



CASE STUDY

COMPANY:
Central Hudson Gas & Electric

EMPLOYEES:
1,061

FOR 14 YEARS, CENTRAL HUDSON'S GAS-LEAK RESPONSE RATE INSIDE AN HOUR HAS BEEN NEARLY PERFECT

CHALLENGE:

- Operators used a time-consuming and labor intensive manual paper-based system for after-hours callout

SOLUTION:

- Revamped their callout process by implementing ARCOS Resource Management solutions for the after-hours callout of first responders and gas crews

RESULTS:

- Have responded, on average, to 99.8 percent of its gas-leak calls in 60 minutes or less since 2007
- Lowered average gas-odor response rate by 2.8 percent and reduced average dispatch time by 31.1 percent

Since 2007, Central Hudson Gas & Electric has responded, on average, to 99.8 percent of its gas-leak calls in 60 minutes or less. When closing that response window to less than 45 minutes, the utility still managed a rate during those 14 years that's never dipped below 98.6 percent. Central Hudson also tracks its gas-leak response rate for less than 30 minutes; for the 12 months ending Dec. 31, 2020, the utility tallied 84.3 percent.

The utility's success with expediting response, in large part, stems from automating a paper-based system for the after-hours callout of first responders and gas crews. In 2005, the utility revamped its callout process by implementing a software-as-a-service, or SaaS, application from ARCOS LLC that automatically locates available first responders or crews, calls them, analyzes responses and reports on the outcome. In 2019, Central Hudson launched 385 automated callouts, or after-hours emergency calls, for crews and 2,569 callouts for commercial representatives.

"I was a system operator with Central Hudson from 2000 to 2003; the callout process required operators to utilize a DOS-based mainframe system. All processes were handled manually," recalled Bill Pedro, Associate Director for Distribution System Operations at Central Hudson. "You called each individual on the callout list, until an individual accepted. If no one accepted on the list you were utilizing for response, you had to manually save and exit the first list

and open and proceed with your calls on the second list. This was quite labor intensive."

Poughkeepsie, N.Y.-based Central Hudson has a service territory spanning from suburban New York City to Albany, including more than 80,000 natural gas customers linked by approximately 163 miles of transmission pipelines and 1,300 miles of distribution pipelines, customer service lines and meters.

In 2007, with ARCOS automated callouts in place, Central Hudson lowered its average gas-odor response rate by 2.8 percent. Remarkably, as the number of meter sets at Central Hudson increased from 2004 to 2009, the average response time in 2009 was six percent lower than in 2004, the year before the utility automated its callout with ARCOS.

During normal business hours (Monday through Friday from 8:00 a.m. to 4:30 p.m.) Central Hudson responds to gas emergencies with first responders referred to as commercial representatives and service workers. After normal business hours, the utility

provides its commercial representatives with take-home vehicles carrying all the equipment they need to safely secure an area and perform a thorough gas leak investigation. If a gas emergency occurs during the off hours and an on-property first responder is unavailable, Central Hudson's dispatchers initiates an automated callout via ARCOS.

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Central Hudson **lowered its average gas-odor response rate by 2.8 percent.**



The ARCOS Callout software has **helped reduce average dispatch time by 31.1 percent.**

“ARCOS has not only had **a positive impact on response times** but has also allowed dispatchers **more time to focus on other aspects of emergency response,**” added Pedro.

AUTOMATING CALLOUT REDUCES DISPATCH TIME

Central Hudson Distribution System Operations relies on its 24/7 Control Center to not only be aware of gas crews, first responders, garage mechanics and Contact Center representatives but also their location and exactly what they’re working on. Central Hudson has seen its greatest improvement in the average time to dispatch someone for an incident; that clock begins when a customer service representative transfers an order to a dispatcher and ends when the dispatcher successfully assigns someone to the incident. The ARCOS Callout software has helped reduce average dispatch time by 31.1 percent.

TECHNOLOGY EFFICIENTLY MANAGES CREWS, WORK AGREEMENTS

Due to schedules and workload, dispatch personnel may be required to seek responders from anywhere within the service territory; reaching beyond the operating area in which the emergency is located can mean the response time is pushed further. For after-hours calls, the dispatch team must select responders in a way that ensures an equitable distribution. ARCOS maintains Central Hudson’s callout roster and has the labor rules built in to ensure accurate distribution of callout opportunities. Schedules are maintained in the ARCOS system, and the team uses the software to cross-check timesheets.

For after-hours callouts, the ARCOS automated callout system provides information to Central Hudson’s mobile work management system creating a schedule for a commercial rep and giving the worker a way to log in and see the work-order address, comments about the incident and a limited history to help complete a gas-leak investigation.

AUTOMATING CALLOUTS AND RESOURCE MANAGEMENT

ARCOS Crew Manager® is a technology that complements the ARCOS callout system and helps Central Hudson’s dispatchers efficiently

manage resources. The Crew Manager software gives Central Hudson’s managers a computer-generated, point-and-click board for visually organizing, tracking and mobilizing crews. Around the clock, Crew Manager helps Central Hudson’s dispatchers remain informed on who’s available for assignments. When the control room receives an incident report during the middle of the day, Crew Manager is used for situational awareness including who is available to work. Dispatchers use Crew Manager to organize and track who’s assigned to each task or incident in a subdistrict and how long they’ve been working, which means they have a real-time picture of who can accept new jobs.

As mentioned above, a dispatcher’s primary duty at Central Hudson is knowing what crews are doing at any point in time. With Crew Manager, Central Hudson dispatchers can more efficiently manage an event. For example, when the Dispatch Control Center becomes aware of a gas emergency, center employees allocate appropriate resources to facilitate event response and monitor the event to provide additional resources and notifications when required.

This is where ARCOS proves to be a valuable tool for dispatchers in managing gas emergencies. This solution-based resource management results in the rapid response to gas emergencies that result in event resolution and public safety. In 2020, the utility’s response time was 0.5 percent faster than the target mark managers had set for themselves partly due to the combination of the crew manager and callout systems.

“ARCOS has not only had a positive impact on response times but has also allowed dispatchers more time to focus on other aspects of emergency response,” added Pedro.

By making the shift from paper-based processes to automated resource management software for callout and crew management, Central Hudson managers also say the efficiency gains began paying for the software investment soon afterward.

