



## WITH ARCOS CALLOUT, PG&E HAS AUTOMATED SYSTEM OF RECORD FOR EMERGENCIES



# Pacific Gas & Electric Company

## OVERVIEW

San Francisco-based Pacific Gas & Electric Company is one of the largest natural gas and electric utilities in the United States. The company's 20,000 employees facilitate the transmission and delivery of natural gas and electric service to approximately 16 million people across a 70,000-square-mile service territory spanning northern and central California.

## CHALLENGES

Prior to 2012, during emergent situations affecting the delivery of natural gas and electric service, PG&E relied on a manual callout process, using paper lists of workers' phone and pager numbers, to identify and assemble available crews for restoration work. Across PG&E's 68-plus construction yards, there were likely many ways in which supervisors interpreted the 212 list, which is the contractual section of the union agreement related to emergency overtime.

- **Consistency** – There was simply no consistency in how calls were made across the many yards. Callout requests could not be filled at the initial yard and the order in which supervisors made calls (or chained requests) to other yards' crew members varied constantly.
- **Efficiency** - The manual callout process worked. But with the manual process, it could take a PG&E supervisor 30 minutes or longer to fill a callout request. In fact, it was often difficult to reach a lineman or troubleman on the first try.
- **Mobility** – Field personnel and supervisors sought real-time updates and status checks related to events as well as call outs.

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## SOLUTION

After successfully piloting an automated call out and scheduling solution, made by ARCOS LLC, from 2012 to 2014, PG&E managers and union representatives activated the callout technology across its first-responder yards, substations, maintenance and construction group and transmission line organization.

In addition to the call out and scheduling suite, PG&E field employees also wanted the new callout solution to work on their smartphones. With a preponderance of its people working in and around Silicon Valley, many managers and field personnel also expected a mobile app for the ARCOS system. PG&E's partners from IBEW Local 1245 and Engineers and Scientists of California Local 20 were clear that they wanted alignment between themselves and the utility's leadership, so they could do a better job of positioning themselves for customers. This meant a streamlined system for mobilizing a couple thousand workers from one side of the state to the other in a short amount of time.

By implementing the ARCOS Mobile application, PG&E field employees are able to use their smartphones to see their status and position updated on a roster for callout, view contact information for coworkers, reset their system password and review their work schedule. Supervisors use the mobile app to, among other things, call out employees, record and send emergency text messages, pinpoint who is accepting call outs, and schedule workers for jobs.

## RESULTS

As of June 2016, nearly 5,000 employees use the ARCOS Mobile application, the majority are field employees. The callout system in general, and the mobile app in particular, have given employees the transparency to see what position they are in the order of call out as well as whether or not they are on the correct roster. Without the mobile app in place, the only way workers could see their callout roster status was to go into the yard.

"Now, as their position on the callout list changes, they get an alert that it's moved, for example, from number 13 to number 10, which helps them manage their plans outside of work," said Stephanie Carstairs, business systems principal for PG&E. "This adds to not just efficiency but quality of life."

"Automated call out has completely changed the way we do things, for the better," added Regan. "The number of grievances has dropped fifty percent due to a consistent approach, and there hasn't been a single case where the callout technology has failed us."

Among the quantifiable improvements that PG&E has seen from the one-two punch of the ARCOS Callout and Scheduling Solution and ARCOS Mobile is nearly \$6.6 million saved because of reduced time spent administering schedules, checking status, making call outs and addressing grievances. In 2016, PG&E estimates it could save as much as \$8 million. PG&E is also seeing use of ARCOS reduce "crew-in-route time," which factors into the utility's calculation for CAIDI.

"Our crews and supervisors know in real-time who is accepting call outs along with the level of experience and background of the person, all from their mobile phones," added Regan. "We can see that we have the right level of involvement to address an outage, and this is critical to better leadership and guidance."

The mobile application reaches beyond field personnel, though. PG&E's leadership receives critical safety messages about service interruptions, wildfires and even activities related to Super Bowl 50 via ARCOS Mobile.

"When we're managing an event that affects our customers or operations, our leadership now says, 'We haven't seen any more ARCOS messages, so everything is good, right?'" commented Regan. "It's become the system of record for alerts as well as a return to normal."