



# Memorandum

**TO:** HONORABLE MAYOR  
AND CITY COUNCIL

**FROM:** Kimberly Shunk

**SUBJECT:** SEE BELOW

**DATE:** October 3, 2006

Approved

*Kay Winer*

Date

*10/5/06*

**COUNCIL DISTRICT:** City-Wide  
**SNI AREA:** N/A

**SUBJECT: STUDY SESSION ON JULY 2006 HEAT STORM AND RELATED  
POWER FAILURES**

## RECOMMENDATION

Staff recommends that Council accept this report as a starting point for discussion about the July 2006 heat storm and the resulting power failures throughout the City of San José.

## OUTCOME

This report reviews the actions taken by the City of San José in response to July's heat storm and resulting power failures. Please note that this report does not address actions taken by Pacific Gas & Electric (PG&E) or other agencies.

## BACKGROUND

From July 18-26, 2006, the City of San José experienced two near-emergencies: a heat storm followed by a series of power failures.

### Heat storm

The first near-emergency was a heat storm, during which daytime and evening temperatures were significantly higher than average for several consecutive days. In some parts of San José, temperatures were in the triple digits. However, the National Weather Service did not issue a

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heat warning for the County since temperatures did not meet the established heat index criteria. The heat index combines the effects of dry air temperature and humidity. Currently, the National Weather Service's criteria for triggering a heat warning in Santa Clara County is set at a heat index reading of at least 115 degrees Fahrenheit for 3 hours, with an additional required finding that the overnight heat index not fall below 80 degrees Fahrenheit.

### **Power failures**

The second near-emergency was a series of widespread power failures, which were caused by and exacerbated, the problems associated with the extreme hot weather. According to an August 9, 2006 letter from PG&E, the San Francisco Bay Area was the hardest hit region in the State, with more than 800,000 customers losing power at some time during the heat storm; in San José alone, there were approximately 1,300 outages affecting 300,000 customers in primarily residential locations. PG&E's letter explained that without the opportunity to cool down at night, transformers overheated and failed.

### **No declaration of a local emergency**

Because of limited losses to life, property or the environment, the City of San José did not declare a local emergency.

- Santa Clara County reported 1 heat-related death. As of August 1, 2006, there were 74 heat-related deaths in the State, with an additional 64 deaths presumed to be related to the heat, for a total of 138.
- City costs related to the heat storm totaled about \$50,000 in overtime and additional expenses, primarily for repairs to heating, ventilation, and air conditioning (HVAC) systems for city facilities.
- Property losses for local businesses and residents are unknown.
- Santa Clara County did not declare a local emergency, nor did the City of Oakland, Alameda County, or the City and County of San Francisco.
- A majority of the counties that declared a local emergency did so because of agricultural losses.

### **Federal disaster declarations for agricultural losses**

In letters dated September 12, 2006 from the Governor's Office of Emergency Services, OES announced that the U.S. Small Business Administration and the U.S. Department of Agriculture granted disaster declarations for farmers and ranchers operating family-sized farming operations, as well as truckers and suppliers of agricultural equipment or services, due to agricultural losses caused by a record-setting heat wave that occurred July 1-31, 2006. Applicants for disaster assistance must be located in one of 16 primary or 30 contiguous California counties and must apply for assistance by May 7, 2007. Santa Clara County has been designated as a contiguous county by both federal agencies.

### **Summary of city actions**

The following is a summary of actions that the City of San José took in response to the heat storm and related power failures:

- From Thursday, July 20 through Wednesday, July 26, 2006, Parks, Recreation, and Neighborhood Services (PRNS) opened a total of 12 community centers/senior centers as

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cooling centers. Nine of the 12 centers were open for extended hours on all 7 days of this period; 3 of the centers were open on a more limited schedule.

- The City Manager's Public Outreach Office sent out daily media releases about the cooling centers beginning July 24 through July 26.
- Office of Emergency Services (OES) updated and distributed brochures on "Heat-related safety tips" to elected officials and to the Fire Department, who in turn sent them out to fire stations, community centers, senior centers, after-school program staff, and community-based organizations.
- Police evacuated Oakridge Mall on Sunday, July 23 when the mall lost power.
- Fire responded to 483 service requests on Sunday, July 23, a higher than normal call volume. For example, on Sunday, September 24, Fire responded to 247 calls.
- A number of elected officials and city offices, including the City Manager's Office, were in regular contact with PG&E regarding restoration of power to San José residents.
- OES immediately updated emergency contact information for PG&E, Volunteer Center of Silicon Valley, and Red Cross of Santa Clara County, and then actively shared information with these agencies during the heat storm.
- Alerts were sent to City employees regarding opportunities to reduce their energy consumption both at work and at home.

## **ANALYSIS**

Because the National Weather Service did not issue a heat warning for the July heat storm, it was difficult to immediately comprehend the size and extent of the problem. The related power outages, which impacted small groups of homes for each transformer that failed, compounded the problem of quantifying the nature of the heat storm. Answers to questions, "How big and how bad?" were only available from anecdotal evidence until PG&E confirmed widespread power failures on Monday, July 24. The decision by Parks, Recreation & Neighborhood Services staff to open cooling centers on July 20 was based on long-standing practice outlined by the Heat Annex in the city's Emergency Operations Plan and helped mitigate exceptionally uncomfortable circumstances for our residents. But more needs to be done, as listed below.

### **San José initiatives**

As a result of San José's experience with the heat storm in July 2006, several initiatives have been started. Among these:

- The Office of Emergency Services (OES) will work with PRNS and other departments to update the Heat Annex to the City's Emergency Operations Plan by May 2007. OES obtained a copy of the most current version of the State's plan in September and is reviewing it. San José's General Services Department advises that it takes approximately 8 hours to cool off a community center on a weekend since the heating, ventilation and air conditioning (HVAC) system is turned off on Friday evening.
- OES will work with the Environmental Services Department and others to update the Power Failure Annex to the City's Emergency Operations Plan by June 2007.

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- Environmental Services Department formally asked PG&E to add 10 community centers to Rotating Outage Block 50, which designates essential services, so that these centers will be exempt from rotating outages in those instances when power loss can be controlled.
- OES is discussing options with the Monterey office of the National Weather Service to update the heat index criteria for San José. Dr. Kalkstein from the University of Delaware has developed an Excessive Heat Warning system for the cities of Portland and Seattle. However, the cost for this service is approximately \$30,000; the lead time is 2-3 years; and the result may require the National Weather Service to issue warnings on a city by city basis, which is not a preferred option for the Weather Service. Alternatively, the Monterey office of the National Weather Service has advised that the Weather Service is investigating a more generic system that could be applied nationwide at a cost not much different than what would be needed to study a single city. However, there is no timeframe for this proposed system. In the interim, the National Weather Service has made a proposal to the State of California for new heat index criteria, given the fact that current criteria did not trigger alerts or warnings in July.
- San José Fire Department is working with the Emergency Medical Services division of the Santa Clara Public Health Department and AMR, the contracted ambulance provider for the County, to draft a permanent policy that would permit the activation of the Fire Department's Supplemental Transport Ambulance Resource (STAR) units when demand for ambulances increases beyond normal thresholds. While language within existing agreements addresses "states of emergency," the July heat storm did not trigger this designation. Staff is working with STAR agencies (San José, Santa Clara, and Gilroy) to craft a policy for adoption during the next several months.
- OES participated in meetings hosted by Santa Clara County OES on August 9 and September 19, during which participants discussed triggers, notification procedures, and expected outcomes related to extreme heat conditions.
- Approximately a week after the heat storm, San José OES asked County OES to investigate a resident's report about a board and care facility that lacked a viable emergency plan, despite state regulations which require this as a condition of their license. Anecdotally, when told that the temperature inside their facility had exceeded acceptable standards, a manager at the board and care facility arranged to transport clients via ambulance to a local emergency room, though none of the clients faced a life-threatening situation. Later, OES had an informal conversation with the Governor's Office of Emergency Services about lack of enforcement or penalties for non-compliance with the licensing regulation. OES also observed that some pre-schools, day care centers, and skilled nursing facilities, i.e., those institutions which serve our most vulnerable populations, may have this same problem. In California, the Department of Health Services oversees the licensing of these types of facilities. An August 4, 2006 press release from the Governor directed State OES and the California Health and Human Services Agency to work together to analyze emergency response measures and expand the most successful models to high impact areas throughout the state.

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### **PUBLIC OUTEACH**

Information in this report has been discussed with Santa Clara County's Office of Emergency Services, the Coastal Region of the Governor's Office of Emergency Services, the Monterey Office of the National Weather Service, and PG&E.

### **COORDINATION**

Within the City of San José, information in this report has been coordinated with the Parks, Recreation & Neighborhood Services Department, Fire Department, Police Department, the City Manager's Public Outreach Office, the Budget Office, the General Services Department, Environmental Services Department, the Planning Department, the Economic Development Office, and the Redevelopment Agency. All city departments were surveyed on July 31, 2006 about costs for the heat storm and related power failures.

### **COST IMPLICATIONS**

This is an informational report. There are no direct cost implications for the City of San José.

### **BUDGET REFERENCE**

There is no budget reference for this informational report.

### **CEQA**

Not a project.



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For questions, please contact Kimberly Shunk at (408) 277-4595.