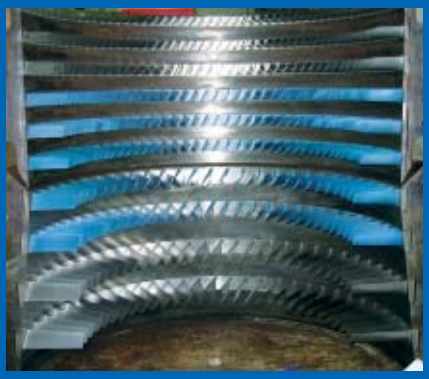
1st stage buckets to 2nd stage buckets.

Frame 1 hot gas inspection.



Upper axial compressor case.

Gas Turbine Maintenance in the U.S. Arctic Region

For the last twelve years Sulzer Enpro has provided all the required large gas turbine maintenance labor for a major oil and gas producer on the North Slope of Alaska. The fleet of gas turbine units consists of (1) Frame 1, Several PGT units, (4) Frame III's, over (70) Frame 5's as well as several Frame 6 units. It is the responsibility of Sulzer Enpro to provide manpower to perform various service activities, including water washes, combustion inspections, hot gas path inspections, and major inspections on the gas turbine units.

Sulzer Enpro has also been involved in the installation and supply of upgraded components on a number of the units. Beyond the gas turbines, Sulzer Enpro has been a key field service provider for all inspections and overhaul requirements on the entire fleet of centrifugal compressors used for gas compression and transmission, and (9) electrical generation units used to provide all of the power requirements of the slope.

VIGV gear replacement.

Pump Station 1 North Slope of Alaska.

The maintenance program is presently spread over four of the major fields on the North Slope. The extent of fields has been spreading as new areas of production are developed in the region. Sulzer Enpro mobilizes all manpower from their Louisiana facility and these crews will normally spend approximately 30 days at a remote location on the slope. Sulzer Enpro provides the customer with onsite technical lead hands, master millwrights, and all other millwright services required to perform the maintenance operations. All inspections are performed on-site, and in many cases utilize refurbished hot section parts, refurbished by our sister company Sulzer Hickham.

The North Slope is still the largest oil and gas producing field in North America, producing approximately 31 million barrels of oil, and 41 billion cubic feet of natural gas in a month. The bulk of the oil produced requires gas lift for production. All of the gas used for lifting is compressed using Frame 5 driven centrifugal compression skids. Producing 31 million barrels of oil in a month requires a great deal of gas for compression, thus generating a substantial amount of maintenance and upkeep of the rotating machinery. Sulzer Enpro is proud to have been a key supplier in the maintenance operations on the North Slope and to have worked to improve the reliability and maintenance processes of our customers

Ken Farmer
Sulzer Enpro