

STROMNETZE Forschungsinitiative der Bundesregierung



SMA Solar Technology AG – Press Release

Netz:Kraft Research Project: Renewable Energies Could Make Significant Contribution to Restoring Utility Grid After Power Outages

Niestetal, June 27, 2018 - With an energy supply that has a share of renewable energy of more than 80%, it will be possible to restore the supply of electricity reliably and quickly after grid failures in the future. This is one of the results of the Netz:Kraft association research project, which has been investigating new approaches to grid restoration in future power plant structures since January 2015. At the presentation of the results, representatives of the 20 partners involved from industry and research and from public utilities and grid operators now met for the concluding workshop at SMA Solar Technology AG (SMA) in Niestetal to present the achieved results and have discussions with the professional public. The Netz:Kraft project of the German federal government's Stromnetze research initiative, coordinated by the Fraunhofer Institute for Energy Economics and Energy System Technology (IEE), was supported by the German Federal Ministry for Economic Affairs and Energy (BMWi) with €8 million.

"The analyses conducted in the Netz:Kraft research project show that modern photovoltaic and storage systems could make a significant contribution to grid restoration in the future," said Thorsten Bülo, System Development Engineer at SMA and manager of the subproject. "It has also shown that SMA can currently provide a large proportion of the technologies required for future requirements that are necessary to solve the technical challenges of grid restoration. However, it must also be noted that there are still a lot of details to be worked out by the grid operator, standards institution and regulating authorities in collaboration with manufacturers and precise technical and economic framework conditions must be defined so that coordination of photovoltaic and storage systems can also be implemented in practice."

Background to the Netz:Kraft project

In order for the energy transition to be able to function, decentralized power generation systems like large PV systems and wind farms need to take on grid management services for the stable operation of the utility grid. This also includes grid restoration, where the electricity supply is re-established and stabilized after a major disruption or a power outage. This also applies if the supply to the utility grid is provided by a high proportion or exclusively by decentralized power plants. With comprehensive grid management service abilities, the SMA inverters and system components ensure that the requirements of grid operators can be met at any time, even at night, within seconds after, for example, power reduction, voltage stability through the provision of reactive power or providing reactive power. The functionality of PV systems is expanded considerably using storage technologies.







About SMA

The SMA Group with sales of around €900 million in 2017 is a global leader for solar inverters, a key component of all PV plants. SMA offers a wide range of products and solutions that allow for high energy yields for residential and commercial PV systems and large-scale PV power plants. To increase PV self-consumption efficiently, SMA system technology can easily be combined with different battery technologies. Intelligent energy management and digital energy solutions, comprehensive services and operational management of PV power plants round off SMA's range. The company is headquartered in Niestetal, near Kassel, Germany, is represented in 20 countries and has more than 3,000 employees worldwide, including 500 working in Development. SMA's multi-award-winning technology is protected by more than 1,100 patents and utility models. Since 2008, the Group's parent company, SMA Solar Technology AG, has been listed on the Prime Standard of the Frankfurt Stock Exchange (S92) and is currently the only company in the solar industry that is listed in the TecDAX index.

SMA Solar Technology AG

Sonnenallee 1 34266 Niestetal Germany

Head of Corporate Communications:

Anja Jasper Tel. +49 561 9522-2805 Presse@SMA.de

Press Contact:

Susanne Henkel Manager Corporate Press Tel. +49 561 9522-1124 Fax +49 561 9522-421400 Presse@SMA.de

Disclaimer:



STROMNETZE

Forschungsinitiative der Bundesregierung



This press release serves only as information and does not constitute an offer or invitation to subscribe for, acquire, hold or sell any securities of SMA Solar Technology AG (the "Company") or any present or future subsidiary of the Company (together with the Company, the "SMA Group") nor should it form the basis of, or be relied upon in connection with, any contract to purchase or subscribe for any securities in the Company or any member of the SMA Group or commitment whatsoever. Securities may not be offered or sold in the United States of America absent registration or an exemption from registration under the U.S. Securities Act of 1933, as amended.

This press release can contain future-oriented statements. Future-oriented statements are statements which do not describe facts of the past. They also include statements about our assumptions and expectations. These statements are based on plans, estimations and forecasts which the Managing Board of SMA Solar Technology AG (SMA or company) has available at this time. Future-oriented statements are therefore only valid on the day on which they are made. Future-oriented statements by nature contain risks and elements of uncertainty. Various known and unknown risks, uncertainties and other factors can lead to considerable differences between the actual results, the financial position, the development or the performance of the corporation and the estimates given here. These factors include those which SMA has discussed in published reports. These reports are available on the SMA website at www.SMA.de. The company accepts no obligation whatsoever to update these future-oriented statements or to adjust them to future events or developments.