

Ivory Coast to Ghana Gas Pipeline

Apache Cote d'Ivoire Petroleum LDC

With 660 Bcf of proved natural gas reserves, Foxtrot is the Ivory Coast's largest gas field. In 1997, Apache Corporation and its partners signed a 10-year contract to supply natural gas, establishing the commercial potential of the Foxtrot gas field. Two years later the first offshore well, the Foxtrot A-1, began production.

In August 1998, Willbros was awarded a contract for a front-end engineering study for a proposed 260-km natural gas pipeline from Vridi, Ivory Coast to a thermal power plant near Takoradi, Ghana. The 330-MW power plant is owned by the government of Ghana's Volta River Authority. Powered by light crude oil, the new pipeline would allow the fuel source to be converted to natural gas.

Two pipeline sizes, 12- and 16-inch, were considered for transporting flow volumes from 20 to 105 MMscf/d. EPC cost estimates were prepared for the installation of 12 and 16-inch pipelines, for gas flow rates of 60, 75 and 100 MMscf/d.

The systems included a 4,000-hp compressor station at the Foxtrot tie-in at Vridi, launchers and receivers, and a metering and pressure regulating station at the power plant site. An intermediate compressor station was included in one case study.

Additional services included:

- Ground reconnaissance to gather information for routing of the pipeline and to establish a basis for the construction estimate
- Gas hydraulics studies to confirm optimum configuration of pipeline diameter and gas compression facilities to transport initial and future volumes to Takoradi, as well as other designated locations
- Process flow diagrams illustrating selected pipeline configuration and appurtenances
- Crossing and pipeline route features map

*Project Award
August 1998*

*Project Completion
September 1998*

Ivory Coast

