



# The 2024 Fort Nelson Long-term Resource Plan engagement summary

## Fall 2023 - What we're hearing

BC Hydro engaged on the development of the draft 2024 Fort Nelson Long-term Resource Plan (FNLTRP). Input was gathered as we developed the draft FNLTRP. Engagement occurred through the fall of 2023 with the Fort Nelson and Prophet River First Nations, the Northern Rockies Regional Municipality, the broader community and two industrial customers. Virtual meetings and on-line survey were used to gather input. In the next phase of engagement, feedback will be gathered on the draft FNLTRP.

This engagement summary reports back on the themes we heard around the planning objectives (to keep costs low for customer, to limit land and water impacts, to reduce greenhouse gas emissions and to support local communities' economic development), what matters to community about the long-term plan, possible future uncertainties and risks that we should be looking at in the LTRP, as well as on the resource options being considered to address the climate policy uncertainty facing the Fort Nelson Generating Station.

Themes that have emerged include:

- Keeping costs low and supporting community economic development opportunities are important planning objectives.
- Energy security, reliability and resiliency to climate change impacts are the main long term uncertainties, along with rising costs of living.
- Local geothermal, renewable natural gas, and carbon capture and storage resources were among the top three choices to address greenhouse gas emissions from the Fort Nelson Generating Station, with some reasons being they are local and available, provide community and environmental benefits and – in the case of the latter two – use existing infrastructure.

Although not part of long-term planning, shorter term operational reliability and emergency response issues arose during the engagement, particularly on the heels of multiple outages due to summer wildfire impacts on the Fort Nelson Generating Station and

Transmission line to Alberta. The need to ensure reliable backup power, and improved operational response were the primary concerns raised in both meetings and the survey responses.

## OUR ENGAGEMENT APPROACH

We've gathered initial input to better understand the values and interests of people in the Fort Nelson region about the long term resource planning and future customer electricity supply. This input is being considered in the development of BC Hydro's draft long-term resource plan for Fort Nelson and we will be bringing the plan back to the community for feedback.

### Indigenous engagement

BC Hydro acknowledges that our infrastructure in Fort Nelson is located on First Nations traditional territories. We recognize that BC Hydro's system and operations have affected the land, and we share a responsibility in advancing reconciliation. Meaningfully involving First Nations in discussions about how BC Hydro can meet future electricity needs is an important principle of our engagement on the FNLTRP.

BC Hydro's consultation on the FNLTRP supports BC Hydro's mandate to incorporate the principles of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) into its business. Early engagement is an important part of advancing reconciliation and the long-term resource plan is the earliest BC Hydro can engage with First Nations on meeting its customers' future electricity needs.

BC Hydro's efforts to advance reconciliation are much broader than the FNLTRP. BC Hydro's UNDRIP Implementation plan involves concrete actions we can take with First Nations to incorporate the principles of UNDRIP across our business.

### Meetings

We hosted six virtual discussions with the communities and stakeholders to share information on the Fort Nelson long-term planning process, and gather initial input on planning topics. We've summarized these meetings below.



Nov 7, 2023 – Two representatives from the Fort Nelson First Nation

Nov 8, 2023 – Two representatives from the Prophet River First Nation

Nov 9, 2023 – Three representatives from the Northern Rockies Regional Municipality

Nov 23, 2023 – Eleven members from the broader community (Nov 23)

Nov 28 and Dec 1 – 4 representatives from Industrial customers and suppliers in the region

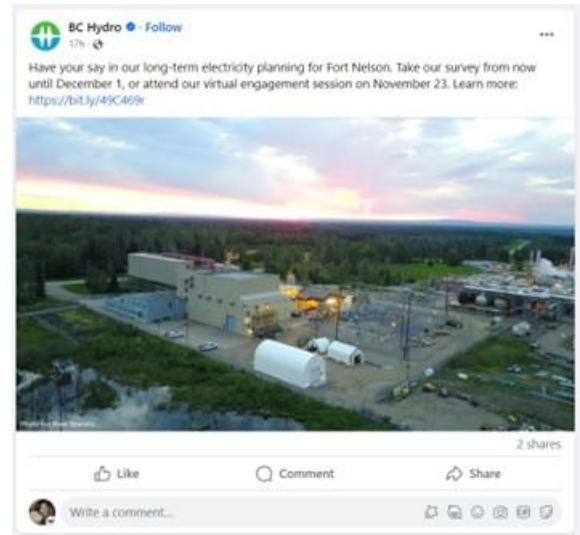
**22**

**participants**

The broader community session was promoted through BC Hydro's facebook page and word of mouth via local organizations and community members. The presentation materials can be found [here](#).

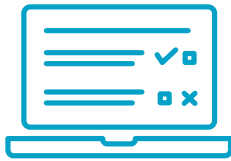
## Website and contact email

On November 14, 2023, a [Fort Nelson long-term resource planning webpage](#) was launched to provide information about the planning process, engagement materials and the Plan. On the webpage people can find a contact email and sign up for the distribution list, as well as locate opportunities to provide input and feedback. A sample of the Facebook post is at right.



## Survey

We shared an online survey with the Fort Nelson community from November 14 to December 1, 2023 through the Fort Nelson long-term resource planning website, a BC Hydro Facebook post and through organizations and community members. We've summarized these responses below.



244 Fort Nelson respondents (87% self-identified as residential customers, 11% commercial, and 2% industrial)

18 of the Fort Nelson respondents identified as members of local First Nations

13 respondents identified as outside of Fort Nelson

# 257

Surveys completed

The survey asked a series of questions that we've summarized below. These questions related to planning topics and provided the opportunity for participants to sign up for updates about the Fort Nelson Long-term Resource Plan. Any notable differences between the perspectives of the First Nations respondents and the remainder of the respondents are described in the summary tables below.

## SURVEY AND MEETING RESPONSES

Three key topic areas were addressed at the virtual meetings and through the survey:

- What matters to participants/customers about the long-term plan and BC Hydro's planning objectives,
- What long-term risks and uncertainties should be considered as BC Hydro develops the plan, and
- Input on the resource options BC Hydro is currently looking at to address Fort Nelson Generating Station greenhouse gas emissions.

We've summarized the responses below.

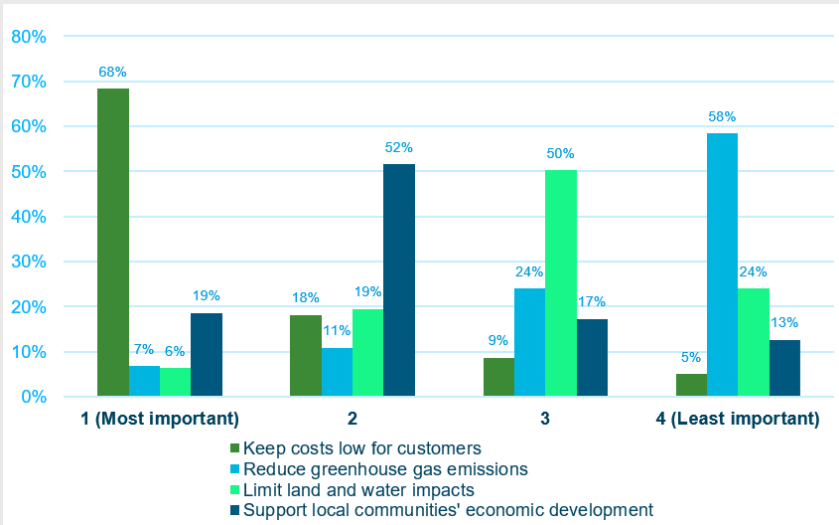
### What matters to participants/customers about the long-term plan and BC Hydro's planning objectives

In the meetings and the survey, BC Hydro asked participants to rank the planning objectives in order of importance to them, and provided an opportunity for additional feedback about these objectives.

## First Nations perspectives (from both the meetings and the survey)

First Nations expressed interest in the economic opportunities that could be created by clean energy developments in their territory.

In terms of the specific planning objectives, First Nations responses to the survey were roughly the same as the broader survey respondents. The only exception was that “Keeping costs low for customers” ranked higher than the broader survey at 76% compared to 68% of the general public survey responses.

Type of engagement	What we're hearing																									
<p><b>Meetings</b></p>	<p><b>During the meetings, input was invited on the four planning objectives as well as generally what matters to people about the long-term plan.</b></p> <ul style="list-style-type: none"> <li>The discussions suggested our planning objectives seem reasonable for a long-term plan.</li> <li>There was strong interest expressed for energy security. This includes a reliable supply and knowing that there is a resilient system if climate change impacts continue.</li> <li>Across the various meetings the desire for economic opportunities and how BC Hydro's decisions might impact those opportunities were raised. This included interest in how BC Hydro would meet the electricity demand from an increase in development – particularly development in the oil and gas sector, should it occur.</li> <li>There was interest in understanding how BC Hydro's non-integrated communities and communities not served by BC Hydro are considered (or not) in the long-term planning. There was interest in being connected to BC Hydro's grid.</li> </ul>																									
<p><b>Survey</b></p>	<p><b>We asked people to rank the planning objectives.</b></p> <ul style="list-style-type: none"> <li>The Figure below shows the results of the 221 survey respondents who ranked the four planning objectives. It shows keeping costs low for customers as top ranking, followed by supporting local communities economic development and limiting land and water impacts, with reducing greenhouse gas emissions being the least important of the four.</li> </ul>  <table border="1"> <caption>Ranking of Planning Objectives</caption> <thead> <tr> <th>Ranking</th> <th>Keep costs low for customers</th> <th>Reduce greenhouse gas emissions</th> <th>Limit land and water impacts</th> <th>Support local communities' economic development</th> </tr> </thead> <tbody> <tr> <td>1 (Most important)</td> <td>68%</td> <td>7%</td> <td>6%</td> <td>19%</td> </tr> <tr> <td>2</td> <td>18%</td> <td>11%</td> <td>19%</td> <td>52%</td> </tr> <tr> <td>3</td> <td>9%</td> <td>24%</td> <td>50%</td> <td>17%</td> </tr> <tr> <td>4 (Least important)</td> <td>5%</td> <td>58%</td> <td>24%</td> <td>13%</td> </tr> </tbody> </table>	Ranking	Keep costs low for customers	Reduce greenhouse gas emissions	Limit land and water impacts	Support local communities' economic development	1 (Most important)	68%	7%	6%	19%	2	18%	11%	19%	52%	3	9%	24%	50%	17%	4 (Least important)	5%	58%	24%	13%
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## What long-term risks and uncertainties should be considered as BC Hydro develops the plan

In the meetings and the survey, BC Hydro asked participants to share uncertainties that they thought were important to consider in our long-term planning.

### First Nations perspectives (from both the meetings and the survey)

First Nations during meetings raised concerns about the reliable function of new heating and cooling technologies such as heat pumps in this region, but also expressed openness in looking at renewable options that could expand the economic options in the area.

Similar to the broader survey respondents, First Nations respondents expressed the desire for more reliable power with fewer outages.

Type of engagement	What we're hearing
<p><b>Meetings</b></p>	<p><b>During the meetings we asked if there were additional uncertainties that BC Hydro should be considering as we developed the draft FNLTRP. Primary themes of responses included:</b></p> <ul style="list-style-type: none"> <li>• There were mixed opinions of the proposed federal Clean Electricity Regulations, but there seemed general agreement that, regardless of which jurisdiction created the regulations, there would be regulations of some sort that could impact the power generation.</li> <li>• Concerns were raised about the impact of climate change on the reliability of the transmission line from Alberta and on the Fort Nelson Generating Station's operations, particularly in light the impacts experienced by the community from the wildfires in the summer of 2023.</li> <li>• There was concern that relying on Alberta to provide transmission could be a risk given the fact that the market forces in Alberta are different than in B.C.</li> <li>• The opportunity for upstream oil and gas development, should LNG developments take off in Northwestern BC, was raised several times as a potential for economic development in the area, and there was interest in how BC Hydro would be able to handle this development.</li> <li>• It was mentioned that a possible gas supply risk could impact the supply that feeds into the Fort Nelson natural gas-fired generating station.</li> </ul>
<p><b>Survey</b></p>	<p><b>We asked an open ended question as to what other uncertainties BC Hydro should be considering in the long-term plan. Primary themes of responses included:</b></p> <ul style="list-style-type: none"> <li>• Focusing on the need for consistent reliable supply. There were concerns regarding having sufficient back-up power and the number of outages experienced by customers in the area on a regular basis. The need for reliable power in the harsh northern winters was emphasized.</li> <li>• Increasing uncertainty and concern over climate change impacts on electricity supply and wildfire damage were raised as a theme in the comments.</li> </ul>

- Economic and industrial growth, particularly in the oil and gas sector, was identified as an uncertainty theme. This uncertainty was around BC Hydro’s ability to supply this growth if it were to occur very rapidly.
- In addition, increasing costs to customers and personal cost of living concerns were raised.

A few samples of what we heard:

*“It’s hard to imagine not using the resources that are right here to power our community. More importance should be put on carbon capturing and continuing education in making our resources safer to extract and use.”*

*“We are remote! Forest fires are definitely an issue. How about just working on getting a dependable, uninterrupted power supply. We lose power on a monthly basis! “*

*“Trimming trees close to hydro lines in the rural area. This used to be done years ago and seems to be the main reason we lose power in the rural residences. If electricity supply has uncertainties then supply everyone with a generator.”*

### Input on the resource options BC Hydro is currently looking at to address Fort Nelson Generating Station greenhouse gas emissions

In the meetings and the survey, BC Hydro outlined possible resource options (Renewable fuels, local geothermal, local biomass, carbon capture & sequestration, wind, solar & batteries combination, smaller sized units, and the transmission line to Alberta) that could be looked at to meet the long-term needs of the Fort Nelson region. We then asked the participants to rank these options and to add any they thought we might have missed.

#### First Nations perspectives (from both the meetings and the survey)

First Nations respondents to the survey equally ranked geothermal and carbon capture and sequestration as the top resource options, followed by renewable fuels.

First Nations respondents expressed that renewable options have limitations, and there is a need to focus on resources that would actually work.

Type of engagement	What we’re hearing
Meetings	<p><b>During the meetings, we invited input on the possible resource options should the long-term plan be exploring further to reduce greenhouse gas emissions from the Fort Nelson Generating Station at its end of life.</b></p> <ul style="list-style-type: none"> <li>• Geothermal and carbon capture and sequestration and/or utilization were the front runners for resource options to pursue.</li> <li>• Some felt biomass could be a possibility as it could provide community and economic benefits; however, some didn’t see biomass happening as it would require significant investment from the forestry sector. Still others raised concerns over biomass and environmental impacts.</li> </ul>

- There was an interest expressed in the potential for transmission line that connects with the North Montney region and BC Hydro’s integrated system, as this would provide clean electricity as well as bringing community benefits.
- Wind and solar were considered less viable due to the lack of wind and the lack of sunlight especially during the winter months.

## Survey

### We asked participants to rank seven resource options and state reasons for their ranking.

The table below provides the survey’s ranking results. There was no single resource option that has a clear preference. However, when we added up all of the top 1 and 2, or top 1, 2 and 3 rankings, there were some preferences.

Resource options	Top 1 and 2 ranked, added together (% of 165 respondents)	Top 1, 2 and 3 ranked, added together (% of 165 respondents)
Local geothermal	43%	65%
Renewable fuels	41%	61%
Carbon capture sequestration (CCS)	35%	50%
Transmission line to Alberta	30%	38%
Smaller-sized units at FNGS	26%	34%
Local biomass	14%	31%
Wind, solar, battery combination	10%	18%

Local **geothermal** was amongst the top ranked resources preferred for further exploration. Some reasons given for why respondents were in favour included: it is locally available, there are community benefits, plans are already underway for a project, it is a reliable and feasible resource, and it helps reduce greenhouse gas emission. Concerns raised regarding geothermal included its costs to customers and that it’s not sufficient to supply the entire region.

**Renewable fuels** was amongst the top ranked resource preferred for further exploration. Some reasons given for why respondents were in favour of exploration included its reliability, the use of existing infrastructure, local availability and community benefits. Concerns were raised that hydrogen (a possible renewable fuel) is not in the area.

**Carbon capture and sequestration** was amongst the top ranked resource preferred for further exploration. Some reasons given for why respondents were in favour of exploration included its

feasible, the use of existing infrastructure, and the potential to help with greenhouse gas emissions reduction. Concerns were raised that this is not a reasonable resource or cost-effective.

**Transmission from Alberta.** Some reasons given for why respondents were in favour of continued use of transmission from Alberta included: a reliable backup supply, a realistic option, and that as time goes on we can potentially get renewables from Alberta that may have more wind and solar resources. Reasons for not wanting continued use of transmission from Alberta included that we should focus on local energy security.

**Smaller-sized (25 MW) units** at the Fort Nelson Generating Station. Some reasons given for why respondents were in favour of smaller units included that they are practical, available and reliable; and that other options are not feasible. Reasons for not being in favour of smaller units included the need to move towards clean or renewable power.

Local **biomass.** Some reasons given for why respondents were in favour of biomass included that it is locally available and has community benefits. Reasons against included that it has emissions and is not cost-effective.

**Wind, solar, battery combination** was the least preferred resource for further exploration. Some reasons given for why respondents were in favour included that it is worth exploring further for self sufficiency reasons and that it helps reduce greenhouse gas emissions. Reasons against included that wind and solar are poor quality resources in the region, and that they are not reliable and are costly to maintain.

Although **transmission connection to BC Hydro's integrated system** was not a resource available for ranking, a number of respondents mentioned this resource as worth exploring.

A few samples of what we heard:

*"Again, the focus must be on minimizing the contribution to climate change while responding to how climate change is impacting the community. We need stable electricity and encourages people to consider shifting from natural gas or heating oil to heat pumps and electric furnaces"*

*"Geothermal power is clean and reliable and it is used all over the world in different countries, so the technology is available"*

*"...Carbon capture storage is an option, if it ever becomes feasible. However, it has not been demonstrated to be effective, or cost effective at scale, and may never be."*

*"As we've seen by this summer that transmission line IS ultra important. Wind/solar is unreliable. Carbon capture is sustainable."*

*"There should be an option to connect to bc electrical grid at site c or gms, this would allow electrification of industry between Fort St John and Fort Nelson and have virtually unlimited green energy to Fort nelson without maintaining any further generating stations."*

*"Solar power is lacking in 6 hours of daylight in the winter. Smaller gas units make sense. Why is Ft Nelson not hooked up to Site C?"*

## **Is there anything else that BC Hydro should be considering for the Fort Nelson region**

In the meetings and the survey, BC Hydro asked whether there was anything else that participants wanted to make sure that we considered as we developed the draft FNLTRP.



## First Nations perspectives (from both the meetings and the survey)

Similar to the broader survey respondents, First Nations respondents expressed that cost, reliability, and energy security remain of high importance, even if that means using natural gas.

First Nations also expressed interest in expanding the existing system including looking at expanding the distribution system beyond Prophet River, and the possibility of connecting Fort Nelson to the integrated BC Hydro system.

Type of engagement	What we're hearing
<p><b>Meetings</b></p>	<p><b>At the end of the meetings, input was invited as to whether there was anything else we should be considering in our long term resource plan. Themes included:</b></p> <ul style="list-style-type: none"> <li>• Participants were interested in possible future energy-related projects in their area, and how to encourage their development. This included how to best reflect the number of potential opportunities in the region that were not far enough along in their development to be included in BC Hydro's Load Forecast.</li> <li>• There was Interest in what it would take to expand the transmission line beyond its current end at Prophet River.</li> <li>• The participants acknowledged wildfire emergency response of BC Hydro and that communication was key for the emergency response.</li> <li>• A comment was raised that we're doing a lot to reduce GHG emissions when others in other jurisdictions aren't doing as much. The feedback stated that the need to reduce GHG emissions has caused a lot of disruption and has been creating economic issues in places like Fort Nelson.</li> </ul>
<p><b>Survey</b></p>	<p><b>We asked as an open ended question what else BC Hydro should consider as part of the long-term resource plan.</b></p> <ul style="list-style-type: none"> <li>• A key theme emerged from the open comments for the need for energy security, and improved reliability on the heels of a number of outages during the summer wildfire season.</li> </ul>