Huawei Selects Honeywell for Central Asia Gas Pipeline Project

Case Study

“We would like to thank the Honeywell China Project Team for their professional coordination and project execution. Without their support, we may not have been able to meet several project milestones within the project deadline.”

– Wang Liming, Project & Technology Cooperation Commodity Expert Group, Huawei

Background

The Uzbekistan-China Gas Pipeline (UCGP) Project is part of the Central Asia Gas Pipeline (CAGP) Project, which is a designated natural gas transportation system for natural gas from production facilities in Turkmenistan and Uzbekistan to China.

The first major part of the CAGP will transport 30 Bm3/a (30 x109 Nm3/a) of gas from Turkmenistan to China via twin DN 42” pipelines extending some 1794 km from the Turkmenistan-Uzbekistan border to the vicinity of Horgos in China. Of the total pipeline, 527km is located in Uzbekistan, 1,300km in Kazakhstan and 4 km in China.

The second major part of the Project (addressed in this case study), adds an additional pipeline running parallel to the above pipelines. For ease of understanding, this pipeline is known as Line C, and the existing pipelines are known as Line A and Line B.

The UCGP Line A/B includes 3 Compressor Stations (WKC1, WKC2, WKC3), 1 metering station (MS), 2 valve chambers (RTU), and 1 control center (BMCC).

The UCGP Line C system consists of the main trunk pipeline, 23 valve chambers, and four pig launching stations, three pig receiving stations, two compressor stations and a dedicated custody/fiscal metering station. The pipeline commences at the border between Turkmenistan and Uzbekistan, extends 530km in a north eastward direction through Uzbekistan and terminates at the border between Uzbekistan and Kazakhstan.

Beginning in 2009, Honeywell was selected for The Uzbekistan-China Gas Pipeline Line A/B Project.

In 2012, Honeywell was selected for the Line C Project.

The Line C pipeline system, operating at a max operating pressure of 9.81 MPa, first delivered gas in May of 2014. The desired capacity of 20 x 108 Nm3/a to China was realized at the end of the year 2015.
The Needs
Huawei Technologies Co., Ltd., an engineering, procurement, and construction management company (EPC), needed an automation provider that could help with the tight project schedule, making delivery to meet the end user’s requirements.

The Solution
Honeywell provided an entire SCADA solution, which includes:

- Station Control System (SCS with PLC controller)
- Emergency Shut Down (ESD)
- Fire and Gas System (FGS)
- Remote Terminal Unit (RTU)
- Global History database (PHD)
- Simulation system
- Leakage detection system
- Variable metering skid solution

Honeywell’s Experion® Process Knowledge System (PKS) includes a world class SCADA system that drives critical information to the pipelines operations team while automating data logging and processing.

The Benefits
With the implementation of the Honeywell SCADA, Huawei realized the following benefits:

- The distributed system architecture (DSA) feature enables easier system HMI deployment and flexibility in making HMI changes. This capability shortened the project delivery time by approximately one month.
- Honeywell’s Uniformalance® Process History Database (PHD), collects, stores and replays historical and continuous plant process data, increases data security and improves process performance.
- Honeywell’s unified platform, with HMI software, facilitates operator usage and maintenance.
- Honeywell’s branch office in Uzbekistan provides local service support in a timely fashion.

For More Information
To learn more about how Honeywell’s Solutions can help you realize benefits, visit our website www.honeywellprocess.com or contact your Honeywell account manager.

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