Hydro Québec TransÉnergie

PN1 - Preliminary information

Connecting the **Rose Lithium-Tantalum** Mine and Relocating a Segment of the 315-kV Line

PRELIMINARY INFORMATION • SUMMER 2017

Current situation

Corporation Éléments Critiques, a mining company, plans to commission the Rose Lithium-Tantalum Mine located in the Baie-James region, west of Eastmain 1 reservoir. The Rose facilities will include an open-pit tantalum and lithium mine and an industrial complex for processing the ore. The future pit will be located beneath the Eastmain-1–Nemiscau 315-kV double-circuit line (circuits 3176-3177), which connects Eastmain-1 generating station to Nemiscau substation. The mining company also wishes to be supplied with electricity.

Recommended solution

The solution recommended by Hydro-Québec is to relocate a 315-kV line segment, just over 4 km long, that currently runs through the future site of the pit. The relocated segment will bypass the future site to the east, keeping a minimal distance of some 500 metres from the boundaries of the planned mining site. This distance was requested by the customer and is required for the mine's operations. Bypassing the pit to the west was also considered, but this option was not selected due to a conflict with the mine's other infrastructure. The relocated line segment will be supported by guyed towers.

For electricity supply, Hydro-Québec plans to connect the mine to the 315-kV line. The customer will build a 315/25-kV transformer substation west of the connection point (exact location to be determined). No new structure is expected to be required for this connection.

Project description

The project includes:

- Relocating a segment of the 315-kV line
- Dismantling a segment of the 315-kV line
- Connecting the customer's 315/25-kV transformer substation to existing circuits

Study area and corridor

The project study area covers approximately 38 km^2. The 315-kV line from which a segment needs to be relocated cuts across the centre of the study area, and the road leading to Eastmain-1 generating station runs to the east of this line. A section of Eastmain 1 reservoir is included in the east of the study area, and the main mining facilities are located in the west.

The study area is part of the territory governed by the *James Bay and Northern Québec Agreement*. It is made up entirely of Category III public lands and includes an Eastmain community trapline.

The study area is characterized by hilly relief and coniferous vegetation, mainly pines. It contains wetlands, consisting mostly of open peatland with some treed peatland. There are many lakes and rivers throughout the territory, which straddles the drainage divide between the Eastmain and Pontax watersheds.

The study area will provide a broader picture of the host environment. However, given the context of the project (connection points close together, operational constraints to the west and safety strip around the pit), a study corridor east of the future pit has been preselected. The corridor is approximately 700 m wide and covers a surface area of close to 3 km^2. It includes the connection towers to the north and south and runs along the 500-m safety strip, overlapping into it.

Main environmental issues

Based on a summary review of the area's and project's characteristics, aside from use by Crees, the main environmental components that are sensitive to the installation of equipment are the rivers, wetlands and forest. Impacts associated with the construction phase must also be given special attention.

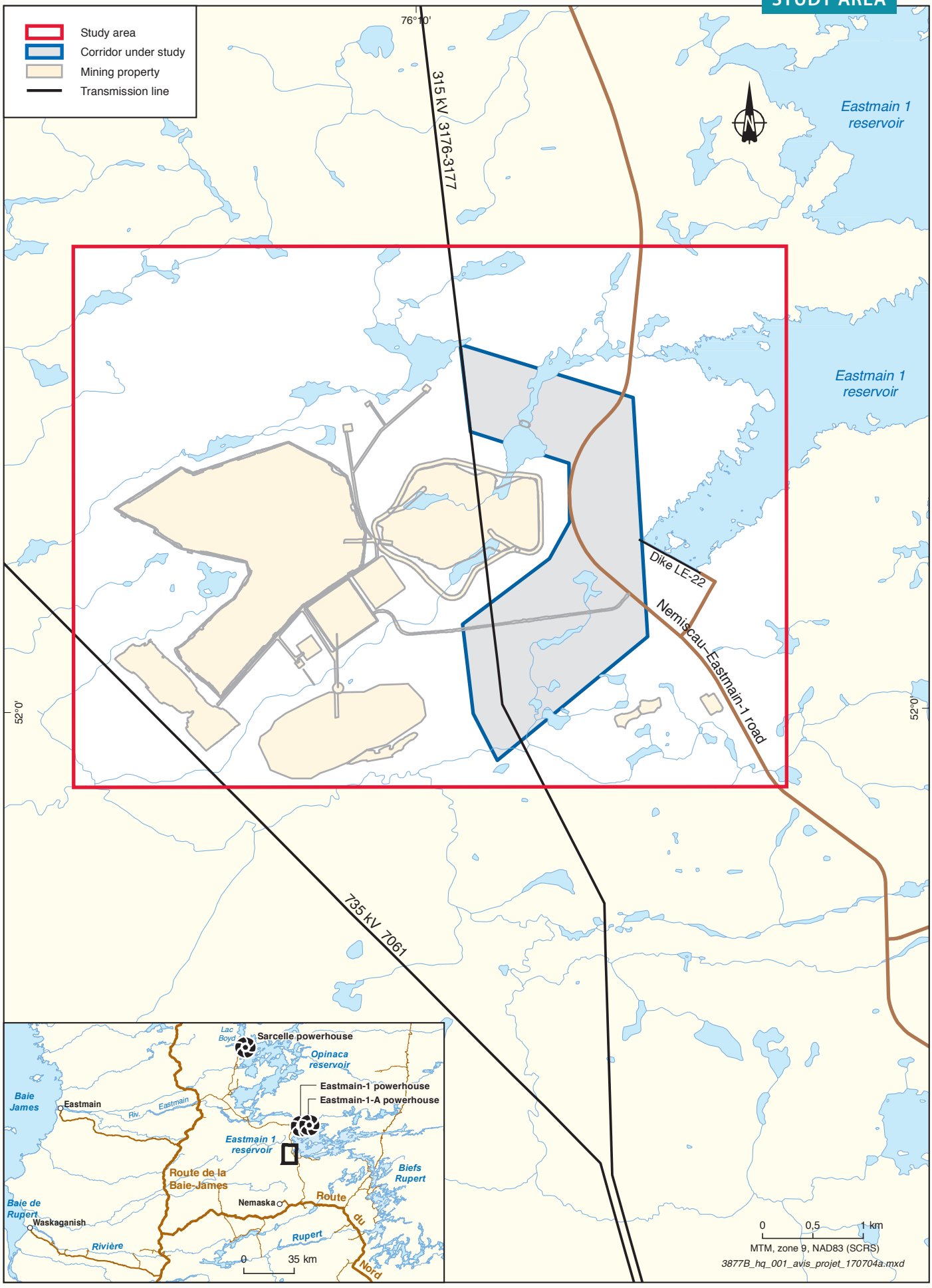
Studies

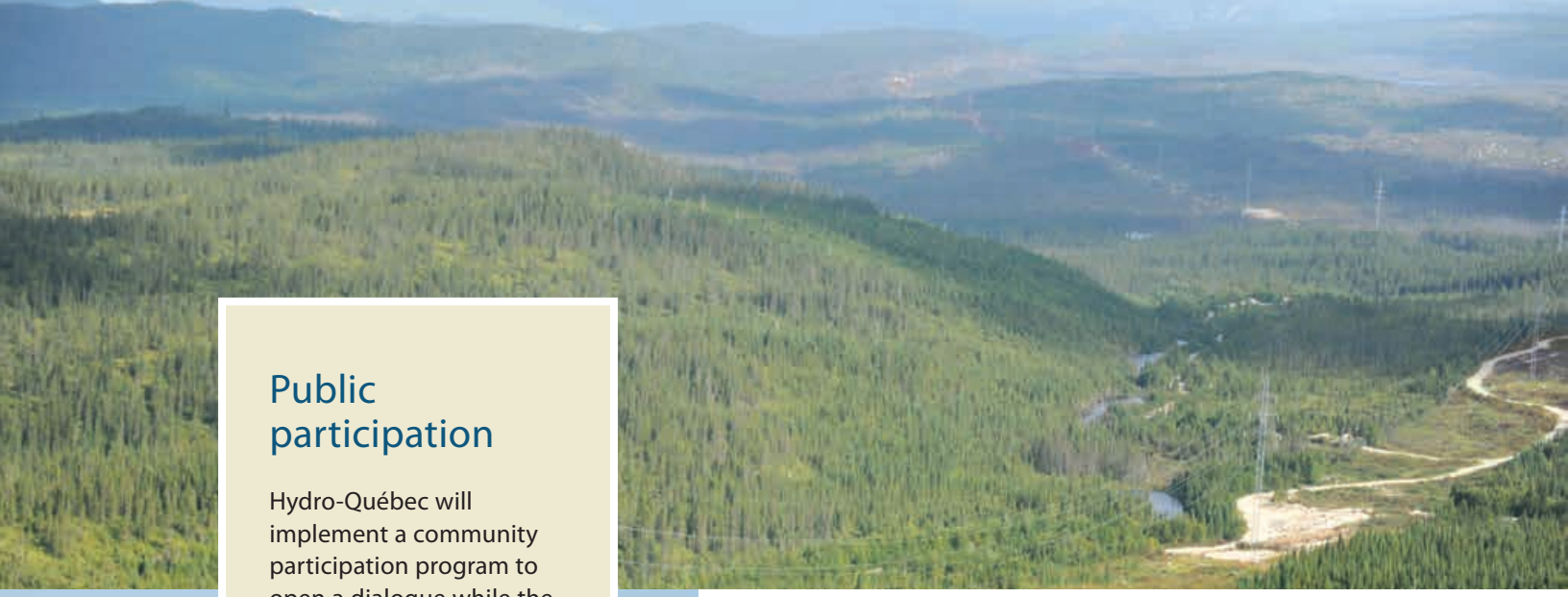
Hydro-Québec will carry out an environmental impact assessment. In addition to reviewing existing data, the company will conduct environmental inventories and technical surveys to better understand the host environment.

The project team will then study line routes that are acceptable to the community and from environmental, technical and economic standpoints, and will perform a comparative analysis of the options.

Finally, the detailed environmental, technical and economic analyses and the results of the community consultation will be used to identify the best route for bypassing the future pit.

STUDY AREA

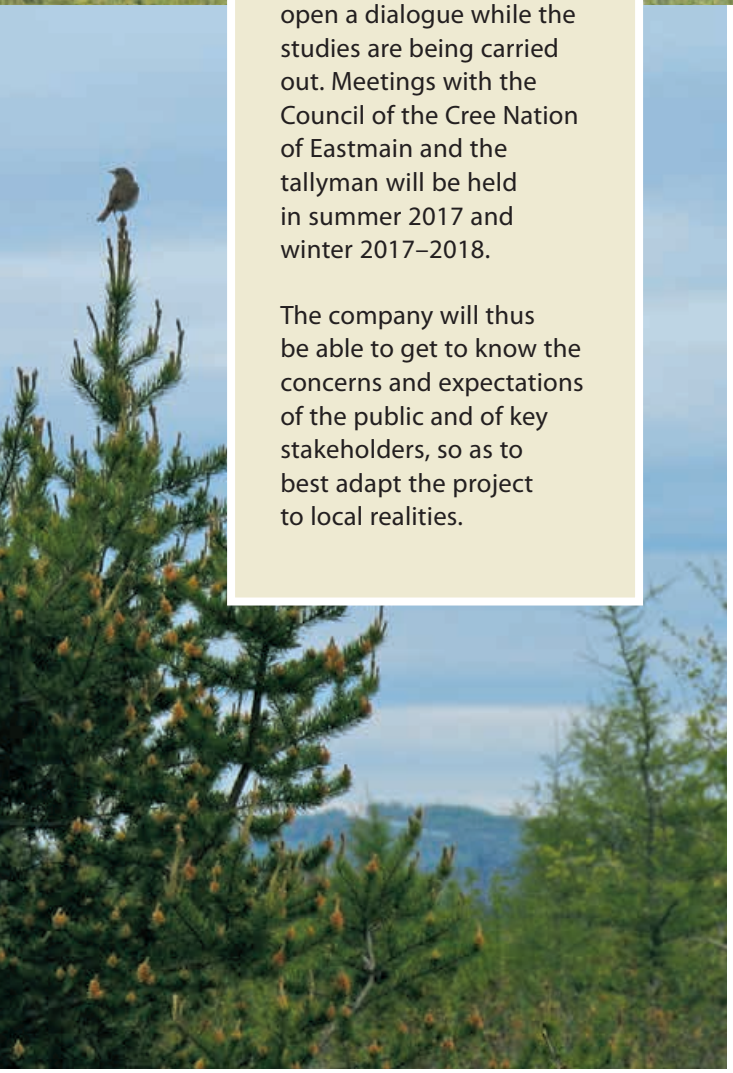

Study area
Corridor under study
Mining property
Transmission line
76°10'
315 kV 3176-3177
Eastmain 1 reservoir
Eastmain 1 reservoir
Dike LE-22
Nemiscau–Eastmain-1 road
52°0'
52°0'
735 kV 7061
Lac Boyd
Sarcelle powerhouse
Opinaca reservoir
Eastmain-1 powerhouse
Eastmain-1-A powerhouse
Baie James
Eastmain
Riv. Eastmain
Eastmain 1 reservoir
Route de la Baie-James
Biefs Rupert
Route du Nord
Nemaska
Baie de Rupert
Waskaganish
Rivière Rupert
0 35 km
0 0,5 1 km
MTM, zone 9, NAD83 (SCRS)
3877B_hq_001_avis_projet_170704a.mxd



Public participation

Hydro-Québec will implement a community participation program to open a dialogue while the studies are being carried out. Meetings with the Council of the Cree Nation of Eastmain and the tallyman will be held in summer 2017 and winter 2017–2018.

The company will thus be able to get to know the concerns and expectations of the public and of key stakeholders, so as to best adapt the project to local realities.



Schedule

DRAFT DESIGN	
General information	Summer 2017
Information and consultation	Summer and fall 2017
Information on route selected	Fall 2017 – winter 2017-2018
PROJECT	
Filing of environmental impact statement	Spring 2018
Permitting	Spring 2019
Bypass construction and commissioning	Summer and fall 2019
Dismantling of relocated line segment	Fall 2019
Connection and commissioning of customer's substation	Fall 2019

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Ce document est également publié en français.
This is a translation of the original French text.
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