



PRIMROSE COGENERATION PLANT

Alberta, Canada

Capacity

- 85 megawatts
- 430 tonnes/hr. of steam

Equipment

- GE 7EA gas turbine
- TIWW heat recovery steam generator (owned by Canadian Natural Resources Limited)

Highlights

- Thermal efficiency 78%
- Low CO₂ and NO_x emissions

Commissioned

- 1998

Ownership

- ATCO Power – 50%
- Canadian Natural Resources – 50%

ATCO Power and Amoco Canada Power Resources Company brought Alberta's first independent power project on stream in 1998 in the newly deregulated market. Amoco's operations have since been purchased by Canadian Natural Resources Limited (CNRL).

The 85-megawatt gas-fired Primrose Cogeneration Plant provides electricity and steam to CNRL's heavy oil operations at Wolf Lake and Primrose in northeastern Alberta. Surplus power is sold to the Power Pool of Alberta.

The cogeneration plant, which is jointly owned by CNRL and ATCO Power, has increased thermal efficiency from 61% using conventional steam generators to 78% with the cogeneration plant producing steam and electricity. As a result, carbon dioxide (CO₂) and nitrous oxide (NO_x) emissions are significantly reduced.

The plant is operated by CNRL with guidance from an ATCO Power plant manager.



ATCO Power

www.atcopower.com