



FILE: 600-0-LUP
PERMIT NUMBER: 01-600-22

PERMIT TO USE COMMISSIONER'S LAND

THIS PERMIT GRANTS:

NORTHERN ENERGY CAPITAL INC.

PERMITTEE

Address of PERMITTEE: 7209 7 Ave, Whitehorse, YT, Y1A 1R8

Permission to proceed with the **MET TOWER INSTALLATION** within all that parcel of land numbered **600-SK-590** outlined blue in the sketch annexed here to and forming part of the permit. The Land use permit application dated May, 2018 and submitted by Malek Tawashy on behalf The PERMITTEE shall be annexed hereto and shall be included in this permit.

1. THIS PERMIT IS SUBJECT TO THE COMMISSIONER'S LAND ACT AND REGULATIONS AND THE OPERATING TERMS AND CONDITIONS AS SPECIFIED IN THE ATTACHED ANNEX NUMBERED A-1.
2. THIS PERMIT MAY ONLY BE ASSIGNED, EXTENDED, DISCONTINUED, SUSPENDED, OR CANCELLED PURSUANT TO THE COMMISSIONER'S LAND ACT AND REGULATIONS.
3. THE GRANTING OF THIS PERMIT DOES NOT RELIEVE THE PERMITTEE FROM OBSERVING AND COMPLYING WITH ANY OTHER APPLICABLE ACTS, REGULATIONS, BY-LAWS OR ORDERS.

This permit is dated at the Hamlet of Rankin Inlet this 14th day of June, 2018.

THE COMMISSIONER OF NUANVUT

Per:


**The Director of Community Development of the
Department of Community and Government
Services, Government of Nunavut**

12:00 AM on JUNE 1, 2018

PERMIT COMMENCEMENT DATE

11:59PM on May 31, 2020

PRMIT EXPIRY DATE

Annex A-1

LAND USE PERMIT CONDITIONS

CONDITIONS ANNEXED TO AND FORMING PART OF LAND USE PERMIT NO. 01-600-22

TERM:

- a. The term of this permit shall be for a period commencing at 12:00 AM the 1st day of June, 2018 and ending at 11:59PM the 31st day of May, 2020.

FEEES AND PAYMENT:

- a. The Permittee shall pay a permit fee of **Five hundred dollars (\$500.00)** per annum commencing on June 1, 2018 to the Municipal Corporation of the Hamlet of Rankin Inlet until such time this permit becomes inactive.

INTERPRETATION:

- a. For the purposes of this permit, "shall not operate" is defined as a complete cessation of activities and removal of all personnel from the project area.

CGS TERMS AND CONDITIONS

1. The Permittee shall not conduct this land use operation on any lands not designated in the accepted application, unless otherwise approved in writing by an authorized Departmental representative.
2. The Permittee shall not conduct any part of the land use operation within 100 meters of any privately owned land or structure unless otherwise approved in writing by an authorized Departmental representative.
3. The Permittee shall during the said term, pay the said rental and all taxes, rates, and assessments charged upon the land or upon the Permittee in respect thereof.
4. The Government of Nunavut (Hereafter called the "Government") nor the Municipal Corporation of the Hamlet of Rankin Inlet (Hereafter called the "Hamlet") is not responsible for the establishment on the ground of the boundaries of the land.
5. The Government or the Hamlet may re-enter and occupy any portion of the land for construction of roads or other public works but such construction shall not unreasonably interfere with the rights granted to the Permittee in this permit.
6. It shall be lawful for the Government or the Hamlet or any person duly authorized at all reasonable times to enter upon the land for the purpose of examining the condition thereof.
7. The Permittee shall not conduct any part of the land use operation on any private or leased land without first having received permission from the owner or lessee.
8. The Permittee shall not construct earth approaches abutted to the roadbed on any public highway or road without prior written approval of an authorized Departmental representative.
9. The Permittee shall display a copy of this permit in a conspicuous place in each campsite established to carry out this land use operation.
10. The Permittee shall have a copy of this permit on the site of operation at all times.
11. The Permittee shall provide to the authorized Departmental representative at least forty-eight (48) hours prior to commencement of this land use operation the following information:
 - a. Person, or persons, in charge of the field operation to whom notices, order and reports may be served;
 - b. Alternative;
 - c. All the indirect methods of contacting the above person(s).

NIRB TERMS AND CONDITIONS

12. If the Nunavut impact review board (Hereafter called "NIRB") imposes any terms or conditions onto this Project than the Permittee shall follow all terms and conditions imposed by NIRB.

ENVIRONMENT

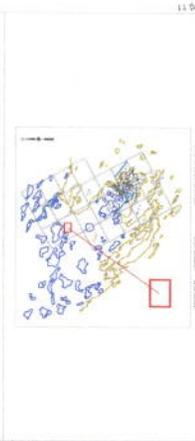
13. The Permittee shall ensure that the land use area is kept clean and tidy at all times
14. The Permittee shall not discharge or deposit any refuse substance or other waste materials in any body of water or on the banks thereof, which will impair the quality of the waters of the natural environment
15. The Permittee shall ensure that any chemical fuels or wastes associated with the project do not spread to the surrounding lands or enter into any water body. Spills shall be cleaned up immediately
16. The Permittee shall immediately report all spills of petroleum or hazardous chemicals to the 24 hour spill report line at 1-867-920-8130.

WILDLIFE

17. If any caribou or similar wild animals are observed using key access corridors within 1 kilometre during the construction of the project than all operations shall be suspended until such time that caribou are no longer in the area.



RANKIN INLET



600-SK-590
 LEGEND

SKETCH BOUNDARY


SKETCH SHOWING
600-SK-590

SITE	AREA	TURNING POINT	UTM NAD 83	
			X	Y
A	56,287.73 m ²	1	542651.00	6989933.25
		2	543142.27	6970065.79
		3	543196.31	6989906.77
		4	542801.02	6989909.66

NOTE

CERTIFIED AS BEING ANNEXED HERETO AND FORMING PART OF LAND USE PERMIT OR LAND LEASE NUMBERED **101-600-22**

APPLICATION FOR LAND USE PERMIT

Wind Resource Assessment Study

Rankin Inlet, Nunavut

May 2018

Prepared by:

NORTHERN ENERGY CAPITAL INC.

Prepared for:

Government of Nunavut

**Department of Community and
Government Services**





1-3. Applicant Information

Legal Name of Applicant: Northern Energy Capital Inc.
Project Title: Wind Resource Assessment Project, Rankin Inlet, Nunavut
Contact Information: Malek Tawashy, M.Sc., B.Sc., LEED® AP
7209 7 Ave, Whitehorse, YT Y1A 1R8
Tel: (250) 213-8185 Email: mtawashy@northernenergycapital.com

Organization’s Background, Mandate and Objectives: Northern Energy Capital Inc. (“Northern Energy”) is a renewable energy development, construction and operating company registered in the Yukon Territory. The company’s mandate is to advance the development of utility-scale wind energy projects in Canada’s Territories with strong community participation and First Nations’ involvement.

Industry Brief - The Wind Energy Landscape in Canada

Wind energy is one of the fastest growing sources of new electricity generated around the world. As of May 2015, Canada surpassed the 10,000 MW threshold of installed wind capacity, one of only seven countries in the world to do so. However, with a world-class wind resource Canada has yet to scratch the surface of its wind potential. Wind energy can play an increasing role in delivering clean, safe and affordable power, and represents a significant opportunity for Canada’s northern communities to reduce the long-standing dependence on fossil fuels.

Benefits of the Proposed Resource Assessment

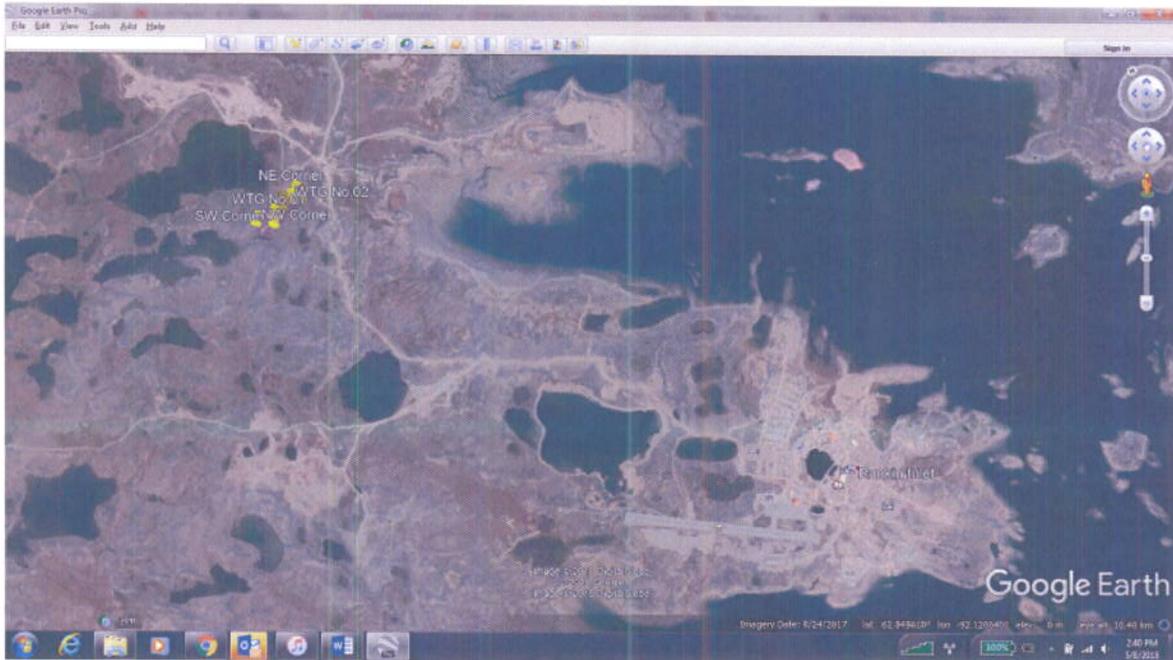
Technological Advancements: The proposed study adopts the most advanced technological innovations for sub-arctic conditions. The meteorological tower (“met tower”) and instruments used in the study logging wind speeds, solar irradiation, air density and icing conditions utilize advancements made in heated instrumentation and cold-weather remote power supplies.

Economic Growth and Diversification: The study will produce valuable wind data from this site evidencing the economic viability to develop renewable energy in Rankin Inlet. Public awareness during the assessment will serve to benefit economic growth and diversification in Canada’s Northern communities supporting the growth of sustainable energy projects.

Capacity Development: A community project such as this brings with it the opportunity to create an awareness for those entering the work force for the first time, or re-entering the workforce, or those still in the early days of their education the opportunities available in the renewable energy sector. Wind turbine technician for example is now the fastest-growing profession in the United States where the demand for trained professionals far exceeds the supply.

4. Location and Description of Operation

The location of the proposed lands to be used for the land use application are shown below as excerpts from Google Earth as well as the GPS coordinates of the corner markers. The lands identified are proposed for both the resource assessment as well as the potential future development of a utility-scale wind energy project.



Corner Marker	Latitude	Longitude
NW Corner	62.856901°	-92.162051°
NE Corner	62.857584°	-92.152379°
SE Corner	62.856689°	-92.151343°
SW Corner	62.855864°	-92.159113°

Description of the Operation (the Scope): The scope of the project is to collect environmental data that will be used to assess the wind resource and solar resource in Rankin Inlet for the purpose of assessing the viability for a utility-scale clean energy project in the Community. The data will be collected by erecting a met tower equipped with instruments designed to measure wind speed, solar irradiation, wind direction, and temperature.

5. Equipment Type, Size and Purpose

An image of the proposed met tower to be erected is shown below. This tower is engineered to withstand the harsh climactic conditions of Canada's Territories. The met tower shown below was designed for the Applicant's Whitehorse project and is of similar size and scale of the proposed met tower for Rankin Inlet; with the exception being the Rankin Inlet tower will be 9m shorter.

Site preparation will include minor amounts of clearing and leveling for the installation of the met tower foundations. Disturbances will be kept to a minimum while a flat pad is prepared to accommodate the met tower base.

Equipment used in these activities will include:

- Pickup truck for transportation and equipment delivery
- Mini-excavator for site and foundation preparation
- Rock drill for anchors

6. Fuel

The met tower instruments will be energized by solar power with a small diesel generator as backup. The fuel therefore is diesel with about 50 gallons stored on site in a Transport Canada -Approved Tidy Tank. The method of emptying and filling containers will be as per

Transport Canada approved methods and industry best practices for spill mitigation.



7. Waste Disposal

No waste will be generated on the site during the wind resource assessment.

8. Contractors and Functions

A third party contractor such as Sentrex Wind Services Inc. www.sentrexwind.com will be retained for the construction, supply and coordinated installation of the met tower.

A third party monitoring company such as Sgurr Energy www.sgurrenergy.com will be retained for the design of the instrumentation package and the siting of the met tower on the lands. The monitoring company will also receive the data from the met tower on hourly intervals via cellular or satellite transmission for record keeping and analysis.

9. Time Schedule

The below table identifies the key activities and anticipated duration associated with the resource assessment. A timeline item has been added at the bottom of the table for the development and operation of a wind energy project, should the resource assessment be positive and commercially viable terms be identified for the future wind energy project.

Activity	Start	End	Deliverables
Land Use Application and Permitting	January 2018	May 2018	NavCanada & Transport Canada Permits Land Management Land Use Permit or Lease for the proposed project Site
Met tower procurement and fabrication	May 2018	June 2018	Met tower fabricated, instruments ordered and received. Ready for shipment to project Site.
Erection of met tower, instruments and commissioning	July 2018	July 2018	Equipment installed and communication link to established to begin recording wind and environmental data
Monitoring Period	Summer 2018	Summer 2020	Environmental Data Collection Period
Reporting and Recommendations	Spring 2020	Spring 2020	Deliverables include release of finalized environmental assessment, energy yield assessment, and comprehensive project plan
Wind Power Project (if approved)	Summer 2021	Year 2046	Construction and operation period for the production of clean, renewable energy for the use in the Community of Rankin Inlet.

10. Name and Address of Field Supervisor

A local field supervisor will be determined upon successful completion of the land use and permitting phase. For communication purposes until that time, Malek Tawashy will be the Applicant's primary contact

11. Number of Employees

The number of employees anticipated to be involved in the design and construction of the met tower is twelve (12).

12. Area Used (hectares)

The general area being applied for is generously sized for the development of a utility scale wind power project should the initial resource assessment phase be successful. The area being applied for under this land use application (or lease) is therefore approximately 5.9 hectares with the opportunity to reduce the area once the comprehensive project plan has been produced within the first two (2) years of the land use permit.

Conclusion

Thank you for the opportunity to submit this land use application. It is our request that the land use permit include a right of first refusal for the applicant to enter into either a long term (25 year) lease or purchase of the identified area prior to the expiry of the land use permit period which is anticipated to be three (3) years. We are very excited about the future of clean energy in Canada's Northern Communities as well as the economic, social and environmental benefits that become possible with the same.

Malek Tawashy • Director



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