



OLDMAN RIVER HYDROELECTRIC PLANT

Alberta, Canada

Capacity

- 32 megawatts

Infrastructure

- Two horizontal axis Francis turbines, supplied by VA Tech Bouvier Canada with GE generators
- Water head of 25-70 metres
- 6.6-km 138-kV transmission line to Pincher Creek substation
- Step-up substation to increase voltage from 13.8kV to 138-kV

Highlights

- Long-term Use of Works Agreement completed with Alberta Environment
- Alberta Environment controls water levels and flows
- The electricity produced is sold into the Power Pool of Alberta

Commissioned

- 2003

Ownership

- ATCO Power – 75%
- Piikani Nation – 25%

The 32-megawatt Oldman River Hydroelectric Plant in southern Alberta is ATCO Power's first hydro project. In January 1999, ATCO Power was selected by Alberta Environment to develop the project at the existing dam site near Pincher Creek.

Generation is provided predominantly between May to September when water flow is greatest. This run-of-river project consists of two 16-megawatt turbines located at the outlet of the existing east water diversion tunnel.

A step-up substation at the power plant increases the voltage from 13.8-kV to 138-kV and connects through a 138-kV transmission line. The average annual generation is approximately 114 gigawatt hours per year.

Construction of the project was an addition to the existing dam and reservoir, built between 1989 and 1992, with minor alterations to connect to the east tunnel. There has been little impact on the terrain and the plant does not affect water releases controlled by Alberta Environment.

The plant is operated remotely. Fisheries and Oceans Canada, as well as Alberta Environment, confirmed that the project would have no significant environmental effects.

Power supplied by the Oldman River project meets the needs of up to 25,000 households. Power is sold into the Power Pool of Alberta.

In July 2007, the Piikani Nation of Brockett, Alberta exercised their option to purchase a 25% interest in the Oldman River Hydro project.



ATCO Power

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