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Sumitomo Electric Industries, Ltd.

Sumitomo Electric Completes Long-Term Test for 525 kV Cross-Linked Polyethylene Submarine Cable

Sumitomo Electric Industries, Ltd. is pleased to announce that its 525 kV cross-linked polyethylene (XLPE)-insulated high-voltage direct current (HVDC) submarine cable system has been tested in accordance with the international standard CIGRE-TB496 and that a third-party certification body has approved the completion of the test.

With the increasing capacity of renewable energy sources and the necessity of long-distance power interconnectors for efficient use of renewable energy between countries and regions, HVDC cable technology, which is suitable for long-distance power transmission, has been gaining significant attention in the global market. Sumitomo Electric has recently completed a long-term test for its 525 kV DC XLPE submarine cable system, which can supply the industrial highest voltage for XLPE cables.

This system is capable of operating at 90°C and transmitting large capacities exceeding 2 GW, thanks to the Company's unique cable insulation technology using DC-XLPE compound and special fillers. Also, its cable system has been qualified with flexible factory joint, offshore joint and transition joint to onshore cable, which will enable us to propose a better solutions to projects which require long-distance and large-capacity power transmission.



Image of submarine cable

In response to decarbonization policies in various countries, there has been a boom in the launch of renewable energy projects such as offshore wind power generation and the construction of interconnectors between countries and regions. Japan is also expected to see an increase in demand for power cables as the construction of a domestic power grid is under consideration.

In developing new classes of high-quality products including DC power transmission cables, Sumitomo Electric will further promote the expansion of power cable systems that contribute to the spread of renewable energy including offshore wind power.

About Sumitomo Electric Industries, Ltd.

Sumitomo Electric Industries, Ltd. was established in 1897. Since then, based on electric wire and cable manufacturing technologies, we have conducted our original research & development and strenuously strived for the establishment of new businesses. These efforts have allowed us to create new products and new technologies, as well as diversify our business fields. Currently, we operate our businesses on a global basis in the following five segments: Automotive, Info-communications, Electronics, Environment & Energy, and Industrial Materials. The Company operates in more than 40 countries, employing 280,000 people. Sumitomo Electric reported group net sales of \$26.0 billion for the fiscal year ended March 2022. We have been contributing to society through environmentally friendly and fair business activities globally. Further information is available here <https://sumitomoelectric.com/>.



■ References

- Press Releases

• [Sumitomo Electric Completes HVDC Cable Projects in Europe & Japan \(16 May 2019\)](#)

• [Sumitomo Electric secures >€500M "Corridor A-Nord" High Voltage DC Underground Cable Project in Germany which sets new innovative benchmarks in the HVDC Industry \(11 May 2020\)](#)

• [Sumitomo Electric Completes Type Approval Test for 525kV DC Gas Insulated Switchgear Interface with Siemens Energy and Südkabel](#)

• [Sumitomo Electric contracts with 50Hertz, an Elia Group company, to replace the 400kV Germany-Denmark Interconnector land cable on the German side. The new cable will be reliable & environmentally friendly and with innovative technology. \(09 February 2021\)](#)

• [Sumitomo Electric and Siemens Energy secure contract for 500 MW Greenlink interconnector between UK and Ireland to enhance exchange capacity of renewable energy \(22 September 2021\)](#)

News Release

- Web site
 - [High Voltage Cable and Overhead Conductor of The World Leading Company](#)

- Sumitomo Electric e-magazine
 - [International Submarine Cable Project](#)

 - [Connecting to the Future of Decarbonized Society at the Forefront of Direct Current Power Transmission Cables](#)

- Sumitomo Electric Technical Review
 - [Expansion of HVDC Cable Application in Response to Growing Demand for Renewable Energy Transmission](#)

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