

Topic:	PG&E and Emergency Preparedness
Speaker:	Gary Mize, Emergency Process Coordinator, PG&E
Date:	Thursday, 1-Feb-01, at 1930
Event:	Cupertino ARES general meeting, Orientation Training

The following is a summary of the presentation made to CARES on PG&E's preparedness plans.

General

PG&E's primary preparedness efforts are to prepare for winter storms through their tree trimming efforts. When an emergency does arise (i.e.: winter and summer storms), PG&E opens and staffs its Operations Coordinator Center in San Francisco. This is the central point for (i) coordinating contacts with the media and governments, (ii) coordinating work force sharing and, (iii) managing logistics.

Local centers also exist at Cupertino (DeAnza Yard), San Jose, and Salinas. These centers' main focus is to manage communication with customers and dispatch crews.

For training, PG&E is required to conduct one tabletop exercise and one live account drill in each of its headquarters area. Scenarios range from major storms, to earthquakes, to terrorist attacks. These drills are primarily aimed at exercising organizational communications, testing their response technologies, and assessing the performance of their resource management processes.

Response

Within the power distribution system, some instrumentation is in place for detecting and identifying failures. However, PG&E primarily depends on its customers for notifying them of a problem (see "History" section below).

Planning and response to an emergency is the same for PG&E regardless of the type of the disaster (earthquake, major storm, etc). In the event of an emergency, their San Francisco office deals with the County and major cities in the area, such as San Jose. The priority for managing the response is based on the size of the population affected.

PG&E also manages the Gas Control Center. The gas system is continuously monitored, and shuts down sections on dramatic changes in flow rates. If an area is shut down, PG&E must (i) turn off the gas mains to the effected area, (ii) go house to house and shut local valves, (iii) fix the problem, (iv) turn on the gas mains, then (v) go house to house to re-light pilots. Turning off the gas is a BIG DEAL.

History

PG&E's current operational priorities recently shifted from "Safety (the public and property), Restoration, and Communications" to "Safety, Communications, then Restoration." This was established because of an emergency (a 100-year storm) in June 1995. During this event, PG&E received over 1 million phone calls over a 24-hour period. Despite quickly restoring service, PG&E wasn't prepared to handle that kind of call volume and received "bad press" for poor communications with the public.

As an outcome of this event, PG&E made a large technology investment in communications to handle customer communications. The result was the "Outage Information System." Now, the process is to locate a problem, communicate with customers, then restore service. PG&E depends on customers to inform them of an outage. A customer can call up and report an outage as well as hear the status of an outage.

For instance, if PG&E receives one call of a power failure, this is not considered an outage. If two calls are received behind the same transformer, this is considered an outage. If calls are received behind two transformers, a "device" failure is inferred. The automated phone system can tell customers that PG&E is aware of the problem and pass on status such as "responding," "investigating," "repair in progress."

On Rolling blackouts

While rolling blackouts were not on the topic, several questions were addressed on the subject.

- Fourteen power outage blocks have been identified throughout California. PG&E does not announce what block is next as a security precaution ("bad people" would know where the lights would go out next).
- The California Independent Systems Operator (ISO) requires all state utilities to identify 70% of its customers who can be vulnerable to rolling blackouts, and 30% that are essential customers. Essential customers include hospitals (>400 beds), Correctional, Fire and Police, National Defense, communications, radio-navigation, and air traffic control facilities to name a few.
- While we have heard a lot of Stage 1, 2, and 3 alerts and the rolling blackouts that can follow, there is no such thing as a 100% guarantee that you will not lose your power. The CA ISO can direct PG&E to initiate "deep load shedding." This is when PG&E would shut down circuits and substations because of a pending major catastrophe that could result in the loss of major power generation capabilities. If this did not happen, CA would run the risk of "tripping the breakers" on the entire state as demand immediately outstrips supply causing brownouts and system frequency fluctuations (recall the great Northeast Blackout of 1965(?)).

Revision

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