



Uninterrupted Power In Remote Arctic Location

Industrial & Commercial

At A Glance

Installation:
8 X OP16-3A

Location: Urengoy,
Russia

Output:
Electricity: 13.6 MWeI
Hot Water: 33,6 MW
Heat: Up To 659 t/Hour Of Hot Water

Customer:
Severneftegazprom

The Challenge

Severneftegazprom is the daughter company of Gazprom that operates the heading part of North Stream 1 pipeline system. North Stream 1 is one of the largest pipeline systems worldwide and supplies gas to Northern Europe. The main challenge was to provide reliable and uninterrupted power to general gas treatment equipment of the gas field as well as to the living camp.

The Solution

The first stage of construction included the installation of 7 x OP16 Gas Turbines gensets with 10,5 kV generators. An additional OP16 unit was installed in a second stage. The CHP plant produces electricity and uses the exhaust heat for hot water production. The co-generation system ensures a reliable and highly efficient energy supply for this isolated installation that faces arctic conditions in the winter.

For hot water production, 8xUT-52 boilers were installed to utilize heat of the OP16 exhaust. These boilers were specially engineered and manufactured for the project in the UEMZ plant (Ukhta, Russia). The power plant includes all necessary auxiliary equipment (electrical, SCADA etc.) to provide heat and power in a continuous mode.



The Results

This site is an excellent example of the OP16 gas turbine's effectiveness and reliability, with over 350,000 hours of reliable operation to date. The installation provides uninterrupted heat and power to support the continuous operation of the plant.

As a result, thanks to the outstanding CHP advantages of the OP16 solution made this possible, even in the most extreme weather conditions of Northern Russia.



Power Generation Model
(Maximum Availability)



Savings From
Heat Recovery



Natural Gas
Production Per Year

Get in Touch With Us
OPRA, Haaksbergerstraat 71,
7554 PA HENGLO, THE NETHERLANDS

+31 (0)74 245 2121
www.opra.energy
sales@opra.nl

