

HOLYOKE GAS & ELECTRIC MICROGRID

A flexible solution to improve resilience of a complex grid





ABOUT THE CUSTOMER

Holyoke Gas & Electric (HG&E) is a public power utility in Massachusetts serving 18,000 customers.

THE PROBLEM

An accidental fire at HG&E's Cabot Station facility in 2007 triggered a search for a new approach to resiliency.

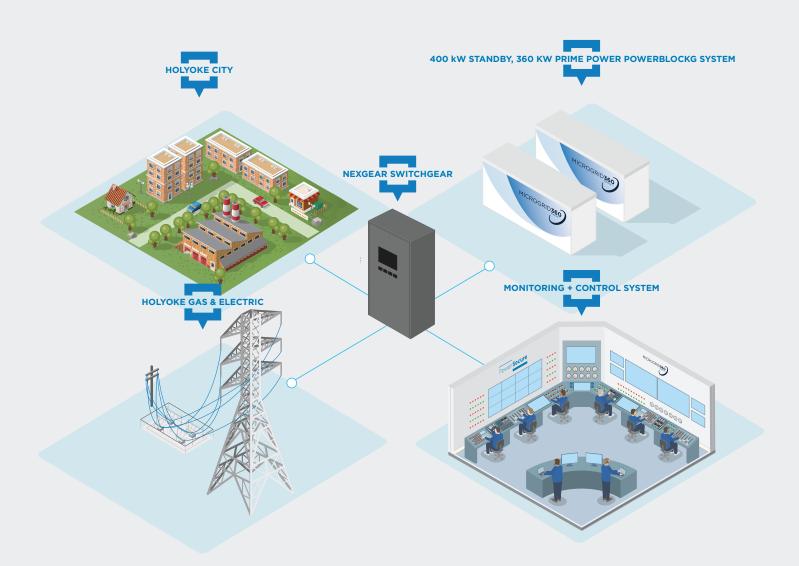
Furthermore, as more substation and distribution feeder assets were placed on HG&E's SCADA system and were subject to automation, it became necessary to provide backup emergency power to the main control center within the City of Holyoke that is fed completely separately from the on-site substation and local electric distribution feeders.



THE SOLUTION

PowerSecure designed, engineered, manufactured and installed a custom microgrid solution that is comprised of a 400 kW standby power and 360 kW prime power PowerBlockG generation system with two natural gas engines and PowerSecure NexGear switchgear.

In addition to creating a customized solution. PowerSecure maintains service and 365/24/7 monitoring of the system's assets by trained analysts ready to respond immediately to an event.



BENEFITS TO HOLYOKE

- 1 Improved reliability full facility backup in island mode
- 2 Improved resilience PowerSecure's distributed-generation solution can be operated to the full rating of 400 kW or as low as 50 kW in standby backup power mode and can come online fully within minutes
- **3** Proprietary switchgear and PowerBlockG engines aids in peak shaving of up to 360 kW each month of the year
- 4 Dual fuel capability HG&E's PowerBlockG can operate on natural gas or propane
- 5 Annual savings is approximately \$20/kW per month with 200 hours of annual operation

"Only PowerSecure spent time to ensure and verify that all of HG&E's requirements and expectations were met or exceeded through the bid process, as generators of this size that are used for both emergency and paralleling mode are not overly common."

- Brian Beauregard, HG&E Electric Division superintendent