ONGC: Changing the face of the Upstream Oil and Gas Industry in India



Upstream Oil and Gas Solutions

THE CUSTOMER

Dr. A. K. Balyan, Oil and Natural Gas Corporation (ONGC) director of Infocom Services stated: "Today the real-time data is becoming part of management dynamics in reaching business conclusions. Keeping this as an imperative, ONGC aims to take maximum advantage of the state-of-theart technology in SCADA for leveraging productivity and thereby profits"

This project covers 157 offshore platforms and 247 onshore installations, pipelines and 2 processing plants with a cost of approximately 100 Million dollars.

The ABB SCADA system will be deployed in 179 onshore servers, 8 offshore servers, 2 plants in tier 1, and 13 redundant servers in Tier 2 control centres. As well, the system will be implemented in the Corporate centre in Delhi with a backup centre in Bombay.

THE CHALLENGE

In addition to the demanding logistics, which included installation of field instrumentation, high end applications and SCADA servers polling through radios there was also the fast tracking of project scheduling covering all of India, including offshore properties.

At the same time replication of data and configuration in real-time via satellite as well as linking to existing systems was also required.

The system deployment could not upset current operations within ONGC, rendering the need for outstanding ABB coordination and customer relations.

Multiple simultaneous implementation teams were organized by ABB in India Canada, Germany and Switzerland all coordinated in one ABB team



Product: ABB Operate IT SCADA Vision

Communications:

Corporate network Satellite network 9600 bps TDMA Radio Fiber optics

Connectivity:

OPC DA, HDA and ÂE ODBC real-time OLEDB real-time Enterprise Connectivity to: SAP Slumberger EPINET and Silicon Graphics VRC

Applications:

Gas lift optimization Well test Mass Balance Gas injection Production data

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THE SOLUTION

ABB selection as a preferred vendor was due to a number of reasons:

- Experience in delivering upstream oil and gas projects of this complexity
- SCADA system with replication capabilities, flexibility and lowest cost of ownership
- ABB presence as a local company in India for implementation and support
- ABB assuming overall project responsibility
- Global coordination of ABB country organizations and external vendors
- RTU and instrumentation capabilities
- SCADA system expansion ability

