

# Clean Power 2040

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## BC Hydro 2021 Integrated Resource Plan Meeting Notes: Local Government Webinar #2

<b>Meeting</b>	Local Government Webinar #2 Presentation on the Draft 2021 Integrated Resource Plan (IRP)
<b>Date</b>	July 14, 2021
<b>Location</b>	Virtual Webinar (Microsoft Teams)
<b>Local Government Representatives</b>	Adriane Carr, City of Vancouver Pam Alexis, MLA, Abbotsford-Mission Christine Boyle, City of Vancouver Bob D'Eith, MLA, Maple Ridge-Mission Doug Daugert, Village of Port Clements Greg Dennis, Township of Langley Jeff Little, City of Port Moody Max Mathies, FortisBC Matt Greeno, Capital Regional District Michie Vidal, Village of Harrison Hot Springs Steven Pettigrew, City of Surrey Councillor Samantha Raven, Constituency Assistant, Stikine Rebecca Newlove, District of Saanich Rick Knodel, Regional District of Okanagan-Similkameen Claire Stechishin, Constituency Assistant, Parksville-Qualicum Will Pearce, City of Vernon Lesley Baird, Village of Cumberland Jordan Sturdy, MLA, West Vancouver-Sea-to-Sky Glen Cheetham, City of Kamloops Sheldon Kitkul, Constituency Assistant, Langford-Juan de Fuca Lisa Dominato, City of Vancouver Erin Desautels, City of Coquitlam
<b>BC Hydro Representatives</b>	Alex Tu – Presenter Anne Wilson – Host Adil Zaheer – Teams Technical host Jen Thompson – Notetaker

### WELCOME

BC Hydro opened the session with a welcome and introductions.

BC Hydro took participants through the upfront information including meeting logistics and then provided an overview of the draft 2021 Integrated Resource Plan (2021 IRP). BC Hydro described

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what an Integrated Resource Plan is and provided an overview of the main elements in the draft plan. Participants were invited to ask questions and provide feedback throughout the session, and opportunity to provide additional feedback was provided at the end of the session.

The summary notes below capture a summary of themes and session areas of interest. This is followed by, for each section of the presentation, participant questions and comments followed by the general BC Hydro response, as appropriate.

### Summary of themes and session areas of interest

In reviewing the **planning context**, there was an interest expressed in the use of gas turbines to offset peak load, and whether there were plans to reinstate the standing offer program, particularly with Indigenous Nations participation.

In reviewing the **demand-side measures draft elements**, there was interest in understanding more about voluntary time-varying rates, and how the two-tiered rates don't speak to the provincial need to electrify and may penalize customers who are electrifying now. There was interest in knowing if optional rates are for all customer classes.

In reviewing the **EPA renewal draft element**, a participant provided feedback to keep options open with respect to IPPs or they may not be there when we need them. There was interest in whether this plan stipulates that any contract renewals will need to meet specific criteria re: producing clean energy.

In reviewing the **transmission upgrades draft element**, there was interest in understanding more about pumped storage facilities (as an alternative to transmission). Concern was expressed about materials being used with transmission lines, and whether there may be future sourcing and pricing issues. There was a question about the impact of heat waves on the transmission system, and whether BC Hydro has a mitigative plan developed.

In reviewing the **future resources draft element**, there was interest in distributed generation. Concern was also raised about carbon leakage, as well as human rights issues, from other countries through solar panel development. There was interest and support expressed in the future of grid-wide, large-scale storage capacity such as batteries, and how it is being considered. There was also caution about competition with the sourcing of materials needed for large-scale batteries. The consideration of using small modular reactors was encouraged.

In terms of **additional** items: there was interest in understanding whether the trend to working from home appearing to continue post COVID, how that would impact smaller communities and rural area electricity planning. A question arose as to whether BC Hydro has considered working with private industry to convert extra power to green hydrogen.

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### Introduction and planning context

#### **Area of interest/comment**

A participant wondered about the use of gas turbines as a cost-effective way to offset peak hours.

#### **Response**

BC Hydro mentioned we looked to these gas turbines for many years; however, we now look to meet our power needs with clean resources.

#### **Area of interest/comment**

There was interest in whether this plan is just around Hydro's own capacity and delivery, or if it includes distributed generation such as solar roofs etc.

#### **Response**

BC Hydro confirmed that increasingly the plan is starting to consider distributed generation. In the past, behind a customer meter was too small or costly to consider. We're taking a more future oriented look – what customers are expected to do in the future. So, things like solar roofs, batteries to use, or foster growth are considered in the planning. We've also looked at incentives that we are not pursuing as they aren't cost effective compared with other resources.

#### **Area of interest/comment**

A participant commented that with the purchase of energy – you were providing IPPs [through the standing offer program]. Are you considering reversing the decision to not do this? Especially when we talk about Indigenous Nations and reconciliation.

#### **Response**

BC Hydro noted that, at this point, we don't have a need for the energy.

#### **Area of interest/comment**

A participant commented and encouraged BC Hydro to keep our options open as when we need the IPP power they might not be in business.

#### **Response**

Thanks for this comment.

#### **Area of interest/comment**

There was interest in whether BC Hydro is considering carbon leakage from other countries through solar panel development. Participant commented that it is something to consider with solar panels being smeltered with dirty energy and human rights issues and this is offsetting our work at being clean.

#### **Response**

Acknowledged the comment and confirmed that carbon leakage isn't considered in the plan at this point.

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### ELEMENTS OF THE IRP

#### Conservation and time-varying rates and demand response options

BC Hydro outlined the first draft elements of the Base Resource Plan: Demand side measures including energy efficiency and time-varying rates and demand response programs.

##### Area of interest/comment

There was interest in knowing more about voluntary time-varying rates, as people are still smarting from the introduction of the two-tiered rate structure. It was also mentioned that these two-tiered rates don't speak to the provincial need to electrify. Those rates need to have considered if people have electrified as then they will be penalized for using tier two. Participant wanted to know if we have thought about how to help those who have already electrified.

##### Response

BC Hydro described the voluntary rates in the draft plan and mentioned the BC Hydro is currently undergoing a rate review in the short-term where the two-tiered rate structure is being looked at.

##### Area of interest/comment

There was interest in knowing whether these optional customers rates are being considered across all customer classes.

##### Response

BC Hydro confirmed that we are considered across customer classes.

#### Renewing electricity purchase agreements

BC Hydro summarized the draft approach for EPA renewal element of the plan.

##### Area of interest/comment

There was interest in whether this plan stipulates that any contract renewals or if new IPPs will need to meet specific criteria re: producing clean energy.

##### Response

BC Hydro confirmed that the renewal offer proposed is for clean or renewable power.

#### Transmission upgrades from the Interior to the South Coast

##### Area of interest/comment

There was interest in understanding more about pumped storage facilities.

##### Response

BC Hydro provided a high-level description of pumped storage.

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### **Area of interest/comment**

Participant expressed concern about materials being used with transmission lines. The actual supply – the proper supply when we're competing with things being mined and these being incorporated into the costs.

### **Response**

BC Hydro expressed appreciation for this comment, and as something to consider further.

### **Area of interest/comment**

There was a question about the impact of heat waves on the transmission system; and whether BC Hydro has a mitigative plan developed.

### **Response**

BC Hydro mentioned that the fire risk is something that BC Hydro is looking at; and within the IRP we're also looking at changes to water inflows based on changes in climate.

### **Area of interest/comment**

A participant mentioned that with the trend to working from home appearing to continue post COVID, smaller communities and rural areas will require an increase in hydro. There was interest in if this has been considered and addressed.

### **Response**

BC Hydro mentioned that changes due to the pandemic are being considered in this IRP. Our load forecast has seen a residential load increase with a reduction in commercial. There appear to be bigger issues with our industrial load and we've adjusted. We will continue to adjust accordingly.

## **Future Resources**

BC Hydro summarized the draft plan element of future resources.

### **Area of interest/comment**

There was interest, when and if BC Hydro has extra power, that BC Hydro consider working with private industry to convert the extra power to green hydrogen.

### **Response**

Acknowledged the comment.

### **Area of interest/comment**

There was interest in the future of grid-wide, large-scale storage capacity such as batteries, and how it is being considered. Especially when talking about new technologies.

### **Response**

BC Hydro described a bit of what the potential batteries may be, for example looking at 50 MW plants, potentially up to 500 MW in the south coast.

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## **Area of interest/comment**

Participant expressed support for large-scale batteries. And cautioned that with so much competition (e.g. California announced they will be doing this too), there will be huge competition with the sourcing of materials needed.

## **Response**

Thanks for this comment.

## **Area of interest/comment**

There was a question as to whether BC Hydro has considered using small modular reactors, as the federal government is moving fast on these.

## **Response**

We mentioned that we aren't considering reactors until we have better idea of costs. We do keep an eye on when these will be ready for prime time.

## **Closing**

BC Hydro thanked people for their participation and mentioned feedback opportunity continues until July 31 with an on-line survey as well as opportunities for organizations to submit comment forms.

Thank you and end of session.