

Clean Power 2040

Powering the future



Engagement on the 2021 Integrated Resource Plan

Regional local government webinar - North

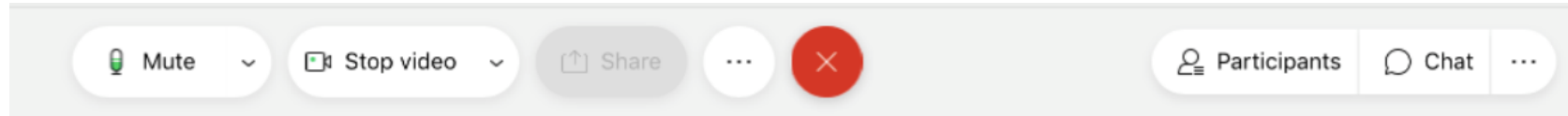
December, 2020

 **BC Hydro**
Power smart

Cisco Webex reminders

We'll be using a few basic tools, which you can find if you hover your mouse over the bottom of the screen

Mute/unmute your mic
& turn your video on/off



View the
participant list



Audio connection trouble?
See the alternative options here



Open the chat panel:

- to ask questions
- to provide feedback

Virtual meeting etiquette



- Be respectful by listening to others and sharing time so that everyone gets heard
- Stay curious about new ideas
- Minimize distractions by “muting” when not speaking
- Use the chat function to seek input and ask questions
- We are not recording these sessions, and kindly ask that others do not record

Purpose and outline

To provide an overview of our IRP, fall engagement and gather input

- Welcome and introductions
- Overview of the Integrated Resource Plan (IRP)
- Planning topics
- Regional considerations
- Next steps

Overview of the Integrated Resource Plan (IRP)

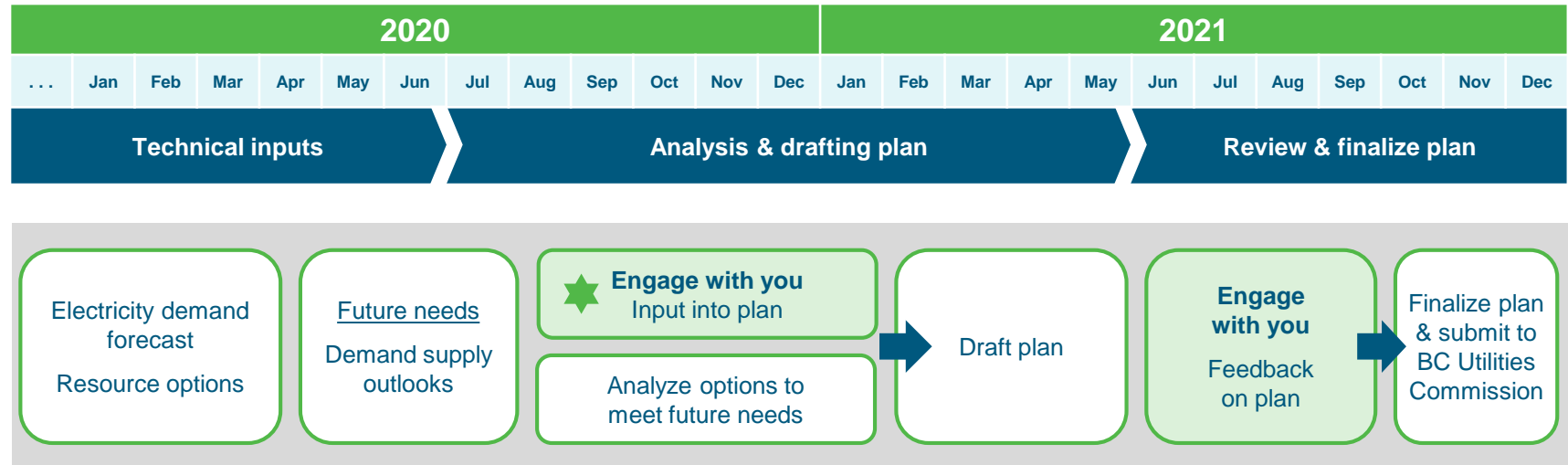
What is an Integrated Resource Plan?

The actions BC Hydro needs to make to meet our customers' future need for electricity

- BC Hydro's plan for the integrated power system
- Addresses any gap between forecast electricity demand and BC Hydro's supply
- Relies on scenarios to address the many uncertainties
- Guided by Provincial legislation and policy, such as the Clean Energy Act and CleanBC Plan
- Involves public, Indigenous, and technical consultation throughout
- Will be submitted to the BC Utilities Commission

Where are we in the schedule?

In this phase of consultation we want to hear what matters to people



Planning objectives

Providing clean, reliable power are key priorities. As we plan, we look at the lowest cost options to meet new demand, and we also consider other objectives:



- Keep costs down for customers



- Limit land and water impacts
- Reduce greenhouse gas emissions through clean electricity



- Support reconciliation with Indigenous people



- Support the growth of B.C.'s economy

Two important terms to know

Energy

The amount of electricity we produce and consume throughout the year.

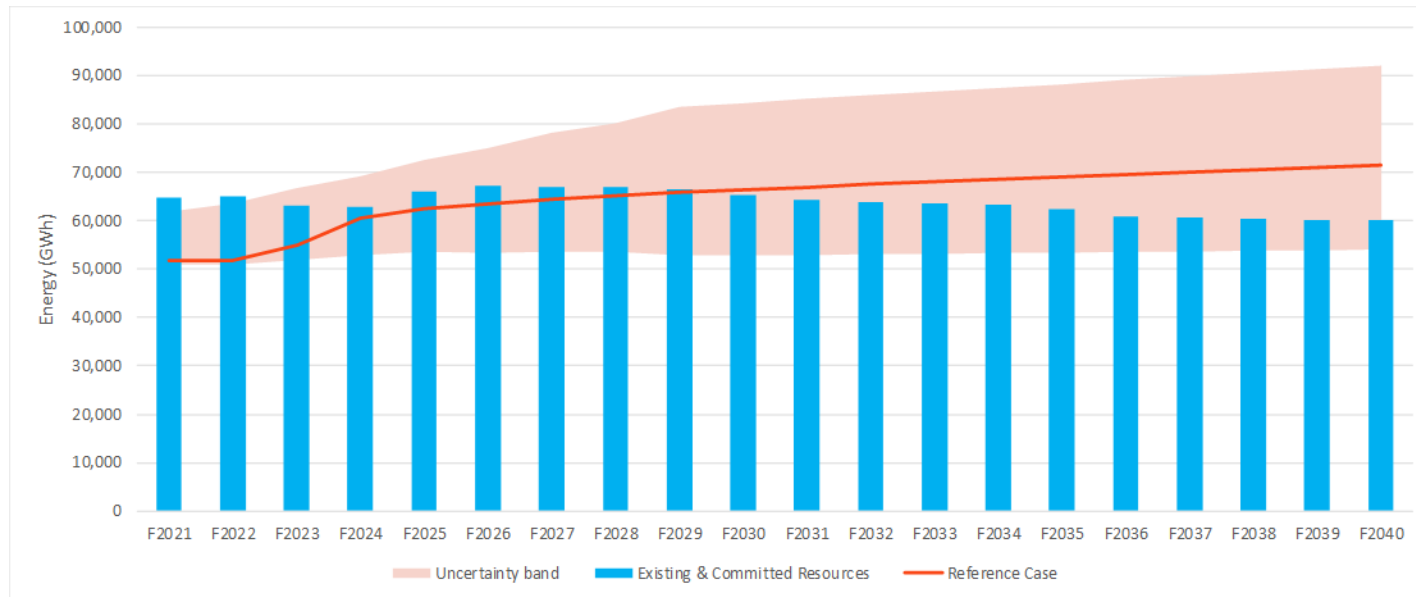


Capacity

The maximum amount of electricity that can be provided at any moment. Also known as “**peak demand**” from a customer electricity use perspective.

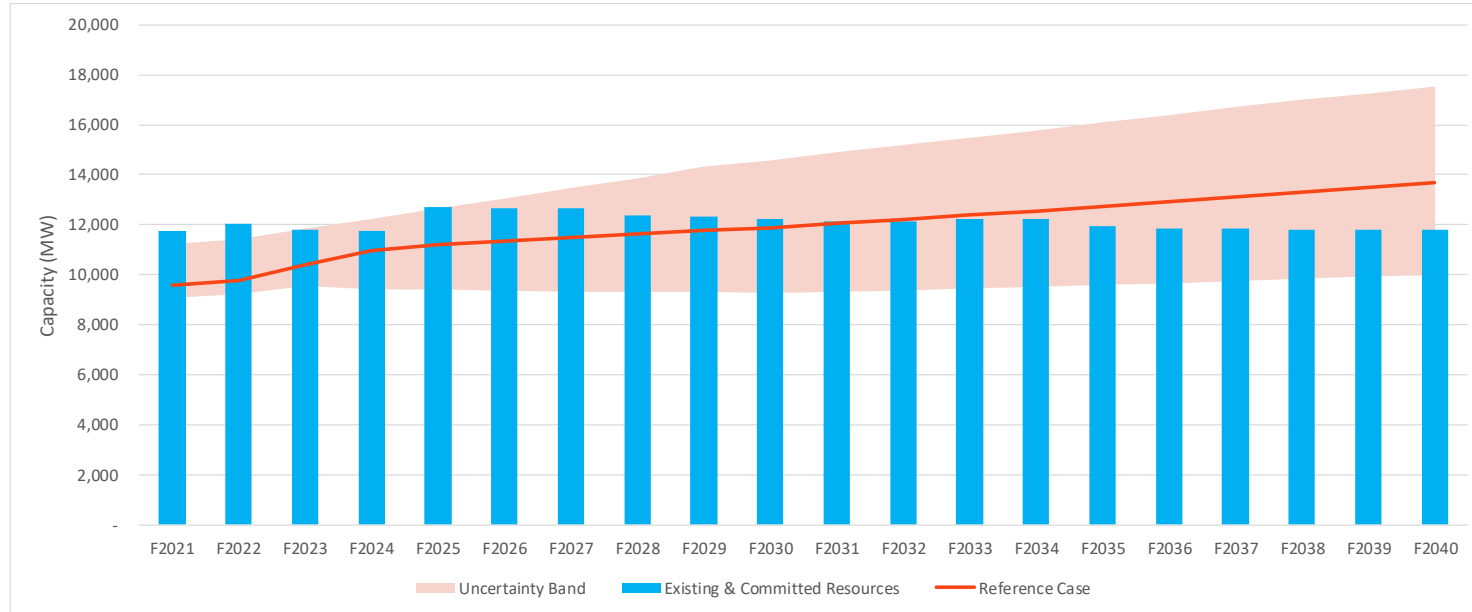
Energy 20-year outlook of supply and demand

We expect to have enough resources to meet B.C.'s energy needs for about 10 years



Capacity 20-year outlook of supply and demand

We expect to have sufficient capacity resources for about 10 years



Planning topics

2020 to 2030: Managing current resources

While we may have enough electricity, there are still choices to make

Conservation and energy management (energy and capacity)

Consider whether to maintain our current level of energy programs, and/or advance new capacity programs

Expiring electricity purchase agreements

Develop an approach for renewals while we have a enough energy and capacity

Small BC Hydro facilities reaching end-of-life

Establish principles when considering refurbishment, decommissioning, or divesting

2030 to 2040: Getting ready to explore new resources

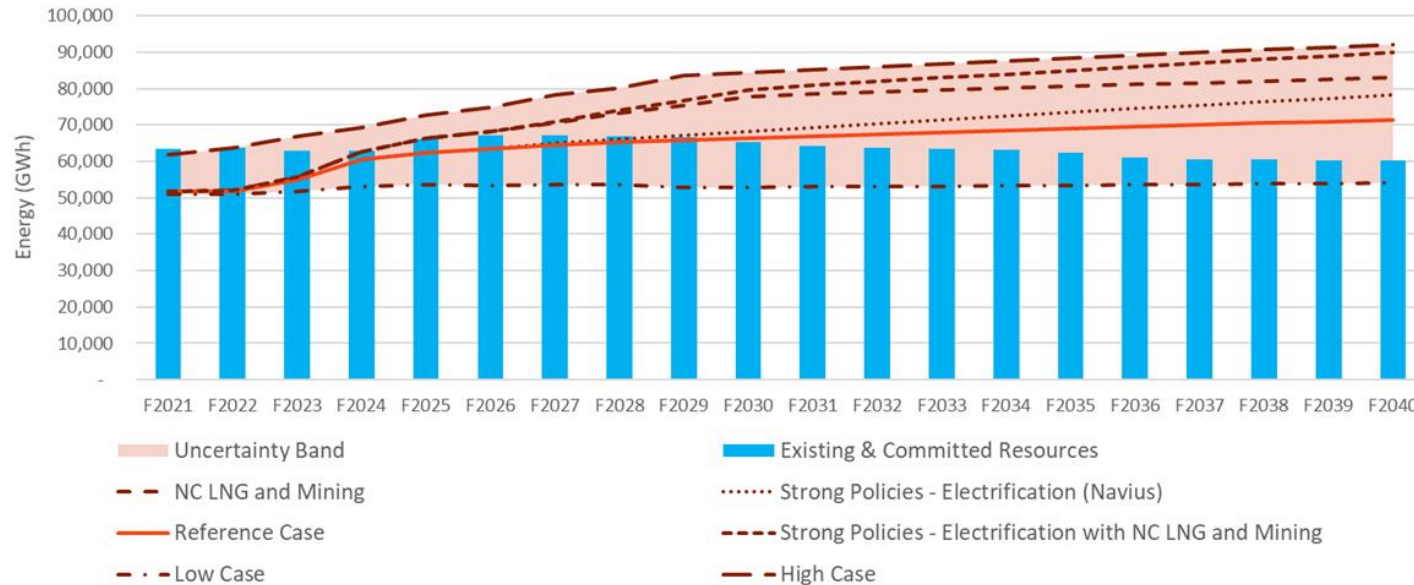
We're looking at ways to address future capacity needs



	Greater conservation and customer involvement	New or renewed local power sources	Upgrades to existing BC Hydro system
Capacity	<ul style="list-style-type: none"> Demand response Time varying rates 	<ul style="list-style-type: none"> Utility scale batteries Pumped storage 	<ul style="list-style-type: none"> Revelstoke Unit 6 Transmission upgrades
Energy	<ul style="list-style-type: none"> Expanded energy efficiency programs Customer generation 	<ul style="list-style-type: none"> Local renewable e.g. wind and solar Could be EPA renewals and/or new EPAs 	<ul style="list-style-type: none"> Renewable from most cost effective sources e.g. wind and solar Could be EPA renewals and/or new EPAs

Planning for uncertainty – Scenarios

The Plan considers uncertainty when comparing our options



Regional considerations

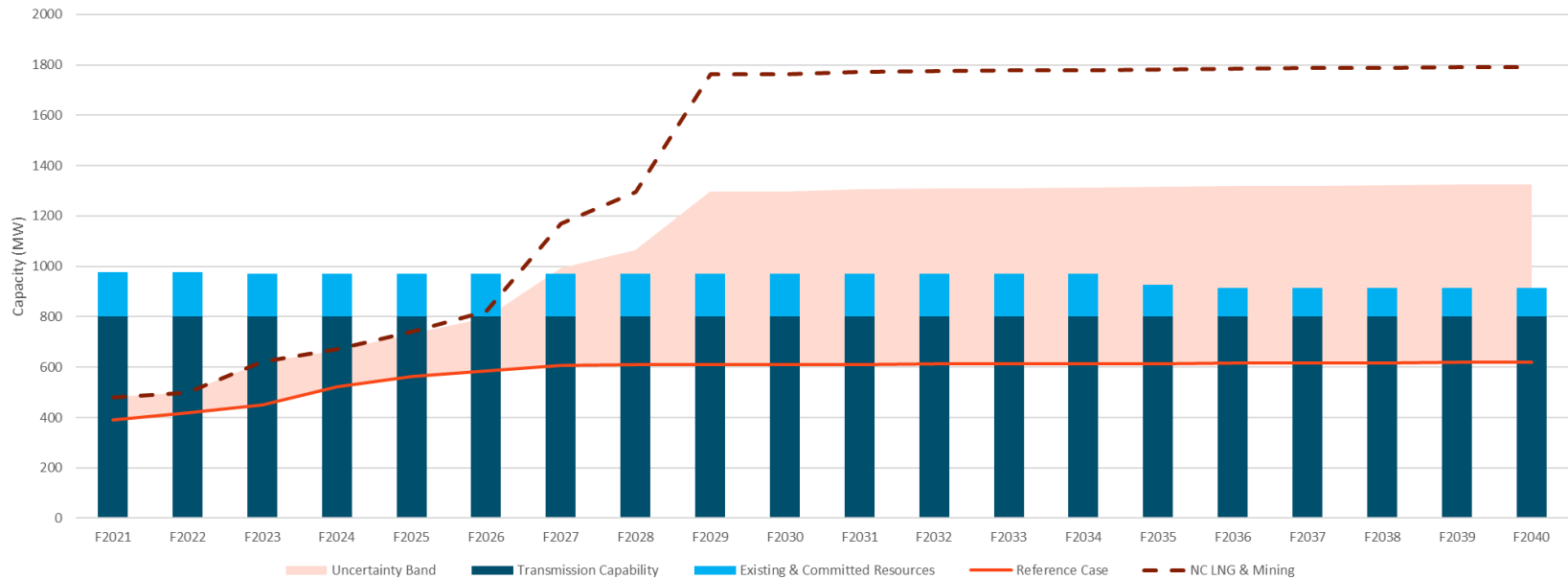
North Coast

The region is served by one long radial line



North Coast region supply demand outlook

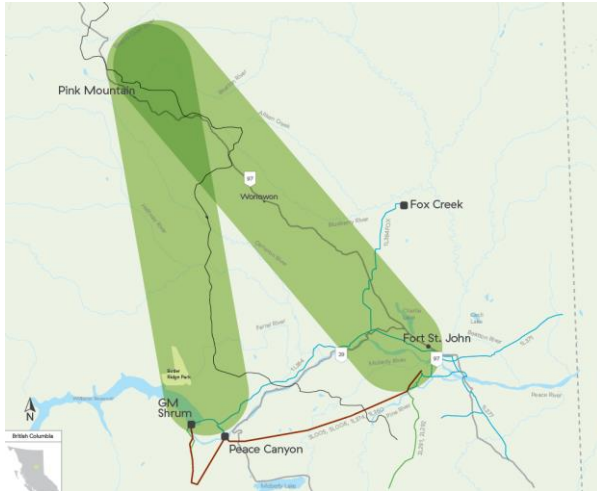
Upside potential from LNG and mining loads



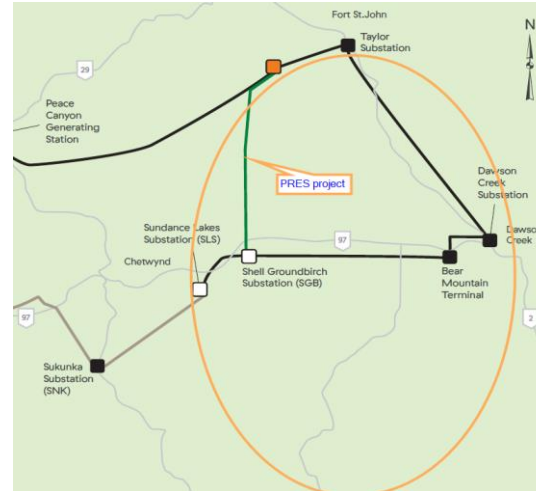
Northeast

Significant load growth expected in two areas that may need new or reinforced transmission

North Montney



Dawson Creek/Groundbirch



Next steps

Thank you for participating

We're asking for comments for this phase of consultation by January 31, 2021

Go to bchydro.com/CleanPower2040

- Provide input through our online survey
- Register to attend a public workshop
- Contact us at cp2040@bchydro.com



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