Peace to Kelly Lake Capacitors Project

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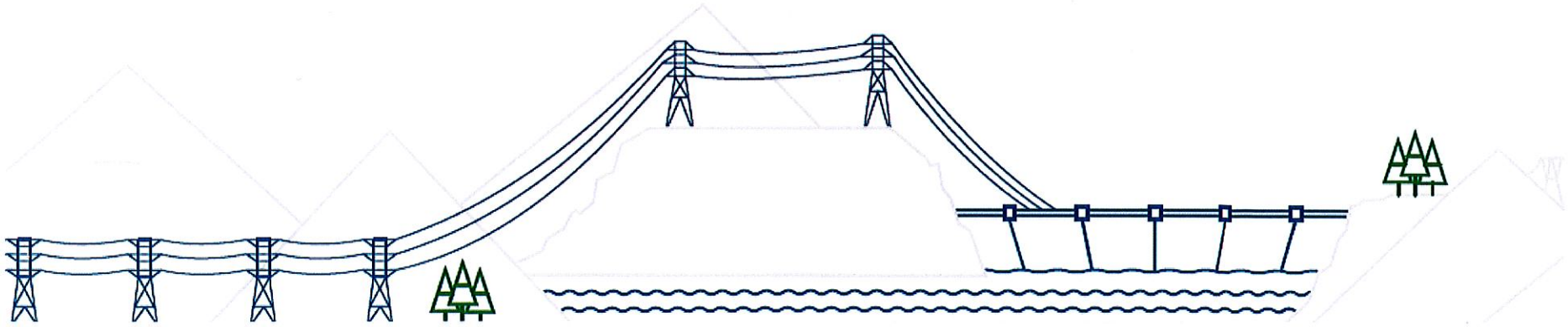

June 2018

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Today's presentation

1. What is the Peace to Kelly Lake Capacitors Project?

2. What alternatives are being considered?

3. First Nations consultation and stakeholder engagement

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Peace to Kelly Lake Capacitors Project

The Peace Region currently generates more than 30% of the total electricity produced in the province.

- With new generation resources being planned, more electricity will be generated in the area in coming years.
- Upgrades are needed to ensure our transmission system can move this electricity from where it is generated to where it is used in homes and businesses across the province.

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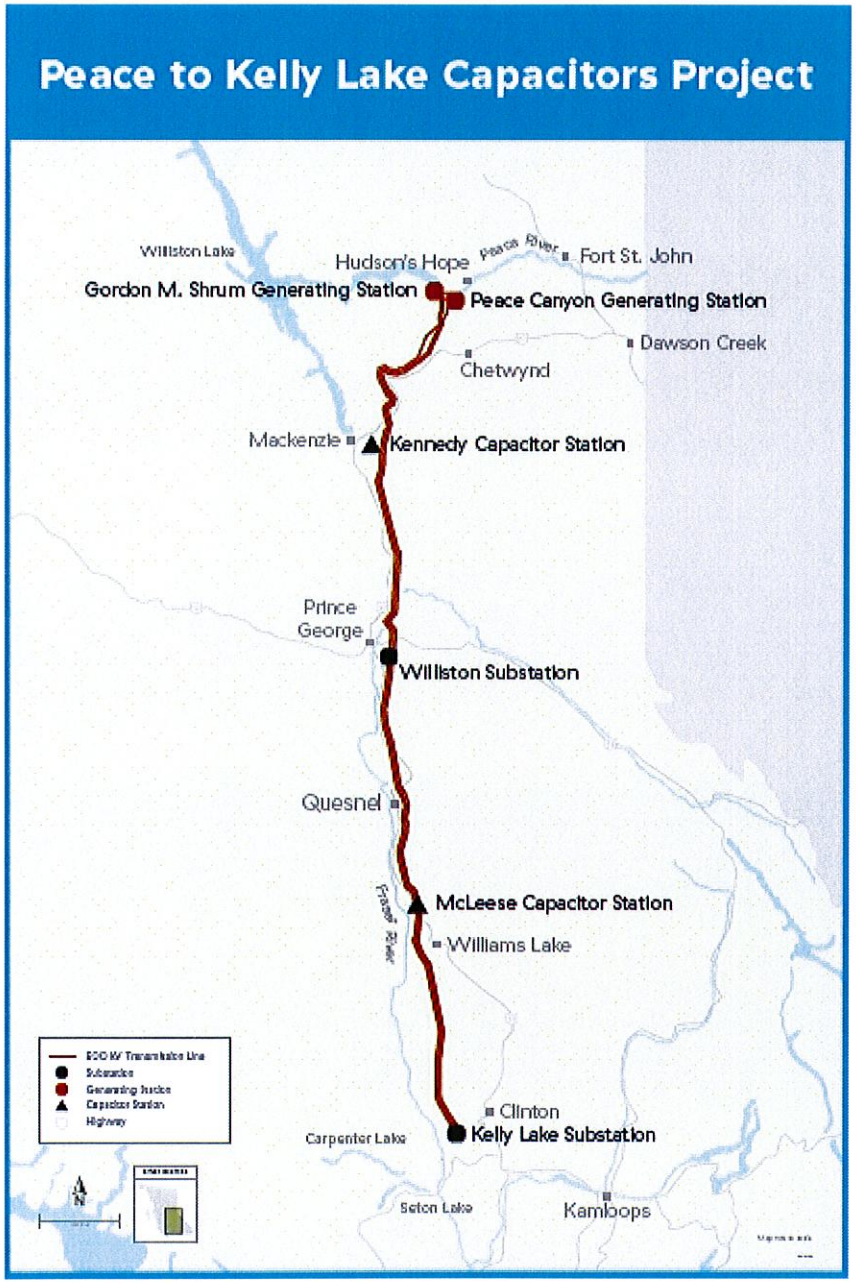

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Why are upgrades needed?

- As electricity moves along a lengthy transmission line, the voltage drops. This limits the amount of electricity that lines can move.
- The existing 500 kilovolt transmission lines in the area are already at 95% capacity.
- Building capacitor stations will help maintain the voltage levels of the transmission lines, maximizing the amount of electricity the existing lines can move.

What upgrades need to be done?

- We need to build capacitor stations to help maintain the voltage levels of the 500 kilovolt transmission lines in the area.
- This project will also include upgrades to the aging equipment that needs to be replaced at the existing Kennedy Capacitor Station.

Above: Example of capacitor station at Ruby Creek about 14 kilometers west of Hope.

What is a capacitor station?

- A capacitor station is a facility where electricity from a high-voltage transmission line is carried through a series of devices called capacitors.
- This helps maintain the voltage levels in a transmission line, allowing more electricity to pass through a line over long distances.
- Capacitor stations are a cost-effective way of maximizing the efficiency of an existing transmission line.

What alternatives are being considered?

We are currently exploring three alternatives.

Alternative 1

This alternative involves:

- Building four new capacitor stations along the 500 kilovolt (kV) transmission lines
- between the Peace Region and Kelly Lake Substation.
- The removal of equipment at the Kennedy and McLeese capacitor stations.
- Upgrades at Williston Substation in Prince George. Expansion is required to the east onto BC Hydro property.

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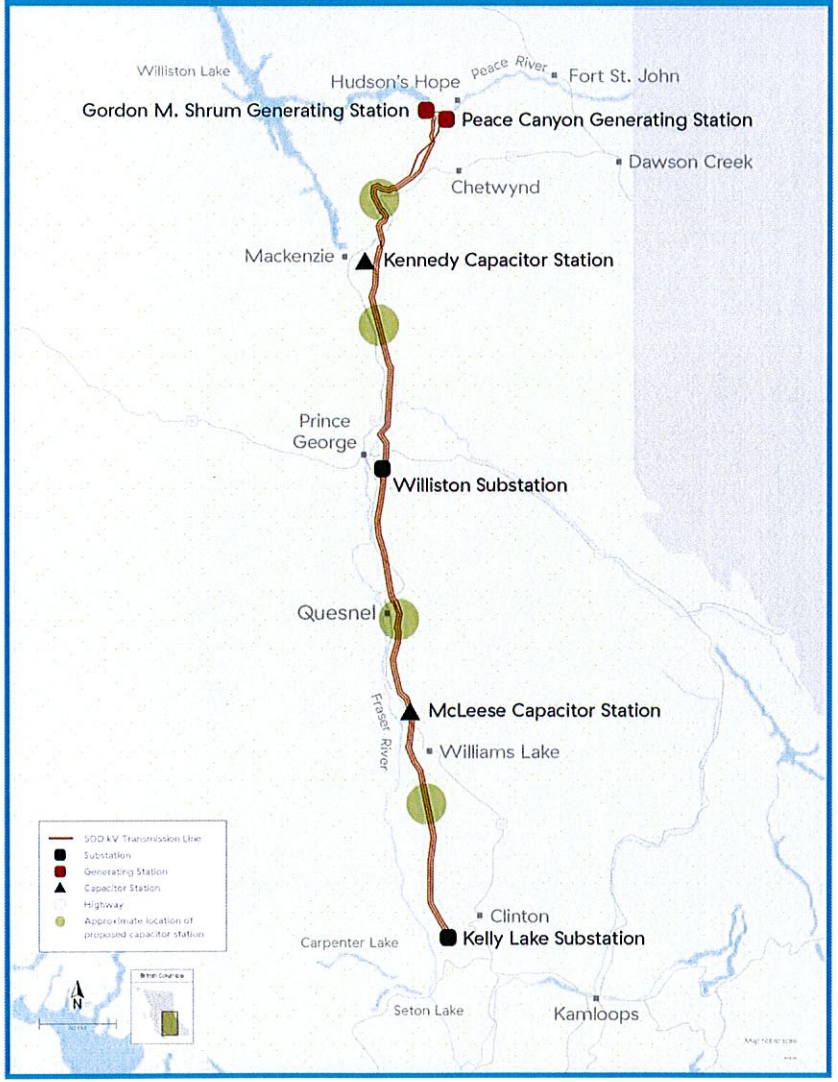
Alternative 1



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What alternatives are being considered?

Alternative 2

This alternative involves:

- Building two new capacitor stations along the 500 kV transmission lines The removal of equipment at the Kennedy Capacitor Station
- Upgrades at Williston Substation in Prince George. Expansion is required to the east onto property that we already own and also to the south.

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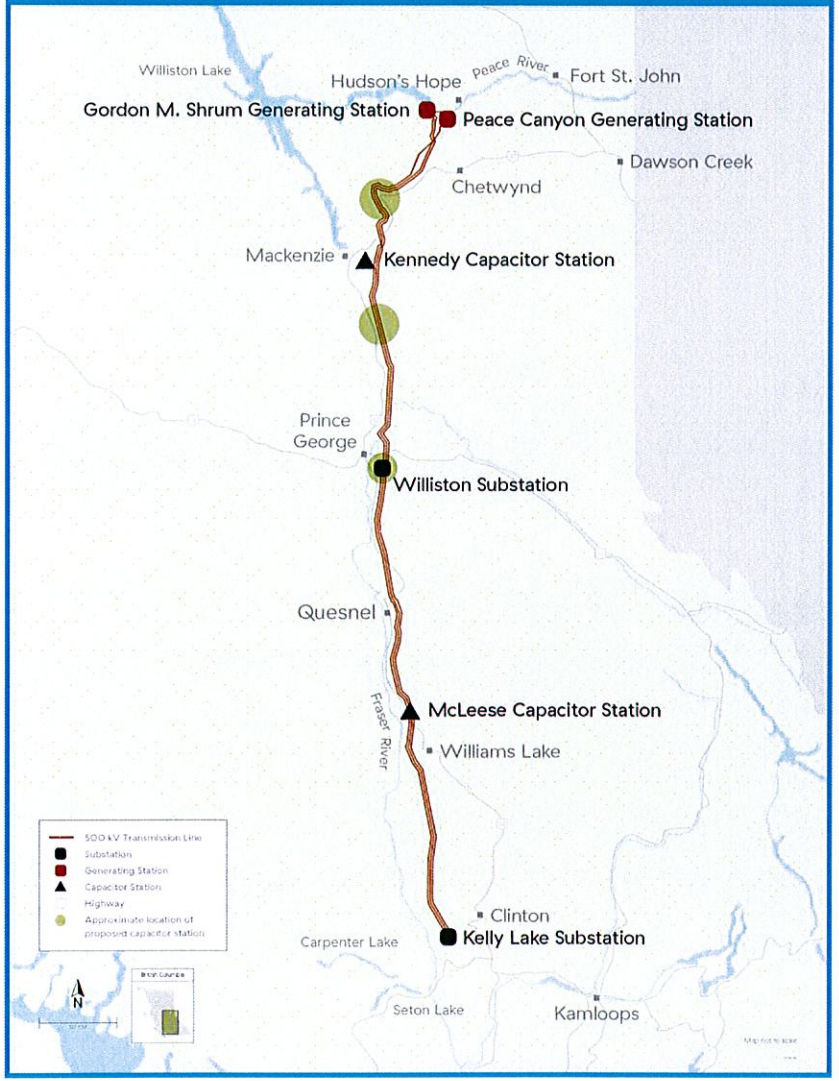
Alternative 2



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What alternatives are being considered?

Alternative 3

This alternative involves:

- Building three new capacitor stations along the 500 kV transmission lines between the Peace Region and Kelly Lake Substation
- Removal of equipment at the Kennedy Capacitor Station
- Upgrades to the McLeese Capacitor Station
- Upgrades at Williston Substation in Prince George. Expansion is required to the east onto BC Hydro property.

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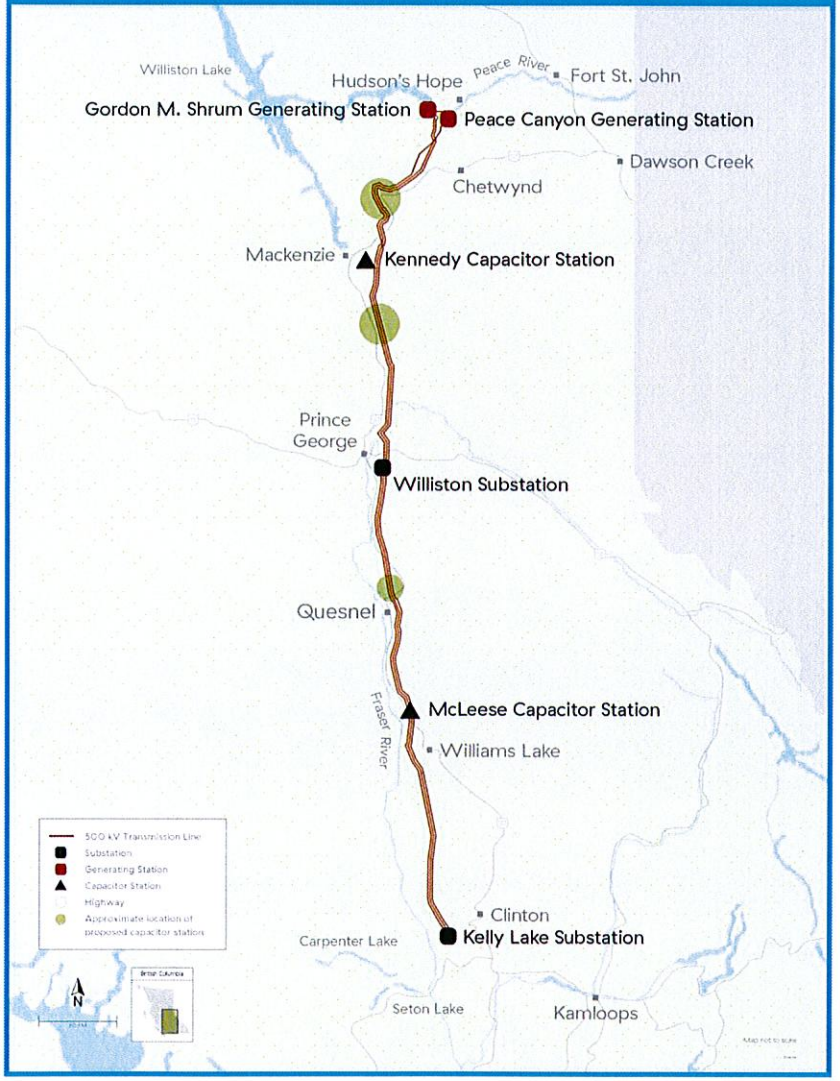
Alternative 3



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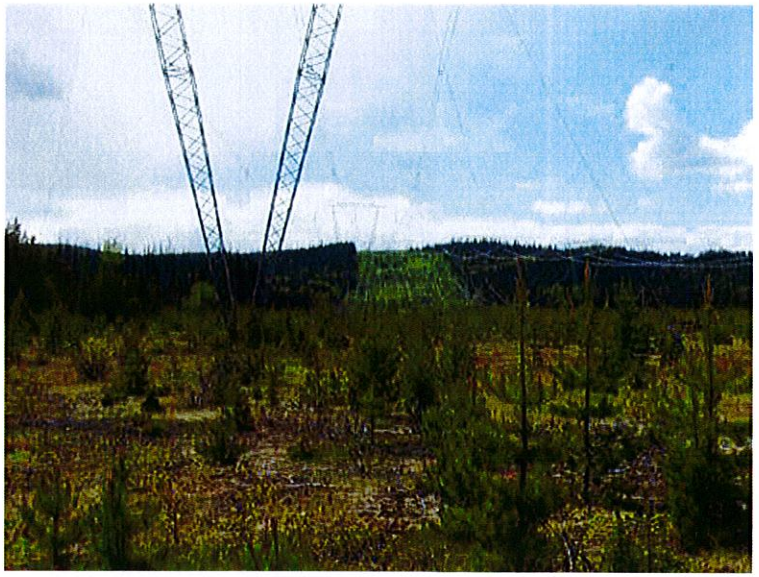
How will you select an alternative?

We hope to select a leading alternative by early 2019.

- To evaluate the alternatives, we assess the social, economic and environmental aspects of each alternative.
- Key aspects include:
  - Safety
  - System reliability
  - Environment
  - First Nations and Stakeholder
  - Constructability and maintenance
  - Visual impacts
  - Property requirements and impacts
  - Cost
  - Schedule



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Were other alternatives considered?

Other alternatives were considered very early in the process. These included:

Do nothing

- This alternative is not being carried forward as it doesn't address the increased generation being planned in the Peace Region.

Upgrading existing capacitor stations

- This alternative is not being carried forward due to operational constraints and cost.

Constructing a new 500 kV transmission line

- This alternative is not being carried forward due to costs and environmental impacts, and in consideration of potential impacts on stakeholders.

Where would the new capacitor stations be located?

- We are currently reviewing possible sites for the capacitor stations in our different alternatives.
- All stations will be located on or near the existing transmission lines' rights-of-way.
- The potential locations for the stations are somewhat limited because they need to be located at specific intervals along the transmission lines.

When is this happening?

We're currently in the very early planning stages of this project and do not expect to start any construction activities until 2021.

- We'll only move forward with one alternative and anticipate identifying a leading alternative by early 2019.
- Project completion will depend on the final alternative and scope selected, at this time the project is expected to be complete between 2024 and 2026.

Stakeholder engagement and First Nations consultation

We will keep you updated throughout the project.

- Activities have started and are ongoing.
- First round of feedback gathered until July 20.
- Visit www.bchydro.com/pkcp for current project information.

Questions or feedback

If you have questions or would like to share any feedback, please contact:

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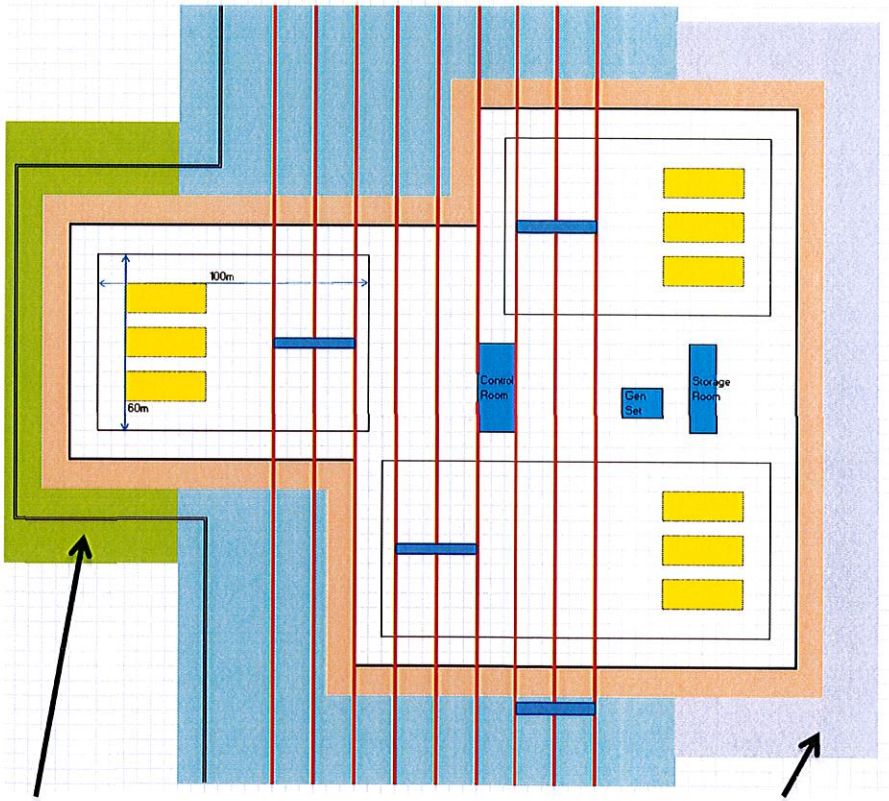
Example of Capacitor Station Layouts

Existing layout (McLeese)

Footprint area = ~6.5 ha

Proposed Layout



138/230kV line rerouted around station in new RoW

Danger tree clearing area

THIS EXAMPLE IS FOR DISCUSSION.

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