

Grandview Cogeneration Plant



Grandview is an 88 megawatt gas-fired cogeneration power plant that is situated within the Irving Oil Refinery in Saint John, New Brunswick. Under a 20-year tolling arrangement, Irving will provide fuel for the plant and contract for 100 per cent of the plant's heat and electricity output.

The facility includes connections to the Refinery's existing electrical system and to New Brunswick Power's transmission facilities, but is engineered and built with the capability to disconnect from NB Power's power grid and operate in an island mode, only supplying electric energy to the Refinery.

Facility Highlights

Configuration:

2x cogeneration.

Location:

Irving Oil Refinery, Saint John, New Brunswick.

In-Service Date:

December 2004

Nameplate Capacity:

88 MW electricity

Fuel:

Natural gas

Environmental Features:

High fuel efficient – 75% at design conditions.

Dry low NOx combustion technology to minimize air emissions.

Owner:

TransCanada Energy Ltd., a wholly owned subsidiary of TransCanada PipeLines Limited.

Operator:

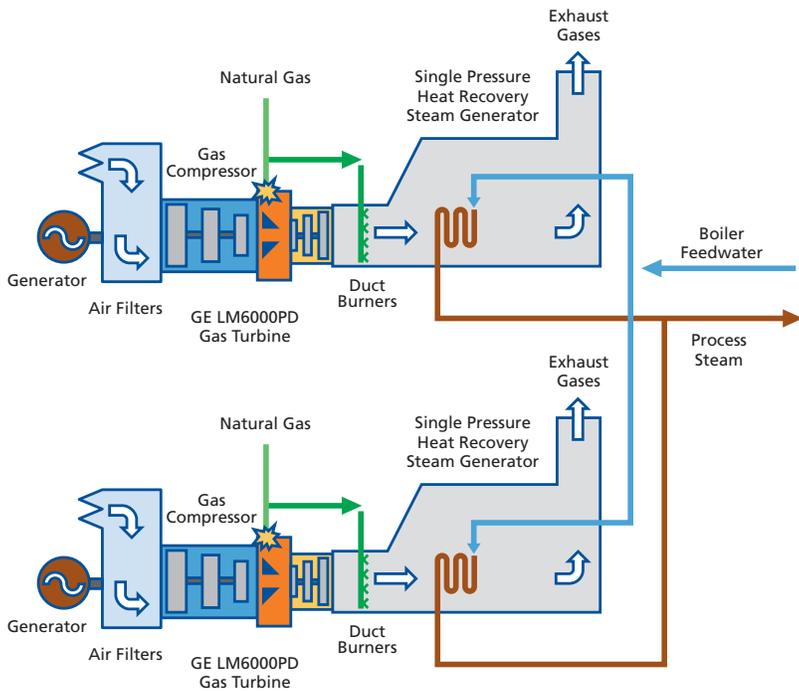
TransCanada Energy Ltd. (through contract with Irving Oil)

Primary Customer:

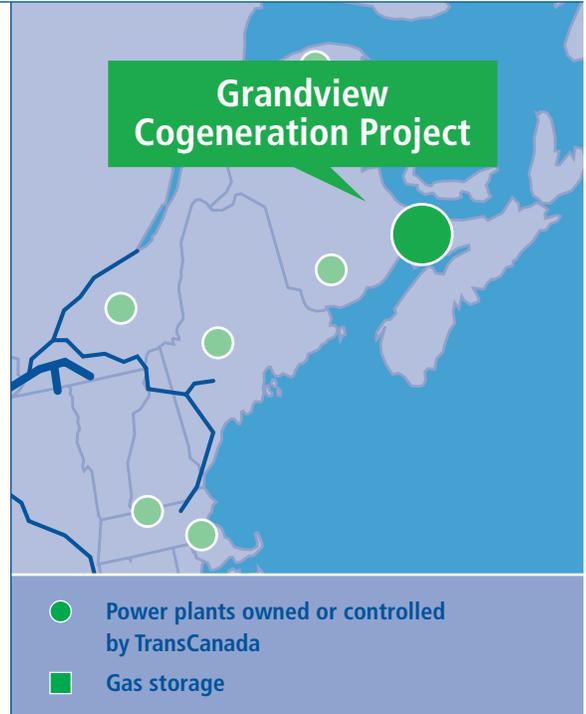
Irving Oil Refinery

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The core pieces of equipment within the Facility are two GE LM6000PD gas turbine generator (GTG) sets, each rated at 44 MW nominal. The GTGs operate in conjunction with Heat Recovery Steam Generators which are owned by Irving Oil Ltd. The gas turbines and heat recovery steam generators have the capability of operating independently of each other. The gas turbines can operate in cogeneration or simple cycle mode and the heat recovery steam generators can operate in cogeneration or fresh air firing mode. When in cogeneration mode the heat recovery steam generators utilize refinery gas supplied duct burners to supplement the steam requirements of the refinery. The same refinery gas supplied duct burners are exclusively used in conjunction with a steam driven fresh air fan to provide the heat for the heat recovery steam generator in fresh air firing mode in the event the gas turbine is not in operation.



Grandview Plant Schematic



For further information on this facility, contact:

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