

October 4, 2018



Dear :

Re: Your request for access to information under Part II of the *Access to Information and Protection of Privacy Act* (File # NR-147-2017)

On September 20, 2018, the Department of Natural Resources received your request for access to the following records/information:

Please provide a copy of the following briefing note: Update on select Canadian energy issues.

I am pleased to inform you that a decision has been made by the Department of Natural Resources, confirmed by the Deputy Minister, to provide access to the requested record. The record is attached.

As set out in section 42 of the Act you may ask the Information and Privacy Commissioner to review the department's decision to provide access to the requested information. A request to the Commissioner must be made in writing within 15 business days of the date of this letter or within a longer period that may be allowed by the Commissioner. Your request should identify your concerns with the department's response and why you are requesting a review.

The request for review may be addressed to the Information and Privacy Commissioner is as follows:

Office of the Information and Privacy Commissioner
2 Canada Drive

P.O. Box 13004, Stn. A
St. John's, NL. A1B 3V8

Telephone: (709) 729-6309
Toll-Free: 1-877-729-6309
Facsimile: (709) 729-6500

Pursuant to section 52 of the Act, you may also appeal directly to the Supreme Court Trial Division within 15 business days after receiving the department's decision.

Please be advised that responsive records will be published following a 72 hour period after the response is sent electronically to you or five business days in the case where records are mailed to you. It is the goal to have the responsive records posted to the Completed Access to Information Requests website within one business day following the applicable period of time. Please note that requests for personal information will not be posted online.

For further details about how an access to information request is processed, please refer to the Access to Information Policy and Procedures Manual at <http://www.atipp.gov.nl.ca/info/index.html>.

If you have any questions, please feel free to contact me at 709-729-0463 or rhynes@gov.nl.ca.

Sincerely,

A handwritten signature in cursive script that reads "Rod Hynes".

Rod Hynes
ATIPP Coordinator

**Information Note
Department of Natural Resources**

Title: Update on Select Canadian Energy Issues

Issue: To provide information on some select energy issues including Site C, BC Hydro Review, Kinder Morgan Pipeline, and Cryptocurrency Mining

Background and Current Status:

Site C

- BC Hydro's Site C Clean Energy Project will provide 1,100 megawatts (MW) of capacity, and produce approximately 5,100 gigawatt hours (GWh) of electricity each year.
- Some key components of the Site C project include two 500 kilovolt AC transmission lines, a generating station with six 183 MW generating units, and an 83-kilometre-long reservoir.
- The project was originally budgeted at \$8.3 billion, however a report by the BC Utilities Commission issued on November 1, 2017 suggested that the project would actually cost from \$10-12 billion, and was not on schedule for 2024 completion. The project has also generated intense criticism from environmental and indigenous groups.
- In December, 2017, Government announced it would continue with the project and noted that cost estimates had increased by \$1.657 billion. In January, 2018 two First Nations have subsequently filed court challenges claiming that the project violates treaty rights and the Canadian Constitution.

BC Hydro Review

- BC Hydro is a provincial Crown corporation and regulated utility generating and delivering electricity to 95 per cent of the British Columbia (BC) population.
- In June, 2018 the BC Government launched a comprehensive review of BC Hydro that will occur in two phases.
- Phase I of the review focuses on BC Hydro's costs and rates including creating a refreshed plan for rates and assisting the utility in preparing a Revenue Requirement Application to be filed with the BCUC in February, 2019.
- Phase II of the review will start in late 2018. The BC government will establish an expert panel to provide recommendations to ensure BC Hydro is well positioned to maximize energy market opportunities.

BC/AB Pipeline Dispute (Kinder Morgan Trans Mountain Pipeline Expansion)

- In November, 2016 the Government of Canada granted approval for the Kinder Morgan Trans Mountain Expansion Project, which would essentially twin an existing 1,150 km pipeline between Alberta (AB) and BC. The \$7.4 billion project will increase the nominal capacity of the system from 300,000 barrels per day to 890,000 barrels per day.
- BC wishes to restrict the expansion as it would see three times more bitumen moved to the BC coast each day and a seven-fold increase in tanker traffic. To this end, in late January, 2018 BC proposed rules to limit increased shipments of bitumen off its coast until it can better understand the ability to mitigate spills. AB argued that BC's move was illegal and unconstitutional and in retaliation, AB banned the import of BC wines.

- In February, 2018 BC withdrew its threat to block AB's bitumen shipments and announced it would ask the Courts whether BC has the jurisdiction to regulate shipments through a federally-approved pipeline. In response, AB dropped its ban on BC wines.
- In April, 2018 Kinder Morgan announced it would suspend all non-essential spending on the project. The federal government had publicly offered to indemnify the company if the expansion project was delayed as a result of BC's opposition to the project and after negotiation with the company; the federal government ultimately purchased the pipeline for \$4.5 billion. Work on the pipeline is expected to begin in AB in August and BC in September.

Resignation of Manitoba Hydro Board

- On March 21, 2018 every member of the Manitoba Hydro board except one (MLA Cliff Graydon) resigned. Everyone who resigned was appointed to the Board shortly after Premier Pallister was elected in May, 2016.
- The outgoing chair of the board, Sandy Riley, has said the resignation is due to an unwillingness of Premier Pallister to meet with the board for over a year to resolve issues related to the finances and governance of Manitoba Hydro.
- Premier Pallister disputes this and has said that the board resigned because the province won't agree to a \$70 million "persuasion money" payment to the Manitoba Metis Federation (MMF) to smooth the approval process on a transmission line.
- Both the Board and the MMF have taken exception to this suggestion and the MMF president, David Chartrand, accused Premier Pallister of using "race card tactics."

Cryptocurrency Mining

- Cryptocurrency or digital currency mining involves the use of dedicated computer hardware to solve complicated mathematical algorithms that when complete entitle the user to units of cryptocurrency such as Bitcoin or Ethereum. The computer hardware is energy intensive so as data mining continues to grow; it will have an impact on electricity demand.
- Cryptocurrency mining data centres' high demand for electricity and business volatility can potentially cause utilities to upgrade generation or transmission at a cost to all ratepayers to service a data centre load requirement that could disappear as quickly as it materialized. Furthermore, these sorts of data centres are highly mobile, and able to migrate within short periods to any jurisdiction that can offer sufficient electricity at the lowest rate. This high mobility creates a significant risk of new data centres shutting down operations, leaving pre-existing customers to pay for the expensive system upgrades caused by data centres who leave.
- These concerns have been faced by many low-cost electricity jurisdictions across North America who have responded by imposing moratoriums on data centres and/or significantly increasing electricity rates for data centres.
- On June 7, 2018 the province of Quebec (QC) announced a "new framework for the category of electricity consumers relating to the cryptographic use applied to block chains" noting it was required because of unprecedented demand and requests from cryptocurrency companies that "go beyond the short and medium-term capabilities of [HQ], hence the urgency and importance of action."

- QC's framework comprises three elements: A ministerial order temporarily suspending data centre applications; Direction to the QC regulator (the Régie de l'énergie) from the Government of QC on the factors that should be considered when serving data centres; and, an application to the Régie de l'énergie, proposing a selection process for data centres projects in light of the concerns expressed by the Government of QC in its direction..

Electric Vehicle Charging Stations

- New Brunswick Power has developed a charging network for electric vehicles made up of standard level 2 (240 Volt) chargers throughout the province and a corridor of 10 fast-charge stations (400 Volt) along the TransCanada Highway. The utility, in conjunction with the federal and provincial government, will spend another \$3 million this year to add additional capability.
- There has been criticism of the plan, however, as the charging stations are doing so little business that they are budgeted to lose money until at least 2028. One new level-2 station in Bathurst showed that only three vehicles were charged there in December, 2017 for a total of 41 minutes. Other centres did even less business.
- At the same time, Nova Scotia Power has announced that it plans to install 24 electric vehicle chargers in early 2018 consisting of 12 level-3 chargers and 12 level-2 chargers in a network from Yarmouth to Sydney. The project will cost about \$1 million with \$420,000 from Nova Scotia Power, \$420,000 from the federal government, and \$120,000 from the provincial government.

Analysis:

- Note is for information purposes only.

Action Being Taken: No action being taken. For information purposes only.

Prepared/Approved by: R. Bates, M. Janes / J. Cowan

Ministerial Approval: Received from Hon. Siobhan Coady _____

August 5, 2018