News Release



FOR IMMEDIATE RELEASE

Hitachi Energy wins order for first subsea electricity interconnection between France and Spain

HVDC link improves the security and quality of power in the region, advancing the integration of emission-free energy



The Biscay Gulf at the border between Spain and France

Zurich, June 15, 2023 – Hitachi Energy, a global technology leader that is advancing a sustainable energy future for all, today announced it won an order from Electricity Interconnection France-Spain (Inelfe), the joint venture bringing together operators of the Spanish (Red Eléctrica) and French (RTE) electricity transmission networks, in charge of the construction and commissioning of all cross-border connections between both countries, to supply four high-voltage direct current (HVDC) converter stations to interconnect France and Spain via a subsea cable across the Biscay Gulf.

The Biscay Gulf interconnection, labeled as project of common interest (PCI) at the European level, will consist of two HVDC links, with a converter station at each end of both systems. Combined, the links will efficiently supply a total of 2,000 megawatts (MW) of electricity at 400 kilovolts (kV) over 400 kilometers (km). Providing the equivalent of the power consumption of more than two million households¹, the links will improve the safety, stability, and quality of the electricity supply between the two countries. It will advance the integration of emission-free electricity and create a more efficient system to generate savings that benefit consumers and the rest of Europe.² Most of the link will be underwater, but a short section of the link cable route will return to land to avoid the deep Capbreton Canyon.

"Cross border, and often subsea, interconnections are vital to Europe's increasingly interconnected grid," said Niklas Persson, Managing Director at Hitachi Energy's Grid Integration business. "Through our pioneering HVDC technology, we enable Inelfe to accelerate the two countries' sustainability goals, improving the safety, stability, and quality of electricity supply between France and Spain and the rest of Europe."



Inelfe (Interconexión Eléctrica Francia-España or Electricity Interconnection France-Spain) was set up following the 2008 Zaragoza Agreement, between the governments of Spain and France, with the mission to enhance the exchange of electricity between the two countries. The resulting infrastructure doubled the interconnection capacity between France and Spain from 1,400 MW to 2,800 MW today. With the Biscay Gulf interconnection, the capacity to exchange power will soon reach 5,000 MW.³

In line with its Purpose to champion the urgency of a clean energy transition through innovation and collaboration, Hitachi Energy is collaborating with VINCI, an industry leader in energy and construction. Together the two companies will provide an advanced solution for the Biscay Gulf project by delivering the engineering and power technologies and the construction of the converter stations. The collaboration with VINCI will leverage the core competencies of the two companies to deliver a best-in-class solution for the project.

Note to editors:

Hitachi Energy's HVDC solution combines world-leading expertise in HVDC converter valves; the MACH[™] digital control platform⁴, converter power transformers and high-voltage switchgear; as well as system studies, design and engineering, supply, installation supervision and commissioning.

HVDC Light[®] is a voltage source converter technology developed by Hitachi Energy, which was launched over 25 years ago. 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.

1 <u>https://www.odyssee-mure.eu/publications/efficiency-by-sector/households/electricity-</u> consumption-dwelling.html

2 https://www.inelfe.eu/en/projects/bay-biscay

3 https://www.inelfe.eu/en/about-inelfe

4 Modular Advanced Control for HVDC (MACH™)

HVDC website

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

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About Hitachi Energy

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 over \$10 billion USD.

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About Hitachi, Ltd.

Hitachi drives Social Innovation Business, creating a sustainable society through the use of data and technology. We solve customers' and society's challenges with Lumada solutions leveraging IT, OT (Operational Technology) and products. Hitachi operates under the business structure of "Digital Systems & Services" - supporting our customers' digital transformation; "Green Energy & Mobility" - contributing to a decarbonized society through energy and railway systems, and "Connective Industries" - connecting products through digital technology to provide solutions in various industries. Driven by Digital, Green, and Innovation, we aim for growth through co-creation with our customers. The company's consolidated revenues for fiscal year 2022 (ended March 31, 2023) totaled 10,881.1 billion yen, with 696 consolidated subsidiaries and approximately 320,000 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.
