ARC Resources needed a new natural gas processing plant in British Columbia, but utility power was not available in this remote area. The solution was to install a microgrid consisting of a microgrid controller and two Mars® 100 gas turbine generator sets. The turbines and microgrid powered plant operations for over a year until a new utility line reached the site.

Today the gas plant enjoys utility power plus backup turbine power automatically managed by the microgrid controller. The microgrid system was so successful that it has been duplicated at two other ARC gas processing plants.
Normally the gas processing plant operates in parallel with the utility while the microgrid controller maintains import/export control for lowest power costs. The system also provides automatic or manual synchronization and automatic disconnect in case of utility disturbance.

When in island mode, the turbines supply all power while the microgrid controller manages load following, spinning reserves, frequency control, and load shedding. The system is pre-designed for two additional turbines and can also accommodate future additions of photovoltaic or energy storage systems.