Guidelines: Nominating Crown Lands for Wind Energy Projects

July 26, 2022
Department of Industry, Energy and Technology

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1. Purpose

The Department of Industry, Energy and Technology (IET) has prepared this document to provide interested proponents guidance in nominating Crown lands for wind energy projects. This includes the use of Crown lands for: wind turbines; permanent buildings, plant facilities, roads, and transmission lines; wind measurement; and surrounding Crown lands.

2. Background

2.1 Newfoundland and Labrador Wind Resources

Newfoundland and Labrador has some of the best onshore wind resources in North America, consistently blowing within speeds optimal for electricity generation. For more information of the province's wind energy resources and supporting infrastructure, please visit IET's website at https://www.gov.nl.ca/iet/.

2.2 Economic Development

Globally, countries and industries are seeking opportunities to use green hydrogen and ammonia to help reduce their carbon emissions in sectors where it is technically challenging or expensive to electrify directly (e.g. industrial processing and large transport). In addition to its abundant wind resources, Newfoundland and Labrador is also well positioned to produce green hydrogen and ammonia thanks to its access to fresh water, available Crown lands, numerous deep marine ports, expertise in the energy sector, and geographic proximity to markets in the United States and Europe.

IET is the lead for innovation, economic development and diversification in Newfoundland and Labrador. It focuses on creating a competitive environment to support private sector investment and business growth; and supporting industries in Newfoundland and Labrador such as mining, energy and technology.

Recognizing the economic development opportunities related to the province's renewable energy resources and its competitive advantages, during fall 2021, IET consulted with the public, Indigenous Governments and Organizations, industry and stakeholders, to inform the development of an economic development plan focused on renewable energy resources. On December 16, 2021, IET released its Renewable Energy Plan, "Maximizing Our Renewable Future". A copy of the Renewable Energy Plan is available on IET's website (see https://www.gov.nl.ca/iet/files/Renewable-Energy-Plan-Final.pdf).

As outlined in the Renewable Energy Plan, Government is pursuing the sustainable development and use the province's renewable energy resources in a manner that ensures the greatest long-term benefit to the people of Newfoundland and Labrador.

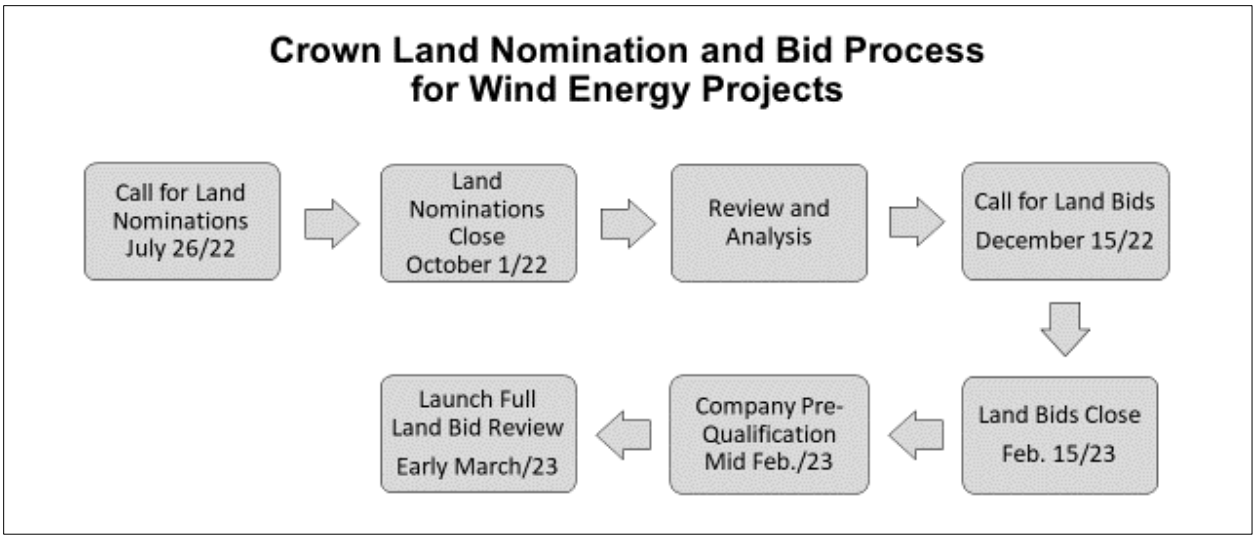
2.3 Enabling Wind Development

In 2007, a wind moratorium was established, restricting wind development activities to the province's energy corporation, and prohibiting companies seeking to develop commercial wind projects from applying for Crown lands, or from registering for an Environmental Assessment. In 2019, the Government of Newfoundland and Labrador lifted the wind moratorium for the province's isolated diesel-generated electricity systems only, enabling the use of wind to reduce diesel-generated electricity. Further, on April 5, 2022, IET announced it would be lifting the wind moratorium for industrial customers seeking to self-generate wind energy for their own consumption, and industrial customers or retailers seeking to generate wind energy for export, with process details to follow in the coming months. Companies should review and familiarize themselves with the legislative and regulatory framework regarding the production of electricity in the province, which includes, but is not limited to the **Public Utilities Act** and the **Electrical Power Control Act, 1994**.

3. Crown Lands Nomination and Bid Process

3.1 Overview of Process

An overview of the Crown Lands Nomination and Bid Process for Wind Energy Projects is outlined in the following flowchart.



Note: Dates are subject to change.

3.2 Call for Land Nominations

From July 26 to October 1, 2022, IET is calling for the submission of Nominations of Areas of Interest for wind energy projects in the province of Newfoundland and Labrador (Call for Land Nominations). In other words, respondents are asked to provide nominations for areas within which they wish to develop wind energy projects.

The Call for Land Nominations is open for any available Crown lands within the province. Interested respondents are not limited to a geographic size for a given submission, or in the number of submissions during this Call (i.e. no maximum land area, or maximum number of

submissions). However, to ensure a future Call for Land Bids that meets industry needs, Call for Land Nominations respondents are encouraged to be strategic in the size of, or number of, their land nomination submissions. If providing multiple submissions, respondents are also encouraged to clearly illustrate to IET the preferred order of preference for any future Call for Land Bids (i.e. order of preferred location).

To avoid nominating areas where wind development would be excluded, due to existing approved land uses, it is recommended that respondents refer to the Department of Fisheries, Forestry and Agriculture's Land Use Atlas at: https://www.gov.nl.ca/landuseatlas/details/. Only Crown lands contained within the boundary will be subject to any eventual land application process. Respondents are also encouraged to consult IET's Geoscience Atlas at https://geoatlas.gov.nl.ca/Default.htm, in particular the 'Mineral Lands' set of layers to ascertain whether an area of wind interest overlaps with current or past exploration/mining/quarrying activities, and to clearly outline how their proposed land submission would coexist with such activity. IET is committed to consulting Indigenous Governments and Organizations when it is contemplating land and resource development decisions that have the potential to impact settled or asserted Aboriginal or treaty rights. As such, respondents are also encouraged to consider whether their identified lands of interest include land which are covered by Indigenous land claims or claims under negotiation.

This Call for Land Nominations will assist IET in selecting a land area(s) to be included in a subsequent Call for Land Bids.

3.2 Call for Land Bids

The Call for Land Nominations is not a competitive process and will not result in award of Crown lands for wind development. This is the first phase of a fair and transparent, multiphase process for awarding Crown lands. Land Nominations are not for evaluation but for consideration by IET in its determination of land packages to advance to the Call for Land Bids stage. Future Call for Land Bids will be for a selected land package(s), as part of a competitive process with the goals of awarding Crown Land for wind development after review and analysis by Government. The Call for Land Bids will be accompanied by a defined evaluation process. A proponent does not need to provide a submission under this Call for Land Nominations in order to be eligible for future Call for Land Bids.

Further details and guidance on Call for Land Bids and subsequent processes noted above, will be announced in the mid-December Call for Land Bids. This competitive approach supports IET's commitment to enable the development and use of the province's wind energy resources in a manner that ensures the greatest long-term benefit to residents, in a fair and transparent manner, as outlined in the 2021 Renewable Energy Plan. The province is committed to continuing to support the development of its wind energy industry. As such, it encourages interested respondents to visit IET's website to obtain further information of the province's wind energy resources and supporting infrastructure (https://www.gov.nl.ca/iet/).

IET notes that any Environmental Assessment considerations for energy projects are under the purview of the Department of Environment and Climate Change. IET further notes that wind energy and hydrogen/ammonia manufacturing projects are subject to registration for Environmental Assessment under the **Environmental Protection Act** and Regulations. For further information, please visit https://www.gov.nl.ca/ecc/env-assessment/ and/or contact EAProjectComments@gov.nl.ca.

3.3 Exceptions

IET notes that the above process will not apply to existing industrial customers seeking to develop energy for their own consumption; rather, these customers can apply separately for lands adjacent to their site to develop wind energy[1]. The lands and energy would be restricted to that required solely for energy consumption of their existing operation, and would be subject to registration for environmental assessment. Companies should review and familiarize themselves with the provisions of the **Public Utilities Act** and the **Electrical Power Control Act, 1994** as it pertains to the production and regulation of electricity in the province.

3.4 Technical Considerations

Newfoundland and Labrador Hydro (Hydro) is the province's Crown utility, responsible for the majority of the electricity generation and transmission in Newfoundland and Labrador. The interconnection of proponents with new loads and/or new wind generation has the potential to impact the province's electricity system. As such, to ensure continued safe and reliable operation of the province's electricity assets, Hydro will support IET in its Crown land nomination and bid process for wind energy projects.[2]

Hydro's review of Land Nomination submissions will include assessments of the technical viability of proposals, associated system investments and potential rate impacts,[3] providing respondents, if applicable, with preliminary insight into the cost of interconnection and energy, to factor into their proposed project. It is noted that rate impacts and interconnections costs will be preliminary as detailed system upgrade requirements and costs can only be determined through subsequent studies, as outlined below.

Hydro will provide technical parameters to support respondents as they develop land nominations. To this end, in the summer of 2022, Hydro is undertaking system studies to assess the amounts of wind generation that can be supported by the electricity grid in a range of forecasted load growth scenarios.[4] The results of these studies will be shared with respondents and made public to ensure that proposed projects are technically viable. It is expected that projects that rely on the grid for support including, voltage regulation, energy storage, backup capacity, etc. will adhere to determined and specified technical limits.

Hydro will support the advancement of project proposals throughout the land bid, through the provision of reasonable preliminary consultation and the provision of reasonable, non-sensitive system information.[5] It is noted that it would not be practical for Hydro to perform system studies

[1] Existing customers who develop generation would need amendments to their interconnection agreements with Newfoundland and Labrador Hydro to establish protocols to ensure safe and reliable operation.
[2] Proposed projects may be specified to be electrically isolated from provincial power system infrastructure. Such projects would not require a technical review.
[3] While upgrades required for the interconnection of a project may be specifically assigned to a proponent, some transmission and generation upgrades may be classified as "common" and would result in rate impacts for existing customers. The evaluation process will include an assessment of any subsidization of upgrade costs through customer rates.
[4] System limits due to technical considerations may restrict the amount of wind generation that can be accommodated provincially and at a single site and on an aggregate basis for the province as a whole.
[5] Preliminary assessments of system upgrade requirements would involve a review of new terminal station and transmission line infrastructure required for the interconnection of proponent facilities to

for proponents. This is the case given the potential number of proposals and complexities associated with overlap and combinations of new developments and system upgrade requirements. Rather, Hydro will initiate detailed system studies through its Interconnection Process upon the successful award of Crown land. This process is defined in the following section.

It is also noted that Hydro is currently involved in a regulatory proceeding called “Reliability and Resource Adequacy Review”. This proceeding is a detailed assessment to ensure sufficient and reliable long term supply of energy and capacity for customers. Hydro will be submitting a detailed report to the Public Utilities Board on September 30, 2022. This study and its ongoing proceeding influences current and future determinations of quantity and location of new wind resources.

Hydro is also currently supporting a significant number of large customer requests in Labrador and is undertaking system impact studies to assess upgrade requirements.

While the conclusions and recommendations of the analyses outlined in Section 3.4 are not yet available, proponents should be advised that proposals involving significant request for incremental firm load from the power system would have the potential to drive requirements for new generation in the province.

3.5 Hydro’s Interconnection Process

Upon completion of the Full Land Bid Review, Hydro will support successful and interested proponents with the normal utility Interconnection Process for the proposed project. This process will involve the submission of a formal interconnection request and the execution of system impact and facilities studies to confirm previous preliminary system upgrade requirements and associated proponent cost allocations. These studies will be executed in accordance with Hydro’s established process.[6] This effort ensures that the required analysis and final engineering estimates are performed so that proponents have cost estimates and schedules to the accuracy required for an interconnection agreement, power purchase agreement negotiation and regulatory approval.[7]

Hydro’s system. The introduction of appreciable incremental power flows on Hydro’s network would also likely trigger requirements for system reinforcements.

[6] System Impact Studies would be performed by the Newfoundland and Labrador System Operator in accordance with the process defined online at the following website: http://www.oasis.oati.com/woa/docs/NLSO/NLSOdocs/Methodology_for_Completing_A_System_Impact_Study_08122021_FINAL_Updated_(for_new_logo).pdf

[7] Interconnection agreements are subject to regulatory approval.

4. Submitting a Land Nomination(s)

Mandatory and optional information to include within any Call for Land Nomination submission is outlined as follows.

Call for Land Nominations: Submission	
Company/Project Details	**Mandatory / Optional**
Company Name	Mandatory
Contact(s) ○ name, title, email, phone number	Mandatory
Project Partners	Mandatory
Previous Relevant Experience	Mandatory
Financial Information	Mandatory
Crown Lands location ○ Written description of geographic location, including size of land area contained within; and, ○ Overview map(s) identifying geographic location area and proposed use - PDF or image file(s), shape File (.shp) or CAD file (.dwg).	Mandatory
Proposed Use of Land ○ Estimated wind project size and details (e.g. number of turbines); and, ○ End use of wind (e.g. green hydrogen/ammonia production)	Mandatory
Grid Requirements ○ Detail on any installed capacity and/or energy requirements, including seasonality; or note not applicable.	Mandatory
Estimated Timelines and Estimated Number of Jobs (construction, operation, decommissioning)	Mandatory
Financial ○ Company and project information	Mandatory
Other ○ Any other company, partner or project details not listed above, that a respondent may wish to provide.	Optional

Land Nomination submissions:

- Will be accepted by IET, from July 26, 2022, until 5:00 p.m. October 1, 2022. Late submissions will not be accepted. Proponents are encouraged to submit early to avoid any technical issues.
- Will be received by IET by email at: windlandnominations@gov.nl.ca.
- Shall be submitted in electronic format and clearly marked as: "Call for Land Nominations".
- May also be accompanied by a presentation to IET before 4:30pm October 11, 2022 (optional). Request to present to IET must be made prior to September 15, 2022 to permit scheduling. Requests to present made after this time will not be accommodated.
- Will become the property of IET and will not be returned. All information concerning nominations provided in confidence will be kept confidential unless:
    - a proponent approves its release, or
    - IET is required or authorized by laws such as the **Access to Information and Protection of Privacy Act, 2015 (ATIPP) Act** to release.

- As well as the Call for Land Nominations itself, shall neither constitute nor give rise to any obligation on the part of the nominees to participate in, or on the part of Government to proceed with, a Call for Land Bids in respect of any areas of interest nominated.

Additionally:

- IET will be offering an information session on the Call for Land Nominations in August 2022. Those interested are invited to send an email to windlandnominations@gov.nl.ca.
- Should a proponent have questions regarding privacy and confidentiality, please contact the Access to Information and Protection of Privacy team, IET, at atipp-iet@gov.nl.ca.

5. Definitions

Industrial Customer: as per 2(h) of the **Electrical Power Control Act, 1994,** "any person purchasing power, other than a retailer, supplied from the bulk transmission grid at voltages of 66 KV or greater on the primary side of any transformation equipment directly supplying the person."

Public Utility: as per 2(1)(h) of the **Public Utilities Act,** "a person that owns, operates, manages or controls structures, equipment or facilities in the province for

(i) the production, generation, storage, transmission, delivery or provision of electric power, energy, water or heat, directly or indirectly, to or for the public or a corporation for compensation,

(ii) the collection, storage, transmission, delivery or provision of water through mains, directly or indirectly, to or for the public or a corporation for compensation, or

(iii) the collection, treatment or disposal of sewage through mains, directly or indirectly, for or from the public or a corporation for compensation;"

Retailer: as per 2(q) of the **Electrical Power Control Act, 1994**: "a public utility within the meaning of the Public Utilities Act , other than a public utility exempt from the application of that Act, which buys or generates power and whose primary business is the sale or resale of power to arm's length customers."

Permanent Building: A permanent building means a building or structure associated with the development, processing and distribution of wind energy that is placed or constructed on lands, fixed in place, intended to be used for the foreseeable future, and unable to be easily removed. Permanent buildings may include, but are not limited to: maintenance buildings, warehouses, manufacturing plants, substation infrastructure, office buildings and other buildings.

Wind Turbine: A power generating device driven by the kinetic energy of wind typically consisting of a rotor assembly (i.e. a hub and blades), a nacelle (electrical generator) and a tower, the tower base, foundation and a service area around the base.