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BC Hydro 2021 Integrated Resource Plan Meeting Notes: Customer & Public Consultation

Meeting	Telephone Town Hall about the Draft 2021 Integrated Resource Plan (IRP)
Date	July 6, 2021 – 7:00 p.m. to 8:00 p.m.
Location	Telephone Conference Line
Participants	117 BC Hydro customers from across the province
Host services & BC Hydro attendees	Stephanie, Host, STRATCOM Bill Clendinning, BC Hydro, Director of Energy Planning & Analytics Anne Wilson, BC Hydro Judy Dobrowolski, BC Hydro

INTRODUCTION AND WELCOME

The host and BC Hydro representative welcomed people to the session and provided opening remarks and background on the topic. Opening remarks are provided in the Appendix attached to this summary. The evening session covered key elements of the Draft 2021 Integrated Resource Plan (IRP), and participants were invited to ask questions and provide comments throughout the session.

Question and answer topics of interest

Throughout the session participants were invited to ask questions. As questions spanned across the IRP topics, areas of interest are grouped here in the following categories:

Rates (4 questions): Participants raised a variety questions and comments about rates including the effectiveness of voluntary time-varying rates. These included the impact of time-of-use rates may have their bills going up as a result, with the introduction of electric vehicles and electric heat their demand will rise and rates will go up, and how quickly BC Hydro plans to implement time-varying rates.

Distributed generation options and IPPs (2 questions): Participants expressed concern that our load forecast increase of 1.5% is too conservative and wanted to know what as being done to subsidize solar power use in some way – either by making it easier to install or easier to sell back. One participant also expressed interest in what we are doing with natural gas as an option. Another participant wanted to know why we'd bother engaging with IPPs and renewing electricity purchase agreements at all when their prices are so much higher.

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Reliability (2 questions): Participant asked about how BC Hydro plans to ensure power outages don't impact people who have life-sustaining medical machines that need electricity. A participant also asked about what was being done to make Vancouver Island self-sufficient.

Selling power (3 questions): Participant raised concern that we're selling power to the U.S. and what rate is BC Hydro selling off the power from the province and what percentages does BC Hydro sell. Another participant wanted to confirm if we could sell to other markets when we have a large debt load.

TOPIC 1: CONSERVATION AND CUSTOMER INVOLVEMENT

Introduction to the IRP element

BC Hydro's draft plan starts with conservation. That comes in the form of helping customer use less electricity and to shift when they use it. The first element is to continue with the current level of energy efficiency or Power smart programs and to prepare to ramp up, or expand these programs, if we need to. The plan also introduces elements new to BC Hydro - voluntary time-varying rates and demand response programs that will help customers take advantage of these new rates.

What is a time-varying rate? It is an electricity price where customers can pay cheaper rates for electricity during most times of a day, in exchange for seeing a higher price during a short window, for example from 5 PM to 9 PM when the electricity system is most heavily used. The voluntary in voluntary time-varying rates means that they are offered to customers who opt into participating. It is their choice.

Having supporting demand response programs can help customers who choose to take advantage of time-varying rates. An example of a supporting program is when you use an automated device that can be programmed to help shift electricity use from peak to off peak periods. Devices like this could help customers take advantage of those time-varying rates. Time-varying rates and supporting programs could be attractive to electric vehicle owners looking to keep their electricity use affordable.

These demand side management measures help relieve pressure on the electricity system, while at the same time, they offer ways for customers to save on their bills. We expect that energy conservation, time-varying rates and their supporting tools would meet about 30% of our customers' future electricity needs.

To recap, in this element we talk about:

- *Time-varying rates, and*
- *Programs that help customer who sign up for time-varying rates to shift their electricity use.*

[open question/comment and answer period]

Poll and results

Question: Energy conservation, voluntary time-varying rates and supporting demand response programs are the first part of meeting the future needs of our customers – while at the same time giving customers options. How does this part of our draft plan align with your values and interests?

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Answer	Votes	%
Strongly aligned	4	11
Somewhat aligned	17	46
Not aligned	10	27
Don't have an opinion	6	16

TOPIC 2: TRANSMISSION UPGRADES FROM THE INTERIOR TO THE LOWER MAINLAND AND VANCOUVER ISLAND REGION

Introduction to the IRP element

Electricity conservation and demand management tools are the first elements of our draft plan to meeting our customers' future electricity needs across the province. The next element of our draft plan focuses on a portion of the province that will see electricity demand grow more rapidly – the Lower Mainland and Vancouver Island.

We'll need additional electricity resources to generate or deliver electricity to the South Coast region sooner than the rest of the province. Our draft plan proposes upgrading the transmission system from the Interior of B.C. to the Lower Mainland to accomplish this. This does not mean new power lines, but rather upgrades to our transmission system in two steps. The first step involves upgrading six existing substations along our lines, and then preparing for (but not yet starting) a second step of upgrades that would add up to five new substations. Early engagement with Indigenous Nations will be an important component of this part this proposed work.

We're proposing upgrades to existing transmission system for several reasons:

- it provides a large amount of capacity – enough to meet the needs for our 20 year planning period at the lowest cost compared to the other options available, and*
- these upgrades also come with limited environmental impacts compared to new generation facilities on the south coast or new transmission lines that would bring the power from elsewhere.*

[open question/comment and answer period]

Poll and results

Question: The draft plan focuses on upgrading our existing transmission system from the Interior of B.C. to the South Coast rather than building new transmission lines or new generating facilities. How does this approach align with your values and interests?

Answer	Votes	%
Strongly aligned	12	34
Somewhat aligned	15	43
Not aligned	5	14
Don't have an opinion	3	9

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TOPIC 3: RENEWING ELECTRICITY PURCHASE AGREEMENTS

Introduction to the IRP element

We talked about our draft plan's elements of conservation and electricity management and then we covered off transmission upgrades to the South Coast. Now let's shift over to discussing renewable energy, starting with agreements BC Hydro already has with Independent Power Producers from whom we buy renewable power.

Today about 25% of our power comes from Independent Power Producers with electricity purchase agreements. Some of these agreements are expiring within the next five years and we need to decide what to do with them. Others expire later and there is more time to decide on how to handle them.

We've mentioned earlier on this call that we don't expect to need additional energy over the next five years. However, rather than cancelling those agreements outright, we're proposing to offer a market-price based renewal options for these clean and renewable electricity contracts. Market-price based means that we'll offer to renew these contracts at what we think they would be worth on the open electricity market. That way, if we don't need the electricity, we can sell the energy on the open market and roughly break even. If it turns out our customers need more electricity than we expect, we'll have these projects at the ready. While this does mean taking on some risk, we felt it was a good balance to give the projects a path forward. Their impacts to land and water have already occurred, and some of them have Indigenous interests that would be supported through this bridging approach.

[open question/comment and answer period]

Poll and results

Question: How much does the proposed bridging strategy of renewing electricity purchase agreements expiring at market price in the next 5 years align with your values and interests?

Answer	Votes	%
Strongly aligned	10	36
Somewhat aligned	8	29
Not aligned	7	25
Don't have an opinion	3	10

TOPIC 4: RENEWABLE POWER

Introduction to the IRP element

Our draft plan to this point covers the first 10 years of the future needs of our customers. In the early 2030s, we will have a need for new renewable resources. We don't have to commit to decisions on that today, but we do know what options we'll be able to choose from. They'll include

- a) renewals of additional electricity purchase agreements for renewable power that is already built, like the ones we just talked about;*
- b) upgrades to BC Hydro existing facilities; and*

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- c) *new renewables from a variety of sources. These could include wind power, solar power from residential rooftops with home battery storage, larger community solar, geothermal, or any other form of renewable power available in British Columbia.*

We'll use similar objectives to assess those options. We look at things like environmental impacts, cost, and societal benefits as we head into our next long-term plan in about five years.

[open question/comment and answer period]

No poll question

THANK YOU AND SESSION CLOSE

The BC Hydro representative thanked everyone for joining in the discussion on the long-term plan, expressing appreciation for listening, providing input, and asking questions. It was mentioned we will incorporate feedback from events like this one into the final version of the 2021 IRP. Our final plan is scheduled for filing with the BC Utilities Commission later this fall. The BC Hydro representative provided contact information for survey and website, stating feedback is being collected until July 31.

ADDITIONAL COMMENTS LEFT ON VOICEMAIL

4 participants left voicemails as an additional opportunity to provide comments. 1 of these would like to be involved in future townhalls and 2 additional calls were received requesting to be included in future townhalls.

Comments received:

- In the future, around 2040 – people might be more interested in solar panels – I was wondering if that's a possibility so people could collect energy and feed it back into the grid. Future town halls
- This townhall was a farce with a one-sided poll questions that were in order to get favoured responses and not provide the ability to respond back to questions. I think it's a complete joke and BC Hydro is railroading the citizens into higher rates.
- When I looked at the overall site the fact that it has a hill on one side and not much on the other and we're destroying so much farmland to meet where the water will be contained. Why couldn't a dike have been built on the other side so farmers could continue farming.
- Does BC Hydro take into account the environment and the amount of rainfall we will get over the next decade to help determine what we might be able to produce?

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APPENDIX 1: INTRODUCTION AND BACKGROUND

Introduction and background

We've just finished a draft of BC Hydro's long-term plan for the power system. The purpose of this plan is to ensure we're ready to supply your electricity needs well into the future. Since it takes time to build or buy new electrical infrastructure or to develop new power smart programs, we plan now for what you may need 10 to 20 years down the road. Tonight, we're seeking feedback on the elements of our draft plan. This is part of phase two of our engagement process. Some of you may have participated in phase one when we sought input from you about what we should include in our plan.

We start with an outlook of customers' future electricity needs. Our outlook shows that, similar to other areas across North America, demand for electricity could grow at about 1.5% per year. When we compare that to our existing ability to provide electricity today, we likely have enough power for roughly the next 7 to 10 years. After that, we likely need more electricity resources.

Of course, as we all know living through a pandemic the future is uncertain – so our draft plan also includes contingencies – you could call them backup plans - if demand is higher or lower than expected.

For the purposes of this call, we've split up describing the plan into four parts:

- conservation and customer involvement, or what we call demand side measures*
- upgrades to our existing transmission system,*
- how to approach agreements we have to buy power from private companies,*
- and new renewable power.*

I'm looking forward to sharing the details of our plan and seeing what you think.