

Barnard Substation upgrade

Meeting demand in Burnaby and Coquitlam

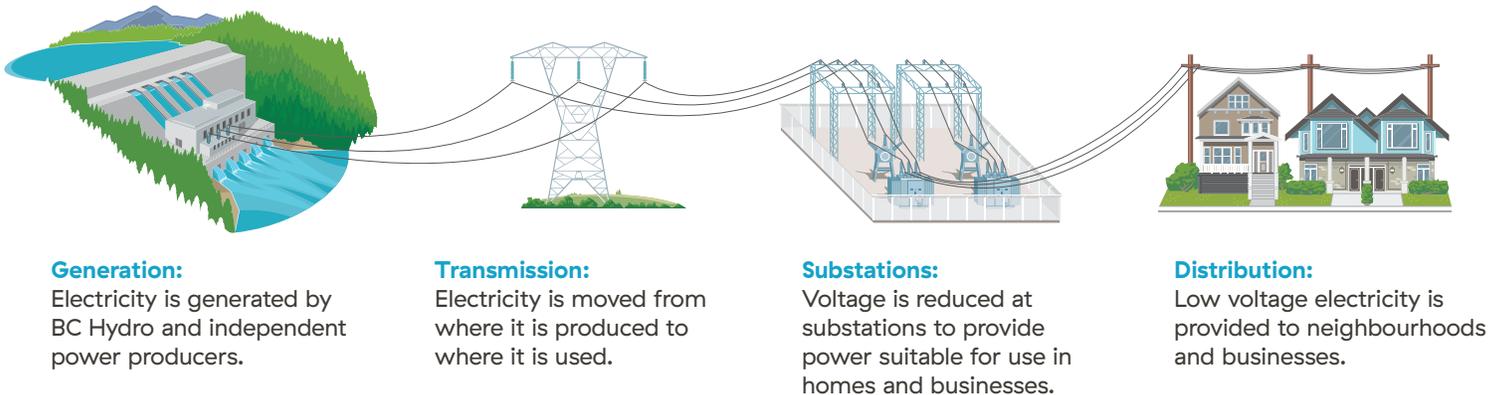
To meet the growing demand for electricity in Burnaby, we're upgrading the Barnard substation, located in Burnaby near Gaglardi Way. The scope of work includes:

- Replace old circuit breakers and existing relay buildings in the 60kV yard with a new relay building.
- Construct a new building and install indoor switchgear to replace existing aging outdoor feeder section.
- Replace end-of-life protection, control and metering equipment.
- Remove existing feeder section after load has been transferred.
- Remove abandoned structures.
- Restore any ground disturbance.

WHAT IS BARNARD SUBSTATION?

Barnard Substation is a distribution substation built in 1950s that takes electricity at higher voltages (230kV) and down convert it to 12kV for supply of power to homes and businesses in the neighbourhood. There is also a switching function for the 60kV transmission lines that goes through Barnard Substation.

Over 36,000 customers are being served by Barnard substation. This number is expected to grow as density in the area increases. The current area Barnard substation serves is west to Lake City Way and east to Mariner Way.



WHAT'S THE BENEFIT OF THIS UPGRADE?

This upgrade will provide increased reliability to the electrical system and address near end-of-life equipment. Upgrades to the substation from oil-filled equipment of the 1950s to new modern equipment will also increase safety for our workers and the public. This upgrade will also prepare for future growth in the area and allow homes, businesses and industries to continue to grow.

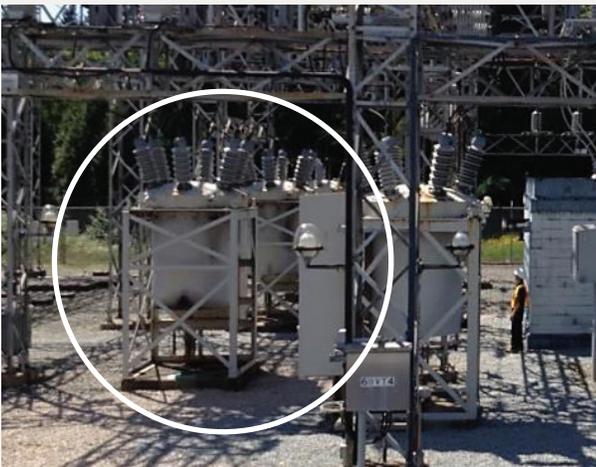
OLD



50/60 series outdoor feeder section



Bulk oil type 12kV circuit breakers



Bulk oil type 60kV circuit breakers

NEW



Indoor feeder section (Example Kidd#2 Substation)



12kV gas-insulated type circuit breaker



60kV gas-insulated type circuit breaker