

BRIGHTON BEACH *Power*



BRIGHTON BEACH POWER LTD. OFFICIAL OPENING – OCTOBER 22, 2004 BACKGROUNDER

OWNERSHIP

- The project is a limited partnership owned 50/50 by ATCO Power Canada Ltd. and Ontario Power Generation Inc.
- Brighton Beach Power Ltd. provides management for the partnership and is the operator of the plant.
- Plant staff is employed by Brighton Beach Power Ltd.

BACKGROUND

- ATCO Power and OPG began working together to develop a new generating station in Ontario in 1998 and settled on the J. Clark Keith site in Windsor in June of 2000. The plant has been designed and sited to serve the Ontario electricity market.
- The environmental approval process was started in December 2000 with the first open house in Windsor.
- Environmental approvals and permits were obtained from the municipal, provincial and federal levels of government and were in place in March and April of 2002.
- Commercial negotiations with Coral Energy Canada were completed in November of 2001. The agreement makes Coral the exclusive supplier of natural gas to the site and Coral will market all the electricity produced.
- Construction started with civil work in May of 2002.
- Financing of \$400 million was completed in September of 2002.
- Commercial operation was achieved in July of 2004.

TECHNICAL DETAILS

- The plant is a natural gas-fired combined cycle power plant.
- Major components are two GE 7241 FA gas turbines with a rating of 170 MW each, two Austrian Energy triple pressure vertical heat recovery steam generators, and one GE DN-11 steam turbine with a rating of 230 MW.
- The plant is capable of producing over 580 MW in cold weather conditions.
- Cooling for the plant is “once through” using water from the Detroit River. The only additive to the water is heat.
- Power from the facility is delivered to the Ontario grid at both 115 kV and 230 kV.

OPERATIONS

- Gas required for the plant operation is purchased by Coral Energy and delivered on the Union Gas System.
- Coral also owns all electricity generated by the plant and markets this electricity.
- Coral dispatches the plant into the Ontario grid through the Independent Electricity Market Operator.
- The plant is capable of cycling operation.

ENVIRONMENTAL

- The plant meets all environmental regulations.
- Gas fired combined cycle power plants are highly efficient and produce very low emissions when compared to other fossil fuel electricity generation.
- The Brighton Beach plant operates in excess of 55 per cent efficiency, as compared to conventional coal-fired plants that operate at 35 per cent efficiency.
- The plant produces less than nine ppm of Nitrogen Oxide (NOx) at operating levels above 50 per cent.
- Greenhouse Gas emissions are over 65 per cent lower than conventional coal generation and the plant produces only trace amounts of sulphur emissions.