Joint press release by RheinEnergie, SMA, and SMA Altenso

SMA Altenso strengthens grid stability in central Germany with large-scale battery storage system for RheinEnergie

Niestetal, July 14, 2026 – SMA Altenso (Altenso) has successfully commissioned a utility-scale battery storage system for the Cologne-based energy supplier RheinEnergie AG. The project in Einbeck, Lower Saxony, is now fully operational and constributes directly to grid stability, increased efficiency in the energy system, and the security of electricity supply at a key node of the German power grid.

Key hub in the north–south power flow: Battery storage optimizes grid operation

The battery energy storage system (BESS) is located in a region that plays a central role in the north–south power flow, between high feed-in volumes from wind energy in northern Germany and major consumers in the south. By temporarily storing surplus energy and feeding it into the grid as required, the battery storage system helps reduce grid bottlenecks, minimize curtailment, and enable more efficient use of renewable energy.

"This project was fully developed independently from initial concept through turnkey delivery to successful commercial operation and clearly demonstrates Altenso's core competencies", says Benjamin Gevelhoff, Head of Corporate Projects at Altenso. "We are particularly proud of the strong and trusted collaboration with our partners at RheinEnergie.

Stephan Segbers, Member of the Executive Board of RheinEnergie: "For us, battery energy storage systems are far more than standalone infrastructure projects. They represent a key growth area for RheinEnergie and an essential pillar of our strategy to build scalable energy services across Germany. With every new project, we expand our portfolio, strengthen our expertise in the flexibility markets, and lay the foundation for continued growth beyond our core region. The Einbeck project marks another important milestone on this journey. For the commercial optimization of the asset, we rely on the expertise of our trading subsidiary, RheinEnergie Trading, which brings many years of experience in the energy markets."

Performance capability and system services of the battery storage system

With a usable capacity of 24.5 MW / 64 MWh, the BESS provides system-relevant services for frequency and grid stabilization. These include, in particular the provision of primary control reserve (PCR) and secondary control reserve (SCR). At the same time, the system is flexibly deployed for both grid services and participation in day-ahead and intraday electricity markets. In addition, the storage system can supply reactive power when required, thereby supporting voltage stability in the grid.

Technical system architecture of the storage system

The solution is based on SMA's inverter and control technology and enables flexible operation across various market and grid requirements. The technical scope of supply includes 8 medium-voltage power stations (MVPS) equipped with SMA Sunny Central Storage UP inverters, as well as 16 battery containers. The inverters combine high performance, operational reliability, and efficiency while fully complying with applicable cybersecurity standards.

Operation and long-term partnership

As part of the project, Altenso assumed overall responsibility as the EPC partner for the planning, engineering, and construction of the so-called "Battery Park Einbeck." This also included the implementation of the medium-voltage grid connection, including switchgear and associated cable infrastructure. Beyond commissioning, Altenso remains closely involved and continues to provide operations and maintenance (O&M) services for the Einbeck site.

Contribution to energy supply and role in the energy system

The project also creates significant added value for the region. It contributes to security of supply and supports the integration of renewable energy. The Battery Park Einbeck underlines the central role of modern battery storage systems as a flexibility option in the energy system. The combination of market integration, system services, and active grid support makes them a key element for a stable and increasingly renewable electricity system.

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About RheinEnergie

RheinEnergie is a Cologne-based energy service provider with operations across Germany. In addition to supplying electricity, heat, and drinking water, the company offers a wide range of sustainable energy solutions. As a specialist in innovative energy concepts, RheinEnergie develops efficient solutions for customers in the industrial, commercial, and real estate sectors.

By leveraging renewable energy sources, state-of-the-art energy systems, and artificial intelligence, RheinEnergie works closely with its partners to accelerate the energy transition. Energy storage solutions complement the company's existing energy services business and represent a key pillar of its strategy to expand beyond its core region and establish scalable business models for sustainable growth.

About SMA Altenso

SMA Altenso GmbH is a wholly owned subsidiary of SMA Solar Technology AG. The young, diverse and dynamic company aims to drive the energy transition by delivering innovative projects around the world. As an international system integrator based in Germany, Australia, and South Africa, Altenso offers comprehensive solutions designed for the integration of complex energy systems. These include large-scale battery storage systems, hydrogen applications, as well as islanded and hybrid solutions for both off-grid and grid-connected energy supplies.

About SMA

SMA Solar Technology AG is a leading global specialist in photovoltaic and storage system technology and is driving advances in the field of decentralized and renewable energy supplies. The SMA portfolio comprises efficient solar and battery inverters, intelligent energy management systems, charging solutions for electric vehicles, and power-to-gas solutions. The company's multi-award-winning technology is protected by more than 1,600 patents. SMA Solar Technology AG has been listed on the Prime Standard of the Frankfurt Stock Exchange (S92) since 2008 and is listed on the SDAX index.

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