

# WE'RE THERE FOR FortisBC

# MOBILTEX

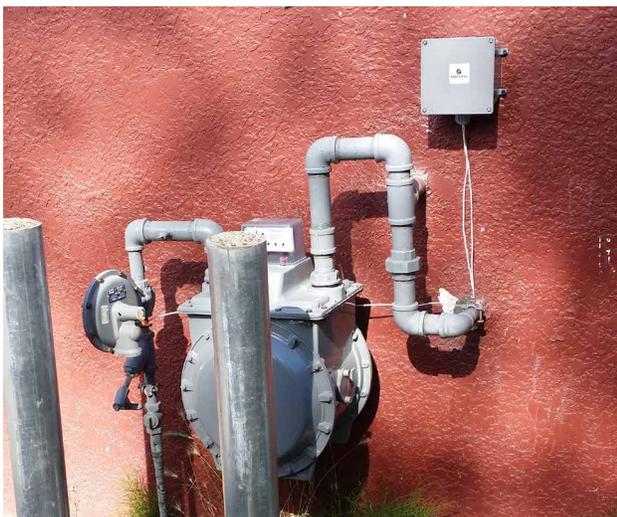
## INTRODUCTION

**Mobiltex's robust, cost-effective IOT solutions are helping FortisBC remotely monitor its cathodic protection system and deliver reliable service to more than one million customers across British Columbia.**

Serving 1.2 million customers across 135 communities, FortisBC delivers natural gas and electricity in British Columbia, Canada, totalling more than 20% of energy consumed in the province.

While it serves more than half of the population in the mainly urban Metro Vancouver area, FortisBC also reaches residential and industrial customers in small, rural, and remote regions. To provide reliable service to all customers, FortisBC maintains 10,400-kilometre (6,462 miles) steel distribution and 3,600-kilometre (2,237 miles) transmission networks.

Monitoring and maintaining these networks is a significant task. As well, climate varies across the province, ranging from mountain, coastal, desert, tundra, and rain forest. As a result, technical staff must consider both long distances and wide-ranging environmental conditions.



## CHALLENGE: MONITORING SYSTEMS IN REMOTE AREAS AND ACROSS CHALLENGING TERRAINS

Since corroded steel pipes can be the cause of system failure and costly outages in natural gas transmission and distribution networks, FortisBC uses a corrosion protection (CP) system to monitor pipelines across the province.

"Our biggest challenge is monitoring CP in remote areas," says Scott Bowing, Manager of Corrosion Control. "A number of the small towns we serve are a long way from the urban centre. We also have to think about climate, landscape, and seasons. Winter access to rectifiers and other test points can be especially challenging." To manage risk and manually meet the provincial mandate to monitor pipe-to-soil potentials on a monthly basis, FortisBC would need a technician in every small town, he estimates.

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As an early adopter of remote monitoring solutions, FortisBC has witnessed the evolution of offerings. "In the 1980s, we had hardwired remote monitors that worked with telephone lines," Bowing says. "When these became obsolete, we moved to a radio-controlled remote monitoring system, using our own network. That worked well, but the network was prone to damage due to lightning."

With the rise of cellular technology, FortisBC started exploring new solutions with one remaining challenge – cellular service is spotty, or often completely unavailable, in remote parts of British Columbia. “We wanted to continue remote monitoring, but we needed a robust, reliable solution to help us stay connected to our entire network,” Bowing says.

## SOLUTION: EVOLVING ALONG WITH REMOTE MONITORING TECHNOLOGY

Since the mid-90s, FortisBC has relied on Mobiltex® solutions, most recently initiating a capital program to install the low-cost, fixed-function RMU2 and RMU3 Remote Monitoring Units across its network. “When the program is complete, it will save our technicians two or three days per month in travel time,” Bowing says.

Designed for cathodic remote monitoring applications and ideal for automated monitoring of rectifiers, test points, and bonds, the RMU2s are paired with corView, Mobiltex’s smart, secure web interface, which give inspection teams access to up-to-the-minute measurement data about their systems. The RMU3s have the same capabilities, but also provide the ability to interrupt the system for survey purposes.

Using data collected in corView, the team can receive alerts about potential threats, assess the situation, and determine next steps remotely.

For example, Bowing says, FortisBC does not have a designated technician for Vancouver Island, which often experiences power outages during storms. “We get alarms that affect our meter readings, but outages are often repaired by local teams and our readings return to normal again overnight. By keeping an eye on corView and BC Hydro’s outage map, we’ve learned to use the data to understand the urgency of a given situation.”

To solve the issue of lacking cellular coverage in some parts of the province, Mobiltex configures those RMUs to communicate with satellite networks. “Mobiltex is ahead of the game when it comes to communication technology. They give us plenty of notice about upcoming upgrades and make them as simple as possible,” Bowing says.

## RESULTS: MAKING BETTER USE OF RESOURCES

More than half of FortisBC’s rectifiers are now remotely monitored. Over the next three years, Bowing’s team will complete installations on British Columbia’s coast. “We’re also reaching 700 test point monitors. We have 100 more to install in 2019,” Bowing adds.

While field technicians will still travel to each rectifier annually for mandated manual inspections, Mobiltex’s solution allows the team to assess alarm situations from a central point, prioritize travel for maintenance and repairs, and even bundle trips to field locations when appropriate. “We can now focus our energy where it is needed,” he says.

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As the monitoring network grows closer to completion, the corrosion control team is discovering several further benefits. “We’re making decisions based on data we’ve never had until now. For example, the RMU3s can help predict when anode beds are going to be consumed as a result of seasonal fluctuation, thereby helping our team prioritize maintenance.”

Though FortisBC has compared Mobiltex with other companies, Bowing adds, Mobiltex has proven many times over that its customer service is far and above the competition. “The team also takes our feedback seriously – they have added new readings to corView based on our needs. They’re very open to hearing from us.”



CorTalk® RMU3 Remote Monitoring Unit