



Hydro-Québec testing laboratories

The solution for your full-scale overhead
line testing needs

Hydro-Québec operates outdoor facilities for conducting studies and tests on the mechanical behavior of HV transmission lines. These facilities constitute an ideal site for testing and validating conductor and line hardware performance before deployment on the power system.

Services offered

- › Aeolian vibration tests
- › Wake-induced oscillation tests, including subspan oscillations
- › Conductor galloping tests
- › Static and dynamic load tests
- › Ice shedding tests
- › Aging tests
- › Spacer and damper certification tests
- › Validation of line installation and inspection methods

Equipment tested

- › Standard and high-temperature conductors
- › Conventional and optical ground wires
- › Conductor bundles (up to 12 conductors)
- › Dampers and spacer-dampers
- › Interphase spacers
- › Aerial warning spheres
- › Suspension clamps



Installing hardware and instruments from an aerial lift.

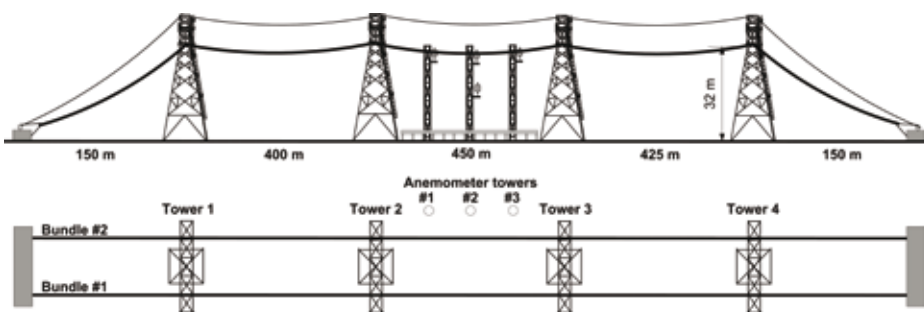


Relative displacement transducers on a quad bundle.

Principal instruments used

- > Anemometers
- > Temperature sensors
- > Barometric pressure sensors
- > Relative humidity sensors
- > Ice detectors
- > Accelerometers
- > Relative displacement transducers
- > Clinometers
- > Force transducers

IREQ operates a full-scale test in Varennes test line to study the dynamic response of conductors and validate the performance of line hardware. Our expertise and technical knowledge are available to benefit other power system builders and operators as well.



Varennes test line

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

To reach us

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Expertise and specialized facilities
 you can bank on

Comprehensive solutions to meet
 your specific needs