

Investments in the gas plant, pipeline and power station are estimated at US\$ 700 million. The pipeline was estimated to cost US\$ 250 million in 1989, and the power plant US\$ 200 million. For its part, Brazil must invest US\$ 100-120 million in power lines. Notional sources of funds are Bolivia/YPFB own resources \$100 million, World Bank \$150 million; Inter-American Development Bank (IDB) \$250 million; Japan Overseas Economic Cooperation Fund \$200 million in untied funds. In addition Japanese EXIMBANK is said to be willing to lend up to \$100 million to support Japanese exports. With the exception of Japanese OECFD funds, credits would be on commercial terms. Loan proposals are still being defined, including some mechanism to ensure timely payments to Bolivia for electricity exports.

Technical and economic factors argue for additional gas use, particularly the construction of an urea fertilizer plant, circa 1994, and a polyethylene plant, whose locations will depend on future markets. It is proposed that these two projects be privately owned and financed, with the possibility of some investment by International Finance Corporation (IFC). A Brazilian/Bolivian group is said to be developing a proposal in this sense.

International Public Tenders were launched late 1990 for the different components of both the Power Plant and the Gas Pipeline but everything has been frozen for the time being due to Japan's EXIMBANK decision to delay their participation while solutions to aspects of Third World debt problems related to Trinidad Terms are being worked out.

### Other Projects

YPFB has a program of drilling 29 wells to be completed by April 1992, to explore for the first time stratigraphic traps on the north east of Santa Cruz supported by IADB funding, while Occidental Petroleum plans to drill 5 wells in the next 2 years.

YPFB require various technical services also being financed by IADB and World Bank, including the following:

- Seismic data and stratigraphic interpretation.
- Well simulation for primary recovery.
- Software for optimization of production, especially gas.
- Gas well completion technology.
- Technical assistance re "heavy" oils (API 30), its transport and optimization of recovery; and viscosity breaking.
- Sand and water control and treatment.
- Bottom hole pressure gauges for gas wells and interpretation.