

News Release

FOR IMMEDIATE RELEASE

Hitachi Energy selected as technology partner to support the transmission of renewable power between Canada and the United States

Substantial modernization of a key transmission system in Canada will support the transfer of electricity between Montreal and New York

Zurich, 15 December 2022 – Hitachi Energy, a global technology leader that is advancing a sustainable energy future for all, today announced that it has been selected by Hydro-Québec for its high-voltage direct current (HVDC) technology for the transmission of electricity, which will ensure the sustainability of the energy exchange between the Quebec network, in eastern Canada, and New York State in the northeastern United States.

Hydro-Québec, the largest hydroelectricity producer in Canada and one of the largest hydroelectricity producers in the world, is a public company that generates, transmits, and distributes reliable, clean and renewable electricity in Québec. Thanks to its surplus energy, it supplies the Canadian provinces and the northeastern United States.

The Châteauguay HVDC system will enable the transmission of up to 1,500 megawatts of electricity between the electrical networks of Quebec and the state of New York which will contribute to maintaining a low carbon footprint in the region. This new system will replace existing equipment which has been in operation since 1984^{*1}, increasing the efficiency and controllability, plus raising the power conversion capacity of the Châteauguay HVDC system^{*2} by 50 percent.

^{*1} [Châteauguay "back-to-back" HVDC converter station](#)

^{*2} Subject to authorization by the Régie de l'énergie du Québec of the project to replace the converter units at Châteauguay substation

"We are proud to be returning to the Châteauguay HVDC station, after helping to build it almost four decades ago," said Niklas Persson, Managing Director of Hitachi Energy's Grid Integration business. "This new system represents an important enhancement to the ability to transmit large-scale hydro power between Canada and the United States, which will support the shift away from fossil fuel."

Hitachi Energy is supplying a "back-to-back" converter station, which converts AC power to DC then reconverts it to AC from DC enabling the interconnection of the 735 kilovolt Canadian and 765 kilovolt New York grids which are "out of phase" and cannot be connected directly via traditional AC systems.

- End -

Note to editors:

Hitachi Energy's HVDC solution combines world-leading expertise in HVDC converter valves; the MACH™ digital control platform^{*3}, which enables renewables integration and manages voltage and frequency disturbances in the grid; converter power transformers and high-voltage switchgear; as well as system studies, design and engineering, supply, installation supervision and commissioning.

^{*3} [Modular Advanced Control for HVDC \(MACH™\)](#)

HVDC Light® is a voltage source converter technology developed by Hitachi Energy. It is the preferred technology for many grid applications, including interconnecting countries, integrating renewables and "power-from-shore" connections to offshore production facilities. HVDC Light's defining features include uniquely compact converter stations and exceptionally

low electrical losses.

Hitachi Energy pioneered commercial HVDC technology almost 70 years ago and has delivered more than half of the world's HVDC projects.

HVDC website:

<https://www.hitachienergy.com/offering/product-and-system/hvdc>

About Hitachi Energy Ltd.

Hitachi Energy is a global technology leader that is advancing a sustainable energy future for all. We serve customers in the utility, industry and infrastructure sectors with innovative solutions and services across the value chain. Together with customers and partners, we pioneer technologies and enable the digital transformation required to accelerate the energy transition towards a carbon-neutral future. We are advancing the world's energy system to become more sustainable, flexible and secure whilst balancing social, environmental and economic value. Hitachi Energy has a proven track record and unparalleled installed base in more than 140 countries. Headquartered in Switzerland, we employ around 40,000 people in 90 countries and generate business volumes of approximately \$10 billion USD.

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About Hitachi, Ltd.

Hitachi drives Social Innovation Business, creating a sustainable society with data and technology. We will solve customers' and society's challenges with Lumada solutions leveraging IT, OT (Operational Technology) and products, under the business structure of Digital Systems & Services, Green Energy & Mobility, Connective Industries and Automotive Systems. Driven by green, digital, and innovation, we aim for growth through collaboration with our customers. The company's consolidated revenues for fiscal year 2021 (ended March 31, 2022) totaled 10,264.6 billion yen (\$84,136 million USD), with 853 consolidated subsidiaries and approximately 370,000 employees worldwide. For more information on Hitachi, please visit the company's website at <https://www.hitachi.com>.

Information contained in this news release is current as of the date of the press announcement, but may be subject to change without prior notice.
