

# News Release

FOR IMMEDIATE RELEASE

## **Hitachi Energy, the partner of choice for largest-ever HVDC wind energy project in U.S.**

*The SunZia Transmission Project, enabled by HVDC Light®, links New Mexico's wind farms to Arizona's grid, increasing renewable energy to the Western States.*



SunZia Transmission will utilize the same corridor as the Western Spirit Transmission line, which was developed by Pattern Energy

**Zurich, May 4, 2023** – Hitachi Energy, a global technology leader that is advancing a sustainable energy future for all, has been selected by Pattern Energy to supply its high-voltage direct current (HVDC) and other advanced technologies for the SunZia Transmission Project. It will connect the 3,500-megawatt(MW) SunZia Wind project in New Mexico to the power grid in Arizona and Southern California, which will be among the world's largest transmission links delivering renewable energy.

Hitachi Energy's HVDC Light® technology will efficiently transfer and integrate huge volumes of wind power over more than 885 kilometers (550 miles) into the regional power grid. This will significantly increase the availability of sustainable energy for homes and businesses throughout the region.

When complete, SunZia Wind will have a total power capacity of 3,500MW, enough clean, renewable electricity to provide power to approximately three million Americans.<sup>1</sup> The HVDC link will efficiently transmit up to 3,000MW of this power west to Arizona. The HVDC Light® system will be the largest voltage source converter (VSC) installation in the United States, one of the largest worldwide, and one of the country's longest HVDC connections.

“We are proud to be advancing a sustainable energy future for all in the southwestern United States, enabling Pattern Energy to integrate emission-free electricity into the regional grid serving Arizona and Southern California,” said Niklas Persson, Managing Director of Hitachi Energy's Grid Integration business. “Our market-leading HVDC technologies combined with our execution expertise makes us the partner of choice to help the U.S. achieve its carbon-

neutral targets by efficiently and reliably maximizing its renewable energy resources.”

“Our collaboration with Hitachi Energy is an important milestone for the SunZia Transmission Project and will enable us to harness and carry this great energy potential to the areas where there is a high demand for renewable energy,” said Hunter Armistead, CEO of Pattern Energy. “The use of HVDC technology will enhance power grid reliability and resilience and play a vital role in delivering clean energy and deploying a sustainable energy system in the U.S.”

The SunZia Transmission project is a 3,000MW HVDC link between Corona, New Mexico and Pinal County, Arizona. Hitachi Energy has already started work on designing and engineering the two HVDC Light® converter stations, one at either end of the link. The transmitting station converts the power from AC to DC for transport in the overhead lines, then back to AC for integration into the receiving grid.

Hitachi Energy has partnered with Quanta Services, Inc. (Quanta) to provide a turnkey project solution for the SunZia project, including managing the HVDC construction and building installation at the associated project sites. Quanta is an industry leader providing specialized infrastructure solutions to the utility, renewable energy, communications, pipeline, and energy industries. The collaboration with Quanta is designed to leverage the core competencies of the two companies to deliver a best-in-class solution for the project. The HVDC converter stations are expected to be in-service by the end of 2025 to support final testing and commissioning of the SunZia Wind facilities in 2026.

To find the optimal solution that considers the impact of the new facility on the existing grid, a system study and a comprehensive interconnection and system impact analysis were conducted by Hitachi Energy’s expert consultants.



SunZia Transmission route

Hitachi Energy will also supply ‘alternating current (AC) chopper’ technology to help restore power if the power flow on the DC line or in the AC grid in Arizona is temporarily interrupted by weather and other contingency events.

Hitachi Energy has delivered more than half of the HVDC projects in North America.<sup>2</sup> These include the Pacific Intertie transmission system, which transfers electricity from the Pacific

Northwest to Los Angeles, the Quebec-New England link, which was the first large-scale multi-terminal HVDC transmission system in the world, and the Maritime link, which connects the Islands of Newfoundland and Nova Scotia, supporting the integration of renewable energy sources and improving grid stability. The company has also recently announced new HVDC projects including Champlain Hudson Power Express<sup>3</sup>, the Châteauguay<sup>4</sup> converter station modernization with Hydro Quebec, and the InterMountain Power Project<sup>5</sup>.

1 <https://sunzia.net/impact/>

2 [Hitachi Energy HVDC references North America](#)

3 [Hitachi Energy to support major renewable electricity transmission between Canada and New York City](#)

4 [Hitachi Energy selected as technology partner to support the transmission of renewable power between Canada and the United States](#)

5 [Hitachi Energy to support the transmission of increasing volumes of sustainable electricity to California](#)

- End -

#### **Note to editors:**

Hitachi Energy's HVDC solution combines world-leading expertise in HVDC converter valves, the MACH™ digital control platform<sup>6</sup> converter power transformers and high-voltage switchgear, as well as in system studies, design and engineering, supply, installation supervision and commissioning.

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.

6 [Modular Advanced Control for HVDC \(MACH™\)](#)

#### **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.

<https://www.hitachienergy.com>

<https://www.linkedin.com/company/hitachienergy>

<https://twitter.com/HitachiEnergy>

#### **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.

---