

## GE's 1st-of-its-kind digital HYpact switchgear for electrical grids makes the unpredictable more predictable

- The digital HYpact switchgear—GE's hybrid compact switchgear assembly—is the first of its kind delivered to customer DB Energie GmbH under the EU-funded IN2STEMPO project
- Technologies like this from GE Grid Solutions are helping the customer monitor their grid status, reduce downtime, and lower the carbon footprint at a decades-old German train station
- GE's HYpact module includes its proven circuit breaker technology, known for its reliability

Paris, FRANCE, and Lonsee, GERMANY — November 23, 2022 — GE Renewable Energy's Grid Solutions business [NYSE:GE] energized a new 123 kV, 16.7 Hz <u>HYpact switchgear</u> for DB Energie GmbH's 60-year-old Amstetten train station located in Lonsee between Stuttgart and Ulm in Germany.

Developed as part of the EU-funded <u>IN2STEMPO project</u>, the digital hybrid compact switchgear is a first-of-its-kind. IN2STEMPO is developing a smart railway power grid with an interconnected system that integrates smart metering, innovative power electronic components, energy management, and energy storage systems.

"We are pleased to be a part of the IN2STEMPO project. Our flexible digital HYpact solution can be used in several applications - from mobile (truck-mounted) substations to onshore wind substations. Basically, it helps make the unpredictability of the electrical network more predictable, while reducing the customer's operational costs, as well as their impact on the environment," said <a href="Eric Chaussin">Eric Chaussin</a>, GE Renewable Energy's Grid Solutions High Voltage Products Leader.

HYpact switchgear is now fitted with digital power sensors using very sensitive low power instrument transformers instead of conventional oil immersed instrument transformers. The new switchgear provides remote monitoring of the grid's status from a control room and provides access to additional HYpact switchgear health monitoring capabilities.

In a modern digital substation, copper cables are replaced by optical fiber cables, which will allow DB Energie to lower its total carbon footprint. These new sensors and monitoring capabilities provide DB Energie with more operational and non-operational data. Leveraging this data, downtime and operational costs can be reduced through predictive insights and proactive maintenance strategies.

## More about HYpact switchgear

GE's HYpact switchgear includes the field proven and reliable circuit-breaker, disconnector, and earthing switch. It has been equipped with hybrid digital current transformer sensors able to provide conventional, as well as digital, data of the current flow. Its low voltage cubicle is equipped with the <a href="Mean-EBWatch system">CBWatch system</a> to monitor circuit-breaker conditions such as gas temperature, pressure, and density; and cabin heating, which is important when the cabin is equipped with several electronic devices. Monitoring the electrical wear gives additional insights into the circuit-breaker's condition. Additionally, a motor current measures switching times and signals alarms for pole discrepancies, out-of-time



operations, and position errors to help ensure safe circuit breaker operation.

###

## **About GE 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 <a href="https://www.gegridsolutions.com">https://www.gegridsolutions.com</a>.

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

Media inquiries

## Allison J. Cohen

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