



SAMCHEOK LNG TERMINAL

CUSTOMER

Korea Gas Corporation (KOGAS) is a South Korean public natural gas company that was established by the Korean government in 1983. Korea Gas Corporation has 3 LNG receiving terminals in Pyeongtaek, Incheon, and Tongyoung. These terminals are core facilities to supply natural gas across Korea. LNG is transported from overseas manufacturers, stored and then vaporized before being supplied to customers.

CHALLENGES

KOGAS required an electrical supervisory and control system for its latest liquefied natural gas terminal, at Samcheok. The scope of the project included the control and monitoring of the entire facility and all its electrical equipment, including the IEDs, E/M generator, transformers and capacitor banks. This meant that any system had to adhere to the IEC 61850 standard.

The solution should:

- ▶ Reduce operating manpower
- ▶ Reduce human error
- ▶ Enable electric power protection, control and monitoring
- ▶ Limit power failure spread
- ▶ Reduce fault recovery time
- ▶ Be simple to operate and maintain.

SOLUTION

In January 2013, Korean system integrator NEXPO decided that zenon would best meet KOGAS' requirements. Hong Seok-Bong is the project manager at NEXPO, with responsibility for the KOGAS Samcheok LNG terminal project. He says: "zenon promised easy fault analysis, a stable communication network and a reliable system of redundancy. KOGAS was very satisfied with the graphical design and the functionality of the software. Initially KOGAS required numerous functions of the project specifications. Thanks to zenon's flexibility and many function buttons, we were easily able to deliver our various requirements. zenon made the project team's work much simpler."

TECHNOLOGY

The KOGAS project required IEC 61850 standard communication between the IEDs and zenon. NEXPO worked in conjunction with COPA-DATA Korea to test the system and ensure compliance with the protocol. Plus, by deploying zenon's report generator, the client can monitor and analyze analog trend values. NEXPO's CEO, Kim Jung-Bae, says: "The level and professionalism of support we have received from COPA-DATA, combined with the impressive functionality and rapid, simple engineering of the zenon software, has impressed us no end."

BENEFITS

- ▶ Innovative system design using IEDs and zenon HMI software
- ▶ Rapid and flexible project engineering
- ▶ Impressive graphical interface
- ▶ Simple system operation and maintenance
- ▶ zenon Report Generator for powerful reporting functionality
- ▶ IEC 61850 compliance
- ▶ Integration with PIS system through ethernet
- ▶ Remote monitoring and control
- ▶ Optimum reliability and security

KOREA GAS CORPORATION

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