GE Vernova to provide HVDC System for South Korea’s largest power grid infrastructure project

- GE Vernova to deliver advanced HVDC technology for the 500 kV Donghaean #2 to Dong-Seoul HVDC converter station project (EP2), part of South Korea's largest power grid initiative.

- Order secured through KAPES, the joint venture between GE Vernova and Korea Electric Power Corporation (KEPCO).

- Advanced HVDC system, based on Line Commutated Converter (LCC) technology, aims for reliable and efficient power transmission and can support South Korea’s energy transition by integrating renewable energy into the grid.

Seoul, South Korea (December 23, 2024)— GE Vernova Inc. (NYSE: GEV) today announced that it has been chosen through its joint venture, KAPES, by Korea Electric Power Corporation (KEPCO) to deliver its advanced High Voltage Direct Current (HVDC) system, based on Line Commutated Converter (LCC) technology, for the 500 kV Donghaean #2 to Dong-Seoul HVDC converter station project (EP2). This project, part of a larger 4 GW HVDC transmission link, is planned to connect South Korea’s power generation complex on the east coast to the Seoul metropolitan area and is intended to be the largest power grid infrastructure initiative in the country’s history.

The EP2 project complements the EP1 project, which is also being executed by GE Vernova through KAPES. Together, EP1 and EP2 projects are designed to provide a stable and reliable power supply to the Seoul metropolitan area, which accounts for approximately 40% of South Korea’s energy demand. Both projects are expected to benefit from GE Vernova’s advanced HVDC technology, designed for efficient long-distance power transmission and enhancing grid resilience to meet growing energy

needs.

GE Vernova’s scope for the EP2 project includes the engineering and delivery of HVDC Valves and Control Systems based on LCC technology, essential for the stable transmission of large-scale power. The project underscores the increasing demand for technology from GE Vernova’s Electrification segment, which continues to grow rapidly.

KEPCO’s Vision for a Sustainable Energy Future

KEPCO is prioritizing advanced HVDC technology as a critical enabler of South Korea’s energy transition. The EP2 project is designed to provide efficient and stable power transmission to key industrial regions while laying the groundwork for a sustainable and resilient energy network.

Mr. Yu-won Kang, CEO of KAPES,said, "The EP2 project reinforces KAPES' position as the leading HVDC provider in Korea in collaboration with GE Vernova, further demonstrating its proven technological expertise and project management capabilities. KAPES is proud to support KEPCO in Korea's energy transition and play a pivotal role in stabilizing the nation's power grid.”

“Our Electrification segment is the fastest-growing part of GE Vernova, with significant growth ahead,” **said Johan Bindele, Business Leader at GE Vernova’s Electrification Systems.** “We are committed to delivering innovative solutions that electrify the world while decarbonizing it, as electrification becomes critical for enabling a sustainable and resilient energy future in Asia and beyond. We are proud of our 26-year relationship with KEPCO, our continued collaboration reflects our shared commitment to providing advanced solutions that address the evolving needs of power infrastructure.”

"Projects like EP2 are pivotal in enabling South Korea’s energy transition,” **said Shailesh Mishra, Regional Leader of Grid Systems Integration in Asia Pacific at GE Vernova.** “By deploying advanced HVDC technology, we are not only enhancing the efficiency and reliability of the country’s grid but also laying the foundation for greater integration of renewable energy. Collaborating with KEPCO

through KAPES allows us to deliver transformative solutions that align with South Korea’s vision for a sustainable energy future.

KAPES: Strengthening South Korea’s Power Grid

KAPES, the joint venture between KEPCO and GE Vernova established in 2012, has been instrumental in delivering various important projects that address South Korea’s unique energy needs. In addition to EP1 and EP2, key initiatives include the Buk-Dangjin-Godeok HVDC Connection, a 3 GW transmission link supplying power from the Dangjin power plant to Seoul and its surrounding regions, and the Shin-Bupyeong HVDC Link, a 500 MW Back-to-Back Voltage Sourced Converter (VSC) system in Incheon designed to alleviate grid overloads. These projects collectively underscore KAPES’ role in strengthening South Korea’s power grid and advancing its energy infrastructure.

The Role of HVDC in Korea’s Energy Transition

High Voltage Direct Current (HVDC) technology is essential in the global shift toward sustainable energy systems as it supports efficient and reliable power transmission over long distances. HVDC system based on the Line Commutated Converter (LCC) technology uses thyristor-based power semiconductors to transfer large amounts of power—up to 8 GW—with low energy losses. Its ability to handle bulk power transmission while providing built-in protection against faults makes it ideal for strengthening South Korea’s power grid and supporting the integration of renewable energy.

In South Korea, HVDC aims for enhanced efficiency and stability in transmitting power over long distances, supporting bi-directional energy flow and facilitating renewable energy integration. EP2 is intended to provide a reliable link between the East Coast’s power generation facilities and the high-demand metropolitan area, including semiconductor manufacturing hubs in Yongin, Incheon, and Pyeongtaek.

GE Vernova in Korea

GE Vernova is a major player in the power sector in South Korea. The company has been present in South Korea since 1976, working closely with local companies to support the country’s growth in the energy sector.

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Notes to Editors:

Forward Looking Statements

This document contains forward-looking statements – that is, statements related to future events that by their nature address matters that are, to different degrees, uncertain. These forward-looking statements address GE Vernova's expected future business and financial performance, and the expected performance of its products, the impact of its services and the results they may generate or produce, and often contain words such as “expect,” “anticipate,” “intend,” “plan,” “believe,” “seek,” “see,” “will,” “would,” “estimate,” “forecast,” “target,” “preliminary,” or “range.” Forward-looking statements by their nature address matters that are, to different degrees, uncertain, such as statements about planned and potential transactions, investments or projects and their expected results and the impacts of macroeconomic and market conditions and volatility on business operations, financial results and financial position and on the global supply chain and world economy.

About GE Vernova

GE Vernova Inc. (NYSE: GEV) is a purpose-built global energy company that includes Power, Wind, and Electrification segments and is supported by its accelerator businesses. Building on over 130 years of experience tackling the world’s challenges, GE Vernova is uniquely positioned to help lead the energy transition by continuing to electrify the world while simultaneously working to decarbonize it. GE Vernova helps customers power economies and deliver electricity that is vital to health, safety, security, and improved quality of life. GE

Vernova is headquartered in Cambridge, Massachusetts, U.S., with approximately 75,000 employees across 100+ countries around the world. Supported by the Company's purpose, The Energy to Change the World, GE Vernova technology helps deliver a more affordable, reliable, sustainable, and secure energy future. Learn more: GE Vernova and LinkedIn.

GE Vernova's **Grid Solutions** business electrifies the world with advanced grid technologies and systems, enabling power transmission and distribution from the point of generation to point of consumption, and supporting a decarbonized and secured energy transition.

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