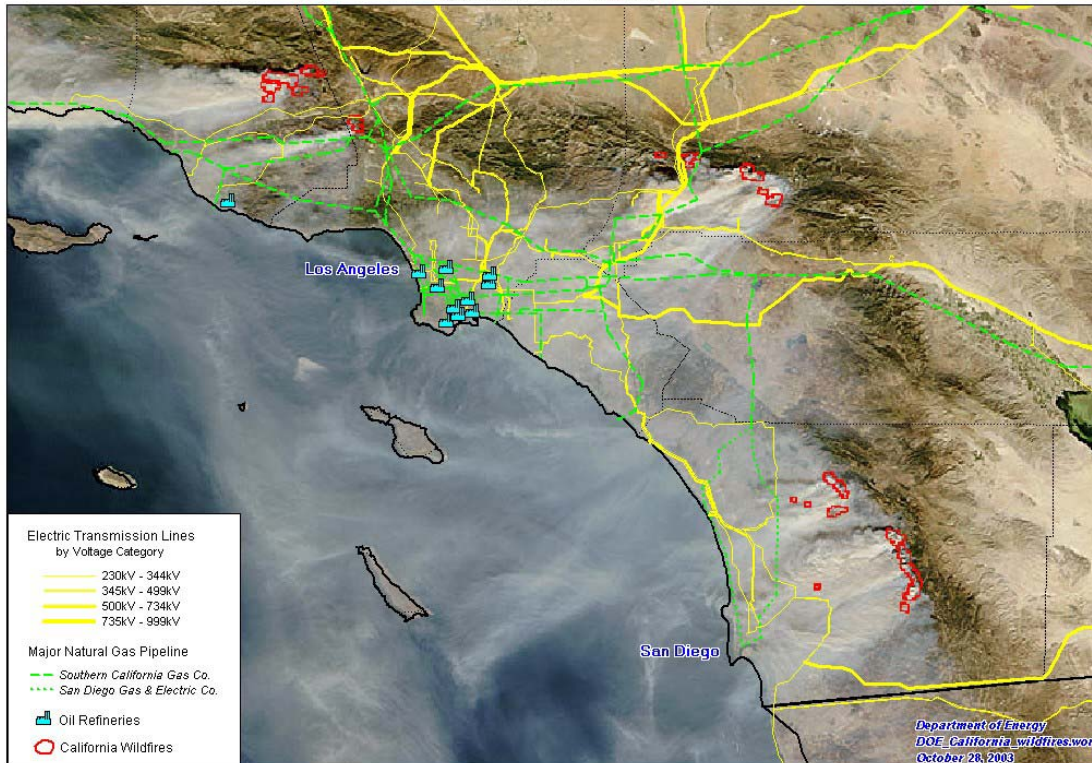
The current wildfires in California have created extensive damage and pose a potential threat to the state's energy systems. As part of its energy emergency program, DOE's Office of Energy Assurance is helping to monitor the situation and respond to energy-related issues as they evolve.

The following bullets summarize OEA's actions during this situation and energy-related impacts created by the California wildfires.

### Office of Energy Assurance (EA) Activities

- EA personnel is staffing a FEMA Disaster Field Office in Pasadena, California in support of the Office's Emergency Support responsibilities (ESF-12).
- EA staff is providing customer outage data to FEMA so that they can calculate the disaster relief that will be needed.

### Energy Infrastructures and California Wildfires (as of 10/28/03)



The picture above shows electric transmission lines, major natural gas pipelines, oil refineries, and the locations of the wildfires as of Monday, October 28, 2003. The heavy smoke from the fires appears as white clouds in this image.

## **Energy Infrastructure Issues (as of October 29, 2003)**

### **Electricity**

- 58,700 customers of Southern California Edison (SCE - 27,700) and San Diego Gas and Electric (SDG&E - 31,000) are out of power and may be out for several days.
- On October 29, approximately 40,000 customers in the Encinitas and Leucadia area of San Diego County lost power for about 2 hours.
- Four major transmission lines in Southern California have had outages over the past few days (including two 500 kilovolt lines this morning), but all have come back on line and none of these resulted in customer outages.
- California – ISO reported that all customer outages thus far are due to loss of low voltage distribution lines.
- SDG&E has lost about 700 utility poles and transmission lines; SCE has lost 800.
- Los Angeles Department of Water and Power (LADWP), the nation's largest municipal utility, has not had and does not anticipate any power outages due to the fires.
- LADWP had to shut down one major transmission tower last week due to fire threatening the line.
- Two 775-megawatt power plants in Ventura County went offline Sunday, although one of those plants came back Monday.
- SDG&E customers used approximately 15% less power yesterday than normal.
- With the conservation efforts and reduced demand due to evacuations, California electricity use yesterday peaked at approximately 2/3 of its peak capacity, so there was adequate spare capacity to make up for and allow rerouting of electricity to make up for downed transmission lines.
- Usage today (10/29) is anticipated to be even less than yesterday because of today's cooler temperatures.

- On October 28, Pacific Gas and Electric Company (PG&E from Northern CA) sent more crews to Southern California to help with power restoration; this addition brings the number of PG&E personnel deployed to 129.

### **Petroleum**

- There are no fires near refineries at present.
- Only two refineries are in the vicinity of the fires that would be in great danger of a shutdown: the large ExxonMobil refinery Torrance, and the large Tosco refinery in Carson.
- No problems have been reported with the petroleum product pipelines serving Southern California.
- Some petroleum distribution problems (delivering products from petroleum terminals) were reported due to temporary highway closures on highways I-8, I-10, and I-15.
- According to officials with the California Energy Commission, the California Air Resources Board granted a waiver that will temporarily require some co-mingling of gasoline blended with MTBE and gasoline blended with ethanol at some Southern CA storage tanks.

### **Natural Gas**

- No major gas line outages have been reported.
- At this time approximately 1,000 customers in San Diego County are without natural gas service and may be without for as long as week.