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January 24, 2024

File: W2023L4-0001

Mark Cliffe-Phillips
Mackenzie Valley Review Board
200 Scotia Centre
Box 938, 5102-50th Avenue
Yellowknife NT X1A 2N7

Sent by email

Dear Mark Cliffe-Phillips,

Re: Snare Hydroelectric Facility – Notice of Preliminary Screening Determination – Renewal Application for Water Licence – Water Use Activities - Power – Snare River, NT

The Wek'èezhì Land and Water Board (Board) met on January 24, 2024 and considered the Application Package from Northwest Territories Power Corporation (NTPC) for Water Licence (Licence) W2023L4-0001 for the Snare Hydroelectric Facility (Project) in accordance with the *Mackenzie Valley Resource Management Act* (MVRMA). NTPC has proposed to include activities in the Licence that were not subject to Part 5 of the MVRMA.

The Board conducted a preliminary screening based on the public record for the proceeding. Based on the evidence provided, the Board is satisfied the screening has been completed according to section 125 of the MVRMA and has decided **not to refer** the Project to environmental assessment. The Board's Preliminary Screening Determination and Reasons for Decision, as required by section 121 of the MVRMA, is attached.

If the Board does not receive notice of referral to environmental assessment by **February 3, 2024**, it will continue with the regulatory proceeding.

The Board and staff look forward to continued communications throughout the pause period. Please contact Ryan Fequet via [email](#) or at (867) 765-4589 with any questions or concerns regarding this letter.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Mason Mantla', written in a cursive style.

Mason Mantla
Chair, Wek'èezhìi Land and Water Board

BCC'd to: NTPC Distribution List
David Dewar, NTPC

Attached: Preliminary Screening Determination and Reasons for Decision



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Preliminary Screening Determination and Reasons for Decision

Water Licence Application	
File Number	W2023L4-0001
Company	Northwest Territories Power Corporation (NTPC)
Project	Snare Hydroelectric Facility
Location	Snare River, NT
Activity	Power
Date of Decision	January 24, 2024.

1.0 Decision

In accordance with subsection 124(1) of the [Mackenzie Valley Resource Management Act](#) (MVRMA), the Wek'èezhì Land and Water Board (WLWB or Board) met on January 24, 2024 to make a preliminary screening determination on the renewal Application (the Application) from Northwest Territories Power Corporation (NTPC) (Applicant) for Water Licence W2023L4-0001 (Licence)¹ for the Snare Hydroelectric Facility (Project).²

The Board has determined that some Project activities are exempt from preliminary screening because they were previously screened or underwent an Environmental Assessment (EA).³ The Applicant has proposed to include activities in the Licence that were not subject to Part 5 of the MVRMA; however, the

¹ See WLWB Online Registry [Snare Hydro - WL Renewal Application - Cover Letter, Attachments 1-3 - Jul 10 23.pdf](#)

² The Project is the Snare Hydroelectric Facility, which is the proposed development, where “development” is defined in Part 5 of the [MVRMA](#) as:

“any undertaking, or any part or extension of an undertaking, that is carried out on land or water and includes an acquisition of lands pursuant to the *Historic Sites and Monuments Act* and measures carried out by a department or agency of government leading to the establishment of a park subject to the *Canada National Parks Act* or the establishment of a park under a territorial law.”

³ An assessment was carried out under the Environmental Assessment Review Process Guidelines Order for Snare Cascades in 1994, and can be found here: [MV2003L4-0014 - NTPC - RERC Report – May 3 94.](#)

Board has decided not to refer these activities to the Mackenzie Valley Environmental Impact Review Board (the Review Board) for Environmental Assessment because it is the Board's opinion that based on the evidence these activities will not have a significant adverse impact on the environment or be a cause of public concern.

The Board's determination, including reasons for its decision, are detailed in sections [3.0](#) and [4.0](#).

2.0 Background

The Snare Hydroelectric Facility is located on the Snare River, approximately 145 km northwest of Yellowknife. The Facility has been providing hydroelectricity since 1948 and currently provides power to the North Slave communities of Yellowknife, Behchokò, Dettah, and N'Dilo. The system includes four separate hydroelectric plants: Snare Rapids, Snare Falls, Snare Cascades, and Snare Forks. These four plants use the difference in elevation (63.3m) between Bigspruce Reservoir (above Snare Rapids) and Strutt Lake (below Snare Forks) for electric power production. Currently, NTPC holds a Type A water licence (N1L4-0150) for Snare Rapids, Snare Falls, and Snare Forks facilities, and the Dogrib Power Corporation (DPC) holds a separate Type A water licence (W2014L4-0001) for Snare Cascades.

On June 29, 2023 NTPC submitted an Application to renew its water licences. The Application included a request to combine the two water licences into one licence (W2023L4-0001) for the entire facility. In the Application NTPC indicated that the "only operational change" to the Project was a proposed reduction to the minimum allowable water level at Bigspruce Reservoir to account for low seasonal water levels, and at Snare Falls Forebay to allow for planned maintenance inspections/activities. NTPC also included draft conditions with the Application, with several proposed changes including changes to reflect the Board's standard conditions. The draft conditions included Water Use for the purpose of withdrawal for the Snare Rapids camp, day-use buildings, roads and site maintenance, and winter road construction and maintenance.

NTPC submitted an Engagement Log with the Application that outlines the pre-submission engagement completed prior to submission to the Board. The Engagement Log indicates that engagement with Indigenous and non-Indigenous Governments and Organizations took place from December 2022 until June 2023. The Engagement Log describes that at a minimum, an email was sent to all Affected Parties notifying them of the renewal and that either engagement meetings were scheduled, or follow-up emails were sent.

2.1 Scope of Screening

Under Part 1, Schedule 1, section 2.1 of the Exemption List Regulations to the [MVRMA](#), project areas and activities that have already been subject to Part 5 of the MVRMA are exempt from preliminary screening. In the cover letter with the Application NTPC requested an exemption from preliminary screening because the Project has been screened in the past.⁴ NTPC indicated that no modifications to the Facilities were

⁴ See WLWB Online Registry for [DPC - Water Licence - Renewal - Reasons for Decision - Aug 11 14](#)

proposed and only changes to the minimum allowable water levels in Bigspruce Reservoir (the Reservoir) and Snare Falls Forebay (the Forebay), as well as minor updates to the Surveillance Network Program (SNP), were being proposed.

Previously Screened or Assessed Areas and Activities:

The environmental effects of the Project have been assessed under several screenings over time. The Project was previously screened under this Application on October 13, 2023 for the proposed change to the minimum allowable water level in the Bigspruce Reservoir and Snare Falls Forebay. The Board concluded that based on the described mitigations and options available to the Board through the use of licence conditions, the proposed changes to the Project will not have a significant adverse impact on the environment or be a cause of public concern.⁵

The Project was also screened under several previous assessments. Snare Cascades was first licenced in 1994 and underwent a review pursuant to the Environmental Assessment Review Process Guidelines Order.⁶ The assessment concluded that the potentially adverse environmental effects that may be caused by the proposal are insignificant or mitigable with known technology” and the “proposal may therefore proceed” to the regulatory phase. In 1999 the Licence N1L4-0150 was renewed and the application included an increase to the flow of water through Snare Forks. An Environmental Screening was completed by Indian and Northern Affairs Canada (INAC) at the time, which concluded that the project was not likely to cause significant adverse environmental effects.⁷ The N1L4-0150 Licence was amended in 2013 to increase the maximum water elevation in Snare Forks Forebay.⁸ The preliminary screening concluded that there was no likelihood that the change to the project would have significant adverse impact on the environment and no likelihood that the proposed development might be cause of public concern. The Snare Cascades Licence was renewed in 2014 (W2014L4-0001) and in the Board’s Reasons for Decision, the Board stated that the application was exempt from preliminary screening because there were no proposed modifications to the Project.⁹

Activities Not Previously Subject to Part 5 of the MVRMA:

In the draft conditions included with the Application, NTPC proposed to include Water Use for the Snare Rapids Camp, day-use buildings, roads and site maintenance, and winter road construction and maintenance “for clarity”. Water Use for these purposes had not previously been included in the Licenses (i.e., N1L4-0150 and W2014L4-0001); however, this type of Water Use is not a new activity at the site.

During the Public Hearing, Board staff questioned NTPC on whether Water Use for additional purposes other than diversion (i.e., for withdrawal for use at the Snare Rapids Camp, day-use buildings, roads and

⁵ See WLWB Online Registry for [Snare Hydro - WL Renewal - Notification and Determination Preliminary Screening - Oct 13 23.pdf](#)

⁶ See WLWB Online Registry for [MV2003L4-0014 - NTPC - RERC Report - Jan 9 04.pdf](#)

⁷ See WLWB Online Registry for [NTPC - Water Licence Renewal Type A - Environmental Screening Level - Oct 22 98.pdf](#)

⁸ See WLWB Online Registry for [N1L4-0150 - NTPC - Water Licence Amendment - Preliminary Screening Form - Feb 28 13](#)

⁹ See WLWB Online Registry for [DPC - Water Licence - Renewal - Reasons for Decision - Aug 11 14.pdf](#)

site maintenance, and winter road construction and maintenance) was screened in previous preliminary screenings. NTPC indicated that this type of Water Use was not screened and therefore Board staff determined that an additional screening would be necessary.

As indicated in the draft conditions submitted with the Application, NTPC requires the following volumes of water: 10 to 20 cubic meters (m³) per day for the Snare Rapids Camp; 2 to 10 m³/day for day-use buildings; 5 to 50 m³/day for roads and site maintenance; and 100 m³/day for winter road construction and maintenance.¹⁰

In accordance with paragraph 125(1)(a) of the [MVRMA](#), the Board must conduct a preliminary screening of the activities that have not yet been subject to Part 5 of the MVRMA to determine and report to the Review Board whether, in its opinion, these activities might have a significant adverse impact on the environment, or might be a cause of public concern. The details of the Board's analysis are set out in section [3.0](#) below.

2.2 Public Record and Regulatory Proceeding

To assist the Board in its preliminary screening determination for the Project an Undertaking (#1) was issued to NTPC during the Public Hearing, requiring NTPC to provide a table outlining the potential impacts and associated mitigations for this Water Use.¹¹ NTPC's response to Undertaking #1¹² was distributed for public review on December 15, 2023 inviting reviewers to provide comments and recommendations using the Online Review System (ORS). Comments were due January 15, 2024, with responses from the Applicant due January 18, 2024. The Board did not receive any comments or recommendations. Both the Government of the Northwest Territories – Environment and Climate Change (GNWT-ECC) and Environment and Climate Change Canada (ECCC) indicated they had no comments or recommendations. Board staff submitted questions for the purposes of clarification.¹³

Since there were no requests to extend the reviewer comment deadline, the Board is satisfied that a reasonable period of notice was given to affected communities and First Nations, as required by subsection 63(2) of the [MVRMA](#).

The Board is also satisfied that notice of the Application was provided to the Tłı̨chǫ Government and that a reasonable period of time was provided for the Tłı̨chǫ Government to make representations to the Board in accordance with section 63 of the [MVRMA](#).

2.3 Technical Session

A Technical Session was held on September 26, 2023 to help identify and clarify issues raised by Parties, including the proposed change to the minimum allowable water level and the potential impacts and

¹⁰ See WLWB Online Registry for [Snare Hydro - WL Renewal Application - Cover Letter, Attachment 1-3 - Jul 10 23.pdf](#)

¹¹ See WLWB Online Registry for [Snare Hydro - WL Renewal - Public Hearing - Undertakings - Dec 7 23](#)

¹² See WLWB Online Registry for [Snare Hydro - WL Renewal - Public Hearing - NTPC response to Undertaking 1 - Dec 14 23](#)

¹³ See WLWB Online Registry for [Snare Hydro - Preliminary Screening - Water Use - Review Summary Table - Jan 18 24](#).

mitigations.¹⁴ Water Use for the purpose of winter road construction was briefly touched on during the Technical Session,¹⁵ but there was no further discussion on Water Use outside of the purpose of diversion.

2.4 Public Hearing

A Public Hearing was held on December 6, 2023 to discuss the Application. Questions on Water Use for the Snare Rapids Camp, day-use buildings, roads and site maintenance, and winter road construction and maintenance were posed by Board staff to NTPC.

3.0 Potential Impacts and Proposed Mitigations

Table 1 below summarizes:

- the potential impacts of the activities;
- the concerns that were identified during the regulatory proceeding and how the Applicant addressed those concerns;
- the proposed and potential mitigations for the potential impacts; and
- the Board's analysis of the potential impacts and proposed mitigations.

NTPC's response to the Undertaking included potential impacts that were not related to the activity of withdrawing water for the purposes of this screening (e.g., potential impact of increased greenhouse gases from the operation of the Snare Facility). Only the impacts from Water Use for the Snare Rapids Camp, day-use buildings, roads and site maintenance, and winter road construction and maintenance are discussed below in Table 1.

¹⁴ A copy of the transcript from can be found on the Board's registry: [Snare Hydro - WL Renewal -Technical Session - Transcript - Sep 26 23](#)

¹⁵ See WLWB Online Registry for [Snare Hydro - WL Renewal - Technical Session - Transcript - Sep 26 23](#) pg. 80.

Table 1: Potential Impacts and Proposed Mitigations for the activities that have not yet been subject to Part 5 of the MVRMA

Potential Impact	Activity	Proposed Mitigations <i>Description of measures to reduce potential impacts, including consideration of cumulative impacts and climate change.</i>	Board Analysis and Determination
Changes to the water level or flow	Water Use from Snare River for the Snare Rapids Camp, day-use buildings, roads and site maintenance, and winter road construction and maintenance	<ul style="list-style-type: none"> • The Applicant noted the following as part of the Impact Mitigation Table in response to the Undertaking: <ul style="list-style-type: none"> ○ Based on the daily discharge data for the Snare River, only a small portion of the available flow would be withdrawn (i.e., 0.02% during low flow conditions or 0.01% of the average flows). ○ There will not be detectable changes in levels or flows of the Snare River based on the withdrawal rate. ○ NTPC committed to adhering to the Water Use limits as outlined in the renewed Water Licence. • The Board has a standard licence condition to mitigate the identified potential impacts,¹⁶ which NTPC included in the draft conditions submitted with the Application The standard condition is: <ul style="list-style-type: none"> ○ Water Source and Maximum Volume. 	<p>The proposed volume of water to be withdrawn daily is relatively low compared to the available flow rate of the river. NTPC has committed to following the Water Use limits that will be included in the renewed Licence.</p> <p>Based on the described mitigations and options available to the Board, it is the Board’s opinion that these activities will not have a significant adverse impact on the environment and will not be a cause of public concern.</p>
Changes to Aquatic Habitats	Water Use from Snare River for the Snare Rapids Camp, day-use buildings, roads and site maintenance, and winter road construction and maintenance	<ul style="list-style-type: none"> • The Applicant noted the following as part of the Impact Mitigation Table in response to the Undertaking: <ul style="list-style-type: none"> ○ The change in water level from this activity will be undetectable and therefore impacts to aquatic habitat are expected to be low. ○ NTPC committed to adhering to the Water Use limits as outlined in the renewed Water Licence. ○ All water withdrawal equipment will be outfitted with fish screens and fishing will continue to be prohibited by all project staff and contractors. • NTPC's Land Use Permit for the construction and maintenance of the winter roads,¹⁷ includes the Board’s standard permit condition to 	<p>NTPC indicates that the proposed volume of water to be withdrawn daily is relatively low, and therefore impacts to aquatic habitat are expected to be low. NTPC has committed to following the Water Use limits that will be included in the renewed Licence.</p> <p>As per NTPC’s Land Use Permit for the winter roads, NTPC is required to “take all reasonable measures to prevent damage to wildlife and fish Habitat during this land-use operation”.</p>

¹⁶ See the WLWB Policies and Resources webpage to access the LWB [Standard Water Licence Conditions Template](#).

¹⁷ See WLWB online Registry for [NTPC - Permit - Land Use Permit and Issuance Letter - Jan 4 22.pdf](#)

		<p>mitigate the identified potential impacts:¹⁸</p> <ul style="list-style-type: none"> ○ Habitat Damage 	<p>Based on the described mitigations, it is the Board's opinion that these activities will not have a significant adverse impact on the environment and will not be a cause of public concern.</p>
Changes to terrestrial wildlife habitat for beavers and muskrat	Water Use from Snare River for the Snare Rapids Camp, day-use building, roads and site maintenance, and winter road construction and maintenance	<ul style="list-style-type: none"> • The Applicant noted the following as part of the Impact Mitigation Table in response to the Undertaking: <ul style="list-style-type: none"> ○ water level changes from water use will be undetectable. ○ NTPC committed to adhering to the Water Use limits limits as outlined in the renewed Water Licence. ○ Hunting, trapping, and fishing will continue to be prohibited by all project staff and contractors. ○ Although not a requirement of its Licence or Land Use Permit, NTPC will continue to follow strategies outlined in its <i>Snare Hydroelectric Facility Vegetation and Wildlife Management and Monitoring Plan</i>.¹⁹ • NTPC's Land Use Permit for the construction and maintenance of the winter roads, includes the Board's standard permit condition to mitigate the identified potential impacts:²⁰ <ul style="list-style-type: none"> ○ Habitat Damage. 	<p>While the Wildlife Management and Monitoring Plan (WMMP) is not for Board approval, it does contain information regarding mitigations to protecting terrestrial habitat. For instance, one of the mitigations in the WMMP is if an active mammal den or young is discovered during construction of the winter road, disruptive construction activities are to be stopped and GNWT would be contacted for advice and to form an appropriate strategy. As per NTPC's Land Use Permit for the winter roads, NTPC is required to "take all reasonable measures to prevent damage to wildlife and fish Habitat during this land-use operation".</p> <p>Based on the described mitigations, it is the Board's opinion that these activities will not have a significant adverse impact on the environment and will not be a cause of public concern.</p>
Impingement and entrainment of fish at intakes	Water Use from Snare River for the Snare Rapids Camp, day-use building, roads and	<ul style="list-style-type: none"> • The Applicant noted the following as part of the Impact Mitigation Table in response to the Undertaking: <ul style="list-style-type: none"> • The water withdrawal equipment will be fitted with fish screens • The Board has a standard licence condition to mitigate the identified 	<p>NTPC indicated in response to Undertaking #1 that fish screens will be used on all equipment when withdrawing water.</p>

¹⁸ See the WLWB Policies and Resources webpage to access the [Standard Land Use Permit Conditions Template](#)

¹⁹ See WLWB online Registry for [NTPC - Permit - Vegetation and Wildlife Management and Monitoring Plan - Version 2.0 - Nov 13 21](#)

²⁰ See the WLWB Policies and Resources webpage to access the [Standard Land Use Permit Conditions Template](#) .

	<p>site maintenance, and winter road construction and maintenance</p>	<p>potential impacts,²¹ which NTPC included in the draft conditions submitted with the Application. The standard condition is:</p> <ul style="list-style-type: none"> • Water Intake Screen 	<p>The Board could include the standard licence condition for “Water Intake Screen” in the renewed Licence.</p> <p>Based on the described mitigations and options available to the Board, it is the Board’s opinion that these activities will not have a significant adverse impact on the environment and will not be a cause of public concern.</p>
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²¹ See the WLWB Policies and Resources webpage to access the LWB [Standard Water Licence Conditions Template](#).

3.1 Consideration of Potential Impacts

Based on the potential impacts and proposed mitigations identified above in Table 1, the Board considered whether the activities that have not yet been subject to Part 5 of the MVRMA might have a significant adverse impact on the environment. In general, impacts of these activities on the environment can be mitigated through the use of licence conditions of two general types:

1. conditions in the existing Licences, including requirements for management and monitoring plans, with revisions where necessary; and
2. new or unique conditions that may be needed to mitigate potential impacts of these activities that may not be addressed by the conditions in the existing Licences, and which may be from the Board's standard conditions list or established by the Board as per the LWB [Standard Process for Creating New Conditions](#).

These conditions may include requirements for management and monitoring plans that provide detailed information regarding the implementation of mitigation measures and the evaluation of their effectiveness. The conditions will be discussed in further detail by all Parties through the regulatory proceeding and will be finalized by the Board following completion of the regulatory proceeding.

3.2 Consideration of Public Concern

In addition to considering the potential impacts of the activities that have not yet been subject to Part 5 of the MVRMA, the Board considered whether these activities might be a cause of public concern. Based on the evidence provided during the regulatory proceeding thus far, the Board did not identify any comments or issues that indicate that the Project is a cause of public concern.

4 Conclusion

The Board has reviewed all the evidence received during the regulatory process with respect to the Preliminary Screening of the activities that had not yet been subject to Part 5 of the MVRMA. Based on the evidence, it is the Board's opinion that these activities will not have a significant adverse impact on the environment or be a cause of public concern, as set out in paragraph 125(1)(a) of the [MVRMA](#). The Board has therefore decided not to refer the activities that had not yet been subject to Part 5 of the MVRMA to Environmental Assessment. If the Board does not receive a notice of referral to environmental assessment by February 3, 2024, the Board will resume the regulatory proceeding.



Mason Mantla, Chair
Wek'èezhì Land and Water Board

January 24, 2024

Date