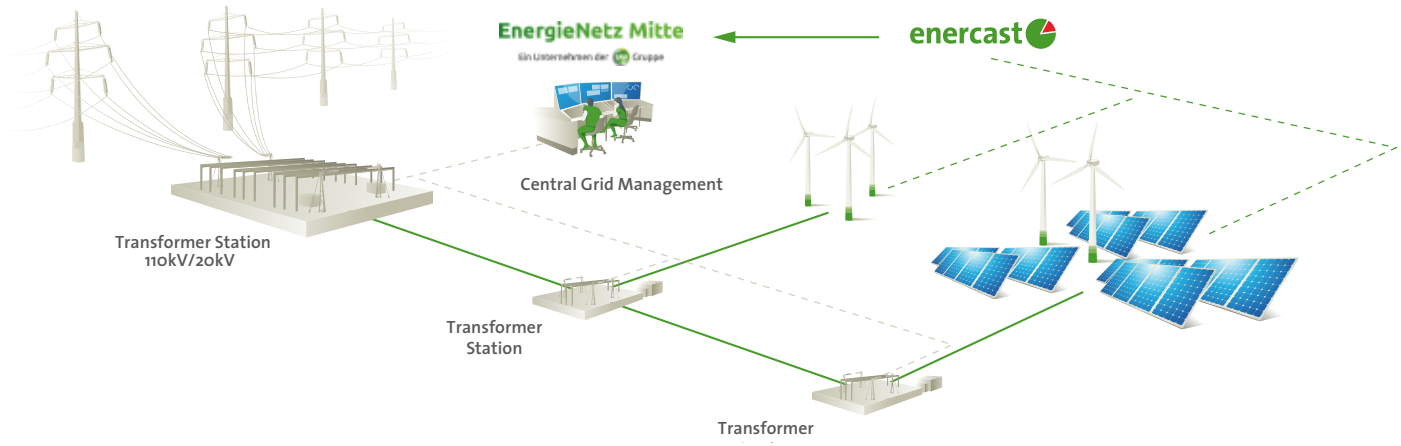
EnergieNetz Mitte

Ein Unternehmen der EAM Gruppe

Area forecasts at the substation level

Clustered enercast wind and solar area forecasts support optimal system capacity management



Challenge

The grid subsidiary of EAM GmbH & Co. KG, EnergieNetz Mitte GmbH, has an electricity network roughly 46,000 km long, spanning five German states. A large part of this network is located in rural areas with numerous communities.

But even cities such as Göttingen, for example, belong to the network area. EAM would like to know the influence on the network of electricity from wind power and PV systems at an early stage to enable them to take the right measures in good time in the event of a fault.

Solution

enercast area forecasts enable network management to know in advance about a critical situation in specific areas of the network. For this purpose, EAM refers to weekly, 72-hour and intraday forecasts for all wind and solar systems in the network. These are each calculated and predicted in the form of area forecasts for the 71 substations in the network. In this way, the influence of electricity from renewable energy sources can be forecast accurately. The forecasts are also broken down according to the individual performance data of the wind power and solar energy plants, so that these can be managed at different levels.

On the basis of the weekly forecasts, it is clear what trends are already emerging with regard to the future power supply. Moreover, these predictions also enable circuit measures, which take place over several days. To this end, periods in which little electricity will be produced by wind power and PV plants are selected. The intraday forecasts make short-term interventions possible – switchovers in the network can lead to easing, for example. The power forecasts ensure constantly maintained power system stability.

Benefit

If critical situations arise in specific areas of the network, these are detected at an early stage thanks to the EE facilities' area forecasts, which are broken down by substation and performance class. EAM can accordingly intervene to ensure a problem-free power supply. Clustered performance forecasts by enercast also offer network operators the possibility to inform wind and solar plant operators in good time about any necessary shutdowns.

Perspective

Renewable energies are on the rise – particularly in networks in rural areas, where a lot of wind and solar energy is generated. The importance of and demand for accurate power forecasts will therefore increase in the future.

„We are very satisfied with the forecasts and service from enercast", says Gerhard Vaupel, head of network management at EAM. „In particular, the specific challenge of clustering according to performance class and the large number of substations was implemented optimally. This has provided us with the necessary information to maintain the stability our network."

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Gerhard Vaupel
Head of Grid Control
EnergieNetz Mitte GmbH

Customer | EnergieNetz Mitte GmbH

EnergieNetz Mitte GmbH is a wholly-owned subsidiary of EAM GmbH & Co. KG. For more than 85 years, the group of companies has been providing secure and reliable energy supplies for around 1.4 million people in the heart of Germany. The network covers a geographical area of more than 13,000 square kilometres and extends over large parts of Hesse as well as southern Lower Saxony, parts of eastern Westphalia, western Thuringia and parts of the Altenkirchen district in Rhineland-Palatinate.

EnergieNetz Mitte operates a total of around 50,000 kilometres of electricity and natural gas grids. The supply facilities include 71 substations and more than 6,600 switchgear and local grid stations. **www.energienetz-mitte.de**

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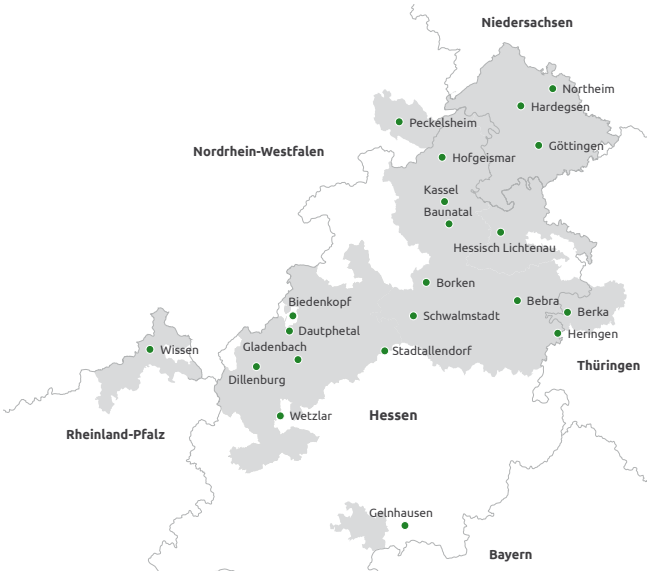

enercast

Services

Power forecasts for energy providers and municipal utilities

With enercast city you can render renewable energy sources projectable and integrate them into your processes. MORE

Direct marketing of forecasts for wind- and solar electricity

If you want to behave optimally on the electricity market, you need to know the direction from which the wind blows and when the sun shines. MORE

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convincing

Deutschland Land der Ideen
Ausgewählter Ort 2012

With its forecasting services fort he energy sector, enercast GmbH is one of the 365 „Selected Landmark 2012“.

Innovationspreis 2011
eine Idee besser WRG

The WRG (Wirtschaftsförderung Region Göttingen) conferred Enercast GmbH with the Innovation Award 2011. Enercast GmbH came in third in the services category.

INNOVATIONSPREIS-IT
NOMINIERT
2011
initiative mittelstand
BRANCHENSOFTWARE

The web service enercast placed third for the Innovation-IT Award 2011 in the category industry software which is awarded by the Initiative Mittelstand.

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