

NPC 151033: Iqaluit Nukkiksautiit Project (INP)

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Proposal Status: Conformity Determination Issued

[Overview Documents](#)

[Project Overview](#)

Type of application: Amendment

Proponent name:

Heather Shilton

Proponent company:

Nunavut Nukkiksautiit Corporation

Project Description:

The Iqaluit Nukkiksautiit Project (INP) is an Inuit-led renewable energy project. It proposes to build a hydroelectric power facility in the Kuugaluk River system on the Hall Peninsula. The Project is led by the Nunavut Nukkiksautiit Corporation (NNC), a 100% Inuit-owned clean energy company. The goal of the Project is to provide a reliable source of renewable electricity for Iqaluit and to reduce the use of diesel fuel brought in from outside Nunavut. The Project would include a hydroelectric facility with a planned power capacity of about 15 megawatts (MW). Electricity would be produced by storing water from an existing lake and river system and releasing it through turbines. The main parts of the Project would include a dam, a reservoir, and a powerhouse with turbines and generators. Other water control structures, such as spillways and intake structures, would help manage water levels and flows. The reservoir is expected to cover about 7,300 hectares, and water levels would be managed to support power generation while allowing water to continue flowing downstream. Other Project infrastructure would include about 65 kilometres of new all-season access roads, smaller roads within the Project area, and a 66-kilometre transmission line to carry electricity to Iqaluit. A new substation near Iqaluit would connect the power to the existing electrical system. Temporary facilities, such as seasonal camps, work areas, and material borrow sites, would be needed during study and construction work. These temporary areas would be removed or restored once they are no longer needed. At this time, the Project is still in the planning stage. The exact size, location, and design of Project components are being finalized. Details such as road routes, construction methods, water management plans, and operating rules will be updated as more engineering work, environmental studies, and Inuit engagement are completed. The Project

area includes tundra, frozen ground (permafrost), and freshwater systems that support fish, wildlife, and Inuit travel and harvesting. Inuit Qaujimajatuqangit (IQ), or Inuit knowledge, has played an important role in shaping the Project. IQ helps guide decisions about where Project components may be located, how access routes are planned, when work should happen during the year, and how wildlife, fish habitat, and culturally important areas are protected. IQ will continue to guide the Project through all future stages. The Project is currently completing environmental, socio-economic and technical studies. These studies look at water flow, water quality, fish and wildlife, permafrost, and ground stability. The information collected will help prepare future environmental reports, including an Environmental Impact Statement (EIS), and will help improve Project design and safety measures. The Project is being reviewed under the Nunavut Planning and Project Assessment Act (NuPPAA). It requires review by the Nunavut Planning Commission and screening by the Nunavut Impact Review Board (NIRB). Based on current information, the Project does not require a federal impact assessment. Federal permits will still be needed for specific activities, such as work in water or near navigable waters. If the Project is approved and built, it could greatly reduce diesel use in Iqaluit, lower greenhouse gas emissions, and improve long-term energy security. The Project would also support Inuit jobs, training, and business opportunities. NNC will continue to work with Inuit communities, regulators, and partners to make sure the Project reflects Inuit values, protects the environment, and meets territorial priorities.

[Project Schedule](#)

Start Date:

2030-12-02

End Date:

2099-12-31

[Project Map](#)

List of project geometries:

Id

Geometry

Location Name

[19432](#)

polygon

[19428](#)

point

McKeand River South

NPC Planning regions:

No Approved Plan

[Project Land Use and Authorizations](#)

Project Land Use:

Scientific Research

Marine-Based Activities

Scientific Research

Temporary Structures

Licensing Agencies:

Nunavut Water Board

Government of Canada - Crown-Indigenous Relations and Northern Affairs Canada

Nunavut Research Institute

Nunavut Research Institute

Government of Nunavut - Department of Environment

Government of Nunavut - Department of Culture and Heritage

Government of Nunavut - Department of Culture and Heritage

Nunavut Research Institute

Government of Nunavut - Department of Environment

Government of Canada - Fisheries and Oceans Canada

Government of Canada - Crown-Indigenous Relations and Northern Affairs Canada

Nunavut Impact Review Board

Government of Canada - Transport Canada

Government of Canada - Fisheries and Oceans Canada

Nunavut Water Board

Material Use

Equipment:

Type

Quantity

Type

Use

AutoSalt water flow monitoring systems

2

24.5 x 23 x 48 tall

The two AutoSalt monitoring systems will be commissioned in the Mckeand River to monitor water flow for a one-year period.

ATV

2

n/a

Moving equipment around on camp.

Water Pump

2

n/a

For water use at the camp

Generator

4

n/a

Heat and light for the camp facility

Drill Rig

1

n/a

Geotechnical drilling. A Tier 4 diesel powered core drill Heli and truck portable.

Solar panel

8

n/a

Heat and light for the camp facility

Batteries

4

n/a

Heat and light for the camp facility 120A

Inverter

16

n/a

Heat and light for the camp facility 1000W

Outboard motor

1

n/a

Boat motor for aquatic field work

Heavy construction - Various

undetermined

>10t

Construction

Aircraft

undetermined

Helicopter/Twin Otter

Transportation of equipment, materials, and personnel

Other

undetermined

unknown

Any activities associated with Project construction or operation

Generators

undetermined

unknown

Provide power

Light vehicles

Unknown

>10t

Various mobilization around the Project site

Fuel Use:

Type

Container

Capacity

Use

Gasoline

6

205

Fuel for ATV, and generators

Diesel

6

205

Fuel for ATV, and generators

Propane

15

20

Cooking and heating for camp facility Container capacity will range between 20-100lbs tanks

Aviation fuel

21

205

Aviation fuel cache for a weekly supply

Diesel

6

205

Fuel for Drill

Aviation fuel

205

205

Aircraft fuel. Additional caches required at Project site. Volumes are to be determined

Hazardous Material and Chemical Use:

Type

Container

Capacity

Use

Engine Oil

1

15

Maintenance for drill and other equipment

Hydraulic Oil

1

60

Maintenance for drill and other equipment

Coolant

1

1

Maintenance for drill and other equipment

Various lubricants, coolants, oil, fuel additives, adhesives, and solvents

1

5

For equipment maintenance. Volumes are to be determined.

Other - undetermined at this time

1

5

For any other activities associated with the construction or operation. Volumes are to be determined

Water Consumption:

Daily Amount (m³)

Retrieval Method

Retrieval Location

0

TBD

Hydro Dam

Waste and Impacts

Environmental Impacts:

Potential environmental and socio-economic effects for the INP have been identified through the EIAS scoping process and early consultation with HTAs, QIA, and community

representatives. The mitigation measures outlined below are preliminary and will be refined as baseline information and design details advance.

- Fish and Fish Habitat: Possible effects include sedimentation, altered flows, and habitat fragmentation. Mitigation will include erosion- and sediment-control measures, seasonal in-water work timing windows, stabilization of disturbed shorelines, and habitat-offsetting consistent with Department of Fisheries and Oceans (DFO) policy. Adaptive management triggers will be based on turbidity, flow, and fish-use monitoring results;
- Wildlife and Vegetation: Disturbance to wildlife and habitat will be reduced through construction-timing restrictions, flight-path and access-route management, and prevention of food-waste attraction. Reclamation of disturbed areas and progressive revegetation will restore vegetation structure and function. Wildlife monitoring will verify response to noise and movement barriers;
- Atmospheric Environment: Air emissions and dust will be managed through equipment maintenance, water-based dust suppression, and vehicle-speed limits. Noise and vibration will be reduced by limiting heavy construction to daytime hours and maintaining equipment mufflers. Conditions will be monitored at sensitive receptors to confirm compliance with GN and federal standards;
- Archaeological and Heritage Resources: Ground-disturbing activities may interact with archaeological or cultural resources, including areas of archaeological significance identified near the proposed reservoir during the 2025 field assessment, as well as previously unidentified sites. Mitigation will focus on avoidance through project design refinement, completion of permitted archaeological surveys in advance of ground disturbance, and implementation of a chance-find protocol requiring work stoppage and notification of authorities if resources are encountered;
- Human Health and Country Foods: Potential exposure to contaminants such as methylmercury will be tracked through fish and water-quality monitoring. Results will be shared through plain-language reports and community sessions with harvesters. Traditional-foods confidence will be incorporated into health-indicator monitoring and adaptive follow-up; and
- Socio-Economic Environment: Potential effects relate to workforce logistics, training access, and local participation. Mitigation focuses on Inuit employment, training, and contracting, along with early coordination with local suppliers and service providers. Engagement will continue to identify community-defined success measures for benefits distribution.

Mitigation will follow the hierarchy: •Avoid; •Minimize; •Restore; and •Offset Commitments will be tracked through an Environmental Commitments Register (ECR) and reviewed regularly through adaptive management to maintain alignment with project performance objectives and community expectations

Waste Management:

Waste Type

Quantity Generated

Treatment Method

Disposal Method

Combustible wastes

Unknown

Waste segregation Regular removal to an approved facility

Collected and stored in sealed wildlife-proof containersTransported off-site to approved municipal waste facilities

Greywater

Unknown

No direct discharge to land or waterDisposal at approved treatment facilitiesManaged under applicable territorial health and land-use permit conditions

Contained in approved holding tanks or portable systemsRemoved by licensed contractor

Hazardous waste

Unknown

Spill prevention and response plansSecondary containment for fuel storageSpill kits maintained on siteImmediate cleanup and reporting of any s

Stored in approved containersRemoved from site and disposed at licensed facilities

Non-Combustible wastes

Unknown

Waste management plan required prior to constructionNo open burning or uncontrolled disposal

Segregated and removed from siteRecyclable materials diverted where feasibleNon-recyclable waste disposed at approved facilities