

## REVELSTOKE DAM AND GENERATING STATION UNIT 5

To ensure British Columbia continues to have the electricity it needs at peak times, BC Hydro is investing in the renewal of the Revelstoke Dam and Generating Station to increase its capacity.

Originally designed as a six-unit facility, Revelstoke began operation in 1984 with four generating units with a combined capacity of 1,980 megawatts (MW). The fifth unit has added 500 MW of dependable capacity to the generating station, enough to service the equivalent of 40,000 additional homes at peak demand. The Revelstoke Dam and Generating Station represents about 21 per cent of BC Hydro's installed generating capacity.

### CONSTRUCTION DETAILS

Construction of the Revelstoke Unit 5 Project included:

- Installation of a fifth penstock;
- Placement of concrete to form the draft tube and house the generating unit;
- Design, fabrication and installation of the generating unit;
- Electrical work to tie the generating unit into switchgear; and
- Upgrades to existing generating station equipment.

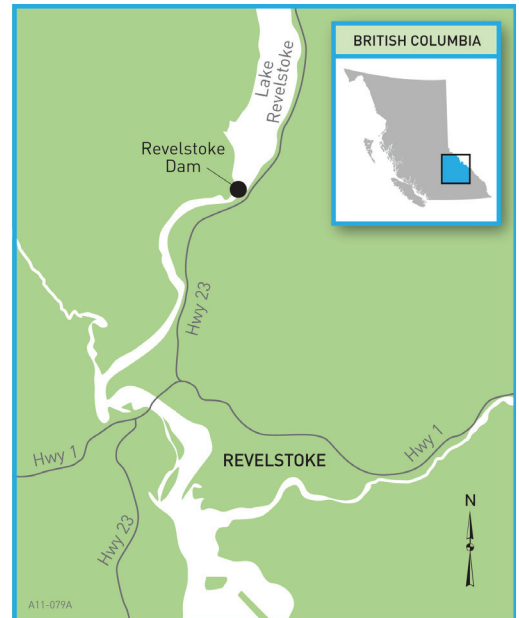
### BENEFITS AND OPPORTUNITIES

The benefits of adding a fifth generating unit to the Revelstoke facility include:

**Low cost to ratepayers:** Revelstoke Unit 5 was the most cost-effective option available to BC Hydro to generate this additional capacity and significant energy benefit.

**Meeting the demand for BC Hydro customers:** Revelstoke Unit 5 provides additional dependable system capacity needed to help BC Hydro meet peak electricity demand.

**Maximize the value of BC Hydro assets:** Because Revelstoke is situated between two major storage reservoirs—Kinbasket and Arrow—the addition of a fifth unit provides additional reservoir and system flexibility.



### QUICK FACTS

- Completion: F2011
- Project cost: between \$230 - \$250 million
- 380 person-years of direct employment
- Adds 500 megawatts (MW) – bringing the facility's total capacity to 2,480 MW
- The facility can now service the equivalent of 40,000 additional homes at peak demand.
- The Revelstoke facility accounts for approximately 21 per cent of BC Hydro's current installed capacity.
- The project involved transporting the new 188 tonne turbine over 18,700 kilometres from Brazil to Revelstoke.



### ABOUT BC HYDRO

For 50 years, BC Hydro has been providing clean, reliable electricity to our customers. Today we are planning for the next 50 years by investing in new projects, upgrading existing facilities and working with our customers to conserve energy through Power Smart.

Learn more at [bchydro.com/regeneration50](http://bchydro.com/regeneration50).