

News Release

FOR IMMEDIATE RELEASE

Hitachi Energy supplies world-breaking OceaniQ™ subsea transformers to OneSubsea for its subsea multiphase compression system

The world's most powerful subsea transformer is being tested in the Port of Vaasa in Finland and will enable the electrification of subsea equipment using renewable hydropower thus reducing energy consumption and carbon emissions

Zurich, July 8, 2022 – Hitachi Energy has today started testing on the world's most powerful 24 MVA subsea transformer, which will be supplied to OneSubsea®, the subsea technologies, production, and processing systems business of Schlumberger.

The tests will involve submerging the 55 tonne subsea transformer into the harbor basin to monitor its thermal behavior and pressure compensation system, as well as ensure its reliability in subsea conditions.

The transformers form part of a large contract awarded to Hitachi Energy for the supply of two subsea OceaniQ™ transformers, two input transformers, two step-up transformers, and a common step-down distribution transformer. Once tested the subsea transformers will be submerged off the Norwegian coast in waters to a depth of about 850 m and will power the OneSubsea multiphase compression system for the Shell Ormen Lange field in the Norwegian Sea.

Hitachi Energy has collaborated closely with ABB on the project. ABB is supplying its INSUBSEA® Long Step-out solution to deliver power to the OneSubsea compressors and have overall system responsibility for the power scope of the project that includes delivering drives for seabed compressors that sit away from topside infrastructure.

The OneSubsea compression system will be powered and controlled from the Nyhamna onshore gas processing plant, which is 120 km from the subsea location. This power stepout distance sets a world record for transmitting variable frequency power from an onshore facility to equipment on the seabed. The system will lower backpressure on the reservoir, helping increase recovery and extend the life of the field.

"We are delighted to be collaborating with ABB and OneSubsea on this important project," said Bruno Melles, Head of the Transformer Business at Hitachi Energy. "A subsea transformer is an advanced technology due to its ability to operate in waters at a depth of up to 3,000 m and in extremely demanding conditions, including high pressure, corrosion, subzero temperatures, and strong underwater currents. Hitachi Energy's OceaniQ subsea transformer technology is also ideally suited for the connection of floating offshore wind farms to the grid. This feature is another example of our company's ability to develop state-of-the-art power systems that meet the highest quality standards."

"Hitachi Energy is a key partner for ABB on this ground-breaking subsea project. Together our long offshore industry experience and power distribution expertise make for an unbeatable solution. We are proud to be contributing to life extension and boosting efficiency at Ormen Lange," said Gunnar Lie, Head of Operations, Subsea and New Energy, Energy Industries at ABB Norway.

Sustainable power from shore

Ormen Lange Phase 3 is a fully subsea-to-shore processing system fed by hydroelectric power

from the Norwegian grid. Ormen Lange Phase 3 is one of the lowest carbon-intensive and most energy-efficient recovery improvement projects in the industry.

Hitachi Energy is the pioneer and the world's leading manufacturer of subsea transformers. The development of the technology started in Finland already in the 1980s and the first subsea transformer was commissioned in 2000. In total, the company has supplied more than 40 subsea transformers. Earlier the world's most powerful subsea transformers have been a 20 MVA transformer for a pilot project at the Nyhamna gas field in Norway and two 19 MVA subsea transformers that are in production at the Åsgard field in Norway.

The Ormen Lange deep-water project off the Norwegian coast will produce natural gas from deep in the Norwegian Sea and bring it onshore to a refinery in Nyhamna. The plant supplies around 20% of the UK's total gas consumption.

Hitachi Energy will deliver the subsea transformers by the end of 2022.

Notes to editors

The subsea transformers are part of Hitachi Energy's OceaniQ™, a ruggedized, proven portfolio that addresses the unique challenges of the offshore energy environment.

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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.

<https://www.hitachienergy.com>

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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>.

About ABB

ABB (ABN: SIX Swiss Ex) is a leading global technology company that energizes the transformation of society and industry to achieve a more productive, sustainable future. By connecting software to its electrification, robotics, automation, and motion portfolio, ABB pushes the boundaries of technology to drive performance to new levels. With a history of excellence stretching back more than 130 years, ABB's success is driven by about 105,000 talented employees in over 100 countries. www.abb.com

About Schlumberger

Schlumberger (SLB: NYSE) is a technology company that partners with customers to access energy. Our people, representing over 160 nationalities, are providing leading digital solutions and deploying innovative technologies to enable performance and sustainability for the global energy industry. With expertise in more than 120 countries, we collaborate to create technology that unlocks access to energy for the benefit of all.

Find out more at www.slb.com.

OneSubsea is a mark of Schlumberger.

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.
