# Fort Nelson Long-term Resource Plan

Presenters: Anne Wilson Alex Tu

November 2023



Fort Nelson Generating Station Photo credit: Ryan Sparshu



### **Agenda**

- Welcome and introductions
- Building the Fort Nelson Long-term Resource Plan
- How the Plan is reviewed and approved
- Discussion and next steps



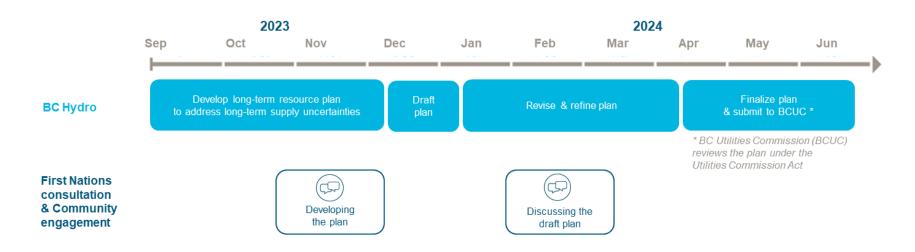
### What is a long-term resource plan?

### The earliest planning BC Hydro undertakes to meet future customer electricity needs

- Looks out into the future (20 years), considers relevant policies and legislation and is submitted to the
   B.C. Utilities Commission
- Any specific projects are subject to separate consultation and approval processes
- Includes:
  - An assessment of future customer electricity needs
  - Plan to meet future needs (e.g., investments in infrastructure, acquisitions)
  - Future technologies that we're exploring



# We're working towards completing the Plan in Spring 2024





# When we build a long-term plan, we start with planning objectives

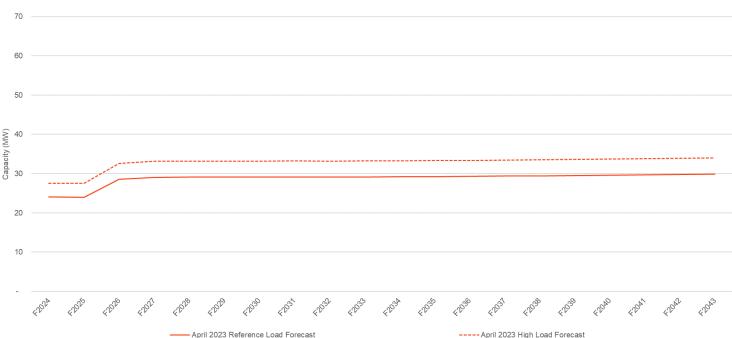
Providing safe, reliable and affordable supply is paramount

The following additional objectives help us with decisions as we develop our plan:

- Keep costs low for customers
- Limit land and water impacts
- Reduce greenhouse gas emissions
- Support local communities' economic development

### We forecast electricity demand

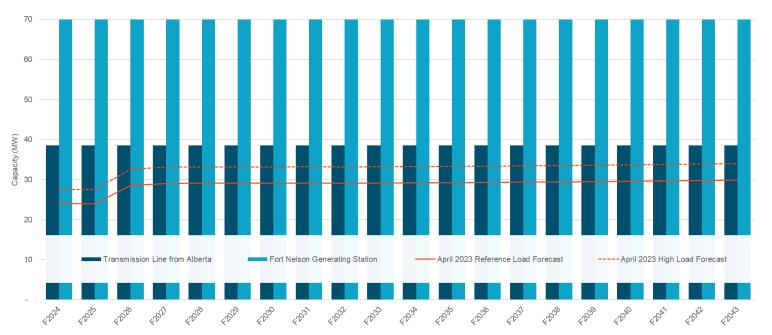
We are expecting demand to be relatively stable through the horizon





### We confirm existing supply

We expect to be able to meet Fort Nelson's needs for the next 20 years





#### We're preparing for an uncertain future

New climate change laws are likely the single largest future impact to planning the supply of electricity in Fort Nelson

- Policies and regulations are being implemented to reduce greenhouse gas emissions.
- In a future where greenhouse gas emissions are limited from power plants, we're looking now at what may be possible to address power supply in the region.



### One example of a potential change

### The proposed federal Clean Electricity Regulations would force closure of natural gas-fuelled generation

#### If enacted:

- Fort Nelson Generating Station would be required to reduce or eliminate GHG emissions
- Timing would be end of life at end of planning horizon (2042)
- Options to address requirements will be identified and considered in this plan
- No decision expected to be recommended; rather, areas of exploration

If not this regulation, another policy or regulation may be advanced

# We have more work to do before our choices are clear and decisions are made

The plan will consider what, if anything, we need to do now to prepare

Renewable Research and study Local biomass

Technology advancement

Cost updates

Policy monitoring

Aberta

Carbon capture

& sequestration



### We're exploring alternatives for a low-carbon future

Each of these resource options has trade-offs

Renewable fuels



Local geothermal



Local biomass

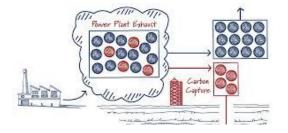




## We're exploring alternatives for a low-carbon future

Each of these resource options has trade-offs

Carbon capture & sequestration



Wind, solar, & batteries combination





### We're exploring alternatives for a low-carbon future

Each of these resource options has trade-offs

Smaller sized units



Transmission line to Alberta



What's important to you as we consider what to explore?

### Our completed plans get reviewed

### Our plans are approved by our Board of Directors and reviewed by the BC Utilities Commission

The BC Utilities Commission uses an established process and regulations through <u>Section 44.1</u> of the Utilities Commission Act to review the plan

- We're suggesting modifications to be more appropriate for small areas such as Fort Nelson
  - A public process will be initiated for the BCUC to review the suggestions
  - We'll send a notification when the BCUC process is initiated (December 15)

For information [starting week of Nov 14]: <a href="https://www.bchydro.com/FortNelsonLTRP">www.bchydro.com/FortNelsonLTRP</a>



#### Thank you and expected next steps

We'll continue engaging on the draft plan in early 2024

November 23 Virtual community townhall (all communities invited)

December 1 Survey closes [see <u>www.bchydro.com/FortNelsonLTRP</u>]

December 15 Submit regulatory modification proposal: BCUC process initiated

January - March 2024 Draft plan feedback

Spring 2024 Submit plan: BCUC review process initiated

Contact us at <a href="mailto:energy.planning@bchydro.com">energy.planning@bchydro.com</a>

