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PG&E UTILIZES ADVANCED DESIGN, CONSTRUCTION AND TECHNOLOGY TO STRENGTHEN ITS READINESS FOR CATASTROPHIC EARTHQUAKES

Earthquake Models Help Identify Potentially Impacted Areas so Resiliency Plans, Resources and Materials Can Be Focused on Where They Will Be Needed Most

SAN FRANCISCO, **Calif**. — Serving an active earthquake region, advanced preparation for natural disasters is a top priority for Pacific Gas and Electric Company (PG&E) to help ensure safe and reliable operations. During Earthquake Preparedness Month in April, and on the anniversary of the Great 1906 San Francisco earthquake, the utility is sharing information about its continuous improvement efforts to strengthen its facilities and preparedness for catastrophic earthquakes.

In respect to earthquake readiness, PG&E has a well-established Geosciences Department staffed with engineers and seismologists who have been dedicated to earthquake and geotechnical risk mitigation since 1985. They also support PG&E's emergency planning through the development of innovative tools that help prioritize where to dispatch PG&E response teams when major earthquakes strike.

Some examples of the work PG&E does to strengthen its system for earthquakes include:

- Utilization of more earthquake resistant circuit breakers and insulators in electric substations
- Replacement of cast iron gas distribution lines with modern, plastic pipe that is more flexible and resilient during an earthquake
- Replacement of gas transmission pipeline in fault areas that incorporates advanced metallurgical and geological design factors and allows the modern pipe to move like a spring within a forgiving trench during an earthquake
- Installation of automated shut-off valves on gas transmission lines in fault areas

PG&E also utilizes industry leading earthquake simulation models and real-time maps of earthquake ground shaking intensity to develop resiliency plans, estimate resource needs and enable rapid dispatch of response personnel to areas that experienced the most severe shaking.

"Our use of industry leading methods, models and technology will help us be better prepared to get communities back on their feet following a catastrophic earthquake," said Barry

Anderson, the utility's vice president of emergency preparedness and response. "Earthquake models help us identify where potential impacts could occur, so we can harden our system and respond more quickly to keep the public safe."

Following a recent 6.8 magnitude earthquake off the coast of Eureka on Sunday, March 9, PG&E utilized these models which, based on the location of the epicenter, predicted that the ground shaking was unlikely to substantially impact PG&E's infrastructure in the area. The models helped deploy PG&E's field teams to conduct inspections and confirm that no significant impacts had occurred.

While PG&E is focused on making its operations safer and more resilient to catastrophic earthquakes, the utility also supports earthquake preparedness in the communities it serves through partnership with first responders and through support of the American Red Cross.

PG&E has contributed \$2.5 million to the Red Cross Ready Neighborhoods and Team Firestopper programs to help train, educate and engage residents throughout Northern and Central California so that they are better prepared in the event of an earthquake or other emergency.

"Through the Ready Neighborhoods initiative, Red Cross volunteers empower individuals and families to effectively prepare for, respond to and recover from emergencies big and small," said Mark Cloutier, Regional CEO of the American Red Cross. "We work closely with our community partners like PG&E to help our communities become more resilient, so they can recover more quickly following an emergency."

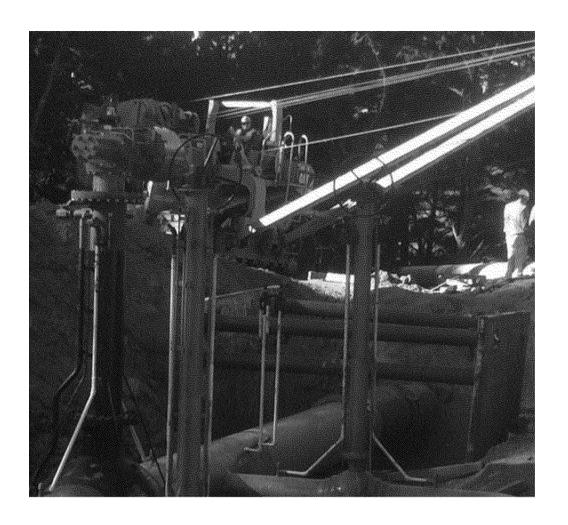
PG&E also partners with first responders on a regular basis to determine what information is most critical in protecting the public when emergencies occur. A result of this partnership was the development of an online portal that provides first responders access to real-time information about PG&E's gas and electric facilities. PG&E also hosts workshops and conducts emergency simulations for first responders throughout the year.

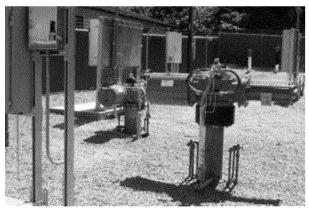
"It is critical that we have strong private-public partnerships before, during and after a disaster," said Mark Ghilarducci, Director of the California Governor's Office of Emergency Services. "These relationships ensure critical information is driven to our first responders and hazard mitigation experts in the field."

About PG&E

Pacific Gas and Electric Company, a subsidiary of <u>PG&E Corporation</u> (NYSE:PCG), is one of the largest combined natural gas and electric utilities in the United States. Based in San Francisco, with more than 20,000 employees, the company delivers some of the nation's cleanest energy to 15 million people in Northern and Central California. For more information, visit <u>www.pge.com/</u> and http://www.pge.com/about/newsroom/.







PG&E plans to install more than 200 automated shutoff valves on its gas transmission system from 2011-2014 as part of the utility's Pipeline Safety Enhancement Program.