

## SEVEN QUESTIONS ABOUT THE SAINT-JEAN PROJECT

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### 1. Why is Hydro-Québec planning to refurbish the Saint-Jean substation in Dollard-des-Ormeaux (DDO)?

- Hydro-Québec is required to provide electricity to all Québec residents.
- The Saint-Jean substation was commissioned in 1957. Most of its 120/12-kilovolts (kV) equipment needs to be replaced and the current voltage converted to 315/25 kV to meet the increasing demand for electricity on Montréal's West Island.
- This project is part of the comprehensive transmission upgrade on the island of Montréal.
- The project also calls for the construction of a new 315-kV line, approximately three kilometres in length. This new line will be built in an existing right-of-way where there is a 120-kV overhead line.

### 2. Why isn't Hydro-Québec planning an underground line in DDO?

- In Québec, as in many other places, power lines are rarely built underground. The main reason is that the cost of building and repairing underground lines is significantly higher than for overhead lines.
- Approximately 0.7% of Hydro-Québec's high-voltage transmission system is underground. In other countries, the percentage of underground power lines with a voltage of 315 kV and higher is:
  - 0.1% in Canada
  - 0.4% in the United States
  - 0.4% in Germany
  - 0.8% in Japan (source: International Council on Large Electric Systems (CIGRE))
- Hydro-Québec builds underground high-voltage power lines in cases where there is insufficient space for overhead lines (e.g., downtown Montréal).
- In DDO, the estimated construction cost for the overhead line is \$14 million, compared to \$59 million (in constant 2014 dollars) for an underground line with a similar transmission capacity.
- In Québec, the cost of building power lines is reflected in electricity rates. To ensure fair and equitable rates for all customers, if an applicant such as the City of DDO wishes to complete an underground project, it must agree to pay the cost difference. In such cases, the underground option may be considered.

### 3. Who has approved the Saint-Jean project?

- In January 2016, the Régie de l'énergie approved the Saint-Jean substation and overhead line project, judging it to be the most equitable and cost-effective solution for all Hydro-Québec customers.
- In addition to minimizing the impact on rates, the overhead option is the best solution in terms of technical criteria and long-term operability and maintenance.
- The Saint-Jean project is also subject to the government approvals process, in accordance with the *Environment Quality Act (EQA)*.

#### **4. What impact will the new line have on property values?**

- Power lines, like roads and railways, are an integral part of our modern landscape.
- Experts show that a number of factors influence property values, including market conditions, the proximity of schools and parks, access to transport, the neighborhood and the quality of buildings.
- Studies on property evaluation tend to show that the presence of a power line may play a role in determining the value of properties in urban and rural environments, and that any impact diminishes over time.\*
- As is the case with other public institutions in Canada,, Hydro-Québec only pays compensation when the acquisition of property rights is required. In this case, the property rights were acquired from farmers in the 1950s.

#### **5. What can be done to improve the visual impact of the new power line in the right-of-way?**

- Hydro-Québec intends to carry out landscaping work and develop recreational facilities in the existing right-of-way between Saint-Jean and des Sources boulevards, in collaboration with the City of DDO.
- Hydro-Québec will propose different types of towers and can vary their height and number to better integrate the line into the environment.
- In addition, through its Integrated Enhancement and Development Program, Hydro-Québec plans to pay \$400,000 to the City of DDO to support an initiative chosen by the City aimed at improving the local living environment.

#### **6. Will the new power line affect my health?**

- Scientific evidence from a number of studies\* carried out over the past 40 years have not demonstrated harmful effects on health from exposure to electric and magnetic fields at voltage levels normally present in the environment, such as those emitted by high-voltage power lines at the edge of their right-of-way.
- Health Canada and the Ministère de la Santé et des Services sociaux du Québec take similar positions\* on this matter.

#### **7. What sound impact will the future line have?**

- According to simulations carried out by acoustical engineers, under all conditions, noise levels from the line will be less than ambient noise levels.
- In dry weather, noise levels from the future 315-kV line will be inaudible near the right-of-way. In humid and rainy weather, noise levels from the line will likely increase, but will remain less than ambient noise levels.

#### **FOR MORE INFORMATION**

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\* See the documents on the project Web page: <http://www.hydroquebec.com/transmission-construction-projects/saint-jean-substation/>  
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