

Elizabeth Wright, Chair  
Gwich'in Land and Water Board  
105 Veterans Way, P.O. Box 2018  
Inuvik, NT X0E 0T0

March 14, 2018

**Inuvik Wind Project, Response to Review Comments - G18L8-001, G18X005**

Dear Ms. Wright,

Please find attached NWT Energy Corporation (03) Ltd.'s (NTEC) response to review comments submitted for the above stated Land Use Permit and Water License applications. Our submission is organized under the following headings:

- Response to reviewer comments submitted by November 30<sup>th</sup>, 2019;
- Response to draft Land Use Permit Conditions;
- Response to comments submitted by Inuvik Native Band on February 25<sup>th</sup>, 2019 and Nihtat Council on February 27<sup>th</sup>, 2019; and
- Results of spring and fall bird surveys.

As outlined in our attached submissions, the Government of the Northwest Territories, Department of Infrastructure (INF), on behalf of NTEC, has engaged with the Gwich'in Tribal Council, Nihtat Gwich'in Council, Inuvik Native Band and Nihtat Corporation through all phases of feasibility and project development. NTEC has also worked collaboratively, to the greatest extent possible, in conducting environmental and archaeological baseline study work and in the design and completion of the Traditional Knowledge (TK) and Traditional Land Use (TLU) workshop. The project represents a unique opportunity for the NWT to reduce its Greenhouse Gas Emissions, incorporate renewable energy into Inuvik's electricity system and help to meet the GNWT's commitments under the Pan Canadian Framework on Clean Growth and Climate Change.

We respectfully request that the Gwich'in Land and Water Board approve issuance of the Land Use Permit and Water License to allow this important project to proceed.

If you have any questions regarding this submission, please contact Peter Lennie-Misgeld at (867) 767-9021 extension 32015.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Paul Grant', with a long horizontal stroke extending to the right.

Paul Grant, Acting/Chief Executive Officer  
NWT Energy Corporation (03) Ltd.

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Elizabeth Wright, Chair  
Gwich'in Land and Water Board  
105 Veterans Way, P.O. Box 2018  
Inuvik, NT X0E 0T0

March 13, 2018

**Inuvik Wind Project, Response to Nihtat Gwich'in Council and Inuvik Native Band Review Comments - G18L8-001, G18X005**

Dear Ms. Wright,

Please find below NWT Energy Corporation (03) Ltd.'s (NTEC) response to comments submitted by the Nihtat Gwich'in Council and the Inuvik Native Band.

The Government of the Northwest Territories, Department of Infrastructure (INF), on behalf of NTEC, has endeavoured to work in the spirit of collaboration with the Gwich'in Tribal Council, Nihtat Gwich'in Council, Inuvik Native Band and Nihtat Corporation during all phases of the Inuvik Wind Project (the Project). Engagement with the Gwich'in Tribal Council included sharing information on the proposed Project, identifying any potential issues or concerns, and committing to work together as the project evolved. On the business component of the Project, the Gwich'in Tribal Council directed INF to negotiate directly with the Gwich'in Development Corporation and the Nihtat Corporation and that process is ongoing.

In their submissions, the Nihtat Gwich'in Council and Inuvik Native Band note that the Board should not proceed with approving the Land Use Permit and Water License until NTEC has addressed the significant and ongoing social, economic, environmental and cultural impacts that may result from the Project. However, both the Nihtat Gwich'in Council and Inuvik Native Band did not provide any specific information or recommendations to help understand what impacts are of interest or concern to them and did not provide any detailed information on the social, cultural, environmental and economic issues that they state will directly affect them if the project is to proceed.

Early discussions with the Gwich'in Tribal Council and the Gwich'in Department of Cultural Heritage suggested that a Traditional Knowledge (TK) and Traditional Land Use (TLU) study and workshop would be beneficial to help understand how the area is used by local people, to help shape the Project's management decisions and to contribute to its ultimate success. As part of the process to develop the methodology for the workshop, engagement was completed with Indigenous Governments, including the Gwich'in Tribal Council, Nihtat Gwich'in Council and Inuvik Native Band, as well as regulatory authorities and organizations in the Inuvik area. This collaborative approach also contributed to obtaining the necessary Gwich'in Tribal Council Research Agreement, Aurora College Research Ethics Committee Research Approval, and Aurora Research Institute Scientific Research Licence to conduct the research.

The Nihtat Corporation Ltd is wholly owned by the Nihtat Gwich'in Council. The Nihtat Corporation successfully competed for and won competitively bid contracts in three successive years of feasibility work on the Inuvik Wind Project as it moved from wind resource assessments through to design feasibility. From October 2016 through to March 31<sup>st</sup>, 2019 Nihtat Corp was awarded over \$ 1.5 million dollars in competitively bid GNWT contracts to lead work on the Inuvik Wind Project.

As part of this work, three technical workshops were held in October 2017, December 2017 and February 2018 that included representatives from the Nihtat Corporation. The technical workshops focused on engineering, economic, environmental, procurement and other technical aspects associated with constructing the Project. INF also held an open house in Inuvik on March 6<sup>th</sup>, 2018 to provide an update on the Project.

For the detailed feasibility study conducted in 2018, Nihtat Corporation was responsible for leading and reviewing environmental and archaeological baseline studies and for ensuring that these studies were completed in accordance with regulatory and scientific requirements. These baseline studies helped assess the potential environmental effects of construction and operation of the Project. This included a wildlife baseline study, spring bear den survey, fall and spring migratory bird surveys, archaeological/heritage assessment. (Please refer to baseline reports - Appendices C,D,E,F and G of the Land Use Permit and Water License supporting documents for further details).

NTEC would also like to note that information requirements for Land Use Permit and Water License applications to the Gwich'in Land and Water Board (the Board) include requirements to include information on engagement with affected parties, particularly with affected Aboriginal organizations and governments. In its submission, NTEC filed information in accordance with all relevant Board guidelines and policies, including the Board's Engagement and Consultation Policy. Extensive information on engagement was included with NTEC's Land Use Permit and Water License applications and the Board declared the applications complete on November 9, 2018. The Board's Engagement and Consultation Policy states that reasonable efforts should be made in setting expectations for engagement and consultation processes and also notes that under the current statutory framework, there is no funding for public participation in regulatory proceedings (MVLWB Engagement and Consultation Policy page 9, footnote 7).

The TK and TLU workshop held on March 7-8, 2018 included both Gwich'in and Inuvialuit elders, land users and youth that were invited to share information on the project, how the Project area is used by local people and to collect and document information on the historic and current TLU in the Project area. A total of 18 attendees participated in the workshop and an additional three land users, who were unable to attend the workshop, were also interviewed. Participants were compensated to attend the workshop and all participants noted that the workshop was positive and productive. INF established an inclusive, community-based approach to conducting the study and workshop from its earliest stages

(page 17, TK/TLU workshop report - Appendix E of the Land Use Permit and Water License supporting documents).

Through the workshop, the study research team was able to collect feedback about the Project and its potential effects. With this information and the valued contributions of participants, the Project became better informed with TK and TLU information and community feedback, which helped to guide the Project's management decisions and direction and helped to support and enhance the Project's regulatory and permitting applications.

In the workshop no concerns were expressed regarding effects to certain wildlife species or ecosystem components (Please refer to TK/TLU workshop report - Appendix E of the Land Use Permit and Water License supporting documents). Nihtat Gwich'in Council noted in their submission that best practices should be used for selection of valued components. The TK/TLU workshop referenced above is an example of how a best practice was used to collect information on how the Project area is used by local people and to help understand any potential effects.

Based on the evidence provided in our Land Use Permit and Water License applications and supporting information and the numerous opportunities for Indigenous Governments and all other project stakeholders to be involved in the process, we feel that the standard for adequate engagement has been met. We are confident that the Project as proposed will result in positive environmental and economic impacts to Inuvik, Gwich'in participants and Gwich'in businesses in the Gwich'in Settlement Area.

We trust that our submission will help clarify the issues raised by the Nihtat Gwich'in Council and Inuvik Native Band.

If you have any questions regarding this submission, please contact Peter Lennie-Misgeld at (867) 767-9021 extension 32015.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Paul Grant', with a stylized flourish extending to the right.

Paul Grant, Acting/Chief Executive Officer  
NWT Energy Corporation (03) Ltd.

Cc Bobbie Jo Greenland-Morgan, Grand Chief, Gwich'in Tribal Council

## NWT Energy Corporation (03) Ltd. Response to Review Comments

### Inuvik Wind Project, G18L8-001, G18X005

#### Environment and Climate Change Canada (ECCC)

##### **Section 6.2- Birds and Bats Appendix C- Section 3.2 - Bird Field Surveys**

**Comment:** ECCC reviewed and provided comments, consistent with our guidance (ECCC 2007a, 2007b), on the initially proposed bird baseline surveys for this project. ECCC also met with the Proponent to further discuss timing of bird migration surveys. However, ECCC was not provided the results of the bird surveys. Results from the spring and fall bird migration surveys in Appendix C are described using relative terms (e.g. “few”, “low”) without providing the actual counts or abundance of birds recorded. This more detailed type of information would be necessary to confirm the risk assessment. Reference: Environment Canada 2007 a. Wind Turbines and Birds - A guidance Document for Environmental Assessment. Reference: Environment Canada 2007 b. Recommended Protocols for Monitoring Impacts of Wind Turbines on Birds.

**Recommendation:** ECCC recommends that the Proponent provide all information gathered during the spring and fall bird field surveys in order to support the submission.

**NTEC Response:** *The requested information is attached to this submission.*

**Comment:** ECCC notes that fog and poor visibility affected baseline surveys and represents an increased collision risk to birds. ECCC supports proposed mitigations for birds in section 6.2.3, at a minimum. ECCC agrees that collisions with the turbines are the greatest threat to birds for the project and that the project’s impacts may not result in significant changes to local populations.

**Recommendation:** ECCC recommends that these predictions be validated through follow-up monitoring (ECCC 2007a). The results of monitoring should be used to adaptively manage operations of the turbine, and could lead to additional mitigations such as deterrence or operational minimization during high risk periods. Reference: Environment Canada 2007 a. Wind Turbines and Birds - A guidance Document for Environmental Assessment.

**NTEC Response:** *NWT Energy Corporation (03) Ltd. (NTEC) staff will be trained to monitor for any occurrences of bird mortality during wind turbine operations. Any instances of bird mortality will be documented.*

#### Department of Fisheries and Oceans

**Comment:** The proposal has been reviewed to determine whether it is likely to result in serious harm to fish which is prohibited under subsection 35(1) of the Fisheries Act unless authorized. The proposal has also been reviewed to determine whether it is likely to affect listed aquatic species at risk, any part of

their critical habitat or the residences of their individuals in a manner which is prohibited under sections 32, 33 and subsection 58(1) of the Species at Risk Act, unless authorized.

**Recommendation:** Provided that the plans are implemented in the manner, and during the timeframe, described, the Program has determined that the proposal will not result in serious harm to fish or prohibited effects on listed aquatic species at risk. As such, an authorization under the Fisheries Act or a permit under the Species at Risk Act is not required at this stage.

**NTEC Response:** *NTEC agrees with this recommendation.*

### **Department of Education, Culture and Employment**

**Comment:** During initial discussions of the proposed project with Hemmera Envirochem Inc, the Culture and Heritage Division of ECE recommended that an Archaeological Overview Assessment (AOA) and an Archaeological Impact Assessment of areas of high archaeological potential identified through the AOA be completed prior to development activities. An AOA and AIA were subsequently completed, and the AOA Report and the AIA Interim Report have been accepted by the PWNHC.

**Recommendation:** No further archaeological work is required for the Inuvik Wind Project as it is currently defined. The proponent should inform the Culture and Heritage Division if the project footprint changes.

**NTEC Response:** *NTEC will contact ECE if the project footprint changes.*

### **Department of Environment and Natural Resources**

#### **Topic 1: Industrial and Solid, Liquid or Sewage Waste Disposal**

**Comment:** If the Proponents Waste Management Plan or methods of waste disposal indicate that project waste, or industrial waste, will be transported to community infrastructure for disposal, the Proponent should not assume they may deposit industrial wastes, generated outside of community boundaries, in Northwest Territories community Solid and Liquid Waste Disposal Facilities.

**Recommendation:** Should the Proponent intend to deposit waste in an NWT community Solid and Liquid Waste Disposal Facility, ENR requests that the Proponent demonstrate in the Waste Management Plan, and to the Board, that the receiving communities' Solid and Liquid Waste Disposal Facility holds a Water Licence that authorizes the disposal of any industrial waste streams originating from outside municipal boundaries. The Proponent should also demonstrate to the Board that the community has been consulted, and has consented in writing, regarding the use of its infrastructure for disposal of the waste streams and quantities in question, and the disposal of such wastes will not contravene the Waters Act or the Environmental Protection Act and related Regulations and Guidelines.

**NTEC Response:** *The Waste Management Plan noted that the majority of waste will be generated during the construction phase of the project, and small volumes of waste will generated during operations and*

*maintenance. Prior to disposing of any waste at the Inuvik landfill, NTEC will notify and get approval from the Town of Inuvik to use the landfill facility.*

## **Topic 2: Hazardous Waste Management**

**Comment:** All Proponents that generate hazardous wastes must be registered as a generator of hazardous waste in the NWT. The Guideline for the General Management of Hazardous Waste in the NWT defines hazardous waste and outlines the roles and responsibilities of generators, carriers, and receivers of hazardous waste in the NWT. The ENR, Environment Division (ED) registers generators, carriers, receivers, and tracks the disposal of hazardous waste generated in the NWT to registered receiving facilities on hazardous waste movement documents (manifest). The definition of hazardous waste includes all waste materials that are 'dangerous goods' according to the Transportation of Dangerous Goods Regulations, and any additional waste of special concern that the ED has determined hazardous until proven otherwise, including but not limited to: a) incinerator waste and/or residuals (including bottom ash and fly ash); b) any liquid or solid wastes contaminated with refined petroleum products; c) bilge wastes; d) vehicle or vessel servicing wastes e) drilling wastes; f) produced fluids (Glycol / Hydrocarbon / Inorganic Mixtures); g) tailings; and h) any hydrocarbon, lead, mercury or other forms of contaminated soils. The Guideline for the General Management of Hazardous Waste in the NWT and the Transportation of Dangerous Good Regulations may be found at the following sites:  
[http://www.enr.gov.nt.ca/sites/enr/files/guidelines/general\\_management.pdf](http://www.enr.gov.nt.ca/sites/enr/files/guidelines/general_management.pdf)  
<http://www.tc.gc.ca/eng/tdg/clear-menu-497.htm>

**Recommendation:** If the Proponent is using or generating hazardous waste, they must register as a generator of hazardous waste in the NWT and track the disposal of hazardous waste from the site activities to registered receivers on hazardous waste movement documents provided by ENR. Please contact the Environment Division, ENR to register or for more information contact Mr. Lee Ross, Hazardous Waste Management Specialist, Environment Division by email ([Lee.Ross@gov.nt.ca](mailto:Lee.Ross@gov.nt.ca)) or by phone (867) 767-9236 extension 53187.

**NTEC Response:** *It anticipated that the project will not generate any hazardous waste, but if hazardous waste is generated, NTEC will register as a generator of hazardous wastes in the NWT and track disposal as required by ENR.*

## **Topic 3: Fuel Storage and Spill Contingency Planning and Reporting**

**Comment:** ENR acknowledges the proponent's Spill Contingency Plan. In addition, the Proponent should also follow best practices for fuel storage and spill containment during project activities which may include the following recommendations.

**Recommendation:** To assist in spill contingency planning, information is provided in EPA Spill Contingency Planning and Reporting Regulations found here: <https://www.justice.gov.nt.ca/en/files/legislation/environmental-protection/environmental-protection.r2.pdf>. If clarification or further information is needed please contact the Environment Division, ENR directly to aid in the development of the Plan.

**NTEC Response:** *Section 1.6 of the Spill Contingency Plan notes that any revisions to the plan will be submitted to the GLWB for approval. If required, NTEC will contact ENR if additional information on spill contingency planning is needed.*

**Recommendation:** In accordance with the Spill Contingency Planning and Reporting Regulations Section 10, all spills in accordance with Schedule B must be reported immediately to the 24-hour Spill Report Line (867) 920-8130.

**NTEC Response:** *NTEC will report all spills to the 24-hour Spill Report Line.*

**Recommendation:** With respect to the Environmental Protection Act Section 5 (1b) all spills, regardless of amount, must be cleaned up, and contaminated materials disposed of at an approved facility, or in an approved manner. Additionally, as indicated in Section 5(1c) all reasonable efforts must be made to notify any parties affected or potentially affected by the spill.

**NTEC Response:** *Section 3.0 of the Spill Contingency Plan outlines potential actions that will be taken in the event of a spill and NTEC will respond to any spills in accordance with Spill Contingency Plan and regulatory requirements.*

**Recommendation:** Fuel storage areas should be greater than 100m distance from the ordinary high water mark of a water body and not located in a drainage channel.

**NTEC Response:** *No fuel will be stored on site. For refueling of equipment, portable diesel fuel trucks will drive to the site and fill up equipment when needed. Fuel transfers would work analogously to pumping fuel at a gas station, including a powered pump nozzle that feeds directly into the equipment's fuel tank.*

**Recommendation:** All fuel or storage vessels containing hazardous substances left for extended periods of time (including overnight in vehicles), should be stationed in an area that contains sufficient secondary containment (i.e. Drip pans, lined bermed areas, double walled enviro-tanks etc.).

**NTEC Response:** *As noted above, no fuel will be stored on site.*

**Recommendation:** It is recommended spill kits be provided. Personnel should be trained to ensure that in the event of a spill it is contained and remediated appropriately to industry-accepted best practices and regulatory approval. In case refuelling takes place near water, in water spill planning should be considered to prevent inadvertent releases.

**NTEC Response:** *Contractors will be required to meet spill contingency plan requirements, including use of spill kits. Refueling will not take place near waterbodies.*

**Recommendation:** ENR recommends, for the operator's convenience and increased environmental protection, that all heavy equipment and refuelling vehicles carry portable spill kits that include items such as absorbent pads, containment booms, and spill pool catchment receptacles. Readily available and fully stocked spill kits can effectively mitigate potential spills.



**NTEC Response:** *As noted above, contractors will be required to meet spill contingency plan requirements, including use of spill kits.*

#### **Topic 4: Wildlife: NWT Listed and Pre-listed Species at Risk**

**Comment:** Sections 76 and 77 of the Species at Risk (NWT) Act require the Minister of Environment and Natural Resources to make a submission to the body responsible for assessing the potential impacts of a proposed development, or for considering a Land Use Permit or Water Licence application, respecting the potential impacts of the proposed development, Permit or Licence application on a NWT-listed or pre-listed species or its habitat. NWT-listed species are those that are on the NWT List of Species at Risk. Pre-listed species are those that have been assessed by the NWT Species at Risk Committee (SARC) but have not yet been added to the NWT List of Species at Risk. The Proponent should be aware that NWT-listed or pre-listed species at risk and their habitat may also be subject to protection under existing sections of the NWT Wildlife Act. As a best practice, ENR encourages the Proponent to consider potential impacts, mitigation measures and monitoring requirements for species at risk listed under the federal Species at Risk Act, as well as those designated as at risk by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) that may occur in the project area, and the prohibitions that may apply to these species under federal legislation. The project area overlaps with the ranges of the following NWT-listed and/or pre-listed species: • Boreal Caribou – Threatened in the NWT • Barren-ground Caribou - Threatened in the NWT • Grizzly Bear – Special Concern in NWT • Polar Bear – Special Concern in the NWT

**Recommendation:** Although the project overlaps with the range(s) of the species listed above, ENR is of the opinion that the scope, nature, areal extent, scale and/or timing of the proposed project are such that the likelihood of impacts to NWT-listed or pre-listed species at risk is minimal.

**NTEC Response:** *NTEC agrees with this recommendation.*

#### **Topic 5: Cumulative Effects Tracking**

**Comment:** Keeping track of the disturbance footprint of development activities is an important component of tracking and informing the management of cumulative effects on wildlife and wildlife habitat.

**Recommendation:** The Proponent should submit the bounding coordinates or geospatial data for the proposed project footprint and for the completed project footprint to the Land and Water Board for placement on the public registry. The Mackenzie Valley Land and Water Board's "Standards for Geographic Information Systems (GIS) Submissions" should be followed when submitting spatial data.

**NTEC Response:** *NTEC will submit GIS data to the Gwich'in Land and Water Board after construction of the access road and turbine is complete. This will ensure that GIS data accurately reflects final routing of the access road and turbine location.*

#### **Topic 6: Wildlife Abodes**

**Comment:** Subject to sub-section 51(2) of the Wildlife Act, it is illegal to break into, destroy, or damage a den, beaver dam or lodge, muskrat push-up or hibernaculum unless you have an Aboriginal or treaty right or a Permit to do so. Protection of dens, beaver lodges, muskrat push-ups, and hibernacula is essential to ensuring reproductive success and survival of both adults and young.

**Recommendation:** The Proponent should conduct pre-activity surveys within 800m of the project footprint to identify active bear dens if project activities will occur between September 30 and March 30. Surveys should be conducted in the fall to detect freshly dug dens.

**NTEC Response:** *A bear den survey was conducted in the spring of 2018 and the survey did not find any active bear dens in the project area. Results of the bear den survey are included in Supporting Information, Appendix C – Wildlife Baseline Technical Report*

**Recommendation:** If an active bear den is detected, or suspected, the Proponent should implement and maintain an 800 m exclusion zone until the bear emerges in spring.

**NTEC Response:** *As noted above, a bear den survey was conducted and no active bear dens were encountered in the project area.*

**Recommendation:** If a bear den and exclusion zone would result in the halt of part or the entire program, the Proponent should contact ENR to discuss alternative mitigation options. The location of active bear dens should be kept confidential between the developer and ENR until after emergence in the spring.

**NTEC Response:** *If an active bear den emerges during project construction on operation, NTEC will contact ENR to discuss mitigation options. .*

**Recommendation:** It is recommended that, if encountered, beaver lodges, muskrat push-ups, and hibernacula are not disturbed or damaged.

**NTEC Response:** *NTEC will not disturb or damage beaver lodges, muskrat push-ups or hibernacula.*

## **Topic 7: Wildlife Attractants and Waste Management**

**Comment:** Subject to sub-section 66(1) of the Wildlife Act no person shall store food, waste, or other substances in a manner that may attract big game or other prescribed wildlife and put people, domestic animals, or wildlife in danger. Subject to sub-section 65(1) of the Wildlife Act, it is illegal to intentionally feed big game, furbearers or other prescribed wildlife. Schedule A – Part 2 of the Wildlife General Regulations sets out the species prescribed as fur-bearers.

**Recommendation:** The Proponent should utilize food and garbage handling and storage procedures that will minimize the attraction of wildlife.

**NTEC Response:** *Section 4.3.4 of the Waste Management Plan notes that refuse materials will be removed from the Project site on a regular basis. NTEC and its contractor(s) will not allow refuse to*

*accumulate on-site for extended periods of time. Refuse that may be a wildlife attractant will be disposed of on a daily basis. Other refuse will be disposed of on a weekly basis.*

**Recommendation:** The Proponent should store all food, waste, washed recyclables and debris that may attract wildlife within sealed animal proof containers until final disposal.

**NTEC Response:** *As noted above, NTEC and its contractor(s) will not allow refuse to accumulate on-site for extended periods of time. Refuse that may be a wildlife attractant will be disposed of on a daily basis.*

**Recommendation:** The Proponent should ensure that sealed animal proof containers are cleaned once emptied to minimize the attraction of wildlife.

**NTEC Response:** *As noted above, and refuse that may be a wildlife attractant will be disposed of on a daily basis.*

**Recommendation:** The Proponent should ensure that all grey water (dishwater, showers, laundry, etc.) and black water (sewage) are treated and disposed of in a manner that will minimize the attraction of wildlife.

**NTEC Response:** *Some temporary construction structures will be used during construction to provide shelter, bathroom facilities and a place to for personnel to have lunch and refreshments. All grey water and sewage will be hauled out with pump out trucks and disposed of at Town of Inuvik facilities.*

**Recommendation:** The Proponent should remove all waste petroleum products including used oil filters, rags, scrap metal, discarded machinery, parts, drums, barrels, or plastics to an approved waste disposal facility.

**NTEC Response:** *NTEC will dispose of any waste petroleum products at the Inuvik Waste Disposal Facility.*

#### **Water Licence Application Topic 8: Water Sources**

**Comment:** Section 6 explains that water extraction during construction will be sourced from either Dolomite Lake or Campbell Creek. As well, the daily water withdrawal is not expected to exceed 100 m<sup>3</sup>, although may be up to 110 m<sup>3</sup> according to section 7. Since no additional information on the source waterbodies was provided in the Water Licence application, reviewers cannot evaluate the potential impact to these source waterbodies. ENR notes it is the responsibility of the proponent to provide information required to assess potential environmental impacts to ensure its application is complete.

**Recommendation:** ENR recommends that water sources not be approved until additional information is provided including:

- Requested maximum annual quantities of water to be withdrawn from each source lake;
- Bathymetric information on Dolomite Lake including depths and available water under-ice;
- A comparison of total water volumes requested from the source against total water available under-ice; and
- The potential impacts to the rate of flow of Campbell Creek.

If the above is not available to the applicant, the applicant should at the very least provide a table top assessment of the size, depth and volume of water available in each source.

**NTEC Response:** *Water will only be used for dust suppression activities on the access road and project site as required and would likely only occur during the summer season when dust could be a factor. Prior to drawing water from any waterbodies, NTEC will notify the GLWB on which waterbodies will be used and the estimated volumes of water to be used.*

**Recommendation:** ENR recommends the Board identify in Part C of the Water Licence each water source that may be used for water withdrawal and the maximum quantity that may be withdrawn annually from each source.

### **Topic 9: Rinsing Equipment**

**Comment:** Section 6 outlines the various uses of water that will occur during the project which includes rinsing construction equipment to prevent transfer of invasive plant species. ENR notes all equipment should arrive at site having already been rinsed to prevent the introduction of invasive plant species into the surrounding environment. As well, should construction equipment require rinsing prior to leaving the site, ENR notes trays should be used to catch runoff and allow for proper disposal of any potentially contaminated water.

**Recommendation:** ENR recommends NWT Energy ensure construction equipment is rinsed prior to arriving at site to prevent the introduction of invasive species to the surrounding environment.

**NTEC Response:** *NTEC and its contractors will inspect equipment before final mobilization to the site, and if necessary, will rinse equipment as needed. Rinsing of equipment will be done at a location where runoff cannot enter the environment.*

**Recommendation:** Further, should construction equipment be rinsed prior to leaving the site, ENR recommends NWT Energy ensure trays or an equivalent are used to catch runoff and ensure any potentially contaminated water is properly disposed.

**NTEC Response:** *NTEC and its contractors will inspect equipment before final mobilization from the site, and if necessary, will rinse equipment as needed.*

### **Unused water**

**Comment:** Section 7 explains that no water will be returned to the source or will be allowed to re-enter natural water bodies unless unused. ENR isn't clear as to the circumstances that would necessitate water uptake and would result in unused water. Additionally, it isn't clear where the water would be stored and what the maximum quantity of water is that may be unused.

**Recommendation:** ENR recommends NWT Energy provide further information as to the circumstances that could result in unused water.

**NTEC Response:** *All water drawn from water sources will be used in its entirety and no water will be returned to the environment.*

**Recommendation:** ENR recommends NWT Energy provide additional information on the location of water storage and the maximum quantity of water that may be unused.

**NTEC Response:** *As noted above, all water drawn from water sources will be used in its entirety. No water will be stored or returned to the environment.*

#### **Draft Water Licence Topic 11: Definitions**

**Comment:** Part A, Condition 2 of the draft Water Licence lists definitions. ENR notes definitions for terms not otherwise used in the Water Licence should not be included. Terms such as analyst, drilling fluids, engineered structures, groundwater, modification, professional engineer, sump, toxic material and wastewater are currently defined in the draft Water Licence but are not used elsewhere in the Water Licence. As well, the term “Spill Contingency Plan” is defined in the draft Water Licence. ENR notes there is a link in the middle of the definition that appears to be an error.

**Recommendation:** ENR recommends the Water Licence only include definitions for terms that are used in the Water Licence.

**NTEC Response:** *NTEC agrees with this recommendation.*

**Recommendation:** ENR recommends the website link in the definition of “Spill Contingency Plan” be removed from the definition.

**NTEC Response:** *NTEC agrees with this recommendation.*

#### **Topic 12: Water Use Fees**

**Comment:** Part B, Condition 2 outlines the requirement to pay water use fees annually in advance of any water use, in accordance with the Mackenzie Valley Land and Water Board’s Water Use Fee Policy. ENR notes according to section 3 of the Waters Act, the Government of the Northwest Territories (NTEC) is not required to pay any fees for the right to use waters or deposit waste pursuant to a Water Licence. NWT Energy Corporation (03) Ltd. is a subsidiary of the NT Hydro Corporation which is governed by the Northwest Territories Hydro Corporations Act. Therefore, NTEC is a 100% owner of the NT Hydro Corporation.

**Recommendation:** ENR recommends Part B, Condition 2 be removed from the Water Licence and the corresponding definition for water use fee should also be removed.

**NTEC Response:** *NTEC agrees with this recommendation.*

#### **Topic 13: Part E, Condition 4**

**Comment:** Part E, Condition 4 requires the licensee to minimize erosion by implementing suitable erosion control measures that shall be in accordance with the Sediment and Erosion Control Plan, as

described in Part E, Condition 2. ENR notes the Sediment and Erosion Control Plan is described in Part E, Condition 3, not Condition 2.

**Recommendation:** ENR recommends Part E, Condition 4 of the Water Licence reference the appropriate condition that refers to the Sediment and Erosion Control Plan.

**NTEC Response:** *NTEC agrees with this recommendation.*

#### **Supporting Information Topic 14: Culvert Crossings**

**Comment:** Section 2.3.2 explains that it is anticipated that the access route will require some culverted crossings. Although it is identified in section 6.1 that two water features are present within the proposed road alignment and the widest appeared to be roughly two metres, it is not clearly identified that these are the watercourses that will require a culvert. ENR notes according to the Waters Regulations, training of watercourses that are greater than five metres wide at the ordinary high water mark are a trigger for a Type B Water Licence.

**Recommendation:** ENR recommends NWT Energy clarify if any of the watercourses that may require a culvert are more than five metres wide at the ordinary high water mark.

**NTEC Response:** *No watercourses are more than five metres wide at the ordinary high water mark along the access road or at the turbine site.*

#### **Dust Suppressants**

**Comment:** Section 6.3.3 explains that to limit dust production along the project access road and during construction activities, dust suppressants will be utilized on roads as required during construction. Further, section 6 of the Water Licence application identifies that water may be used during construction for dust management. ENR notes it isn't clear in the Supporting Information document if water will be the only substance used as dust suppressant.

**Recommendation:** ENR recommends NWT Energy clarify if any substances other than water will be used as dust suppressant during construction.

**NTEC Response:** *Only water will be used for dust suppression.*

**Recommendation:** If substances other than water are being proposed for dust suppressant, ENR recommends that additional information is provided including the MSDS for the chemical.

**NTEC Response:** *As noted above, only water will be used for dust suppression.*

#### **Waste Management Plan Topic 16: Recycling**

**Comment:** At the end of section 4.3.2, section 3.4 is referenced. ENR notes section 3.4 does not exist in the Waste Management Plan.

**Recommendation:** ENR recommends NWT Energy update the Waste Management Plan to reference the appropriate section.

**NTEC Response:** *NTEC will update the Waste Management Plan as requested.*

### **Spill Contingency Plan Topic 17: MSDS**

**Comment:** Section 1.8 identifies propane as the only hazardous materials that will be stored on site. As well, section 3.2 identifies diesel fuel, gasoline and waste oil and miscellaneous oil/grease as potential sources of spills. ENR notes Material Safety Data Sheets (MSDS) for hazardous materials should be included in an appendix to the Spill Contingency Plan.

**Recommendation:** ENR recommends NWT Energy include all necessary MSDS as an appendix to the Spill Contingency Plan.

**NTEC Response:** *NTEC will include all necessary MSDS in the Spill Contingency Plan.*

### **Topic 18: Potential Spill Sizes and Sources**

**Comment:** Section 3.1 identifies potential spill sizes and sources for hazardous material on-site. The listed sources include diesel fuel and gasoline. ENR notes according to Section 1.8, up to 5,000 litres of propane may be stored on site.

**Recommendation:** ENR recommends NWT Energy update section 3 of the Spill Contingency Plan to identify all sizes and sources of hazardous material on-site, including propane and include potential environmental impacts of a spill.

**NTEC Response:** *NTEC will update section 3 of the Spill Contingency Plan to identify and include all sizes and sources of hazardous material on-site.*

### **Topic 19: Map**

**Comment:** Although there are maps of the site included as part of the supporting documents package for the Land Use Permit and Water Licence applications, there is not a map included in the Spill Contingency Plan. Since the Spill Contingency Plan will be a standalone document used during construction and operations, a map should also be included in the plan.

**Recommendation:** ENR recommends NWT Energy include a map of the site in the Spill Contingency Plan that shows buildings, roads, culverts, water bodies with direction of flow, storage locations of hazardous material, storage locations of spill response equipment and, environmentally sensitive areas.

**NTEC Response:** *NTEC will include a map in the Spill Contingency Plan.*

### **Department of Lands**

**Comment:** Chapter 10.2 Methods of Fuel Transfer it says that a fuel truck (which is listed in Chapter 9.0 Equipment and Personnel) will drive out to the site and fill up equipment directly from the fuel truck,

but Appendix L Section 1.9 Preventative Measures the second paragraph says that spill kits will be located wherever fuel is stored or used on site.

**Recommendation:** I know they are building a road and have seen the fueling operations done before, but in Chapter 10.2 they are quite ambiguous about where exactly they will be filling up equipment. It says they would drive to the site and fill up equipment, but would that only be on the embankment or would they be transporting the diesel tanker over the tundra?

**NTEC Response:** *Refueling of equipment could take place either on the embankment or along the access road corridor depending on where the equipment is situated during construction. For refueling of equipment, portable diesel fuel trucks will drive to the site and fill up equipment when needed. Fuel transfers would work analogously to pumping fuel at a gas station, including a powered pump nozzle that feeds directly into the equipment's fuel tank.*

**Comment:** There is an existing Reserve (107B/7-172) at the site belonging to the NTEC – Department of Infrastructure (Proponent) which covers a 50 m<sup>2</sup> block of land. In this application the Proponent is the NWT Energy Corporation and they've applied for up to a 100 m<sup>2</sup> block of land disturbance. Herbert spoke to Shelley Hauck from Lands in YK and she indicated that there would have to be an amendment on the current Reserve 107B/7-172 in order for the project to carry on in that area. She also indicated that there might be a community consultation for that amendment to occur.

**Recommendation:** Also, because there are two different Proponents on that Reserve would there have to be an access agreement in place for the project?

**NTEC Response:** *The project is located on Commissioner's land. NTEC has been working with the Department of Lands to finalize the land reserve held by the Department of Infrastructure, on behalf of NTEC. NTEC is a crown corporation that is wholly owned by the GNWT and the project is located on Commissioners Land; therefore, it is NTEC's understanding that no access agreement is required for the project.*

**Comment:** They do not indicate which type of foundation would be selected for the Wind Tower itself, but indicate they may use either a steel or concrete foundation and build it using the best practices for protecting permafrost

**Recommendation:** Would we be able to request a copy of the construction design?

**NTEC Response:** *NTEC is still evaluating which exact foundation type will be used for the project. Once the foundation design has been finalized, NTEC will submit design drawings to the GLWB.*

**Comment:** It would be good to see the actual design of the embankment, because it says they may remove some vegetation for road construction. Under the current permit G17S009 they've already staked out, plowed trees/shrubs and flagged off the trail. Would it be necessary to remove more of the vegetative layer?



**Recommendation:** As for the permafrost protection would it not make more sense to build over the veg cover to help in keeping the ground cooler to avoid any likely hood of slumping in a permafrost area?

**NTEC Response:** *Removal of the vegetative layer will kept to a minimum in order to project the permafrost. Some vegetation will have to be removed, but no disturbance of the sub-surface layer will occur.*

**Comment:** The draft land use permit (condition 34) includes a standard condition requiring the permittee to post security, with the amount blank. The applicant, NWT Energy Corporation (03) Ltd. is a subsidiary of the NT Hydro Corporation which is governed by the Northwest Territories Hydro Corporations Act. The NTEC is the 100% owner of the NT Hydro Corporation. Under Section 94 of the MVRMA, the applicant is therefore exempt from posting security.

**Recommendation:** Do not include security requirements in the land use permit.

**NTEC Response:** *NTEC agrees with this recommendation. NTEC is a subsidiary of the NT Hydro Corporation which is wholly owned by the Government of the Northwest Territories and governed by the Northwest Territories Hydro Corporations Act.*

### **GTC Department of Cultural Heritage**

**Comment:** We have reviewed the above applications, and based on this review and the negative Archaeological Impact Assessment, we have no issues or concerns at this time. The area in question is seasonal habitat for caribou, and Gwich'in participants have traditionally used the area for harvesting caribou. There are several trails nearby.

#### **Recommendation:**

As with any application, if archaeological or heritage materials are encountered during the development within the Gwich'in Settlement Area, all work must cease immediately as required by law, and the DCH and the Prince of Wales Northern Heritage Centre in Yellowknife must then be contacted.

**NTEC Response:** *NTEC agrees with this recommendation will adhere to all legislative and regulatory requirements for encountering archaeological or heritage resources during project activities.*

### **Gwich'in Renewable Resources Board**

#### **Comment:**

Federally listed Species at Risk that may be present in the area include; Boreal caribou (*Rangifer tarandus caribou*), Grizzly bear (*Ursus arctos*), Gypsy cuckoo bumble bee (*Bombus bohemicus*), Little brown myotis (a bat which may be in the GSA) (*Myotis lucifugus*), Olive-sided flycatcher (*Contopus cooperi*), Peregrine falcon (*Falco peregrinus tundris*), Rusty blackbird (*Euphagus carolinus*), Short-eared owl (*Asio flammeus*), Wolverine (*Gulo gulo*).

**Recommendation:** n/a

**NTEC Response:** *NTEC appreciates the information that has been provided by the GRRB. Bat surveys were conducted as part of the wildlife baseline study and no bats were detected (Page 5 – Wildlife Baseline Report, Land Use Permit and Water License supporting information)*

**Comment:** Staff note there is the potential for raptor mortality by wind turbine operation, especially for medium to large size raptors. Peregrine Falcon and Rough-legged hawk nesting sites have been observed at Airport Lake less than 10 km away from the proposed wind turbine and may at risk of increased morbidity or mortality.

**Recommendation:** n/a

**NTEC Response:** *NTEC staff will be trained to monitor for any occurrences of bird mortality during wind turbine operations. Any instances of bird mortality will be documented.*

**Comment:** The access road will have a negative effect on wildlife by providing easier access for hunting activities.

**Recommendation:** Staff strongly recommend putting in place a permanent access gate to prevent unauthorized vehicle access. It is important to note that 4 wheelers and snowmobiles will probably still have access to the road by going around the gate, unless measure to discourage going around the gate are adopted.

**NTEC Response:** *As noted in Section 1.2, page 2 Supporting Information Application for Land Use Permit for the Inuvik Wind Project, NTEC will discuss installation of a gate to restrict access with the Department of Lands to determine an appropriate location.*

**Recommendation:** During construction and use of the access road, staff recommend the proponent suspend activities temporarily if caribou, moose, grizzly bear and muskoxen are spotted within 500m of any work site. Do not attempt to harass or 'encourage' wildlife to move away from the site. Resume activities once the animal(s) have left the area. Give wildlife right of way whenever possible.

**NTEC Response:** *NTEC agrees with this recommendation.*

**NWT Energy Corporation (03) Ltd. Response to Draft Land Use Permit**

**Inuvik Wind Project, G18L8-001, G18X005**

**Land Use Permit Draft Condition #2**

**WIDTH RIGHT-OFWAY**

**“The Permittee shall confine the width of the right of way to a maximum of ten (10) metres, unless otherwise authorized in writing by a Land Use Inspector. The Permittee shall not clear a right-of-way that is wider than 12 metres”.**

*NTEC Response:*

*Section 2.3.2 of the supporting information filed with the Land Use Permit and Water License applications states:*

*“The area of disturbance will generally be 20 m on either side of road but may be up to 50 m or more if construction conditions require it in specific locations. The study areas for field surveys were scoped accordingly”.*

*NTEC needs the right-of-way to be wide enough to allow for construction of the access road and the transmission line to connect the wind turbine to Inuvik’s existing electricity infrastructure. A right-of-way width of 30m is required to accommodate transportation of large wind turbine components, operation of a large crane (11m wide body) and supporting vehicles. Right-of-way for the access road consists of the following:*

- *5m on each side of the road center line, total of 10m road width.*
- *5m toe sloping from road to ground.*

*Depending on the detailed site specific conditions (e.g. slope direction, topography) along the road route, the entire 30m may not be required for certain sections of the road, but this cannot be confirmed until construction activities commence.*

*The additional 10m of right-of-way is needed for installation of the transmission line and to allow for adequate clearance on either side of the line to meet safety standards. Under the Canadian Standards Association electrical code requirements, transmission lines have to be constructed to meet clearance standards between individual electrical lines and between electrical lines and the ground as well as trees or other tall objects, to prevent electrical malfunctions or arcing. For transmission line installation and operation, a 10m right-of-way will provide adequate room to meet clearance standards and allow equipment to manoeuvre for*

*installation of transmission line poles and electrical lines. NTEC requests that the Board change this condition to expand the right-of-way width to 40m to accommodate both access road and transmission distribution line construction and operation.*

**Land Use Permit Draft Condition #14**

**PREVENTION OF RUTTING**

**“The Permittee shall prepare the site in such a manner as to prevent rutting of the ground surface”.**

**Land Use Permit Draft Condition # 15**

**SUSPEND OVERLAND TRAVEL**

**“The Permittee shall suspend overland travel of equipment or vehicles at the first sign of rutting”.**

**Land Use Permit Draft Condition # 16**

**VEHICLE MOVEMENT FREEZE-UP**

**“The Permittee shall not move any equipment or vehicles unless the ground surface is in a state capable of fully supporting the equipment or vehicles without rutting or gouging”.**

*NTEC Response:*

*Conditions 14, 15 and 16 restrict operations of equipment and vehicles to winter frozen-ground conditions. Initially, NTEC had planned for access road construction to occur during the winter season but the extension of the public review period to February 28, 2019 has eliminated the possibility of completing access road construction during this year’s winter season. In order to meet the project schedule for installation of the wind turbine, summer construction of the access road may be required. NTEC respectfully requests that these conditions be deleted or amended to allow for summer construction to proceed.*

Species	Number	Height (m)	Heading / Bearing	Behaviour	Date	Observation Time	Site	Location Lat	Location Long	Wind Speed	Wind Direction	Cloud Cover (%)	Cloud Ceiling (m)	Precipitation	Fog	Observation Comment	
AMW - American Wigeon	4	0	Unknown	Local	5/22/2018	12:51 PM	Inuvik - High Point Turbine Location	68° 21' 24.667' N	133° 24' 27.667' W	5	branches	N	200-500	Light	Light	Pair in pond near high point 2	
ARTE - Arctic Tern	1	50	N	Straight Flight	5/24/2018	12:47 PM	Inuvik - High Point Turbine Location	68° 21' 24.667' N	133° 24' 27.667' W	5	branches	N	100	200-500	None	Light	Single tern approx 1 km west of high point
ATSP - American Tree Sparrow	3	1	S	Land / Perch on Structure	11-19-09	3:54 PM	Inuvik - High Point Turbine Location	68° 21' 24.131' N	133° 24' 27.231' W	2	wind felt	S	80	1000+	None	None	Obs flying around high point
ATSP - American Tree Sparrow	3	1	Unknown	Land / Perch on Structure	2018-01-09	10:32 AM	Inuvik - High Point Turbine Location	68° 21' 24.127' N	133° 24' 27.752' W	2	wind felt	SW	100	500-1000	Moderate	Light	At least three ATSP flew past high point. Landed on shrubs as they flew past
ATSP - American Tree Sparrow	10	1	Unknown	Land / Perch on Structure	8/3/2002	1:11 PM	Inuvik - High Point Turbine Location	68° 21' 24.557' N	133° 24' 27.871' W	5	branches	N	100	200-500	None	None	Approx ten ATSP flew through high point. Landed in shrubs while they flew through
ATSP - American Tree Sparrow	2	1	Unknown	Local	5/20/2018	10:02 AM	Inuvik - High Point Turbine Location	68° 21' 24.147' N	133° 24' 27.677' W	3	branches	SE	100	1000+	None	None	Circling near high point
COLO - Common Loon	2	150	N	Straight Flight	5/29/2018	8:20 PM	Inuvik - High Point Turbine Location	68° 21' 24.411' N	133° 24' 27.311' W	2	wind felt	N	0	1000+	None	None	Flew directly over high point
COLO - Common Loon	1	200	N	Straight Flight	5/29/2018	7:49 PM	Inuvik - High Point Turbine Location	68° 21' 24.557' N	133° 24' 27.671' W	2	wind felt	N	50	1000+	None	None	Flew within half km of high point
COLO - Common Loon	1	500	N	Circling	5/28/2018	7:58 PM	Inuvik - High Point Turbine Location	68° 21' 24.411' N	133° 24' 27.311' W	2	wind felt	N	0	1000+	None	None	Observed near 2 km away
CORA - Common Raven	2	20	Unknown	Local	9/15/2018	12:33 PM	Inuvik - High Point Turbine Location	68° 21' 24.267' N	133° 24' 27.317' W	2	wind felt	S	0	1000+	None	None	Circled around high point
CORA - Common Raven	2	20	Unknown	Local	9/15/2018	2:09 PM	Inuvik - High Point Turbine Location	68° 21' 24.267' N	133° 24' 27.317' W	2	wind felt	S	0	1000+	None	None	Circled around high point
CORA - Common Raven	4	20	Unknown	Local	9/13/2018	2:45 PM	Inuvik - High Point Turbine Location	68° 21' 24.267' N	133° 24' 27.317' W	2	wind felt	S	0	1000+	None	None	Flew past high point
CORA - Common Raven	1	30	Unknown	Local	9/14/2018	12:29 PM	Inuvik - High Point Turbine Location	68° 21' 24.267' N	133° 24' 27.317' W	2	wind felt	S	0	1000+	None	None	Flew past high point
CORA - Common Raven	2	40	E	Straight Flight	9/13/2018	10:56 AM	Inuvik - High Point Turbine Location	68° 21' 23.987' N	133° 24' 27.367' W	2	wind felt	N	0	1000+	None	Moderate	Flew past high point to the north
CORA - Common Raven	3	30	Unknown	Local	9/13/2018	1:53 PM	Inuvik - High Point Turbine Location	68° 21' 23.987' N	133° 24' 27.367' W	2	wind felt	N	0	1000+	None	Moderate	Flew past high point
CORA - Common Raven	11	20	W	Straight Flight	2018-12-09	1:21 PM	Inuvik - High Point Turbine Location	68° 21' 23.967' N	133° 24' 27.607' W	2	wind felt	S	0	1000+	None	None	Flew over high point
CORA - Common Raven	3	30	Unknown	Local	8/23/2018	11:28 AM	Inuvik - High Point Turbine Location	68° 21' 24.267' N	133° 24' 27.871' W	5	branches	N	100	500-1000	None	None	Flying west of high point. Obs around high point each day of surveys
CORA - Common Raven	3	30	Unknown	Local	8/29/2018	11:38 AM	Inuvik - High Point Turbine Location	68° 21' 24.887' N	133° 24' 27.245' W	3	leaves an	S	100	0-200	None	Moderate	Large flock of ravens flew past high point and landed in alpine to the east of high point
CORA - Common Raven	30	30	Unknown	Local	8/29/2018	1:38 PM	Inuvik - High Point Turbine Location	68° 21' 24.887' N	133° 24' 27.245' W	3	leaves an	S	100	0-200	None	Moderate	Large flock of ravens flew past high point and landed in alpine to the east of high point
CORA - Common Raven	2	30	Unknown	Local	8/27/2018	11:52 AM	Inuvik - High Point Turbine Location	68° 21' 24.487' N	133° 24' 27.731' W	4	dust and	S	100	200-500	None	Light	Observed near 2 km away
CORA - Common Raven	1	20	Unknown	Local	5/21/2018	9:20 AM	Inuvik - High Point Turbine Location	68° 21' 24.557' N	133° 24' 27.557' W	5	branches	S	10	1000+	None	None	Flew over high point calling. Observed ravens here every day
CORA - Common Raven	4	10	Unknown	Local	5/30/2018	9:40 AM	Inuvik - High Point Turbine Location	68° 21' 24.124' N	133° 24' 27.677' W	3	leaves an	SE	0	1000+	None	None	Flew by high point
CORA - Common Raven	1	30	NE	Straight Flight	5/30/2018	11:19 AM	Inuvik - High Point Turbine Location	68° 21' 24.124' N	133° 24' 27.677' W	3	leaves an	SE	0	1000+	None	None	Flew by high point
CORA - Common Raven	1	30	Unknown	Local	5/29/2018	3:56 PM	Inuvik - High Point Turbine Location	68° 21' 24.241' N	133° 24' 27.317' W	2	wind felt	N	0	1000+	None	None	Flew directly overhead
CORA - Common Raven	3	20	Unknown	Local	5/29/2018	5:20 PM	Inuvik - High Point Turbine Location	68° 21' 24.411' N	133° 24' 27.317' W	2	wind felt	N	0	1000+	None	None	Circling around high point. Observed here many times
CORA - Common Raven	1	20	Unknown	Local	5/28/2018	2:43 PM	Inuvik - High Point Turbine Location	68° 21' 24.557' N	133° 24' 27.477' W	2	wind felt	N	50	1000+	None	None	None
CORA - Common Raven	1	75	N	Straight Flight	5/28/2018	8:01 PM	Inuvik - High Point Turbine Location	68° 21' 24.557' N	133° 24' 27.477' W	2	wind felt	N	50	1000+	None	None	Flew over high point
CORA - Common Raven	1	50	Unknown	Local	5/22/2018	10:01 AM	Inuvik - High Point Turbine Location	68° 21' 24.667' N	133° 24' 27.667' W	5	branches	N	100	500-1000	None	Moderate	Being tracked by male harrier
CORA - Common Raven	1	50	Unknown	Local	5/24/2018	9:16 AM	Inuvik - High Point Turbine Location	68° 21' 24.324' N	133° 24' 27.641' W	5	branches	N	100	200-500	Light	None	Heard multiple ravens calling. Turbine location is close to the dump so lots of ravens there
CORA - Common Raven	9	20	Unknown	Straight Flight	5/24/2018	12:13 PM	Inuvik - High Point Turbine Location	68° 21' 24.124' N	133° 24' 27.641' W	5	branches	N	100	200-500	Light	None	Flew over surveyors heads
CORA - Common Raven	3	0	Unknown	Other	5/22/2018	10:22 AM	Inuvik - High Point Turbine Location	68° 21' 24.667' N	133° 24' 27.688' W	5	branches	N	90	200-500	Light	Light	Heard in the distance
CORA - Common Raven	5	25	Unknown	Local	5/22/2018	12:55 PM	Inuvik - High Point Turbine Location	68° 21' 24.667' N	133° 24' 27.688' W	5	branches	N	90	200-500	Light	Light	Flying near high point
GLGU - Glaucous Gull	1	40	Unknown	Local	5/30/2018	9:59 AM	Inuvik - High Point Turbine Location	68° 21' 24.124' N	133° 24' 27.677' W	3	leaves an	SE	0	1000+	None	None	Flew over lake to the north of high point
GLGU - Glaucous Gull	2	15	Unknown	Local	5/24/2018	10:06 AM	Inuvik - High Point Turbine Location	68° 21' 24.124' N	133° 24' 27.641' W	5	branches	N	100	200-500	Light	None	None
GLGU - Glaucous Gull	1	15	N	Local	5/24/2018	12:55 PM	Inuvik - High Point Turbine Location	68° 21' 24.124' N	133° 24' 27.641' W	5	branches	N	100	200-500	Light	None	None
GLGU - Glaucous Gull	1	10	Unknown	Straight Flight	5/22/2018	11:34 AM	Inuvik - High Point Turbine Location	68° 21' 24.557' N	133° 24' 27.688' W	5	branches	N	50	200-500	Light	None	Flew by lake to the north of high point
GWFG - Greater White-fronted Goose	11	200	N	Straight Flight	5/28/2018	8:15 PM	Inuvik - High Point Turbine Location	68° 21' 24.557' N	133° 24' 27.477' W	2	wind felt	N	50	1000+	None	None	Flew over high point
GWFG - Greater White-fronted Goose	10	300	N	Straight Flight	5/28/2018	8:16 PM	Inuvik - High Point Turbine Location	68° 21' 24.557' N	133° 24' 27.477' W	2	wind felt	N	50	1000+	None	None	Flew east of high point approx 1 km
GYYR - Gyrfalcon	1	10	S	Straight Flight	2018-12-09	2:54 PM	Inuvik - High Point Turbine Location	68° 21' 23.967' N	133° 24' 27.607' W	2	wind felt	S	0	1000+	None	None	Flew through guy wires of existing tower at high point.
LEVE - Lesser Yellowlegs	2	50	Unknown	Other	5/22/2018	12:51 PM	Inuvik - High Point Turbine Location	68° 21' 24.667' N	133° 24' 27.641' W	5	branches	N	100	200-500	Light	None	Calling
LEVE - Lesser Yellowlegs	1	0	Unknown	Other	5/22/2018	12:34 PM	Inuvik - High Point Turbine Location	68° 21' 24.667' N	133° 24' 27.688' W	5	branches	N	90	200-500	Light	Light	Heard calling. Did not see
LEVE - Lesser Yellowlegs	1	0	Unknown	Other	5/22/2018	1:20 PM	Inuvik - High Point Turbine Location	68° 21' 24.667' N	133° 24' 27.688' W	5	branches	N	90	200-500	Light	Light	Heard calling. Did not see
LTA - Long-tailed Jaeger	1	200	N	Straight Flight	5/28/2018	6:58 PM	Inuvik - High Point Turbine Location	68° 21' 24.557' N	133° 24' 27.477' W	2	wind felt	N	50	1000+	None	None	Solitary. Heading north. Flew east of high point approx 1 km.
LTA - Long-tailed Jaeger	1	50	Unknown	Straight Flight	5/28/2018	7:40 PM	Inuvik - High Point Turbine Location	68° 21' 24.557' N	133° 24' 27.477' W	2	wind felt	N	50	1000+	None	None	Flew directly over high point. May have been same one as earlier as it came from the north
MALL - Mallard	1	10	Unknown	Local	5/30/2018	11:28 AM	Inuvik - High Point Turbine Location	68° 21' 24.124' N	133° 24' 27.677' W	3	leaves an	SE	0	1000+	None	None	Male. Flying between pot hole lakes at high point
MALL - Mallard	1	20	Unknown	Local	5/28/2018	3:29 PM	Inuvik - High Point Turbine Location	68° 21' 24.557' N	133° 24' 27.477' W	2	wind felt	N	50	1000+	None	None	Male flew to lake north of high point. Observed here previous days of surveying
MALL - Mallard	1	15	N	Straight Flight	5/27/2018	12:02 PM	Inuvik - High Point Turbine Location	68° 21' 23.967' N	133° 24' 27.667' W	5	branches	N	100	500-1000	Moderate	Light	Flew directly adjacent to high point. Male. May have come from adjacent small lake
MALL - Mallard	1	15	S	Straight Flight	5/27/2018	12:45 PM	Inuvik - High Point Turbine Location	68° 21' 24.124' N	133° 24' 27.641' W	5	branches	N	100	200-500	Light	None	Flew directly adjacent to high point. Male. Headed for small lake to the south of high point
MALL - Mallard	2	10	N	Straight Flight	5/24/2018	1:38 PM	Inuvik - High Point Turbine Location	68° 21' 24.124' N	133° 24' 27.641' W	5	branches	N	100	1000+	Light	None	Both male. Using lakes around high point
MALL - Mallard	3	0	Unknown	Local	5/24/2018	11:24 AM	Inuvik - High Point Turbine Location	68° 21' 24.667' N	133° 24' 27.688' W	5	branches	N	90	200-500	Light	Light	Feeding at edge of pond near high point
MALL - Mallard	1	10	Unknown	Local	5/22/2018	12:50 PM	Inuvik - High Point Turbine Location	68° 21' 24.667' N	133° 24' 27.688' W	5	branches	N	90	200-500	Light	Light	Feeding at edge of pond near high point. Male
MEGU - Mew Gull	5	15	Unknown	Local	5/20/2018	11:23 AM	Inuvik - High Point Turbine Location	68° 21' 24.124' N	133° 24' 27.677' W	3	leaves an	SE	0	1000+	None	None	Flew within 1 km of high point
NOHA - Northern Harrier	2	5	Unknown	Local	5/31/2018	8:44 AM	Inuvik - High Point Turbine Location	68° 21' 24.156' N	133° 24' 27.558' W	5	branches	S	10	1000+	None	None	Observed male and female. Male had food in mouth and interacted with female. Good evidence to suggest nesting is occurring in the area
NOHA - Northern Harrier	1	5	Unknown	Local	5/30/2018	8:57 AM	Inuvik - High Point Turbine Location	68° 21' 24.124' N	133° 24' 27.677' W	3	leaves an	SE	0	1000+	None	None	Male. Flying within 100 m of high point
NOHA - Northern Harrier	2	200	N	Straight Flight	5/30/2018	12:24 PM	Inuvik - High Point Turbine Location	68° 21' 24.557' N	133° 24' 27.677' W	3	leaves an	SE	0	1000+	None	None	Female. Likely different than local female
NOHA - Northern Harrier	1	10	Unknown	Local	5/30/2018	1:05 PM	Inuvik - High Point Turbine Location	68° 21' 24.124' N	133° 24' 27.677' W	3	leaves an	SE	0	1000+	None	None	Female. Resident bird
NOHA - Northern Harrier	2	20	Unknown	Local	5/30/2018	2:48 PM	Inuvik - High Point Turbine Location	68° 21' 24.124' N	133° 24' 27.677' W	3	leaves an	SE	0	1000+	None	None	Male and female circling around high point
NOHA - Northern Harrier	1	20	Unknown	Local	5/28/2018	2:42 PM	Inuvik - High Point Turbine Location	68° 21' 24.557' N	133° 24' 27.477' W	2	wind felt	N	50	1000+	None	None	Female. Observed every day here
NOHA - Northern Harrier	2	20	Unknown	Local	5/28/2018	3:16 PM	Inuvik - High Point Turbine Location	68° 21' 24.557' N	133° 24' 27.477' W	2	wind felt	N	50	1000+	None	None	Male and female. Observed every day here
NOHA - Northern Harrier	1	15	Unknown	Local	5/27/2018	10:02 AM	Inuvik - High Point Turbine Location	68° 21' 23.967' N	133° 24' 27.667' W	5	branches	N	100	500-1000	None	Moderate	Male harrier Chased raven away when raven flew by. Within 100m of high point
NOHA - Northern Harrier	1	10	Unknown</														