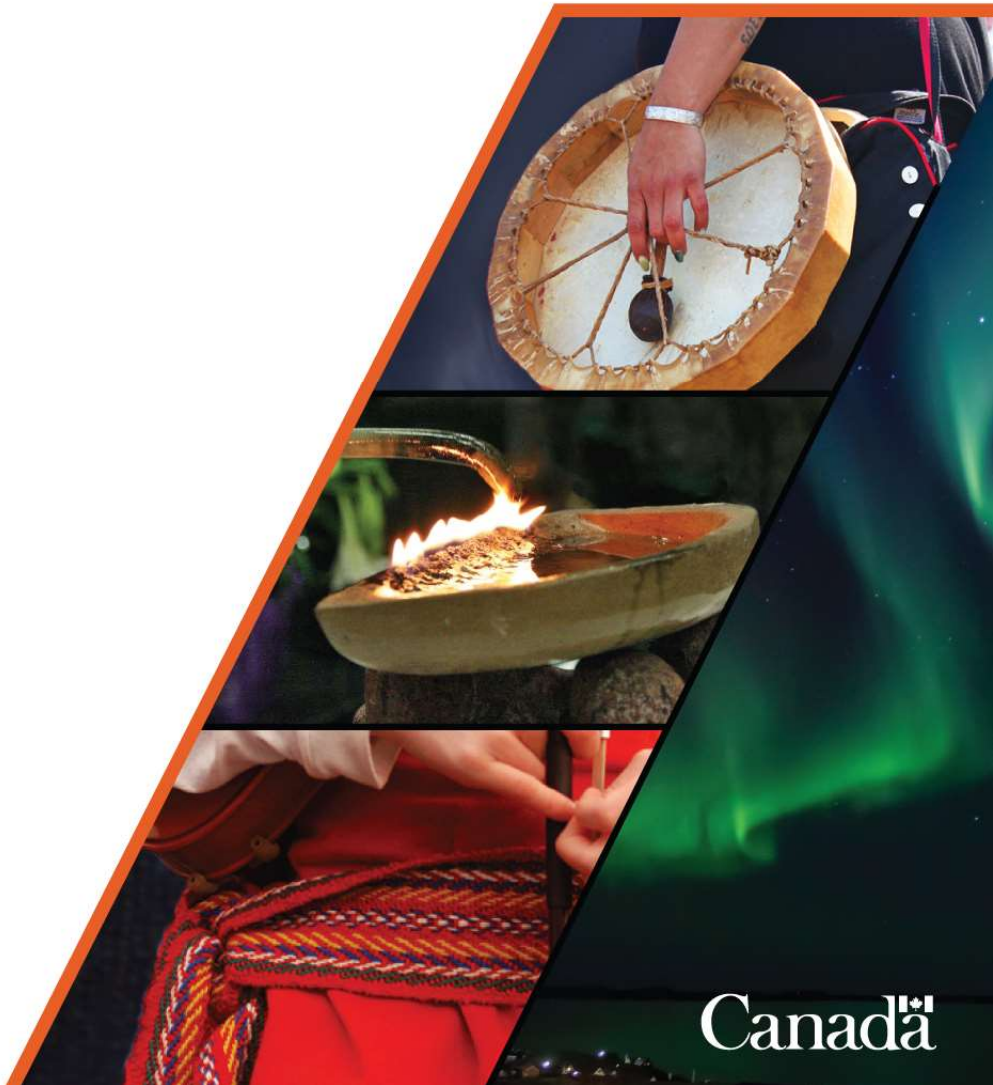




# CIRNAC Comments to NIRB

## Re: Notice of Screening for Kitikmeot Corporation's "Cambridge Bay Solar and Storage" Project Proposal



Nunavut Regional Office  
918 Sivumugiaq Street  
Iqaluit, NU, X0A 3H0

Your file - Votre référence  
25XN022  
Our file - Notre référence  
GCdocs# 139382280

August 6, 2025

Francis Emingak  
Screening Officer  
Nunavut Impact Review Board  
P.O. Box 1360  
Cambridge Bay, NU, X0B 0C0  
via NIRB public registry

**Re: Notice of Screening and Comment Request for Kitikmeot Corporation's "Cambridge Bay Solar and Storage" Project Proposal**

Dear Francis Emingak,

On July 16, 2025, the Nunavut Impact Review Board (NIRB) invited parties to comment on Kitikmeot Corporation's "Cambridge Bay Solar and Storage" project proposal. Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) offers the responses below as it pertains to the NIRB's request:

**Whether the project proposal is of a type where the potential adverse effects are highly predictable and mitigable with known technology**

Kitikmeot Corporation proposes a 4 MW DC fixed-tilt solar array with a 3MWh battery energy storage system on municipally owned land across the bay near "Old Town". Energy simulation estimate 4.3 to 4.4 GWh/year, displacing 1.2 million L diesel. CIRNAC is of the view that the potential impacts of the proposed Project can be mitigated with the known practice or technology.

**CIRNAC #1: Spill Prevention**

Construction, operation and maintenance will handle diesel (100 gallon) for a 30 kW generator at a shoreline-adjacent array and along the ~4 km interconnect, including the Fresh Water Creek crossing. During Spring melt, overland flow paths are short and hydraulically connected to the bay/creek; even small releases can rapidly reach surface water. CIRNAC recommends the Proponent considers:

- Storing diesel fuel in secondary containment areas and conduct refueling activities on impermeable surfaces equipped with spill trays and absorbent materials;
- Maintaining spill-response equipment at all refueling sites and conduct regular spill drills;



- Ensuring hazardous materials storage and greywater sumps are at least 31 meters from any waterbody's high water mark; and,
- Implementing daily inspection routines for all fuel storage and handling areas.

### **CIRNAC #2: Battery Energy Storage System (BESS) Safety**

The BESS comprises 3 MWh LiFePO<sub>4</sub> units with an estimated enclosure volume of 70 m<sup>3</sup>. While solid state preference reduces leakage and thermal-runaway probability, a container event could release toxic smoke/soot and contaminated fire-water that can mobilize on tundra toward nearby waters. Local responders may also have limited Li-ion experience in Arctic conditions. CIRNAC recommend the Proponent considers:

- Developing an emergency response plan specific to battery storage system before it is commissioned;
- Installing automated fire suppression systems within battery enclosures;
- Training local emergency response teams specifically in lithium-ion battery incident management; and,
- Establishing robust emergency response protocols including contaminated water capture and hazardous waste disposal planning.

### **CIRNAC #3: Preventing Erosion and Habitat Restoration**

Construction includes array grading and 4 km of underground/overhead interconnection adjacent to the Cambridge Bay shoreline and across Fresh Water Creek. A temporary construction bridge is planned for a small parallel creek segment to avoid vehicle fording; without controls, melt and storm events can mobilize silts to the bay/creek. CIRNAC recommends the Proponent considers:

- Confining all construction activities to defined areas by making work boundaries to prevent any unintentional damage to adjacent tundra;
- Implementing erosion and sediment controls (e.g., silt fencing, stabilized entrances) pre-disturbance;
- Diverting clean runoff around disturbed areas; and,
- Immediately stabilizing and revegetating exposed soils.

### **CIRNAC #4: Permafrost Protection**

The site is underlain by continuous permafrost. Ground disturbance, heat transfer from foundations, and snow drifting around racking can deepen the active layer and cause thaw settlement, affecting terrain stability and nearby drainage. Further to indicated measures, CIRNAC recommends that the Proponent to perform regular monitoring to track ground temperatures, active layer thickness, and trigger corrective measures as needed. Also, where feasible, heavier ground-disturbing work could occur in colder periods, and summer traffic could be minimized off prepared/stabilized surfaces.



**Any matter of importance to the Party related to the project proposal**

**CIRNAC #5: Consultation with interested parties**

CIRNAC recommends that the Proponent continue consulting with the Hamlet of Cambridge Bay, the Nattivak Hunters and Trappers Association, Pitquhirnikkut Ilihautiniq / Kitikmeot Heritage Society Board, the Ekaluktutiak Hunters and Trappers Organization, and any other relevant organizations or individuals on its project proposal. As part of these consultation activities, several issues should be considered, including, but not limited to:

- Incorporation of Inuit Qaujimagatuqangit into project activities;
- Mitigation measures to prevent any disturbance to wildlife and the environment;
- Mitigation measures to prevent disturbance to sites of cultural, archaeological, and/or environmental significance;
- The experience of community members who practice traditional and recreational activities within or in close proximity to project area;
- Training and employment opportunities for Inuit and community members;
- Procurement opportunities for local and Inuit-owned businesses; and
- Regular updates on the status of project activities.

CIRNAC appreciates the opportunity to provide comments. Should you have any questions, please contact Muhammad Arslan by e-mail at [muhammad.arslan@rcaanc-cirnac.gc.ca](mailto:muhammad.arslan@rcaanc-cirnac.gc.ca) or David Abernethy by email at [david.abernethy@rcaanc-cirnac.gc.ca](mailto:david.abernethy@rcaanc-cirnac.gc.ca).

Sincerely,



Richard Bingley  
Manager, Impact Assessment

