COLUMBIA POWER
POSITIVE ENERGY

BC Hydro
Power smart

ELKO REDEVELOPMENT PROJECT FACT SHEET

OVERVIEW

The Elko Dam & Generating Station, owned and operated by BC Hydro, is located on the Elk River in the southeast corner of British Columbia approximately 60 km southeast of Cranbrook and 25 km south of Fernie.

The Elko Dam & Generating Station was completed in 1925 by the East Kootenay Power Company and was acquired by BC Hydro in 1968. It contains two vertical axis Francis turbines with a combined design output of 12 MW and licensed flow capacity of 25.5 m^3/s. The gross head developed by the Elko facility is approximately 65 metres and the mean annual discharge for the Elk River at Elko Dam is 61 m^3/s.

While improvements have been made to the facility, some of the major equipment is original and reaching end of service life. In 2014, BC Hydro asked Columbia Power Corporation (Columbia Power) to conduct a study of the options for the Elko Dam & Generating Station. BC Hydro and Columbia Power are currently analyzing the results of the study and a decision concerning the future of the facility is expected in 2016.

Klohn Crippen Berger Ltd. has been retained as the Owner's Engineer for the project which will provide preliminary engineering investigation and option evaluation.

BC Hydro is overseeing the project's aboriginal relations activities and Columbia Power is delivering community engagement activities.

QUICK FACTS:

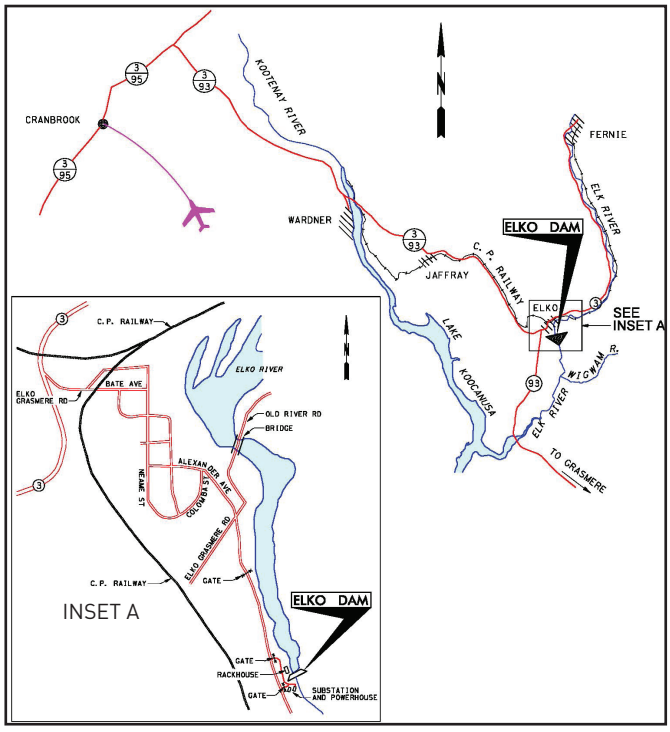
- Current Capacity: 12 MW
- Turbines: 2 Francis
- Owner: BC Hydro
- Original completion: 1925
- Type: Run of River

COLUMBIA POWER + BC HYDRO

Columbia Power is a commercial Crown corporation owned by the Province of British Columbia. It develops, owns and operates hydropower projects in the Columbia Basin. Its head office is located in Castlegar and the company is an active member of the Kootenay communities.

BC Hydro is also a commercial Crown corporation owned by the Province of British Columbia. The Columbia Region provides almost half of BC Hydro's total generating capacity.

Columbia Power and BC Hydro have agreed to explore future projects that would benefit both companies and B.C. taxpayers, while creating opportunities regionally.



PROJECT OPTIONS

Option 1: **Life Extension (12 MW)**
Minimal repairs and replacements to extend life of existing facility.

Option 2: **Upgrade (13.4 MW)**
More significant repairs and replacements to extend life and improve efficiency of existing facility.

Option 3: **Expansion of existing facility (26.6 MW)**
Addition of new powerhouse adjacent to current powerhouse in addition to upgrading existing powerhouse.

Option 4: **New Powerhouse at existing facility location including a new bypass facility:**

- Option 4: 26.6 MW capacity.
- Option 4a: 16 MW capacity.
- Option 4b: 20.8 MW capacity.

Option 5: **New Powerhouse downstream of existing location (41.7 MW)**
Add new powerhouse 2 km downstream of the current location.

Option 6: **Decommission the Existing Dam and Powerhouse**
Decommission existing powerhouse, dam, penstocks, surge shaft and tunnel.