GE to unveil Grid technology innovations at CIGRE 2022

- *Focusing on four of the biggest challenges facing the grid, specifically modernization, decarbonization, digitization and electrification, GE Renewable Energy's Grid Solutions business spotlights its holistic approach to building the grid of the future at this year's CIGRE*
- *Combining advanced hardware with software and services, GE emphasizes its commitment to deliver innovative solutions that help customers modernize the grid and accelerate the energy transition*
- *For the first time in more than 100 years, the global energy landscape is undergoing a massive transformation*

Paris, FRANCE – August 25, 2022 – GE Renewable Energy's Grid Solutions business (NYSE: GE) today announced it will unveil new technologies at CIGRE Session 2022. Among these are the world's first sulfur hexafluoride (SF_6)-free g^3 circuit-breaker for 420 kV gas-insulated substations. These technologies demonstrate the value of combining advanced hardware with digital technologies to address customers' needs and adapt to a more digitalized, decentralized, and decarbonized energy landscape, while bringing reliable electricity online all around the world.

"For the first time in more than 100 years, the global energy landscape is undergoing a massive transformation. To support this transition while building a grid that will be sustainable for the next hundred years, we are working closely with our customers to continue to find ways to make the grid more efficient, resilient and sustainable," said Vera Silva, Chief Technology Officer at GE Grid Solutions. "We are investing in and delivering advanced technologies and services to meet these new grid challenges and many of these new technologies are on display during the CIGRE Session 2022."

At this year's CIGRE, GE Renewable Energy's Grid Solutions business will spotlight its latest innovations and services as part of the company's holistic approach to building the grid of the future with a special emphasis on four of the biggest challenges facing the grid: modernization, decarbonization, digitization and electrification.

Modernization: With a deep knowledge of electrical infrastructure, GE will introduce solutions that modernize transmission and distribution substations with the latest protection and control and monitoring and diagnostic technologies to increase grid reliability and extend asset life while maximizing performance. The MiCOM P40 5th generation is now supporting the challenges of low inertia grids with advanced sub-cycle algorithms and adaptive reclosing to ensure stability and avoid excessive costly circuit breaker operations. Advanced monitoring and diagnostic technologies for primary equipment (such as Kelman™ Transformer Monitoring Solutions) coupled with software and analytics to predict asset behavior (such as Perception Fleet) and build an intelligent asset performance strategy (such as EnergyAPM Software), enable operators to gain actionable intelligence that helps focus resources when and where they are needed most. When combined with GE's field services (such as non-intrusive inspection) and field inspection tools (such as EnergyFIT), utilities can identify and benefit from efficient maintenance and asset management strategies, allowing them to improve asset operations and minimize

the cost of ownership.

Decarbonization: During CIGRE and as part of the EU co-funded LifeGRID project, GE will showcase its SF_6-free g^3 circuit-breaker for 420 kV gas-insulated substations (GIS). In 2023, this circuit breaker will be available in the 420 kV g^3 GIS bay that will be launched at the end of this year, in line with GE's g^3 product roadmap. GE's game-changing g^3 insulating and switching gas helps eliminate the use of SF_6 – a potent greenhouse gas from high voltage equipment. With g^3, the contribution to global warming is reduced by 99%, while the switchgear compactness provides the lowest carbon footprint compared to other SF_6 alternatives. This is just one of the steps GE is taking to help the power and distribution industry decarbonize and meet its carbon neutrality commitments and net zero ambitions. The industry alone accounts for about 80% of the SF_6 use in the world today.

Digitization: To address the challenges and future needs of the transforming grid, GE will feature the latest in intelligent digital substations, device management, cyber security, critical communications infrastructure, and advanced automation applications. Solutions such as DS Agile, Wide Area Monitoring Protection and Control, and Dynamic System Rating are designed to play an increasingly critical role in ensuring operators can deliver energy efficiently, affordably, and reliably. More than ever, the ability to network remote assets is reinforced with multiplexed networks, radio, and teleprotection secure communications being essential. Private long-term evolution (LTE) solutions are introduced to enable the fast and deterministic transfer of data from edge to control.

Electrification: While at CIGRE, GE will also demonstrate its latest developments in microgrids and enterprise grid software including distributed energy resource management solutions that provide utilities with the visibility, controls and optimization needed to operate and balance generation resources and loads. GE's GridNode solutions facilitate the connection of distributed energy resources while maintaining grid stability and maximized renewable energy flows. Several advances in Grid Automation solutions further address the challenge of low inertia and generation intermittency faced by the grid. As renewables and distributed energy resources continue to be the fastest growing source of new power generation capacity, the industry needs solutions that enable the connectivity, stability, and management of these resources. GE is at the forefront of these solutions with next generation VSC valves and control systems for High Voltage DC (HVDC) and Flexible AC Transmission Systems (FACTS), which enable utilities to integrate renewables and move more power further and more efficiently.

CIGRE Session 2022 will further reveal that with GE's hundred plus years of domain expertise and the power of digital integration, GE Renewable Energy's Grid Solutions business is playing a critical role in advancing the future of energy.

If you are attending CIGRE, visit GE's stand #343 on the third floor of Palais des Congrès de Paris, France.

Contact GE for interviews with our industry experts on-site during CIGRE. For daily updates, follow GE's Grid Solutions business at @GE Grid Solutions and the hashtags #GEatCIGRE and #GEGrid.

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About GE’s Grid Solutions business
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’s Grid Solutions, visit https://www.gegridsolutions.com.

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