





Customer: Fluor UK / Tengizchevroil

Project: Future Growth Project (FGP) & Wellhead Pressure Management

Project (WPMP)

Location: Tengiz Field, Kazakhstan

Products: HVAC Panels, Ancillary HVAC Process Control Instrumentation

Package & Ultrasonic Flow Meters



Final Investment Decision for FGP-WPMP

In July 2016, Tengizchevroil LLP (TCO) announced it had received approval from its partners on the final investment decision for the Future Growth Project and Wellhead Pressure Management Project (FGP-WPMP), two integrated projects representing the next major expansion of the Tengiz oil field in western Kazakhstan. FGP-WPMP is currently estimated to cost US \$36.8 billion, with first oil planned for 2022.

FGP will use sour gas injection technology, successfully developed and proven during TCO's previous expansion in 2008, to increase Tengiz crude oil production capacity by about 12 million tonnes per year/260,000 barrels per day to about 39 million tonnes per year/850,000 barrels per day. While FGP will expand production, WPMP will keep the existing Tengiz plants at full capacity by lowering the flowing pressure at the wellhead and then boosting the pressure to the inlet requirements of the six existing processing trains.

Tengizchevroil LLP is a Kazakhstani partnership that explores, develops, produces and markets crude oil, LPG, dry gas and sulphur. TCO conducts its operations in accordance with world-class safety and environmental standards. In April 1993, Tengizchevroil was formed between the Republic of Kazakhstan and Chevron Corporation. Current partners are: Chevron Overseas Company, 50 percent; KazMunayGas NC JSC, 20 percent; ExxonMobil Kazakhstan Ventures Inc., 25 percent and LUKARCO B.V., 5 percent.

ABLE and TCO

ABLE Instruments & Controls Ltd was a supplier to the SGI/SGP Projects providing a full range of process control instrumentation including flow, level and analytical and continues to furnish the plant with spares, replacement instruments and after sales support.

ABLE have been contracted to fulfil the design, fabrication and supply of HVAC Panels and an associated process control instrumentation package. ABLE have also been awarded an order to supply Clamp-on Ultrasonic Flow Meters for the sour gas lines as part of the Wellhead Pressure Management Project (WPMP).

Scope of Supply

ABLE's System Integration arm has been commissioned to supply 48 HVAC Panels in a mixture of 2 and 4-bay cabinets including special ATEX purged variants due

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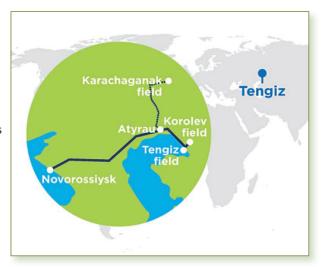


to the high H_2S environment and all incorporating redundant PLCs and I/O. ABLE are partnering with Rockwell to integrate Allen Bradley PLCs into the design. Of the scheduled panels, 20 are planned for delivery in December this year, 23 for July 2017 and the remaining 5 for August 2017. The total scope, which includes 15 of the aforementioned ultrasonic flow meters, is expected to reach more than 60 panels with total I/O in excess of 8,500 and 1000 no. ancillary temperature and pressure control instruments.

Modular Strategy & Infrastructure

FGP-WPMP will be built with large equipment blocks called modules, which will be fabricated, assembled and pre-commissioned at fabrication yards in Kazakhstan, South Korea and Italy and then transported to Tengiz. The work at Tengiz involves interconnecting the modules and stick-building the remaining facilities.

A modular approach moves highly-complex work to a more controlled environment, away from the field. Equally important, modular construction will minimize construction impacts onsite at Tengiz – use of land, water and other resources, as well as minimizing creation of construction trash.



Modular construction was chosen as a superior construction method that allows the timely and cost-efficient fabrication of a high-quality, reliable and safe facility required by TCO. Many of the approximately 20,000 local labour force for the FGP-WPMP will benefit by having direct experience with large-scale modular construction technology, which is now a leading construction method for medium-to-large construction projects worldwide.

Web

able.co.uk





