

August 28, 2017

BCUC INQUIRY RESPECTING SITE C

F45-1

Mr. David M. Morton
Chair and CEO
BC Utilities Commission
Suite 410, 900 Howe Street
Vancouver, BC
V6Z 2N3

Re: Independent Contractors and Businesses Association (ICBA) Submission to the BC Utilities Commission (BCUC) Site C Inquiry

Dear Chair Morton and Commissioners:

ICBA is pleased to make a submission to the BCUC regarding the review of the Site C Clean Energy Project. We appreciate being offered an opportunity to do so in light of BCUC's tight timeframe to report publicly on its findings.

By way of background, with more than 2,000 members and clients, ICBA is the leading voice of British Columbia's construction industry. Along with providing group benefits and training for our members, ICBA undertakes public policy analysis and advocacy focussed on the construction industry and responsible resource development. As a result of our #Get2Yes and *Growing the Economy* campaigns, ICBA's online community supporting Canada's energy sector and major infrastructure projects now numbers nearly 50,000 people.

Background and Context

While the general background will be familiar to Commissioners, ICBA would like go on record reviewing some of the key elements underpinning the compelling business case for the Site C Project. In our view, Site C is in the overall economic, social, and environmental interest of British Columbia, and we are strongly of the view that **the project should proceed without delay**.

The Site C project is the latest – and very likely last – hydroelectric project completing the decades-old effort to harness clean energy from British Columbia's Peace and Columbia River systems. Our province is in the very enviable position of having a substantial hydroelectric endowment. Indeed, fully 93 percent of BC's electrical needs are met with clean energy, principally from large-scale hydroelectric generation. This is a tremendous asset and a competitive advantage in a world shifting away from fossil fuels. This legacy should continue given the *Clean Energy Act* requires British Columbia's incremental electricity needs to be obtained from clean sources; i.e. not fossil fuels.

Site C is required to meet British Columbia's long-term needs for residential, commercial and industrial users. BC Hydro forecasts electricity demand will increase by almost 40 percent over the next 20 years.¹ Site C will provide 1,100 megawatts of capacity, and around 5,100 gigawatt hours of electricity each year.

¹ BC Hydro, Site C Fact Sheet, <https://www.sitecproject.com/sites/default/files//site-c-fact-sheet-july-2017>, July 2017

The energy produced will supply enough power for 450,000 homes per year. Importantly, Site C will also be available to help enable the shift away from fossil fuels to clean energy, thereby assisting with Canada's commitments under the *2015 Paris Climate Accord*.

The Compelling Case for Site C

As complex as British Columbia's hydroelectric system is, the compelling case for the Site C project is relatively simple. The project provides the most cost-effective and reliable incremental resource available to BC Hydro; it has a very low greenhouse gas emission (GHG) profile; and, it provides the best source of both energy and capacity. In other words, while it may be possible to assemble energy derived from a portfolio of smaller scale wind, solar, and other means, these sources are generally not firm, nor are they "dispatchable" like Site C. Dispatchability is a critical feature setting the Site C Project apart from a smaller scale, intermittent "portfolio approach" to energy generation which makes energy difficult to store and to reliably draw upon when required.

In this regard, we note the recent public observations by Simon Fraser University Professor of Sustainable Energy (and former Chair of BCUC), Dr. Mark Jaccard:

“...renewable electricity generated by hydropower with a reservoir, like Site C, is dispatchable. The full capacity of these facilities can reliably generate power when it is of the greatest need, and therefore greatest value, because of available-on-demand stored energy in the form of a hydro reservoir...”²

Dr. Jaccard further suggests independent assessments of dispatchable versus non-dispatchable options reveal that dispatchable electricity sources can be 10 times or more the value per kilowatt hour of non-dispatchable (i.e. wind or solar). He further notes that, on this basis, opinions that wind and solar are becoming “cheaper” than Site C are “nonsensical”.

Site C has a number of other attributes which combine to make the project compelling:

- Site C will provide electricity for 100 years;
- As the third project on the Peace River – downstream from the W.A.C. Bennett Dam and Peace Canyon – the Williston reservoir will provide upstream storage for Site C. BC Hydro estimates suggest that because storage is already *in situ*, Site C will generate 35 per cent of the energy produced at W.A.C. Bennett Dam with merely five percent of the reservoir area;
- Construction of Site C will contribute \$3.2 billion to provincial GDP and, importantly, \$130 million to the regional GDP – an important consideration given the recent economic downturn in the Peace region;
- Local governments will benefit from \$40 million in tax revenues during construction, and \$2 million in revenue from grants-in-lieu and school taxes;
- BC Hydro estimates ratepayers will save an average of \$650 million to \$900 million over Site C's project life compared to the alternatives;³

² Mark Jaccard, “Opinion: BCUC must consider ‘dispatchability’ in Site C Review”, Vancouver Sun, August 3, 2017.

³ BC Hydro, Site C Project, Project Benefits, <https://sitecproject.com/why-site-c/project-benefits>

- As of June 2017, 2,633 people are working on Site C, including 2,125 workers from BC (or 81 percent of the total workforce), with 771 coming from the local area. There are 213 workers from Indigenous communities working on Site C as well;⁴ and,
- As of May 2017, project expenditures stood at \$1.75 billion, while BC Hydro has “spent and committed” in signed agreements and contracts more than \$4 billion on Site C. Along with this, about \$175 million in procurement opportunities have been committed to First Nations companies⁵.

In addition to important economic and social benefits, the project is the result of an exhaustive decade of environmental due diligence, including a 29,000-page environmental impact statement. Moreover, Site C is subject to more than 150 legally binding conditions to mitigate environmental and related impacts.

BCUC has asked parties making a submission to address five questions which we respond to below in turn (answers to questions 2 and 3 are combined):

- **Whether the project is on time and within budget.** A review of the latest *Site C Clean Energy Quarterly Progress Report* to the BCUC indicates that the project is “on track with the Project completion date of November 2024”. The quarterly report also indicates the “overall cost forecast remains on track and total project cost is forecast to be within budget”⁶. The project has approximately \$700 million in its contingency reserve. In addition, there have been no draws on the project’s Treasury Board mandated reserve of \$440 million. All indications are that the project is on time and within budget.
- **The cost to ratepayers of suspending the project and the cost to ratepayers of terminating the project.** Cancellation costs would need to be calculated. At a minimum, these would include paying contractors all costs incurred to date, as well as additional costs related to: decommissioning and demobilization; site reclamation; and, unraveling the Impact Benefit Agreements with First Nations and other local community benefit arrangements. These costs (and likely others), together with approximately \$2 billion spent to date, would be highly disruptive and result in a substantial “sunk cost” to ratepayers. Ratepayers cannot be expected to spend billions of dollars with no return on investment.
- **What portfolio of generating projects and demand side management initiatives could provide similar benefits.** As noted elsewhere within our submission, it may be possible to assemble a portfolio of generating projects that provide equivalent energy, but it is not possible to replicate the firm and “dispatchable” capacity provided by Site C. To meet future power needs, B.C. needs it all – Site C, solar, wind and other power sources. These must work together, with Site C providing an all-important backbone for the system.
- **What are the expected peak capacity demand and energy demand.** BC Hydro estimates that the demand for electricity will increase between 25 and 45 percent over the next 20 years. Given population trends and projections, this estimate is valid. Site C opponents who claim the dam’s power is not needed are using skewed statistics. To support their claims of “flat energy demand”, opponents use 2007/08 energy data as a baseline. However, they ignore the 2008/09 worldwide

⁴ Energetic City, <https://energeticcity.ca/2017/08/number-of-local-workers-at-site-c-increased-in-june/>

⁵ BC Hydro Fact Sheet, July 2017.

⁶ BC Hydro, Site C Clean Energy Project, PUBLIC Quarterly Progress Report No. 7 – January to March 2017 (Report), <https://sitecproject.com/sites/default/filesquarterly-progress-report-no7-f2017-q4-january-march.pdf>

economic meltdown that occurred; a recession unmatched since the Great Depression. In effect, to support a “flat energy demand” projection, Site C opponents claim that a once-in-a-generation, 2008/09-style recession will occur every decade. This is highly unlikely.

Opponents also ignore the fact that energy demand has grown since the 2008/09 recession. An analysis of BC Hydro demand by environmental scientist Blair King shows that the financial hit taken by heavy industrial users during the 2008/09 recession has masked growing electricity demand for residential and light industrial/commercial users: “Comparing only (the time period from) 2008 to 2017 shows a relatively steady energy demand picture but it does so by ignoring the effects of the crash and the post-crash recovery”⁷.

Conclusion: Enabling Responsible Resource and Urban Economic Development

In British Columbia, we can choose to enable economic development, in part, by building critical infrastructure such as Site C, or we can leave these challenges to future generations and risk losing opportunities that will contribute to improving the lives of British Columbians in the meantime.

ICBA submits that, in our time, Site C – similar to BC Hydro generating facilities built in the 1960s, 1970s and 1980s – is a critically important and visionary project that will secure a reliable supply of electricity. It is fundamentally important to maintaining existing and building new competitive resource industries. Site C is also critical for enabling affordable urban development and meeting international climate action commitments as we move toward a clean energy future.

British Columbia must continue to be “investment ready”; fulfilling the commitment to build Site C sends an important signal to the international and domestic investment community that BC is committed to enabling resource-based economic development and growth. To cancel or postpone Site C at this stage of construction would do severe damage to British Columbia’s reputation and send a highly negative signal to both Canadian and international investors.

Meanwhile, preparing B.C. for further urban development – whether in the Lower Mainland, Southern Vancouver Island or regional growth centers such as Kelowna, Prince George, Kamloops and Nanaimo -- also requires a clear “line of sight” to reliable sources of both electrical energy and capacity. Meeting affordability challenges in the Lower Mainland and Southern Vancouver Island will require housing and commercial densification and new rapid transit projects to address current needs along with forecasts for substantial population growth.

As we conclude, the Joint Review Panel in its May 2014 report stated clearly after its 29-month independent review that: “Site C is the best and cheapest alternative for new energy in BC... and its cost advantages would increase with the passing decades as inflation makes alternatives more costly”. ICBA believes Site C is a key ingredient to building a strong and competitive B.C. economy based on clean energy generation not only for now, but also for the future.

⁷ Blair King. <https://achemistinlangley.wordpress.com/2017/08/24/will-there-be-a-demand-for-site-c-power-delving-into-bc-hydro-demand-statistics/>

The history of British Columbia is replete with examples of the critical role that the proactive development of hydroelectric generation has played in enabling sustainable resource development and, very importantly, thousands of well-paid family-supporting jobs for families across B.C. and substantial tax revenues for successive local, provincial and federal governments⁸.

As the BCUC deliberates on Site C, ICBA believes it is imperative that long-term thinking prevail. If British Columbia is truly committed to helping Canada meet its Paris Climate Action commitments; to addressing affordability and livability in the Lower Mainland, on Southern Vancouver Island and throughout the province; and, to being investment ready for new growth opportunities in our resource and urban economies, then Site C should proceed without delay.

On behalf of the 2,000 members and clients of ICBA, thank you for the opportunity to provide our views as you undertake your review of Site C.

Sincerely,
Independent Contractors and Businesses Association

A handwritten signature in black ink, appearing to read "Chris Gardner", written in a cursive style.

Chris Gardner
President

⁸ For example, development of hydroelectric generation on the Kootenay and Pend O’reille rivers facilitated the development of a world class zinc-lead-silver smelter and refinery at Trail, B.C., which has been in continuous operation for more than 100 years. The visionary development of the Kemano generating facility in the early 1950s has enabled the continuous production of aluminum in Kitimat, B.C., for almost 70 years. Many pulp, paper, and saw mills of the Central Interior were enabled in large measure by efforts in the 1960s, 1970s and 1980s to install generating capacity on the Peace and Columbia Rivers.