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**European Utility Week, November 12-14, 2019, Paris Expo Porte de Versailles,
Pavilion 1, Booth C60**

Siemens presents approach for a smart and sustainable energy ecosystem

At this year's European Utility Week (EUW) in Paris, Siemens Smart Infrastructure will demonstrate how it is driving energy intelligence across supply and demand. By helping shape the energy ecosystem across buildings, industry and the grid, Siemens is supporting government, cities and businesses with their sustainability goals. The company will focus on four topics that support the energy transition: sustainable grids, smart distribution, the Internet of Energy and grid edge.

By 2035, more than 50 percent of electricity is expected to be generated by renewables. In parallel, electricity consumption is forecast to double by 2050. Megatrends such as increasing urbanization and climate change are driving the need for electrification and decarbonization. Meanwhile, new applications in software and digitalization are making grids smarter and more efficient, creating new business models.

"The question we have to ask ourselves is, are we doing enough? By taking an holistic view about the application of energy across infrastructure, technology can solve major challenges to support progress in a sustainable way. Industry and government must join together to accelerate the energy transition to help tackle climate change," said Cedrik Neike, Member of the Managing Board of Siemens AG and CEO of Siemens Smart Infrastructure.

"Buildings, infrastructure and power grids are steadily converging, creating great opportunities for our customers at the grid edge. In support of decarbonization, the markets of energy storage, distributed energy systems and eMobility charging solutions are growing up to ten times faster than the energy supply and demand side. Siemens is uniquely positioned to connect the ecosystem of physical assets

and make infrastructure smarter, creating energy-intelligent and more livable societies – supporting the increased demand for electricity in the most sustainable way possible. We want to support governments, cities and our customers to accelerate the adoption of cleaner, smarter energy,” added Neike.

During EUW, Siemens will demonstrate how to turn challenges with the energy transition into opportunities with innovative technologies and solutions. It will display customized solutions to enhance the efficiency and reliability of electrical power supply for buildings, infrastructure and for complete power grids. Visitors to the booth can witness how Siemens supports municipalities, transmission and distributions system operators, and large energy consumers with digital solutions that let them analyze and optimize their grid operations. Experts will deliver presentations on topics such as technologies for an energy-intelligent society.

Technology highlights

The growing share of electrical power generated from renewable energy sources is posing new challenges for power grids. Due to their intermittent nature, renewables can impact network stability and reliability. To protect critical components in power plants, such as electrical generators and step-up transformers, Siemens will be presenting a new generator circuit-breaker which features a compact design and a high level of flexibility to address customers’ challenges. To integrate the fluctuating infeed to power grids from photovoltaic (PV) systems, Siemens is offering intelligent infrastructure and storage technology such as its electrical Balance of Plant (eBoP) solution.

Digitalization is advancing in distribution networks

A growing number of intelligent electrical devices are being equipped with the Internet of Things (IoT) interfaces, enabling them to exchange and analyze data while safeguarding secure communication. Siemens is also offering new grid diagnostic applications that collect and record data that until now were difficult for power grid operators to come by. This lends them the ability to gain useful insights into grid operations using analytics. In addition, Siemens will show a new series of protective devices for high and medium-voltage grids, and industrial power networks.

Using efficient model data management and advanced analysis, Siemens can generate a digital twin of an electrical distribution grid within an entire IT landscape. The MindSphere Application Center for the Internet of Energy (IoE) will help transmission and distribution grid operators, utilities, industries and operators of buildings and infrastructures to analyze the collected data and develop strategies to increase productivity and profitability. This allows process optimization and predictive maintenance planning. It also increases the energy efficiency of major power consumers while improving the reliability of the overall power grid.

eMobility solutions from Siemens

In the future, electromobility will increasingly contribute to a more efficient energy system. Siemens offers consulting services for eMobility solutions to support with integrating this sector into existing power grids. Such efforts range from grid planning and connection, to developing business models and advising on the specification of hardware and software integration. At EUW, the company will present the new Sicharge CC AC22 compact charger for electric vehicles, as well as complete solutions for e-mobility charging infrastructure including depot charging for e-buses and e-service vehicles as well as public AC charging.

This press release is available at <https://sie.ag/2PB1Ad4>

For further information on Siemens Smart Infrastructure, please see here www.siemens.com/smartinfrastructure

More information about Siemens at the EUW is available at www.siemens.com/euw

Contact for journalists

Eva-Maria Baumann

Phone: +49 9131 17 36620; E-mail: eva-maria.baumann@siemens.com

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Siemens Smart Infrastructure (SI) is shaping the market for intelligent, adaptive infrastructure for today and the future. It addresses the pressing challenges of urbanization and climate change by connecting energy systems, buildings and industries. SI provides customers with a comprehensive end-to-end portfolio from a single source – with products, systems, solutions and services from the point of power generation all the way to consumption. With an increasingly digitalized ecosystem, it helps customers thrive and communities progress while contributing toward protecting the planet. SI creates environments that care. Siemens Smart Infrastructure has its global headquarters in Zug, Switzerland, and has around 71,000 employees worldwide.

Siemens AG (Berlin and Munich) is a global technology powerhouse that has stood for engineering excellence, innovation, quality, reliability and internationality for more than 170 years. The company is active around the globe, focusing on the areas of electrification, automation and digitalization. One of the largest producers of energy-efficient, resource-saving technologies, Siemens is a leading supplier of efficient power generation and power transmission solutions and a pioneer in infrastructure solutions as well as automation, drive and software solutions for industry. With its publicly listed subsidiary Siemens Healthineers AG, the company is also a leading provider of medical imaging equipment – such as computed tomography and magnetic resonance imaging systems – and a leader in laboratory diagnostics as well as clinical IT. In fiscal 2018, which ended on September 30, 2018, Siemens generated revenue of €83.0 billion and net income of €6.1 billion. At the end of September 2018, the company had around 379,000 employees worldwide. Further information is available on the Internet at www.siemens.com.