

MEDIA BACKGROUNDER

Bill 17 - 2020 Clean Energy Amendment Act, 2020

Created in 1961, BC Hydro (BCH) has enjoyed a near monopoly of the generation and distribution of power in the province. Like crown corporation utilities in other provinces, BCH takes seriously its mandate to deliver inexpensive, reliable electricity to ratepayers. Historically, that has meant big hydro megaprojects. Those legacy assets are considered the crown jewel of BC's power system and hydropower is BCH's preferred method of generating power.

The provincial government decided in 2007 to support the wind and solar in addition to small hydro. The new guiding principle was "self-sufficiency," the requirement that there always be enough power generated within BC to meet provincial needs, at a predictable cost. Imported electricity prices were very high, and at 18% of its portfolio, BCH deemed import levels were too high. BCH created the Standing Offer Program and entered into energy purchase agreements (EPAs) with Clean Energy BC members, the independent power producers. The utility was forecasting steady demand growth and welcomed the new supply, even though its pricing reflected the earlier phase of technology development.

Then the global financial system collapsed in 2008. The subsequent Great Recession reduced demand for electricity and consumption did not return to former levels until 2017. Suddenly, BCH had too much electricity.

Two years ago, BCH began terminating "mom and pop" small hydro projects that had supplied clean electricity for decades. Last year the Standing Offer Program was suspended. Then, the 2019 *Zapped* report alleged that BCH had bought too much electricity at excessive prices, leading to suspicions that the contracts were "sweetheart deals" for friends of the government. Although Clean Energy BC used BCH and BC Utilities Commission data to credibly refute *Zapped*'s data and conclusions shortly after it was published, the public relations damage was done.

Now the BC government wants to end self-sufficiency, effectively putting independent power producers out of business even if that means stranded assets and in some cases, bankruptcy. Without self-sufficiency, if BCH needs extra electricity, it would revert back to buying it on the Mid C spot market.

Clean Energy BC applauds the government for requiring that power to be certified as clean. That's the part the government got right. The rest of the strategy that underpins Bill 17 is a poorly conceived mess.

By trying to fix problems created by previous governments, Victoria is instead making a bad situation much, much worse.

Where BC went wrong

The problem started with the government's 2007 decision to shift the cost of developing a renewable energy sector to BCH, essentially hiding that cost on the utility's balance sheet rather than the Province's.

This is not how other jurisdictions have stimulated renewables development. The most common tool is some form of a feed-in tariff. These are long-term contracts based upon the cost to produce power from nascent energy technologies. They often include the option to lower the price paid as those technologies mature and produce ever cheaper electricity.

Texas, for example, implemented renewable energy portfolios under Gov. George W. Bush in the late 1990s and now gets 17 per cent of its electricity from wind and a growing percentage from solar. Germany, Denmark, California, Ontario - the list is a long one of national and sub-national governments that paid more for renewable energy in order to kick start the technology and the industry.

One of the advantages of feed-in tariffs is that the financial support is provided by governments - not directly by ratepayers - and acknowledged as a subsidy. And reporting in public budgets is transparent. Had the BC government taken this approach and not shifted financial responsibility for EPAs to BCH, the British Columbia IPP narrative would likely be very different.

As it stands now, in part because of the disputed analysis in *Zapped*, IPPs are viewed by the government as a costly and unnecessary burden, contracts that must be shed to help BCH reduce costs and repair its damaged balance sheet. In fact, this is probably the dominant narrative within the province.

Judging by Friday's story in *Victoria Now*, this is already Minister Bruce Ralston's narrative: "It will give a certain flexibility to the utility so that it will be able to import, particularly from jurisdictions where there is a 100-per-cent clean standard, rather than the self-sufficiency requirement, which was basically designed to make sure that private power companies were able to prosper," Ralston said.

Another wrinkle to the existing narrative is the preference for public ownership by many members of the BC NDP caucus.

From Clean Energy BC's point of view, Bill 17 damages far more than it repairs. Below are four arguments for scrapping the legislation and embracing IPPs as partners, not adversaries.

Undermining BC's energy security

Minister Ralston argues that BC can import power any time it needs to. Will that always be true in the future?

British Columbia isn't the only jurisdiction electrifying its economy in order to reduce greenhouse gas emissions. US states like Washington and California, from which Powerex imports electricity, are preparing to aggressively shift transportation, industry, and buildings off fossil fuels. Just like BC.

Will those jurisdictions have enough inexpensive, clean power generation to electrify their economies and surplus for British Columbia? The BC government is gambling that they will and that cheap power will continue for decades, conveniently forgetting other times - such as the early 2000s - when prices spiked as high as \$250/MWh.

What if electricity demand in those states outstrips supply and prices rise? What if climate change continues to exacerbate California wildfires, increasing the threat of taking the state's power supply offline? What about when drought inevitably returns to the Western United States, reducing hydro generation and raising prices?

Increasing dependence upon the Mid C spot market just as regional jurisdictions begin to electrify their economies in response to the climate crisis is a short-sighted strategy that could easily backfire, leading to decreased energy security and higher rates for BC ratepayers.

Wind and solar are lowest cost power generation options

Feed-in tariffs in other jurisdictions provided important support that allowed wind costs to decline from \$101/MWh in 2009 to \$28/MWh in 2019; the drop in costs is even more dramatic for solar, which fell from \$323/MWh to \$32/MWh, according to Lazard's levelized cost of energy study. Compare those numbers to new natural gas combined cycle at \$44 and new coal at \$66.

Last year, an Alberta government renewables auction saw a record low price of \$37/MWh for wind power.

Please note that these costs are unsubsidized and do not include the effect of carbon taxes, which would further favour wind and solar. Furthermore, a recent Wood Mackenzie study estimates that wind costs will fall another 17% by 2025. Factor in the rapidly falling cost of battery storage and there is no doubt renewables are the least cost option for British Columbia.

British Columbia's approach to building out IPPs may not have been as effective as other jurisdictions, but the province now boasts a robust IPP industry just as wind and solar have

become the world's lowest-cost form of power generation. By comparison, power from Site C is estimated to cost as much as \$83/MWh - or even higher if billion dollar cost overruns continue.

The BC government is sabotaging the potential for abundant cheap electricity in favour of some of the highest cost power in the world. It doesn't have to be like this.

Clean Energy BC members are ready and willing to help the BC Government and BCH achieve the ambitious electrification strategy set out in CleanBC while keeping electricity prices low for ratepayers.

In fact, IPPs are the BC government's only chance of producing enough power to electrify the provincial economy over the next 30 years.

Meeting CleanBC targets impossible without wind, solar

"Will BC have enough electricity to support electric vehicles? The answer was no. Mungall asserted BC will need the equivalent of five Site C dams to power the transition from fossil fuels that is envisioned in CleanBC. Heyman said BC has enough electricity for 5-10 years but will need to work now to develop offshore wind power, geothermal and solar resources as well as developing better battery storage technology." - Kathy Hartman, The Valley Voice, November 21, 2019.

The ministers may be optimistic about needing just five Site C dams. Site C will produce 5,100 GWh of electricity per year, roughly 10 per cent of BC's current requirements. In a 2017 submission to the BC Utilities Commission, energy consultant Davis Swan estimated that converting provincial consumption of gasoline (diesel was not included) and natural gas would require just over 90,000 GWh of generation capacity, or roughly 18 Site C dams.

Whether it's the equivalent of five or 18 Site C dams, CEBC agrees with Minister Heyman that BC has a very short runway to begin building a tremendous amount of renewable energy capacity if CleanBC goals are to be achieved.

To the best of CEBC's knowledge, an actual plan to electrify the BC economy as called for by CleanBC has never been developed. But the comments from Ministers Mungall and Heyman suggest the BC government has done at least some preliminary analysis that concluded non-BCH power generation of renewable energy will be required.

There are only two ways to acquire the necessary amount of electricity: import risky electricity from the United States as contemplated by Bill 17 or build the generating capacity in BC.

Clean Energy BC members have already invested \$9 billion and are ideally positioned to further invest in new capacity. In fact, the culmination of the IPP program begun in 2007 has perfectly

positioned British Columbia to create a strong working partnership between the provincial crown utility and the small private power producers.

If the BC government chooses not to take this route, how will the CleanBC electrification objectives be met? The only sensible answer is that they most likely will not be achieved.

First Nation and community economic development opportunities

First Nations are leading developers of renewable energy in British Columbia. Feedback in 2017 from 102 BC First Nations and three tribal councils identified 78 operational projects with a total generation of 1,836 MW, while two-thirds of respondents had 48 projects in planning or construction. Overall, 98% of respondents indicated existing involvement or a desire to be involved with the renewable energy industry.

The business and job opportunities in First Nations and remote communities are invaluable. Local power generation displaces expensive, polluting diesel generators.

Clean power is aligned with Indigenous ways and the desire to live in harmony with fragile ecosystems. Now that British Columbia has formally adopted the United Nations Declaration on the Rights of Indigenous Peoples, enabling First Nations to continue investing in renewable energy projects is an important component of reconciliation. The BC Utilities Commission recently recommended that BC amend the Utilities Commission Act to align with UNDRIP.

First Nations investment in renewable energy is an opportunity that British Columbia cannot afford to miss.

Conclusion

Last year, highly respected Canadian think tank Pembina Institute convened a forum of key stakeholders to discuss how CleanBC should be implemented. The subsequent report contains three key recommendations. The third recognizes “the need for a diversity of clean energy solutions to reduce fossil fuel dependence across B.C.’s economy.”

Ministers Heyman and Mungall publicly acknowledge BC needs renewable energy equivalent to at least five Site C dams to meet CleanBC goals. At the same time, Minister Ralston is pushing Bill 17 to kneecap independent power producers, the only sector that has the capacity to build the required renewable capacity. The government’s own cabinet ministers are sending mixed messages to British Columbians.

That confusion is reflected in the interim report of the Phase 2 review of BC Hydro. The review was expected to provide a roadmap for implementing CleanBC, especially addressing how electrification goals would be achieved. Instead, it “bogs down in vague discussions of secondary issues, makes several oddball proposals and invites a further round of public input

on a list of largely rhetorical questions,” as the BC Sustainable Energy Association aptly describes the report.

The government’s strategy for power generation and distribution is a mess. One thing, however, is clear: Clean Energy BC members represent the future of the global energy system. Across the planet, hundreds of billions are being invested in wind and solar farms. Wind/solar + storage + legacy systems like natural gas and hydro = the 21st century electricity model.

The low cost of renewable energy tells the story: BCH is building Site C at a cost of \$83/MWh while ignoring wind at \$28/MWh and solar at \$32/MWh.

Why are the BC government and BCH stuck in the 20th century?