



*Test hall measuring 82 m by 67 m and 50 m high, insulated against radio interference (attenuation of 50 to 60 dB at 1 MHz and acoustic suppression).*

# Hydro-Québec testing laboratories

The solution for your HV testing needs

Hydro-Québec operates one of the world's largest laboratories for testing and optimizing a wide range of power system equipment according to the applicable standards and service requirements. Our leading-edge facilities can generate a nominal impulse voltage of 5.4 MV, a switching impulse of 2.7 MV and a peak test voltage of 1,800 kV AC or 1,200 kV DC.

## **Tests offered**

- > Dry or wet tests
  - > Voltage (up to 1,800 kV AC or 1,200 kV DC)
  - > Full-wave or chopped-wave lightning impulse (up to 5.4 MV)
  - > Switching impulse (up to 2.7 MV)
  - > AC or DC voltage combined with lightning impulse or switching impulse
  - > Current impulse
- > Radio interference voltage measurements
- > Corona detection
- > Partial discharge measurements
- > Capacitance and loss angle measurements
- > HV tests in oil or gas
- > Temperature rise tests
- > Loss measurements



### ***Equipment tested***

- > Switches
- > Circuit breakers
- > Power cables
- > Line hardware
- > Insulators
- > Bushings
- > Surge arresters
- > Shunt reactors
- > Air or steel-core reactors
- > Instrument transformers (current and voltage)
- > Power transformers
- > Grounding transformers
- > Spark gaps
- > Distribution cabinets
- > Conductor bundles
- > HV measurement and test apparatus
- > Tools and equipment used for live-line work

- ✔ High-voltage testing
- Electrical testing
- Mechanical and environmental testing
- Underground cable testing
- Testing on a full-scale overhead line
- Calibration and repair services

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**Expertise and specialized facilities  
you can bank on**

**Comprehensive solutions to meet  
your specific needs**

### ***To reach us***

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www.hydroquebec.com/innovation/en

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