

Success Story: Remote Power ICCP PowerGen



Introduction

A midstream gas transportation company with activity in the Rocky Mountains maintain portions of their pipeline that are in places without access to utility grid power. In order to provide electrical power to their essential corrosion prevention equipment, such as their ICCP (Impressed Current Cathodic Protection) rectifiers, this company needed simple and extremely reliable electric power solutions that could be powered by pipeline gas. Due to the remote locations that are difficult to reach in inclement weather, a low maintenance and minimal site operation cost is essential.

Qnergy Solution

Qnergy's Remote Power solution is designed specifically to reliably transform pipeline natural-gas into reliable electrical power. The PowerGen is an extremely low maintenance generator, due to zero required maintenance to the core engine.

With multiple configurable outputs, the PowerGen was programmed to output electric power at the preferred operating voltage of 240Vac (single-phase) for use with a standard rectifier (50V / 50A).



Results

The PowerGen was installed and commissioned at a remote site in the Uintah basin of eastern Utah. It was placed adjacent to the pipeline and is fueled by pipeline gas. Electrically, it is coupled directly to the ICCP rectifier with a standard 3-conductor cable carrying the 240Vac.

Application	50Vdc-50A ICCP Rectifier for Cathodic Protection
Operating Profile	24/7 Continuous Power
Power Output Configuration	240Vac, single-phase
Power Output Setting	2800 watts
Fuel Source	Pipeline Natural Gas



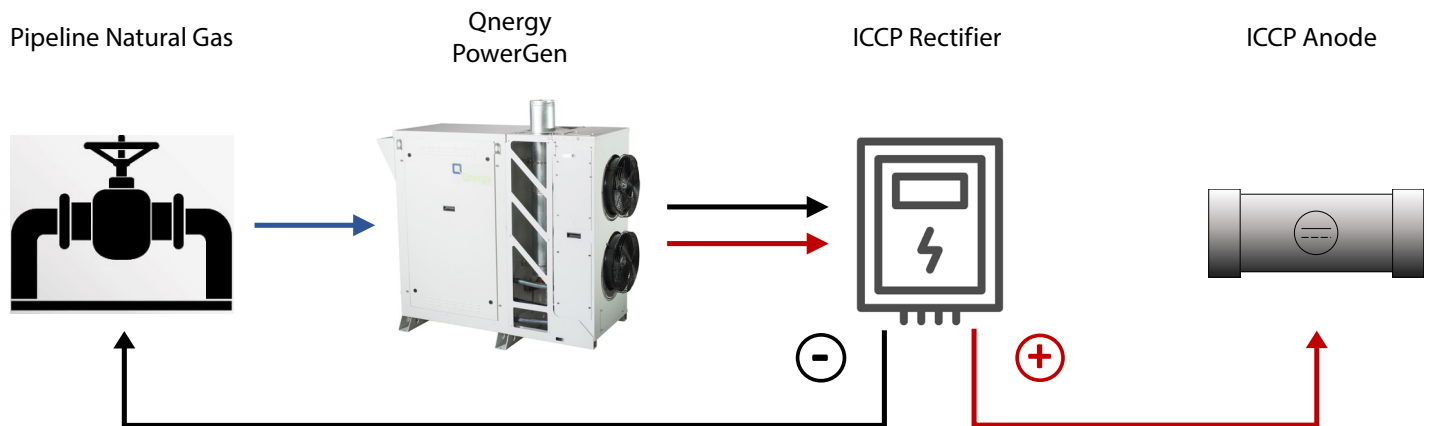
Qnergy at a Glance

Qnergy (q-ner-gy) is a company focused on providing ultra-reliable power solutions. Our technology is rugged, cost-effective, and efficient. With more than 40 years of expertise and proven reliability, Qnergy brings proprietary, high-performance Free-Piston Stirling Engine technology to the marketplace to integrate within commercial and industrial applications.

Qnergy's Free-Piston Stirling Engine (FPSE) generator can transform virtually any heat source into electricity. Once heat is applied to the FPSE the heat exchangers maintain a temperature differential across the engine causing the piston to shuttle back-and-forth. The oscillating helium drives the linear reciprocating motion of the piston, which by means of an integral linear alternator, directly converts the mechanical motion of the piston into electrical power.

The Qnergy engine has fewer moving parts than traditional kinematic Stirling engines, and no direct-contact points that cause wear and require lubrication. The Qnergy engine is truly a maintenance-free technology and offers long-life performance, two key features that make it an ideal power source.

SmartGen Configured to ICCP Application:



The PowerGen configured to ICCP Application is one of 5 standard configurations to meet your remote power needs.

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