

20 December, 2023

BC Hydro Task Force Call for Feedback Response

Transmitted electronically at: <https://www2.gov.bc.ca/gov/content/governments/organizational-structure/ministries-organizations/crown-corporations/bc-hydro-and-power-authority/bchydrotaskforce>

Stakeholder Feedback Questions

1. When thinking about the three focuses of the BC Hydro Task Force, what do you feel is the level of importance of each?

	1 - Not very important	2 - Somewhat important	3 - Very important	4 - Extremely important
Improving the speed of permitting and delivery of required infrastructure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Modernizing regulatory framework to better align with government priorities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Identifying, enabling, and accelerating economic opportunities in clean energy, including opportunities for Indigenous Nations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

2. What actions should the BC Hydro Task Force recommend to the Province to improve the speed of permitting and delivery of required electrification infrastructure?

Investment in energy storage resources (ESRs) is growing rapidly around the world as their unique capabilities and attributes are recognized as a critical to a cost-effective, safe, clean, and reliable electricity grid. As BC experiences faster than anticipated capacity and energy, ESRs will play an even more critical role providing a clean source of capacity and reliability. Sources of clean energy and capacity will be needed at a faster pace than they have been deployed thus far.

In BC, investment in ESRs (outside of existing reservoirs) is relatively new to BC Hydro, local communities, and consumers. In many cases, ESRs have not been considered as part of the permitting process and could face a lengthy process as ad-hoc assessments are established when an application is made.

To avoid the potential delays, the BC Hydro Task Force should work to established clear and concise guidelines for ESRs permitting throughout the province. Materials should be developed for local municipalities and other approval bodies to help inform them on the capabilities and attributes of energy storage as well as potential challenges they may want to consider. For example, local fire codes and communication requirements may be different compared to other electricity resources.

The BC Hydro Task Force should consider the value of distributed energy storage applications to customers and work to establish a streamlined approval process. The streamlined approval could include exemptions, standard assessments and other tools to avoid inefficient processes.

Of particular importance is ensuring that the Environment Assessment process works to support the pace of deployment needed for sources of clean energy and capacity.

Finally, it is important to recognize that human resources play a major role in speeding up permitting processes. Investing in the necessary human resources to increase permitting times, as has been done for other sectors like mining, needs to be implemented.

3. What actions should the BC Hydro Task Force recommend to the province to modernize B.C.'s regulatory framework to better align with government priorities (e.g., climate action, reconciliation, building a clean economy) while protecting ratepayers?

For ESRs, modernizing the regulatory framework requires energy storage to be recognized and incorporated within legislation and throughout the regulatory framework. This should include recognizing that while ESRs have characteristics of a load customer and a generator, it is a unique resource capable of offering specific attributes through a wide variety of technology types and connection arrangements. For example, ESRs have the ability to smooth out peaks and valleys on generation. Human behaviour is less likely to change, but with the appropriate regulatory framework, we can generate at a more continuous rate, and discharge stored energy when load peaks.

In addition, the regulatory framework should recognize the value of energy storage as a non-wires alternative and modernize the ability for ESRs to provide flexibility and cost savings when meeting future customer and power system needs. Acting as a non-wires alternative in system expansion, ESRs can often be deployed much more quickly and incrementally than traditional transmission and distribution lines. Investment in storage can be done quickly in response to load growth, while still planning and investing in wires if still required. For many intermittent load shapes, such as EV charging demand, energy storage may be sufficient to avoid wires investment.

When considering the system impact of storage to the grid, care must be taken to assess reasonable behavior for a storage asset, especially in what system conditions an asset would reasonably charge and discharge.

4. What actions should the BC Hydro Task Force recommend to the Province to identify, enable, and accelerate economic opportunities in clean energy, especially for First Nations?

The BC Hydro Task Force should seek opportunities for First Nations to invest in and deploy ESRs both within First Nations communities and as part of broader infrastructure projects to enhance the safety, cost-effectiveness, reliability, and resiliency of power systems. Infrastructure loan programs, for example, along with grant programs such as the BCICEI, will allow First Nations communities to leverage the required capital to become equity partners or owners of ESRs. In addition, the BC Hydro Task Force should consider the environmental benefits (e.g., reduction of GHG emissions) from the deployment of ESRs in remote communities. First Nations are critical partners for the development of ESRs across a variety of scales, from utility scale to community resilience.

Research and development of clean energy is critical to meeting energy demand and accelerating economic opportunities. Leaving it entirely to the private sector leaves BC Hydro and government out of this important area to address the public good. The Task Force should consider policy and financial levers such as BC Hydro having its own R&D fund on par with other jurisdictions' Crown utilities which has minimal impact on rate affordability, or government having an R&D fund accessible to BC utilities for clean energy innovation.

When considering procurement design for energy storage as part of accelerating economic opportunities for clean energy, our recommendation at this stage is that it be transparent and apply principles of fairness.
