Oklahoma Natural Gas

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A Sierra Wireless® Remote Monitoring Solution

CUSTOMER CRITICAL CHALLENGE

- Need to remotely manage and monitor infrastructure reliably and securely

SOLUTION

- AirLink gateways installed at over 900 sites

BENEFITS

- Accelerate IMP compliance
- Remotely monitor pipeline network components
- Decrease operating expenses without expanding its workforce

- Increase shareholder value
- Implement a clear and simple upgrade path to evolving technologies
- Improved quality and accuracy of data

Oklahoma is the third largest gas producing state in the US. To serve its broad client base, ONG has extensive pipeline networks deployed over vast stretches spanningurban and rural areas. The company’s priority is to deliver natural gas with no adverse effect on the public, its customers, employees or the environment, and its goals forenvironmental safety and performance meet or exceed all industry requirements.

Business Challenge

When the Office of Pipeline Safety issued a mandate in December 2003 requiring natural gas pipeline operators to develop integrity management programs (IMP) forgas transmission pipelines, ONG was ahead of the curve. The company had already started addressing the need to revise the complex and costly process of checking 900 sites each month.

To implement the new IMP programs manually, ONG estimated that it would need to hire 90 technicians. They would also need to supply vehicles and cover mileageand other travel expenses, creating a recurring annual expenditure of over $5M. The costs and time required for this process led ONG to seek a solution that would enableremote monitoring without any additional recurring costs.

Sierra Wireless AirLink Solution

ONG implemented an asset management solution that included a Sierra Wireless AirLink Gateway, a rugged communications device specifically designed to handleremote asset management applications for utility management. With capabilities like remote monitoring and configuration, packet-level diagnostics and over-the-airsoftware updates, the gateway provides the always-on and always-aware connection management required for today’s mission-critical applications. Certified as ClassI, Division II, the AirLink gateway is rated intrinsically safe and suitable for use in hazardous environments.

ONG installed 900 AirLink gateways, one for each of its remote sites. Each gateway enabled information to be sent back to a single command base, eliminating the timeand travel required for manual integrity checks. In addition, Sierra Wireless

tailored its solution for ONG with specific enhancements that would efficiently manage data andreduce wireless network usage, further minimizing costs for the organization.

Results

Sierra Wireless’ monitoring solution provided the low latency and reliability required for more frequent meter polling, making ONG’s data reads more accurate. ONG was ableto not only meet mandated IMP specifications, but also to use the new data retrieval process to reduce losses resulting from inaccurate billing.

Assuming annual technician compensation of $45,000 and an annual vehicle operating expense of $12,000, the recurring annual expenditure for manual integritychecks would be $5.1M. The cost to purchase and deploy 900 AirLink gateways was approximately $630K. Even with recurring airtime, ONG recovered its investment in thesecond month of deployment, and continues to save over $4.8M per year.