The Opportunity
Situated approximately 160 miles northwest of Edmonton, Alberta, Fox Creek (pop., 2,000) would appear to be a typical small community on the vast western Canadian landscape. Upon closer inspection, however, you’ll find that the town is bustling with activity. That’s because Fox Creek sits right in the middle of a massive oil play.

As one of the world’s top independent oil and gas exploration and production companies, Houston, TX-based Apache Corporation has been active in the Fox Creek region for a number of years with numerous oil and gas wells and facilities.

Historically, the firm employed diesel-fueled gen-sets for wellhead gas to power. More recently, however, company management was looking to replace these sets with more efficient gas-powered units.

The Solution
After exploring its options, Apache decided to install a high-efficiency Siemens gen-set, known for its toughness and superior performance, even under the harshest conditions.

Working closely with its packager, Nebraska-based Industrial Irrigation Services and its dealer, Wild Horse Power in Alberta and Siemens engines, commissioned a Siemens generator set for Apache Corporation’s Fox Creek oil field in early 2016. As of October 31, 2016, the gen-set has been running for a total of 6,680 hours. This flawless operation recently prompted Apache to rent three additional units with Siemens engine generator sets for other well pads in the Fox Creek area.

In addition to fuel cost savings, other key factors in deciding upon the Siemens gen-set are lower maintenance costs and a decrease in downtime due to the proven reliability.

The use of field gas also avoids the need to purchase, transport and store diesel fuel on-site, which is accompanied by potential spill and environmental hazards. Moreover, the Siemens gen-sets can be powered by natural gas, biogas, landfill gas, sewage gas, flare gas and a wide variety of other gases – syngas, associated petroleum gas, well gas, etc. Gas-powered gen-sets are also typically more durable than diesel-powered units.

The ultra-low compression gen-sets can use a variety of low methane wellhead gaseous fuels to produce reliable power. The gen-sets use the latest turbocharging and fuel and engine technologies, which increase power output, reduce fuel consumption and optimize maintenance costs.
Benefits
• Field-proven Siemens gen-set creates a highly reliable and efficient power source using a variety of gases
• Siemens gas-powered gen-set features longer service intervals, easy maintenance and low fuel consumption
• Siemens gas-powered gen-set’s higher efficiencies reduce CO₂ emissions.

• Siemens gas-powered gen-set is specially designed for continuous duty, even under harsh conditions.
• Siemens offers a strong distributor network for spare parts and engine service.

The Business
Siemens is among the largest suppliers of rotating equipment solutions worldwide. The company offers some of the most efficient and environmentally friendly technology platforms, products and services in distributed power generation for oil and gas, industrial, institutional, and commercial clients and rural electrification programs.

Our solutions include combined heat and power (CHP) systems, biogas-fueled gen-sets, hybrid systems (solar photovoltaic and engine-based gen-sets), biomass and waste-to-energy steam turbine generators, compressed air energy storage (CAES), and more. We are also developing new technologies that use fossil fuels and renewable energy resources more efficiently, such as our wave energy-based HydroAir® turbine.