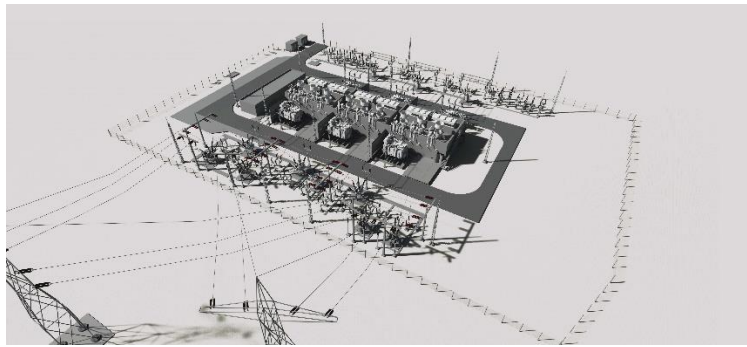


# News Release

FOR IMMEDIATE RELEASE

## Hitachi Energy wins order from Deutsche Bahn to deliver one of the most powerful converter stations in the world

*The Thyrow converter plant will convert electricity from the public three-phase distribution network to a frequency of 16.7 Hz and feed it into the traction current network*



Rendering of the Thyrow converter station

**Zurich, May 31, 2022** – Hitachi Energy, the global technology and market leader in power grids, announced today that it has won an order from Deutsche Bahn to provide a 120 megawatt (MW) converter station which enables DB Energie to secure power supply for the Greater Berlin rail network. The network serves a metropolitan population of around 3.5 million people and is the hub for multiple high-speed train services to cities throughout Germany and neighboring countries.

The Thyrow converter station, south of Berlin, will enable Deutsche Bahn to convert electricity from the public three-phase power distribution grid, which operates at a frequency of 50 hertz (Hz) to 16.7 Hz, and feed it into the rail power grid used to power trains and rail infrastructure.

The order follows one awarded last year by Deutsche Bahn to Hitachi Energy for the 160 MW Delitz converter station in the greater Halle/Leipzig area, which will be one of the most powerful converter stations for rail power worldwide.

“We are delighted that Deutsche Bahn has selected Hitachi Energy as partner of choice to secure the 16.7 Hz power supply for their rail network,” said Niklas Persson, Managing Director of Hitachi Energy’s Grid Integration business. “This is an excellent example of how we collaborate together with customers and partners to accelerate the energy transition and advancing a sustainable energy future for all.”

The Hitachi Energy solution for the Thyrow converter station comprises three compact 40 MW static frequency converter modules, which use Hitachi Energy’s advanced power semiconductors to provide a steady and reliable power supply at maximum availability and with minimal electrical losses. The solution includes a 30-year service contract and a digitalization package to provide Deutsche Bahn with condition-based and reactive maintenance and data insights into the system status of the converter station over the life cycle.

Hitachi Energy is the world’s leading supplier of grid integration and power quality solutions, including rail converter stations and the integration of renewable energy into power transmission systems.

## Notes to the Editor

### ***Static frequency converters***

Rail frequency converter stations are based on static frequency converters (SFC). They connect three-phase power distribution or transmission grids, which typically operate at 50 or 60 Hz, with single-phase railway power grids, which operate at 16.7, 25, 50 or 60 Hz. Besides the transfer of active power, the SFC can also control reactive power in both grids independently. It responds immediately to grid faults and enables a smooth and interruption-free transition to island mode during an outage.

### ***Power electronics***

SFCs are based on Hitachi Energy's power electronics. These integrated gate-commutated thyristors (IGCTs) will be part of this solution. They maintain grid stability and power quality by responding rapidly to frequency fluctuations and grid disturbances. Power electronics are an integral part of many Hitachi Energy technologies, including high-voltage direct current (HVDC) and flexible AC transmission systems (FACTS).

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### **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 38,000 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>.

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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.

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