

# Clean Power 2040

Powering the future



## BC Hydro 2021 Integrated Resource Plan

### Meeting Notes: Local Government Webinar – Interior, BC

<b>Meeting</b>	Local Government Webinar (Southern Interior, BC) about the Integrated Resource Plan
<b>Date</b>	December 09, 2020
<b>Location</b>	Virtual Workshop (Webex)
<b>Local Government Representatives</b>	Farrell Segall, Village of Salmo Owen Torgerson, Village of Valemount Arjun Singh, City of Kamloops Kyle Dalum, City of Kimberley Todd McKenzie, Town of Lake Country Tony Jeglum, Columbia River-Revelstoke Constituency Office Jake Devlin, Thompson-Nicola Regional District Victor Cumming, City of Vernon Jason Friesen, City of West Kelowna Scott Spencer, Nelson Hydro
<b>BC Hydro Representatives</b>	Bill Clendinning; Presenter Anne Wilson; Moderator Shaka Baker; Host Alex Tu; SME Dag Sharman; SME Jen Walker-Larsen; SME Sharon Wasylik; note-taker Judy Dobrowolski; note-taker

### Presentation Summary

The webinar began with a traditional territory acknowledgement.

After introductions and discussing virtual meeting tools and etiquette, Bill Clendinning, Director of Energy Planning and Analytics at BC Hydro led the presentation for the webinar. The presentation is appended to the meeting notes.

# Clean Power 2040

## Powering the future



### What is an Integrated Resource Plan & consultation timeline

Bill Clendinning provided an overview of the Integrated Resource Plan (IRP) and the schedule for creating the plan for submission to the BC Utilities Commission.

### Planning objectives

Bill Clendinning explained the five planning objectives that BC Hydro is considering when reviewing topics for the IRP. He also explained two important terms to know when discussing the topics for the IRP: energy and capacity.

### Integrated Resource Plan Choices

Bill presented the 20-year outlook of electricity supply and demand in BC, for both energy and capacity, and discussed choices BC Hydro will have to make in light of the outlook. The outlook, as shown on the graph, does not include:

- Upgrades to BC Hydro's integrated electricity system
- Conservation programs that could be employed.

Participants were invited to provide input regarding the choices and options presented.

During the first several years when we have sufficient supply of electricity to meet demand, choices presented were:

- Energy efficiency programs, voluntary time varying rates and voluntary demand response programs
- Expiring Electricity Purchase Agreements (EPA) and BC Hydro's potential options
- BC hydro's Small generation plants approaching end of life

Later in the planning horizon as gaps between supply and demand emerge, the following illustrative options were presented:

- Looking at ways that new technology, such as utility-scale batteries and pumped storage could help to store electricity for when customers need it.
- Upgrading our existing system, including expanding some of our larger facilities, like adding an additional generating unit at the Revelstoke Generating Station, and upgrading our power lines to help meet demand from customers.

Basil then discussed uncertainty and the various scenarios BC Hydro considers when evaluating the options presented above.

# Clean Power 2040

## Powering the future



Bill concluded by discussing the regional demand supply outlook and the options that the IRP may consider in the region.

### Participant Input

The following is a summary of the discussion that took place.

20-year outlook of Supply and Demand (4 comments) when reviewing the 20-year outlook of supply and demand, one participant questioned why the existing and committed resources reduced over time.

Another participant questioned if Site C was included in the 20-year outlook.

One participant asked if there would be enough electricity to meet demand if most of the drivers in BC switch to electric vehicles.

Another participant asked of the capacity outlook reduce the appetite for more private power in the southern interior area.

### 2030 to 2040: Getting ready to explore new resources

Greater conservation and customer involvement (1 comment) one participant questioned if conservation was a way to reduce peak capacity, noting that their municipality saved a lot of money by lowering the temperature in facilities during the pandemic lock-town.

New or renewed local power sources (3 comments) one participant questioned why BC Hydro is not allowing municipal-owned generation facilities to address the upcoming demand/supply issue, anticipated for the beginning of 2030. It was also noted that by allowing these types of facilities to supply power to the integrated system, it could allow cities and small communities to produce their own power needs, and it would be seen as a way for BC Hydro to give back to communities.

One participant questioned if there was going to be a reduced dependence on the Peace and Columbia systems?

Hydrogen and power cell technology (3 comments) there were some participants that asked if small nuclear modular reactors are under consideration noting that there are many areas where there are rural demands from mining and other sectors, and that getting power to those areas can be a problem.

One participant asked about hydrogen and power cell technology as an option.

# Clean Power 2040

Powering the future



Another participant asked if it was important to locate a hydrogen production facility near a source of water like a dam, providing an advantage over wind and solar.

Geothermal energy (1 comment) one participant noted that geothermal is an excellent resource to meet the demands for both energy and capacity. They also noted that it is a global resource used throughout the world, but that B.C. is the last jurisdiction to take advantage of it.