



Dear David Morton:

Site C to maintain our advantage

British Columbia enjoys many advantages – some natural, some built. One of the biggest advantages we have built is our reliable, clean, affordable power.

We have some of North America’s lowest hydro rates, as well as some of the cleanest, with 98.3 per cent of our electricity generated from completely clean sources. With both a growing population and increasing demand for power, we have a responsibility to meet future needs while continuing to maintain this advantage.

B.C.’s grid is largely powered by large, aging hydroelectric facilities. By constructing the Site C dam, BC Hydro will meet the long-term needs of British Columbians for more than 100 years.

Simply put, to both keep rates low and meet future demands, we must build Site C.

Benefits

Site C will provide 1,100 megawatts of capacity, and produce 5,100 gigawatt hours of electricity annually – enough to power the equivalent of about 450,000 B.C. homes every year.

It will also be a source of clean electricity for more than 100 years, and is projected to have one of the lowest GHG emissions per gigawatt hour in relation to other resource options.

Site C will have a smaller footprint than comparable projects. As the third project on the Peace River, Site C will rely on the existing Williston Reservoir for storage. This means Site C will generate approximately 35% of the energy produced at the W.A.C. Bennett Dam with only 5% of the reservoir area.

And it will be among the most cost-effective options for ratepayers, as confirmed by the Joint Review Panel:

“Site C would be the least expensive of the alternatives, and its cost advantages would increase with the passing decades as inflation makes alternatives more costly.”

Approximately 10,000 jobs will be created during construction, and about 33,000 total jobs through all stages of development and construction. Construction is also creating significant opportunities for business of all sizes throughout British Columbia.

Site C will continue to make a large contribution to the provincial economy. Over the life of construction, it will contribute \$3.2 billion to the provincial GDP, including approximately \$130

in the Peace River Regional District alone. Site C will also create \$40 million in tax revenues to local governments, and once in operation, \$2 million in revenue from grants-in-lieu and school taxes.

Site C is the right investment for our province's future. As the Joint Review Panel said:

"A few decades from now...Site C could appear as a wonderful gift from the ancestors of that future society, just as BC consumers today thank the dam-builders of the 1960s."

Needs/Forecasting

British Columbians will need more and more electricity at home, work, and school. Given a projected population increase of more than a million people and continued economic growth, B.C.'s electricity needs will grow by almost 40% over the next 20 years.

Long-term increased demand has been the subject of several independent reviews, and has been accepted by the BCUC. Additionally, a third-party review of BC Hydro's load forecasting methodology was conducted by Mark P. Gilbert, an independent energy consultant with over 30 years of experience:

"BC Hydro is using state-of-the-art methodologies for forecasting sales," and that "(the) company utilizes several methodologies to produce peak forecast methods, all of which are among state-of the-art methods."

Growing demand doesn't mean a cap on growth – it means B.C. will no longer be self-sufficient in power generation. Site C will provide both energy and capacity for BC Hydro's grid. Without Site C and the Revelstoke 6 Project, B.C. is forecasted to have an 8% capacity deficit and a 2% energy deficit within 10 years – equivalent to the power needs of 100,000 homes.

BC Hydro needs both energy and capacity to meet the long-term electricity needs. Capacity requirements are important since both wind and solar are intermittent and do not yet contribute dependable capacity during peak demand periods. Site C is a source of both energy and capacity, where Revelstoke 6 is about adding needed capacity to the system.

While short-term demand will always fluctuate, B.C.'s energy needs will continue to grow. Over the last few years, BC Hydro has seen several records broken for usage. This winter, an 11 year record for usage between 5:00 – 6:00 PM was broken, peaking at 10,126 megawatts.

Conservation

Increased capacity, including Site C, is part of the answer to growing demand, but conservation has always been our first choice. B.C. is leading the country in demand side management and has one of the most ambitious conservation programs in North America. Since 2003, BC Hydro

has invested \$1.3 billion in conservation, an average of \$100 million per year. Over the next three years, BC Hydro had planned to invest another \$375 million in conservation, an average \$125 million per year.

A Cadmus Group survey ranked British Columbia 6th out of 26 jurisdictions in North America, well ahead of the only other Canadian jurisdictions surveyed, Quebec (16th) and Ontario (23rd).

Under the BC Liberal Government, BC Hydro was required by law to meet 66% of increased future demand for energy through conservation. This policy has been a success: BC Hydro is on track to meet over 70% of all incremental new demand through conservation.

Despite these energy savings, British Columbians will increasingly require additional power.

Alternatives

According to the Joint Review Panel, Site C is the most cost-effective and reliable option to meet B.C.'s growing electricity demand:

“Site C would be the least expensive of the alternatives, and its cost advantages would increase with the passing decades as inflation makes alternatives more costly.”

Intermittent renewable power alternatives such as wind and solar are part of the solution but are not always available. The wind does not always blow and the sun does not always shine. By ensuring the lights stay on, a reliable, dependable source like Site C will create more opportunity to develop renewable resources.

B.C. is a North American leader in renewables with our Climate Action Plan calling for 100% renewables by BC Hydro. For example, the governments of Saskatchewan and Alberta have announced they will follow B.C.'s lead by moving to 50% and 30% renewables, respectively, by 2030.

The BC Liberal Government and BC Hydro committed to working with the Clean Energy Association through a Memorandum of Understanding to create opportunities for private, renewable power.

Our government also established the Innovative Clean Energy (ICE) Fund to support promising clean energy projects in areas such as bioenergy, solar, hydro, wind, wave and tidal energy, smart grid and energy management, waste to energy, energy storage and conservation. Since 2008, more than \$71 million has been allocated to support pre-commercial clean technology projects, clean energy vehicles, research and development, and various energy efficiency programs.

Successful partnerships under the ICE Fund have included universities, First Nations, local government and emerging clean tech companies across British Columbia.

Cost Effectiveness

Site C is being built at an ideal time. The project is being financed through historically low interest rates, low commodity prices are helping keep material costs down, and the slowdown in the natural resource sector means skilled, experienced workers are available.

B.C. has extensive proficiency with large hydroelectric projects, and history has shown they are cost-effective for the ratepayer. While there are significant upfront capital costs for a hydroelectric facility, they have a long life of over 100 years and are inexpensive to operate. As the Joint Review Panel commented:

“Site C, after an initial burst of expenditure, would lock in low rates for many decades, and would produce fewer greenhouse gas emissions per unit of energy than any source save nuclear.”

Some have claimed Site C will lose money for 70 years. At best, this is a distortion of the facts. For a long-term public asset like Site C that will last for more than 100 years, a 70-year economic life reflects the weighted average asset depreciation term. Asset depreciation periods are based on standard accounting practices and the methodology is applied to other large hydro projects and approved by the BCUC.

Costs for Site C have been independently reviewed by KPMG and an independent panel of contractors with decades of experience in the management and construction of major projects. BC Hydro has taken steps provide further transparency on the project’s costs by providing regular updates to the BCUC during construction.

Ernst & Young has also reviewed Site C’s procurement and risk management, concluding that BC Hydro has adopted leading practices in identifying and managing risks to the successful delivery of the project.

Site C is the most reviewed project in the history of British Columbia. It’s the right choice, at the right time, to create the right future. It’s time to move forward.



Rich Coleman
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