

GE and KAPES awarded contract to power South Korea's electric grid using latest HVDC technology

- *GE and KAPES, a KEPCO-GE joint venture, to add a 500-MW high voltage direct current (HVDC) link to South Korea's electric grid*
- The Shin-bupyeong project, located in Incheon west of Seoul, will relieve overload conditions, and strengthen the grid system
- This latest contract award from KEPCO, in excess of USD \$100 million, is the first project by GE and the KAPES consortium in South Korea using the newest Voltage-Sourced Converter (VSC) HVDC technology, and GE's fifth VSC project in the world

Seoul, KOREA and Paris, FRANCE — July 14, 2022 – GE Renewable Energy's Grid Solutions business (NYSE: GE) and KAPES, a KEPCO-GE joint venture, has been awarded a contract in excess of USD \$100 million by Korea Electric Power Corporation's (KEPCO) to deliver a 500 MW Back-to-Back Voltage Sourced Converter (VSC) High Voltage Direct Current (HVDC) link in Incheon, South Korea.

Shin-bupyeong is the first project in South Korea by the GE and KAPES consortium using VSC, the newest <u>HVDC</u> technology, which connects AC systems and features highly specialized power electronics, allowing for enhanced operational capability, greater power and frequency control compared with Line Commutated Converter (LLC) technology. VSC also has a smaller overall footprint, resulting in a lower environmental impact.

"The Shin-bupyeong project is our fifth VSC project in the world, demonstrating that our technology is now well established, and that we have the ability to commercially deliver on this latest and most advanced HVDC technology," said Johan Bindele, GE Grid Solutions' Grid Integration Leader. "GE and KEPCO continue to reinforce the value of the KAPES joint venture. Prior to this contract award, GE signed to deliver more than 7.5 GW of power through multiple HVDC projects in South Korea, including 7 GW with KAPES. The investment that has been made to transfer knowledge and localize GE's HVDC technology continues to be a win-win



for both partners. GE is proud to be able to contribute to South Korea's growing energy economy in this way."

South Korea has experienced a nearly 35% growth in energy consumption within the last decade and continues to be one of the biggest energy consumers in the world. The Shin-bupyeong project in Incheon – the nation's third most populous city – will be crucial in providing rapid active power flow controls and compensation of reactive power to relieve any overload and overvoltage conditions in the congested area.

As part of this turnkey project, GE Grid Solutions, together with KAPES, will deliver the complete engineering design, as well as oversee procurement, manufacturing and delivery of the equipment, and installation and commissioning of the VSC HVDC system. The core equipment will be manufactured at GE's sites in UK, France, Italy, and Brazil. Installation is expected to start in 2024.

GE has been delivering HVDC projects in South Korea since 1994 when GE provided South Korea's first 300 megawatt HVDC bi-pole link for the 101 km, point-to-point submarine electric interconnector linking Jeju Island to the mainland.

###

About GE's Grid Solutions

Grid Solutions, a GE Renewable Energy business, serves customers globally with over 12,000 employees. Grid Solutions provides power utilities and industries worldwide with equipment, systems and services to bring power reliably and efficiently from the point of generation to end power consumers. Grid Solutions is focused on addressing the challenges of the energy transition by enabling the safe and reliable connection of renewable and distributed energy resources to the grid. We electrify the world with advanced grid technologies and accelerate the energy transition. For more about GE Grid Solutions, visit <u>https://www.gegridsolutions.com</u>.

https://www.gevernova.com/ GE Vernova_



Media inquiries

Allison J. Cohen

GE Vernova | Communications, Offshore Wind allison.j.cohen@gevernova.com +972 54 7299742