



One of three Capstone C65 microturbines fueled by conditioned flare gas.

Location
Manitoba, Canada

Commissioned
August 2014

Application
Separation and processing facility

Fuel
Conditioned flare gas

Technology
3 65kW Capstone microturbines

Jade Cable, Tundra's facilities and construction manager, expects the microturbines will create 1.3 million kWh of electricity each year, with peak output during winter.

Double win with microturbines

Fueled by raw natural gas

Microturbines' ability to run on conditioned flare gas that contains high levels of hydrogen sulfide and nitrogen, and the opportunity to export power to the grid convinced Tundra Oil & Gas that Capstone microturbines were the right choice.

The three 65kW microturbines from Horizon Power Systems are installed in a separation and processing facility that serves 400 surrounding wells. Tundra chose Capstone microturbines because of their ability to run on natural gas that is of a marketable quality but expensive to process for selling.

According to a 2015 story in Manitoba Oil & Gas Review, on average, each Capstone microturbine takes in 500 cubic meters of gas a day to produce 65kW of energy, for a total of 195kW daily among the three units. Jade Cable, Tundra's facilities and construction manager, expects the microturbines will create 1.3 million kWh of electricity each year, with peak output during winter.

In addition to reducing emissions from the flare gas, Cable said the facility offsets a large portion of the load by feeding power back to the utility to help reach the site's goal of running at a neutral cost.

- **1.3M kWh of electrical output** each year
- **Significant emission reduction** from elimination of flare gas
- **No cost to run site** due to power offset

