

Fort Nelson Resource Plan

BC Hydro is developing a resource plan to help meet the long-term electricity needs in Fort Nelson.

Since Fort Nelson is not a part of BC Hydro's integrated system, Fort Nelson's electricity supply is limited to the power output of the Fort Nelson Generating Station and the backup supply provided by Alberta. Given this limited supply and the possible increase in demand, BC Hydro is currently looking for ways to continue to provide reliable power to the area.

In the medium- to long-term there may be potentially significant increases to electricity demand in the Fort Nelson area that are beyond the capability of the existing supply arrangements. As a result, BC Hydro is exploring several supply options to meet these increases in electricity demand in the Fort Nelson area. These options include:

- Improving the efficiency and capacity of the existing Fort Nelson Generation Station with a Resource Smart project,
- Continuing/expanding the backup supply with Alberta,
- Acquiring or building new supply in the area, and
- Interconnecting the Fort Nelson area to the BC Hydro integrated system via a transmission line connected to the Peace Region.

Fort Nelson Resource Smart Upgrade

Currently power from BC Hydro's Fort Nelson Generating Station is developed using a simple cycle natural gas fired turbine that produces an average of 40 megawatts (MW). On a daily basis almost all of the power output is consumed by the town of Fort Nelson and the surrounding businesses. Any surplus power is delivered to the transmission line that runs into Alberta through Rainbow Lake to support power users along this corridor.

The proposed Resource Smart project will upgrade the current simple cycle 47 MW generating facility to a full combined-cycle facility with a predicted output of 58 MW. Environmental and plant output improvements are expected with the same fuel consumption as the current simple cycle configuration. With the current information available to the project team, and assuming the full project is approved, the combined cycle upgrade is scheduled to deliver power to the Fort Nelson area in 2012.

Conducting More Detailed Studies on Future Resource Options

While uncertain at this time, a significant increase of electricity demand from industrial sources in the Fort Nelson area is possible. Due to long lead times and large investments needed to build new projects, BC Hydro must be prepared with a plan in the event of significant new load growth in the area.

The Fort Nelson Resource Plan recommends that more detailed studies be conducted on the options of building a new supply resource locally; building a new transmission line to connect Fort Nelson to the BC Grid; and expanding the supply purchased from Alberta.

These studies are expected to continue through the fall of 2008, with an updated resource plan completed in 2009.

For further information:

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Website: Fort Nelson Resource Plan webpage (planned for summer 2008) at bchydro.com/iep