SIEMENS

Press

Zug, Switzerland, February 5, 2025

Siemens' Electrification X boosts efficiency, safety of Aral pulse's charging infrastructure

- **Siemens receives order from Aral pulse to monitor and control charging infrastructure in real-time at 300 Aral electric charging stations in Germany**
- **Dynamic load management for more than 3,000 ultra-fast chargers enables optimized energy supply**
- **Open and scalable IoT platform Electrification X can connect electrical systems regardless of location and manufacturer**

Siemens Smart Infrastructure has been awarded a contract by Aral pulse to deploy Electrification X from the Siemens Xcelerator portfolio for its Aral e-mobility brand. Using Electrification X allows Aral pulse to centrally operate, optimize and secure Aral charging stations with ultra-fast electric vehicle charging technology.

Siemens has delivered and commissioned in the past four years 300 intelligent substations and connected them to Electrification X. The digital substations powering the charging infrastructure for electric cars and trucks have an output of up to 400 kilowatts (kW). Depending on the vehicle, electric cars can charge up to 300 kilometers reach in 10 minutes.

"To make charging as quick as refueling vehicles with conventional fuels, we're investing in ultra-fast chargers with outputs of up to 400 kW. But the chargers alone are not enough. Upgrades also require an efficient and reliable connection to the power grid. That's why we're happy to have Siemens on board as an expert in electrical infrastructure," said Alexander Junge, member of the Aral AG Management Board in charge of the Electromobility division.

Siemens AG
Communications
Head: Lynette Jackson

Werner-von-Siemens-Strasse 1
80333 Munich
Germany

A dashboard provides insight into all safety-related messages from the individual stations in real-time. Digital condition monitoring visualizes the entire energy distribution and all operating data at the medium- and low-voltage level and highlights issues across the locations. A central service cloud for patches and updates, user management with multi-factor authentication, and a SIEM for attack detection make the systems NIS-2-compliant.

The cloud-solution Electrification X Dynamic Load Management provides transparency into the status and utilization of the electric vehicle charging network for efficient and optimized charging. Dynamic load management and remote control of the digital charging stations make it possible to avoid potential capacity limitations by the distribution system operator which could result in costly violations.

“This project is a strong example of how we can connect the real and the digital worlds. The substations are the physical heart of the energy supply for Aral’s charging infrastructure, but without the connection to the digital world, each system would remain siloed. This central connection enables us to provide an efficient and secure charging infrastructure and, alongside Aral pulse, pave the way for sustainable and electrified mobility,” said Stephan May, CEO of Electrification and Automation at Siemens Smart Infrastructure.

Furthermore, the installation of 350 additional digital substations at Aral’s service stations in Germany is already underway.

Built on cloud services, Electrification X is designed to manage, optimize, and automate the challenging electrification infrastructure of commercial, industrial and utility customers. As a part of Siemens Xcelerator, an open digital business platform to accelerate digital transformation and value creation, the Electrification X IoT suite is developed according to the core design principles of interoperability, flexibility, openness, availability as a service, and the highest level of cybersecurity.

This press release as well as a press picture are available here https://sie.ag/CFN8j

For more information on Siemens Smart Infrastructure, please see Siemens Smart Infrastructure.

For further information about Electrification X and SIEM (Security Information & Event Management), please see siemens.com/electrification-x and siemens.com/SIEM

Follow us at: www.x.com/siemens_press, www.x.com/siemensinfra

Contact for journalists:
Siemens Smart Infrastructure
Nicole Bär
Phone: +41 79 450 50 31; E-Mail: nicole.baer@siemens.com

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. Siemens Smart Infrastructure has its global headquarters in Zug, Switzerland. As of September 30, 2024, the business had around 78,500 employees worldwide.

Siemens AG (Berlin and Munich) is a leading technology company focused on industry, infrastructure, mobility, and healthcare. The company's purpose is to create technology to transform the everyday, for everyone. By combining the real and the digital worlds, Siemens empowers customers to accelerate their digital and sustainability transformations, making factories more efficient, cities more livable, and transportation more sustainable. Siemens also owns a majority stake in the publicly listed company Siemens Healthineers, a leading global medical technology provider pioneering breakthroughs in healthcare. For everyone. Everywhere. Sustainably.
In fiscal 2024, which ended on September 30, 2024, the Siemens Group generated revenue of €75.9 billion and net income of €9.0 billion. As of September 30, 2024, the company employed around 312,000 people worldwide on the basis of continuing operations. Further information is available on the Internet at www.siemens.com.