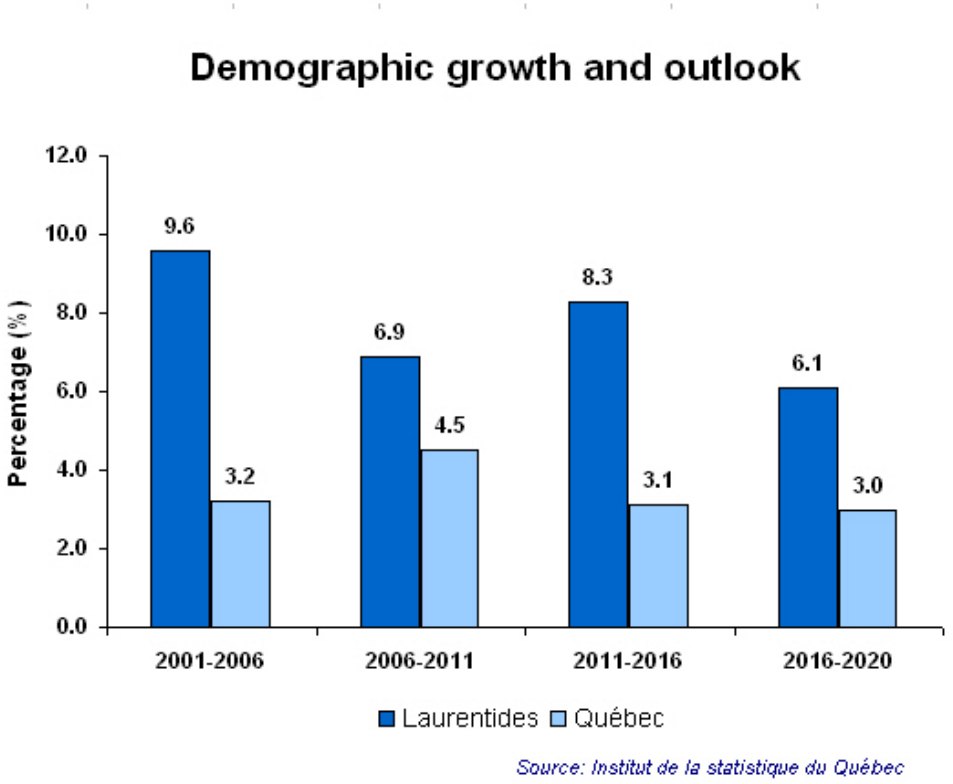
120-KV GRAND-BRÛLÉ–SAINT-SAUVEUR SUPPLY LINE

GROWTH AND ELECTRICITY SUPPLY SCENARIOS

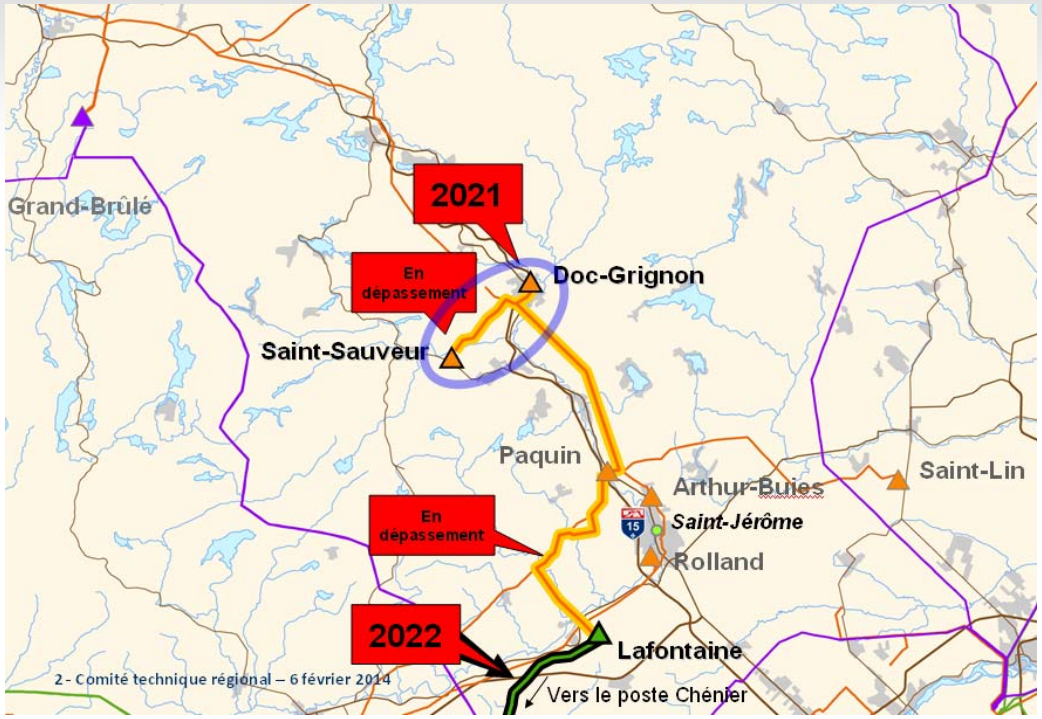
Electricity demand growth in the Laurentides

- The annual growth of electricity demand in the region is 2.8%, compared with the Québec average of 1.4%.
- Several factors might explain this growth:
  - Population increase
  - The presence of important economic hubs: Saint-Jérôme, Saint-Sauveur and Sainte-Agathe-des-Monts
  - Secondary homes being transformed into permanent residences



Upgrade of the high-voltage system in the Laurentides

- Several transmission substations and lines that supply the region have reached their maximum transmission capacity.
- To adequately meet the growing demand for electricity, Hydro-Québec must increase the transmission and transformer capacity of some of its facilities.



- The need identified:
  - A new source of electricity supply in the region to relieve the pressure on existing lines and substations that have reached their maximum capacity, or will reach it in the next few years

Electricity supply scenarios studied

Hydro-Québec initially studied two supply scenarios to meet the growing demand for electricity in the region:

1 Continue to supply the substations from the south

2 Build a new 120-kV line between Grand-Brûlé substation and the line connecting Saint-Sauveur and Doc-Grignon substations

Subsequently, at the community's request, the company studied three additional scenarios:

3a New 120-kV line running along the existing 120-kV line between Grand-Brûlé and Sainte-Agathe-des-Monts substations

3b New 315-kV line running along the existing 120-kV line between Grand-Brûlé and Sainte-Agathe-des-Monts substations

4 New 120-kV underground Grand-Brûlé–Saint-Sauveur supply line

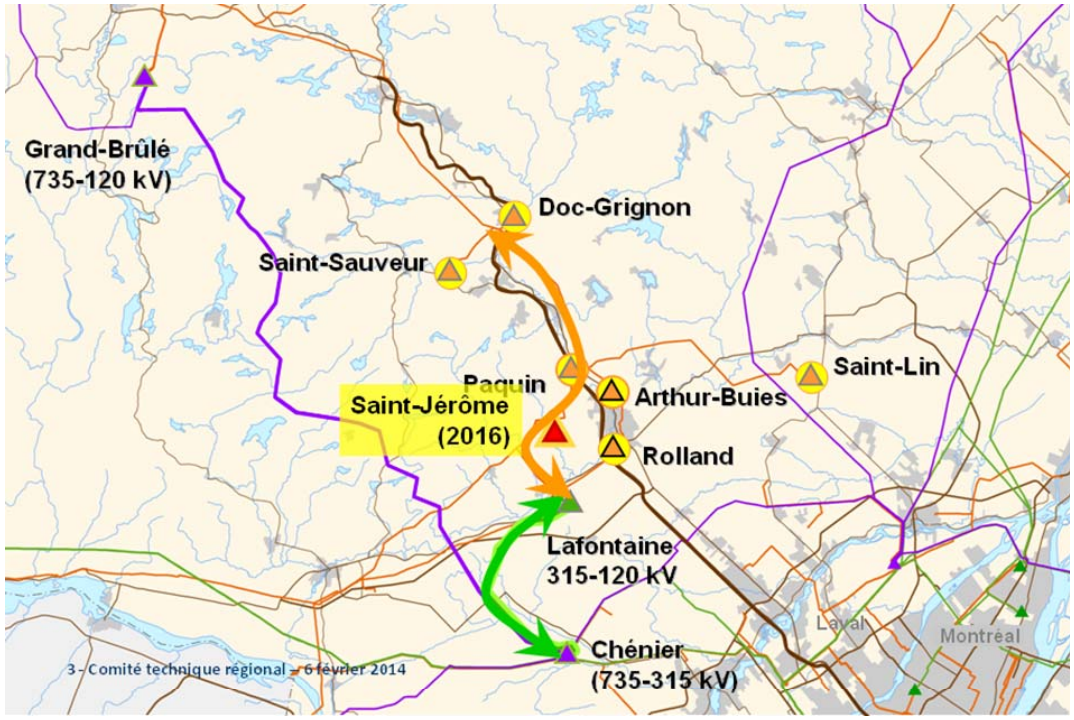
Scenario 1: Continuing to supply the substations from the south

- Construction of 61 km of lines (315 kV and 120 kV) in densely populated areas in Basses-Laurentides, with significant associated impacts on the environment and landscape

- Addition of a fourth transformer and two 120-kV feeder bays at Lafontaine substation, and of 315-kV feeder bays at Chénier and Lafontaine substations

- The region will continue to be supplied exclusively from the south, incurring the significant electricity losses associated with this set-up

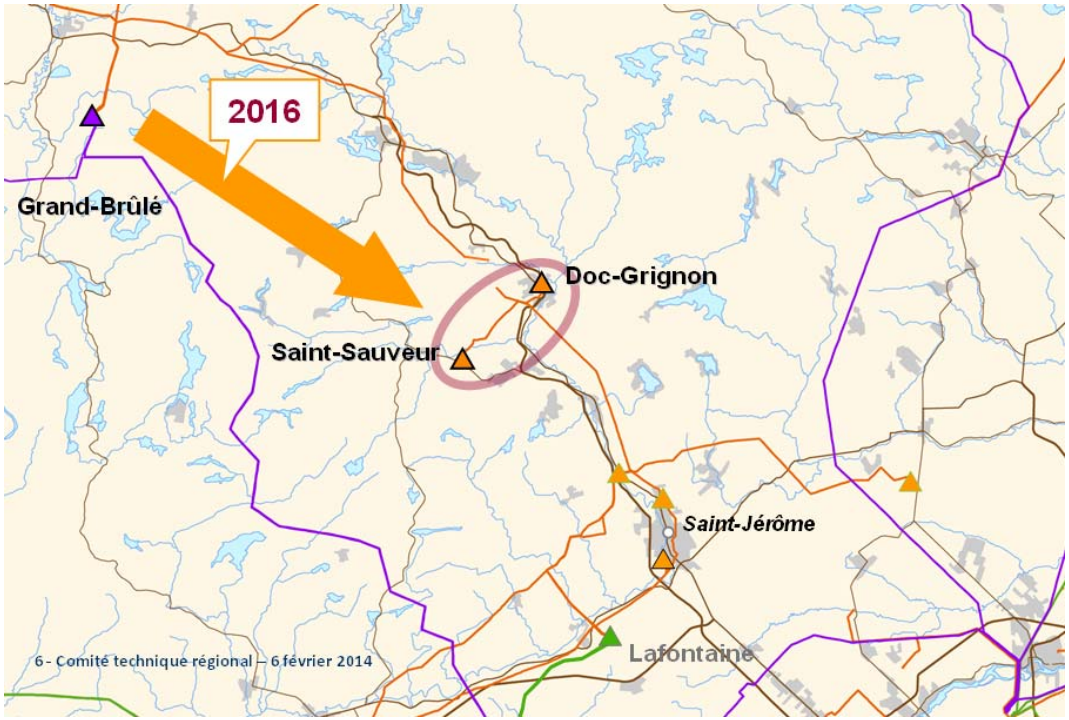
- Total estimated cost: $195 million



Scenario 2: New 120-kV line between Grand-Brûlé substation and the Saint-Sauveur transmission line

- Construction of a 120-kV line approximately 40-km long:
  - Possibility of building some of the line in the right-of-way of an existing 735-kV line and of building in the right-of-way of an existing 120-kV line
  - Opening of a new line corridor in lightly populated areas with the associated impacts on the environment and landscape

- Addition of two 120-kV feeder bays at Grand-Brûlé substation
- Allows for part of the region to be supplied from the north (fewer electricity losses)
- Total estimated cost: $92 million

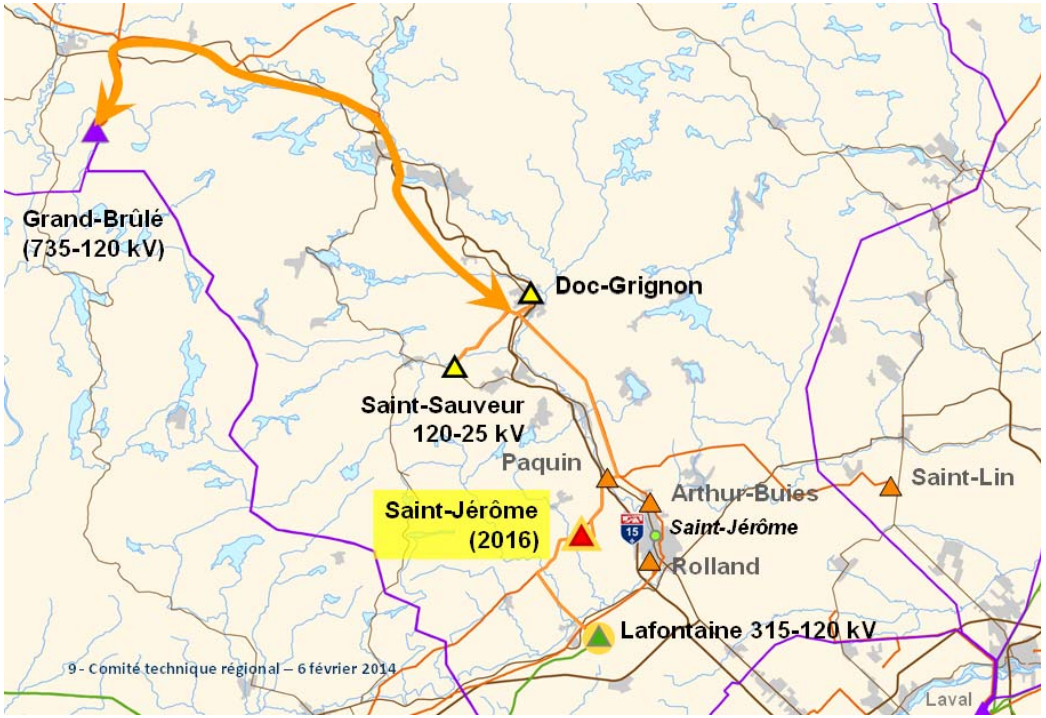


Scenario 3a: New 120-kV line running along the existing 120-kV line between Grand-Brûlé and Sainte-Agathe-des-Monts substations

- Construction of a new 120-kV line (50 km) and addition of two 120-kV feeder bays at Grand-Brûlé substation
- **Scenario viable only for the next five to six years. For the longer term, scenario 3b (315 kV) would have to be implemented, which would require additional investments**
- Right-of-way: impossible to expand at several sections of the line; in other areas, the line would cut through heavily inhabited and frequented areas between Mont-Tremblant and Sainte-Agathe-des-Monts, requiring the relocation of buildings and causing significant environmental impacts
- The line would cross important travel routes six times (15, 329 and 117), and also through the heart of the municipality of Sainte-Agathe-des-Monts, with significant impacts on the landscape

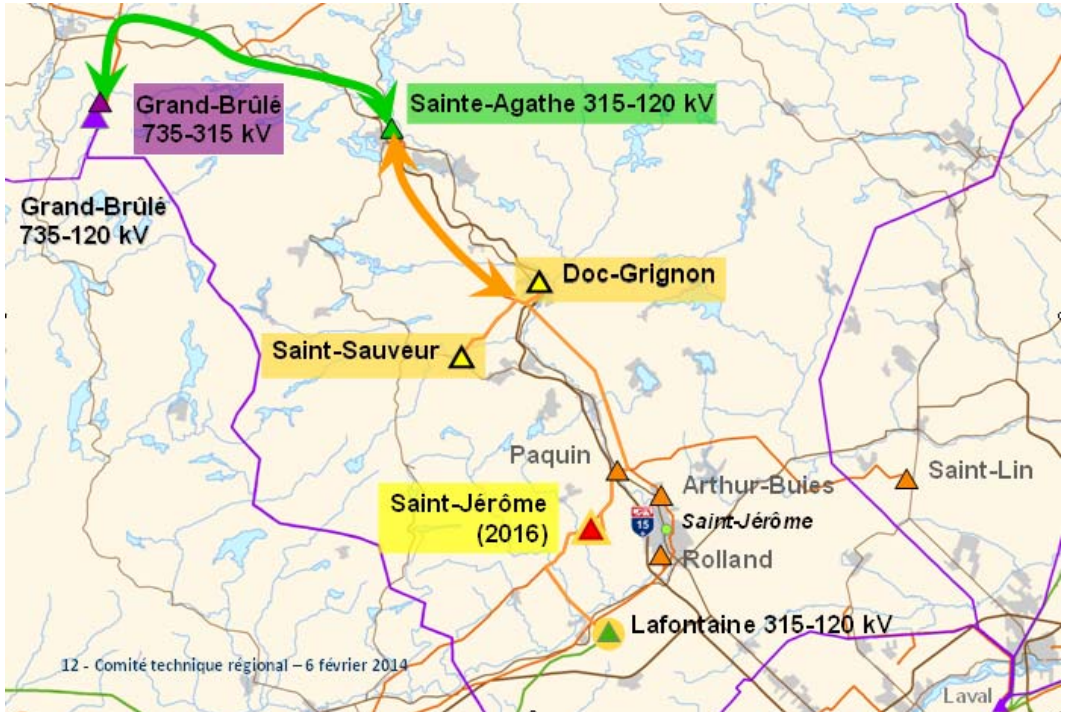
Scenario 3a: New 120-kV line running along the existing 120-kV line between Grand-Brûlé and Sainte-Agathe-des-Monts substations (cont)

- Allows for part of the region to be supplied from the north (fewer electricity losses)
- Total estimated cost: $112 million
  (additional investment would be required after 6 years to implement scenario 3b, for a total cost of $300 million)



Scenario 3b: New 315-kV line running along the existing 120-kV line between Grand-Brûlé and Sainte-Agathe-des-Monts substations

- Addition of a 735/315-kV transformer section at Grand-Brûlé substation
- Construction of a line approximately 35-km long between Grand-Brûlé substation and a new 315/120-kV source substation
- Construction of a new 315/120-kV source substation
- Construction of a 120-kV line approximately 15-km long between the source substation and the line connecting Saint-Sauveur and Doc-Grignon substations
- Environmental impacts associated with the new substation at Sainte-Agathe-des-Monts
- Allows for part of the region to be supplied from the north (fewer electricity losses)
- Total estimated cost: $300 million



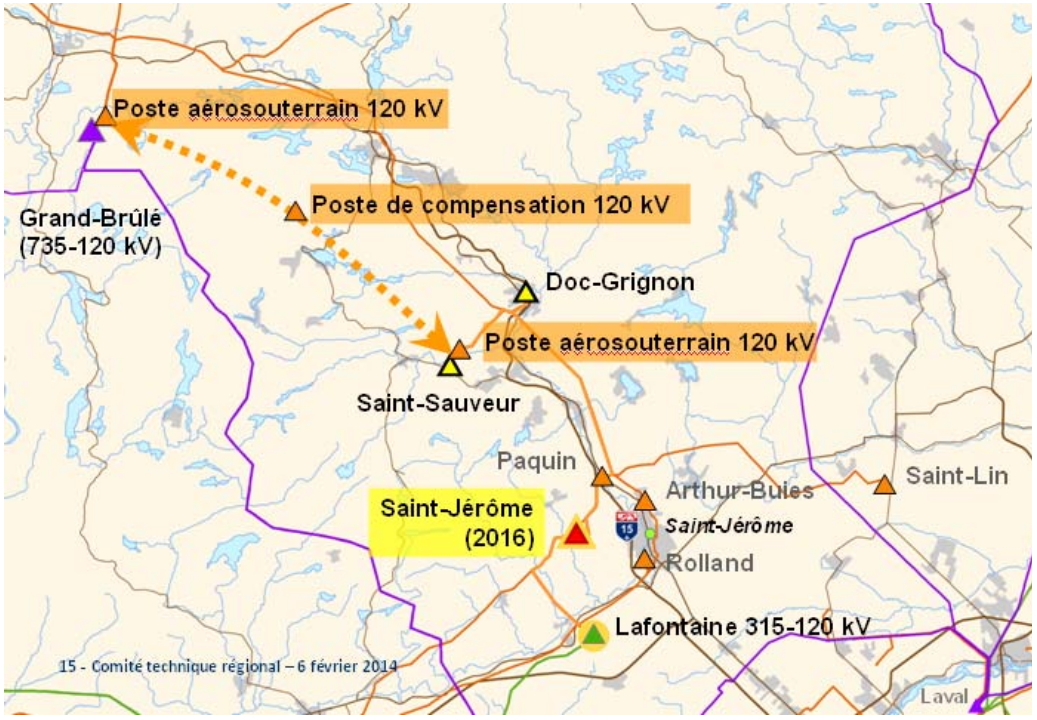
Scenario 4: New 120-kV underground Grand-Brûlé–Saint-Sauveur supply line

- Construction of:
  - a new 120-kV (40 km) underground line (two parallel underground encasements)
  - two new overhead-underground junction substations, one at each end of the underground line
  - a new compensation substation at the route's halfway point
  - joint bays at every 800 m
- Addition of two 120-kV feeder bays at Grand-Brûlé substation
- Impacts associated with the two new overhead-underground junction substations and the compensation substation

(continued)

Scenario 4: New 120-kV underground Grand-Brûlé–Saint-Sauveur supply line (cont)

- Clearing of a 10-m wide right-of-way for the encasements and an additional 8 m for the construction work
- Presence of sensitive areas that cannot be bypassed (wetlands, waterways, etc.)
- Allows for part of the region to be supplied from the north (fewer electricity losses)
- Underground line: maintenance is more expensive and more complex than for an overhead line
- Total estimated cost: $440 million (for a service life of 40 years, compared with 70 years for an overhead line)



Conclusion

- To adequately meet the growing demand for electricity in the Laurentides, Hydro-Québec must increase the transmission and transformer capacity of some of its facilities
- The need identified by Hydro-Québec:
  - A new electricity supply source in the region to relieve the pressure on existing lines and substations that have reached their maximum capacity, or will reach it in the next few years
- **The scenario with the least technical, economic and environmental constraints is the one for a new 120-kV line between Grand-Brûlé substation and the line connecting Saint-Sauveur and Doc-Grignon substations.**