

Avista was one of the first utilities to try automated gas-leak response. The effort has paid off

BY DAVID HOWELL AND JEFF POTTER

RESPONSE

FIRST ON THE SCENE

A rapid and efficient response to gas leaks matters to utilities and their stakeholders. Companies and regulators monitor response times, as slow responses to gas orders, carbon monoxide leaks, or damaged gas lines can lead to increased risk to the public and regulatory scrutiny. Most important, a rapid, efficient response helps ensure safety and reliability.

In 2009, Avista became one of the first utilities in the nation to fully automate its gas-leak response process. Our automated callout system has reduced overall gas-leak response time by 13 percent, or an average of seven minutes per event. Just as importantly, the callout system—combined with fine-tuning of our dispatch and work-order process—has improved the incident response capacity, not only of the responders but of the entire organization.

Avista's service area covers 30,000 square miles in eastern Washington, northern Idaho, and parts of southern and eastern Oregon. Prior to the automated system, a gas-leak report would prompt a process that resulted in a series of calls that could last an hour or more. An in-house database first sorted first responders by the number of overtime hours worked. Next, the in-house system would call or page each first responder on the list. They would then contact dispatch, receive the details related to the incident, and indicate their availability to respond to the call. The dispatcher would give each serviceman at least four minutes to respond before moving to the next person on the list.

Now, to speed the process, the automat-

ed system—supplied by ARCOS of Columbus, Ohio—tracks each first responder's work schedule and stated availability, as well as his or her overtime situation. The system determines callout order based not only on availability, but also on the first responder's proximity to the trouble call, if required. That is made easy since home addresses for first responders are in the system. Dispatchers initiate the process with just a few keystrokes.

When a responder picks up the phone, he or she hears an interactive voice recording with key details of the incident. If the first responder cannot accept, then the system automatically moves down the list. If he or she can respond, Avista uses a mobile dispatch software platform to send an electronic work order to the first responder. If the first responder on the scene determines that additional resources are needed, he or she will call Avista's dispatchers, who will again tap the automated callout system to assemble the crew.

The automated process helps us focus where it matters—on the incident. Instead of working through a call list, dispatchers prepare information to assist with the field response, such as pipe size, pipe type, and potential isolation scenarios. Managers on the scene, who can also access the process, spend less time calling field personnel and sending orders to crews.

In addition to automating the response, the system can send automatic text messages with incident details to a predefined list of utility personnel. This is a key benefit to our external communication managers. Previously, they would sometimes learn about leaks or dig-ins through media calls

and would have to call busy dispatchers to follow up. Now, the text message typically comes before the media call and obviates the call to dispatch. External communications managers can often notify the public through social media ahead of the traditional media's reports.

Finally, by creating an audit log of callout activities, the system helps us fulfill our reporting obligations to regulators, unions, employees, and other stakeholders. It also facilitates our efforts to track and benchmark our response performance.

Avista has taken other measures to improve our incident response, such as adding more detail to work orders and implementing business intelligence software to gauge how well crews are completing assignments. Inside the business intelligence platform, Avista set triggers to generate exception reports that alert the utility if crews were completing tasks (such as gas odor inspections or customer furnace examinations) outside a specified response time.

We believe that automation can play a role in improving response, improving public safety, and increasing customer satisfaction and trust. The new automated system has provided time savings over Avista's previous solution by focusing dispatchers on emergency response preparedness instead of crew scheduling. Most importantly, automation is helping our employees respond to emergencies more quickly to ensure customer and public safety by providing timely repairs and restoration of service.

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