



Highlights

Targeted Consultation and Inquiry Report

Report
no 369

Hertel-New York Interconnection Line Project

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INFORMER



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The BAPE Mandate: Background

On November 15, 2022, the ministre de l'Environnement, de la Lutte contre les changements climatiques, de la Faune et des Parcs mandated the Bureau d'audiences publiques sur l'environnement (BAPE) to conduct a targeted consultation on the Hertel-New York Interconnection Line Project. The Minister indicated that this consultation was to focus on the protection of agricultural land and activities as well as the protection of waterways and waterway infrastructures. Specifically, the consultation was to cover stray voltage impacts as well as the effects of construction on topsoil, crops and farm machinery traffic. The interim president of the BAPE formed a Commission of Inquiry for this purpose, whose mandate began on December 12, 2022, for a maximum three-month period.

The Project

In order to supply renewable energy to New York City, Hydro-Québec is planning to build a 400 kV direct current transmission line. This line would connect the Hertel substation in the City of La Prairie to the Champlain Hudson Power Express project line in the United States, mainly along Highway 15 and national and regional roads through the regional county municipalities of Roussillon, Jardins-de-Napierville and Haut-Richelieu. It would be 56.1 km underground and 1.6 km underwater. The connection to the American network would be made in the bed of the Richelieu river.

To transform the alternating current into direct current, Hydro-Québec plans to add a 1,250 MW power converter at the Hertel substation. However, this addition is not part of the Hertel-New York line construction project.

The cost of the proposed line project is estimated at \$0.5 billion. With the addition of the associated work at Hertel, the cost would be \$1.15 billion. Construction is expected to begin in the summer of 2023 and will take approximately 3 years. The line is expected to be in service by the spring of 2026.

Information and Consultation Activities

The Commission of Inquiry held two public sessions on December 13 and 14, 2022, to allow the proponent and contacts from various government departments to answer questions from the Commission and the public. Submissions and opinions were also invited. The sessions were organized in a hybrid format. Those who wished to participate in the work of the Commission of Inquiry could be present in the room where the consultation was held or could do so remotely by videoconference or telephone.

Public Opinions and Concerns

Agricultural issues were at the heart of the opinions and concerns expressed by participants in the targeted consultation. These included the impacts of construction on topsoil and farm machinery traffic, the effects of warning tape on farming operations, the impact of heat from the proposed power line on crop growth and culvert integrity, the potential risk of flooding on adjacent farmland, the impact of stray voltage on livestock production, and the monitoring of power line effects on agriculture.

Some people also raised issues non-related to those identified by the ministre de l'Environnement, de la Lutte contre les changements climatiques, de la Faune et des Parcs, such as the costs and benefits of the project, the preservation of natural environments, and energy transition in Quebec.

Main Findings and Opinions of the Commission

Targeted Issues and Agricultural Community

At the end of its investigation and targeted consultation mandate on the Hertel-New York Interconnection Line project, the Commission of Inquiry has concluded that certain considerations should be pointed out.

Regarding soil compaction, the ministère de l'Environnement, de la Lutte contre les changements climatiques, de la Faune et des Parcs should consider all of the conditions determined by the ministère de l'Agriculture, des Pêcheries et de l'Alimentation to reduce soil compaction both on the surface and at depth in its recommendation on the authorization of the project. It should be noted, however, that the eventual restoration of arable land would be carried out by Hydro-Québec, or at its expense, to the satisfaction of agricultural landowners.

The Commission notes that construction work could hinder the movement of farm machinery and that Hydro-Québec is working with a firm specializing in traffic and with its partners to implement various concerted approaches to limit the effects.

Regarding the concern that heat emitted by the proposed power line would affect crop yields, reviews of the scientific literature conducted by the ministère de l'Agriculture, des Pêcheries et de l'Alimentation and by Hydro-Québec concur with expert agronomic opinion that this heat would have a negligible effect.

In addition, this heat would only cause a slight increase in soil temperature around the culverts that will be bypassed by the proposed power line. Consequently, it is not expected to affect the freeze-thaw cycle sufficiently to affect their integrity and thus pose a risk of flooding to adjacent agricultural lands.

Furthermore, regarding stray voltage, the Commission notes that experts from Hydro-Québec and the ministère de l'Agriculture, des Pêcheries et de l'Alimentation consider that the Hertel-New York direct current interconnection line would not create induction and that it would not be connected to any distribution line. Therefore, it could not theoretically be the source of stray voltage to farms along its route.

Regarding agronomic monitoring, the program proposed by Hydro-Québec should be for a minimum seven-year-period as recommended by the ministère de l'Agriculture, des Pêcheries et de l'Alimentation. Such a period is required to verify the return to normal agricultural yields that prevailed prior to construction work. In the event of a loss of agricultural yields, Hydro-Québec undertakes to carry out corrective work, or to compensate landowners.

Energy Transition Issue

Although the issue of energy transition and its connection with electricity requirements is not one of the targets identified by the ministre de l'Environnement, de la Lutte contre les changements climatiques, de la Faune et des Parcs, the Commission of Inquiry chose to consider it because it is a concern raised by participants.

The Commission of Inquiry recognizes that this project highlights the importance of a reflection on energy transition in Quebec. In this regard, it notes the government's intention to make Quebec a leader in carbon neutrality in North America and to hold a consultation on its energy future in a manner to be determined. For Hydro-Québec, not only is it possible to meet supply needs in Quebec while completing the Hertel-New York Interconnection project, but the corporation also intends to increase commercial opportunities. Nevertheless, the corporation's flexibility in terms of its generating capacity is diminishing as new supply would be required by 2026-2027.

Consequently, the Commission of Inquiry is of the opinion that, given the climate emergency and the imminent need to increase Quebec's energy supply, the energy transition should be based on planning that reconciles its supply needs with its electricity export projects. And since this transition implies important societal changes that involve more than just government responsibility, this planning would benefit from promoting active and inclusive participation of the public. This would allow for a debate from which major strategic guidelines would be determined, while obtaining insight into various sustainable development issues that such planning raises.