November 8, 2018

Dear [Name]:

Re: Your request for access to information under Part II of the Access to Information and Protection of Privacy Act (File # NR-209-2018)

On October 12, 2018, the Department of Natural Resources received your request for access to the following records/information:

Any reports, studies or briefing materials relating to the considerations of Wind Energy as an energy source. Please note this is not limited to just the comparison Wind Energy to the development of Muskrat Falls.

You subsequently indicated a two year time frame to search for records.

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 records. The records are attached.

We are providing access to the most information possible but have made redactions in accordance with Sections 29 (1)(a), 35 (1)(d), 35 (1)(f), 35 (1)(g), 39 (1)(a)(ii), 39 (1)(b), 39 (1)(c)(ii), 39 (1)(c)(ii) and 39 (1)(c)(iii) of ATIPPA, 2015 as follows:

29. (1)(a) The head of a public body may refuse to disclose to an applicant information that would reveal advice, proposals, recommendations, analyses or policy options developed by or for a public body or minister;

35. (1)(d) The head of a public body may refuse to disclose to an applicant information which could reasonably be expected to disclose information, the disclosure of which...
could reasonably be expected to result in the premature disclosure of a proposal or project or in significant loss or gain to a third party;

35. (1) (f) The head of a public body may refuse to disclose to an applicant information which could reasonably be expected to disclose positions, plans, procedures, criteria or instructions developed for the purpose of contractual or other negotiations by or on behalf of the government of the province or a public body, or considerations which relate to those negotiations;

35. (1) (g) The head of a public body may refuse to disclose to an applicant information which could reasonably be expected to disclose information, the disclosure of which could reasonably be expected to prejudice the financial or economic interest of the government of the province or a public body;

39. (1) (a)(ii) The head of a public body shall refuse to disclose to an applicant information that would reveal commercial, financial, labour relations, scientific or technical information of a third party;

39. (1) (b) The head of a public body shall refuse to disclose to an applicant information that is supplied, implicitly or explicitly, in confidence;

39. (1) (c) (i) The head of a public body shall refuse to disclose to an applicant information the disclosure of which could reasonably be expected to harm significantly the competitive position or interfere significantly with the negotiating position of the third party,

39. (1) (c) (ii) The head of a public body shall refuse to disclose to an applicant information the disclosure of which could reasonably be expected to result in similar information no longer being supplied to the public body when it is in the public interest that similar information continue to be supplied;

39. (1) (c) (iii) The head of a public body shall refuse to disclose to an applicant information the disclosure of which could reasonably be expected to result in undue financial loss or gain to any person.

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:
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,

Rod Hynes

Rod Hynes
ATIPP Coordinator
Title: Ramea Wind-Hydrogen-Diesel Project

Issue: To update the Minister on the status of the Ramea Wind-Hydrogen-Diesel Project.

Background and Current Status:
- Newfoundland and Labrador Hydro (NLH) provides electricity service to the off-grid community of Ramea using a hybrid diesel-wind-hydrogen system.

- In 2004, NLH entered into a Power Purchase Agreement (PPA) with Frontier Power Systems (Frontier) to operate a 390 kilowatt (kW) wind farm in Ramea to reduce NLH’s diesel usage.

- In 2009, NLH parent company Nalcor Energy began constructing the Ramea diesel-wind hydrogen research and development project to store and later use excess wind energy when available by using a hydrogen production, storage and generation system.

- Nalcor sought to develop and prove the technology and associated energy control system for use in its remote diesel systems and then export the technology.

- Under the project, Nalcor added three more wind turbines to generate electricity during high load periods. When wind generation exceeds community load, the project was designed to use the surplus to power a hydrogen electrolyzer to create and store hydrogen until needed, when it would be used as fuel in a hydrogen generator.

- Phase I of the Project was completed in 2012 and integrated existing diesel generators in Ramea with wind turbines and hydrogen equipment through Nalcor’s proprietary Energy Management System (EMS), which automatically dispatches the different generation sources in a manner that maximizes renewable energy generation.

Analysis:
- Total costs associated with Phase I of the project were $11.82 million (M). Phase I project contribution partners included: Nalcor ($3.97M), Atlantic Canada Opportunities Agency (ACOA) ($3M), Natural Resources Canada (in-kind contribution of a $350K hydrogen generation set), and the Government of NL ($4.5M). Project collaborators included Memorial University, University of New Brunswick, and Frontier.

- Project equipment for Phase I included three 100 kW wind turbines, a hydrogen electrolyzer, a hydrogen generation set (genset), three hydrogen storage tanks and associated piping and Nalcor’s EMS. This is in addition to NLH’s existing diesel units and Frontier’s six wind turbines.

- Nalcor has indicated that the EMS has the potential to be a viable energy solution for remote communities across Canada and around the world.
Action Being Taken:
- NR will consult with Nalcor executive to determine if and how the company can proceed with Phase II of the project.

Prepared / Approved by: C. Boland/C. Snook/W. Parsons
Ministerial Approval:

February 1, 2017
Title: Wind Energy Policies and Development

Issue: To provide Minister Gerry Byrne with an overview of the province’s wind policies and development.

Background and Current Status:
- NR is responsible for the stewardship and development of the province’s natural resources through the Mines and Energy Branches.

- The province’s energy corporation, Nalcor Energy is wholly owned by the province and takes the lead role in developing our energy resources. Newfoundland and Labrador Hydro (NLH) is a crown electric utility and subsidiary of Nalcor Energy. Further, NLH is the primary generator of electricity in the province.

- More than 80 per cent of NLH’s electricity generation is from renewable sources such as hydro and wind. This number will increase to 98 percent with the in-service of Muskrat Falls.

- NLH currently has power purchase agreements (PPA) with two 27 megawatt (MW) private wind farms in St. Lawrence and Fermeuse.

- NLH also has a PPA with a 390 kilowatt (kW) private wind farm in Ramea to reduce NLH’s diesel usage. This is associated with Nalcor Energy’s off-grid wind-hydrogen-diesel electricity generation project in Ramea, which aims to use excess power to create and store hydrogen, and later convert it to electricity. Through this project, Nalcor also has three 100 kW wind turbines in Ramea.

Analysis:

Future Wind Development
- In 2006, Government adopted a new policy on Crown Lands permitting for wind power, in that only Nalcor Energy, or a company selected by it, will be able to apply for a Crown lease for wind power development. However, applications may be accepted for wind collection sites up to one acre in acre.

- The Premier’s December 2015 mandate letter directed the Minister of NR to seek out opportunities to develop wind and small scale hydro, with priority given to communities that are isolated from the primary power grid.

- There are currently 21 isolated diesel-powered electricity systems along NL’s coast serving approximately 3,400 customers with a total installed capability of 36 MW.

- Since 2008, Government has provided $3.5 million to NLH to determine if alternative energy sources, including wind and hydro, can be used to reduce generation costs in remote Labrador communities. Government now has a better understanding of these resources.

- NR is currently exploring the potential for wind and small hydro to reduce diesel in isolated Labrador communities.
In recent years, NR has received correspondence and meeting requests from multiple companies interested in establishing wind farms in the province. This includes Beothuk Energy which is the subject of a concurrent information note.

Net Metering
- Net metering provides a further opportunity for small-scale wind development in NL. Net metering allows utility customers with small-scale generating facilities to generate power from renewable sources (such as wind) for their own use, as well as feed electricity into the distribution system during periods when they generate excess power and draw power from the grid when their generation does not fully meet their needs.

- On July 28, 2015, the previous Government announced its net metering policy framework to provide guidance for Newfoundland Power (NP) and NLH to develop net metering program applications to the Board of Commissioners of Public Utilities (PUB) for small-scale generation facilities under 100 kilowatts.

- The utilities submitted these applications to PUB in December 2016 and its regulatory review process is underway. This review will ensure any net metering policy/program is appropriate for all ratepayers.

NL’s Electricity Mix and Addition of Muskrat Falls
- NLH forecasts that the addition of Muskrat Falls will provide surplus electricity to meet the province’s electricity requirements for the foreseeable future. Therefore, if NLH enters into a new PPA to purchase additional generation from wind or other sources, NLH would either have to spill (i.e. waste) water at its hydro reservoirs or export the power over the Maritime Link, once it enters service.

- While the Maritime Link will enable export of some surplus NL generation, Nalcor advises there will be no firm capacity available for sale in its initial years of operation as this capacity is required to export surplus power, including its contractual agreements with Emera to deliver power to Nova Scotia.

- As a regulated utility, NLH would also require PUB approval to recover PPA costs in rates. If the new generation is not required to meet NL customer needs and is not lowest cost generation, then the PUB would not be expected to allow PPA cost recovery in rates.

- While awaiting PUB approval of the net metering policy, it is important to note that proponents wishing to develop wind energy to supply their own needs may do so while disconnected from the grid subject to the appropriate laws and regulations (e.g. environmental assessment requirements, building permits, municipal rules, etc.).

Action Being Taken:
- NR, in consultation with NLH, is continuing to explore opportunities to develop wind farms and small scale hydro, with priority to communities that are isolated from the grid, including coastal regions of Labrador.

Prepared/Approved by: C. Boland / C. Snook
Ministerial Approval:

February 10, 2017