

Pacific Gas & Electric Shifts Crew Assignments To Meet Customer Needs With Help From ClickSoftware



The Company

Pacific Gas and Electric Company, a subsidiary of PG&E Corporation (NYSE:PCG), is one of the largest combined natural gas and electric utilities in the United States. Based in San Francisco, with 20,000 employees, the company delivers some of the nation's cleanest energy to 15 million people in northern and central California.

The Challenge

In conjunction with its SAP application for managing project work orders, Pacific Gas & Electric (PG&E) also needs to manage the schedules of its electric and gas crews that consist of two to five specialists. In addition, PG&E schedules individual designers that create work orders for electrical and gas service installations. Across its entire service territory, stretching from northern to central California, PG&E manages approximately 1500 crews consisting of close to 5,000 specialists that service approximately 50 million gas and electric customers.

The crews perform a wide variety of work, including gas and electric installations as well as work requested by cities and towns such as reconstructive work and emergency requests. Part of the scheduling challenge PG&E faces is prioritizing all of the work so that management can view a crew's expected workload over a five-week period to see the projected utilization rate of future schedules. PG&E also needs to assess whether each work project is considered mission-critical or if can be delayed when necessary.

"Having all of this knowledge gives us the flexibility to reschedule work or move crews to new assignments when we see that changes will benefit our customers," said Jerry Olson, Lead IT Manager.

PG&E previously coordinated crew schedules within the SAP application monitored by the dispatcher teams that worked at each of the 67 local PG&E offices. To improve on the efficiency of the scheduling, PG&E decided to consolidate the dispatching teams to work out of two regional remote management centers in Concord and Fresno.

Benefits

- Allows management to have **centralized control over scheduling of field crews** to help ensure corporate usage goals are met.
- Provides **accurate measurement of current week crew utilization rates** as well as projected utilization rates for future weeks.
- Gives management the **ability to move crews among service regions** to ensure customers receive gas and electric services efficiently and effectively.
- **Enables scheduling staff to be consolidated** from dispatchers at 67 offices to dispatchers at two offices.
- Creates a base scheduling solution that can be **easily enhanced with planning, forecasting and mobile components** as business needs change.

"Each of the local offices previously had its own set of jobs established by a ticket designation in the SAP work order application that showed which jobs had been originated or needed to be worked on, each office also had its own control over when the crews worked these jobs and the type of work they wanted to do. Sometimes this created problems as far as achieving crew utilization goals set by corporate. The individual local offices sometimes managed their crews based on a local strategy rather than a corporate strategy," said Olson.

In some case, corporate wanted to focus more crew work on new business while some of the field offices would focus on reconstructive work. The system allowed the freedom for each of the offices to make its own choices. "Thus our goal was to centralize and consolidate the scheduling process out of two offices for our entire service territory, this would help us reach our corporate goals by giving us more control and visibility over how the crews were utilized across the entire company," said Olson.





The Solution

In looking for a centralized scheduling solution, PG&E wanted the ability to easily view crew utilization rates so that it could conduct proper capacity planning across divisions. "We also wanted to be able to move crews from one service area to another whenever there was an imbalance with how busy the crews were in each service area, this can only be done through centralized scheduling."

PG&E also sought a user-friendly solution that would provide easy-to-interpret graphical views rather than a text driven interface that would show job lists but which made it difficult to determine how the company performed from a resource utilization perspective. "We wanted to see performance from a scheduling perspective with a drag-and-drop tool offering visual representations of the crews, given the number of crews we have, it's much easier to do this when you can look at data graphically rather than in text format," said Olson.

To take on the scheduling challenge, PG&E turned to the ClickSoftware ServiceOptimization Suite of tools including ClickSchedule, ClickPlan, ClickAnalyze and ClickForecast.

"By working closely with ClickSoftware, we could see that ClickSchedule would help us with our immediate scheduling need, which was to acquire the ability to schedule our 1500 crews from the two centralized offices, but just as importantly, we also looked to the future. The other ServiceOptimization Suite components all integrate easily with ClickSchedule, and will prove beneficial down the road when we start forecasting to a greater extent; ClickSoftware essentially provided a solution we can grow into."

Another key reason that PG&E selected ClickSoftware is that the scheduling solution also integrates easily with the SAP work-order application. As strategic partners, ClickSoftware and SAP have worked on many joint integrated solutions. "We only had to make a few tweaks with the adaptor that connects SAP and ClickSchedule, but the overall the integration went very smoothly."

The Implementation

To deploy ClickSchedule, ClickSoftware worked with the PG&E information-technology and business-process teams at the company's San Francisco headquarters to configure the internal servers. To ensure the project's success, ClickSoftware also worked closely with Accenture, the management consulting and technology service company that manages the SAP application for PG&E.

The internal IT team at PG&E then deployed the solution at the Concord and Fresno remote management centers where scheduling is now handled by approximately 37 dispatchers.

Previously, multiple people were needed to handle the dispatch function at each of the 67 field offices. With the centralized scheduling and the visibility that ClickSchedule gives PG&E into how busy each of the crews are, resources can be moved more easily to new service areas when necessary, especially when it comes to short-term and medium-term projects.

"The true movement of resources across our entire territory is more of a forecasting issue than a scheduling issue," said Olsen. "So we expect to be able to do more of this for long term projects as we begin to deploy ClickForecast. But we are already finding improvements in moving small numbers of resources short distances among the territories."

Since ClickSchedule was deployed, PG&E has benefitted from greater visibility into the work performed by each crew as well as future work on the schedule. "In the past, we simply did not have the ability to see this type of information."

"We had a plan and we had actual results, but we were missing the middle scheduling piece, so we could not easily determine what occurred between the plan and the results. ClickSchedule has been a big benefit in showing us our effectiveness from a utilization perspective and what we can do to stay on plan."

Jerry Olson, Pacific Gas & Electric

- For more information on Pacific Gas & Electric, visit www.pge.com
- For more information on ClickSoftware visit www.clicksoftware.com or sales@clicksoftware.com

ClickSoftware Offices

North America **(888) 438 3308, (781) 272 5903**

United Kingdom **+44 (0) 1628 607000**

Israel **+ 972 3 765 9400**

Germany **+49 (0) 69 489813 0**

India **+91 124 4311 188**

Australia **+61 (0) 3 9946 6400**

Japan **+81 3 5456 5661**