BCIT Burnaby Campus Electrical Infrastructure Modernization

This critical infrastructure modernization project will replace 60-year old electrical infrastructure and protect BCIT against potential electrical service failure for 50% of the campus buildings.

EDUCATION BUSINESS CONTINUITY

- A strategic implementation plan will maintain operation of the existing services while replacement infrastructure is renewed and downstream sub-stations are replaced incrementally.

STRATEGIC ALIGNMENT

- Aligns directly with the BC Skills for Jobs Blueprint with a focus on supporting education for the construction trades.
- Aligns with with BCIT's Campus Plan by accommodating future building energy demand, flexibility and location.

@ A GLANCE

The $47 million renewal of BCIT's electrical infrastructure serves 24 trades-related education buildings at the Burnaby Campus.

- Install a new electrical receiving substation and high voltage service line.
- Replace all aging unit substations on the north campus.
- Replace other aging underground utility services (water, gas, storm, sewer, telecommunications) impacted by the associated electrical works.

BCIT 50 YEARS

RESEARCH

- Supports the BC Hydro and BCIT joint research initiative in Canada's first Smart Microgrid distribution at BCIT's Burnaby Campus.
- Supports research in leading-edge power generation technologies and the integration of smart metering systems.

SUSTAINABILITY

- A modern and more efficient electrical distribution system will support demand management and reduce overall energy consumption on campus.
- Provide institutional resiliency by enabling load shedding redundancy (between Goard Way and Canada Way main feeds).

INNOVATION

- A fiber optic network loop will be established and allow integration of building operations with energy researchers on campus and promote "Living Lab " initiatives.
- The updated electrical system will support research in sustainable and reliable energy, tying into the existing Smart Microgrid program and also support the plug-in of future energy research projects.

ECONOMIC IMPACT

- $64 million of economic activity and 423 jobs created.