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## **News Release**

#### FOR IMMEDIATE RELEASE

# Hitachi Energy releases global updates to Grid Edge Solutions portfolio including new services

Latest e-mesh<sup>™</sup> battery energy storage and digital solutions are engineered for fast, modular execution and high renewable penetration

**Zurich, November 9, 2021** – Hitachi Energy has today launched the next generation of its e-mesh<sup>(1)</sup> portfolio of energy storage and digital automation solutions.

The release delivers the energy industry's most comprehensive set of digital energy solutions. It tightly integrates advanced analytics with both software and hardware systems to maximize system performance and value, while reducing the overall carbon footprint.

#### New updates include:

- Vehicle to grid (V2G) readiness for electric vehicle fleets
- Options for advanced cloud-based performance and monitoring applications
- Flexible design improvements to the PowerStore<sup>TM</sup> battery energy storage system
- Expanded controls and automation

"The entire energy market is transforming, and the challenges are expanding in scope and urgency," said Maxine Ghavi, head of Grid Edge Solutions for Hitachi Energy. Maxine continued, "It is no longer about one transformation. It is about many changes happening at once, and is always built on more electrification. We have heard from customers around the globe that they don't just want a single product for a microgrid, energy storage, or a control system. They want a flexible and optimized solution for reducing complexity, providing the highest penetration of renewables, while increasing overall stability and reliability. This also means they will ultimately need more digital services for their own management, productivity, and growth."

#### Highlights of this update:

e-mesh is part of the Hitachi Energy services network of collaborative operations centers. That network provides customers with global 24/7 support and ready access to unmatched technical and domain expertise. Hitachi Energy's combined digital and



service offerings accelerate customer outcomes and reduce CapEx with performance and availability guarantees, extended warranties, and other offerings across the product lifecycle.

With this release, e-mesh is also now well-suited for the fleet EV charging market. This infrastructure requires advanced technologies to control, optimize and coordinate the vehicle charging process, better integrating it with battery energy storage systems and local Distributed Energy Resources (DERs), with many of the same requirements as a complex microgrid. As use cases evolve, e-mesh provides a platform to address a range of needs, including managing large EV fleet depots, coordinating fast-charging stations, and optimizing EV recharging.

"As demand increases for more renewable energy and V2G readiness, battery energy storage, with exceptional reliability, becomes the linchpin for our future infrastructure," said Scott Gibson, principal engineer with Snohomish County Public Utility District (SnoPUD). He continued, "The right control and automation technologies are also needed to synchronize assets in order to maximize and optimize microgrid system performance. By working with Hitachi Energy, we are looking ahead to a future where we can pave a sustainable path, maximize renewable integration and address future energy needs."

#### New features in e-mesh include:

- PowerStore, our grid-forming battery energy storage systems (BESS) for both gridconnected and off-grid applications, is now available in integrated or modular
  versions, covering an increasingly larger range of power ratings in line with bigger
  customer projects. This also includes global UL/EU/AU-grid code converter
  certifications for safety and reliability, designed to be more interoperable and
  flexible. PowerStore provides grid stabilization with added energy storage and
  cyber security enhancements for large-scale projects.
- e-mesh EMS improves energy management, reducing electric utility bills through strategic operation of BESS and other distributed energy resources, including support for load management and electric vehicles. EMS maximizes the value of renewable generation.
- e-mesh Monitor further extends asset and operational performance to a cloudbased platform, aggregating data from distributed energy resources (DERs) and turning that into actionable business insights. The solution includes cybersecurity and remote updates and troubleshooting.

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 Options for both advanced MicroSCADA automation and RTU-based control combine traditional and renewable generating assets into a single view for simplified operations.

As a pioneer in energy management and optimization, with more than 30 years of experience, Hitachi Energy's Grid Edge Solutions is a trusted partner in the evolving global energy ecosystem. With a global footprint of more than 700+ MW and 225+ references, our solutions help customers increase profitability and unlock new revenue streams by reducing energy cost, maximizing renewable integration and lowering CO<sub>2</sub>, while improving overall reliability.

Note:

(1) https://www.hitachienergy.com/offering/solutions/grid-edge-solutions/our-offering/e-mesh

#### **About Hitachi Energy**

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 38,000 people in 90 countries and generate business volumes of approximately \$10 billion USD.

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#### About Hitachi, Ltd.

Hitachi, Ltd. (TSE: 6501), headquartered in Tokyo, Japan, contributes to a sustainable society with a higher quality of life by driving innovation through data and technology as the Social Innovation Business. Hitachi is focused on strengthening its contribution to the Environment, the Resilience of business and social infrastructure as well as comprehensive programs to enhance Security & Safety. Hitachi resolves the issues faced by customers and society across six domains: IT, Energy, Mobility, Industry, Smart Life and Automotive Systems through its proprietary Lumada solutions. The

company's consolidated revenues for fiscal year 2020 (ended March 31, 2021) totaled 8,729.1 billion yen (\$78.6 billion), with 871 consolidated subsidiaries and approximately 350,000 employees worldwide. For more information on Hitachi, please visit the company's website at https://www.hitachi.com.

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