TESVOLT
Free to go green.

A NEW GOLD RUSH

Electricity trading on the stock exchange – electrical company achieves high revenues with storage systems and energy trading

PROFILE

Client:
Reichbrandstätter GmbH & Co. KG

Type of business:
SMEs, trades

Special characteristics:
Energy trading with cabinet systems

Region, country:
Reichbrandstätter GmbH & Co. KG

THE BACKGROUND

Electrical firm Reichbrandstätter started receiving unusual enquiries from a few commercial customers who had heard that battery storage systems can generate high revenues by participating in energy trading on the electricity exchange. "Our region in Upper Bavaria is home to numerous farmers, for example, who have their own fairly large grid connection points. And, of course, they also want their slice of the cake," reports Johannes Mitterreiter, Managing Director of Reichbrandstätter, which is based in Engelsberg im Chiemgau.

THE CHALLENGE

Up to now, operators of smaller battery storage systems have been excluded from energy trading. That is because it was not economical for traders to trade their small storage capacities on the electricity exchange. Only large-scale storage systems of around 5 MWh or more were of interest to them.

"Then, when TESVOLT devised a new business model that combines numerous commercial storage systems into one virtual large-scale storage system, we were keen to take a closer look," says Johannes Mitterreiter. "Our Head of PV and Storage Systems, Stefan Balk, drove the project forward, ensuring that we could participate in the field tests as a specialist partner. We were supplied with the appropriate TESVOLT FORTON storage system, enabling us to test for ourselves how well energy trading works."

The electrical installation company has a grid connection point of 400 kW, which was already connected to photovoltaic systems with a total output of 250 kWp. The owner wanted to use the remaining connected load by connecting four battery storage systems with a total of 184 kW to the utility grid. This created a problem in that the total output of the PV and storage system was now 34 kW above the permissible connected load.

Although storage systems and photovoltaics usually operate at different times – with feed-in by solar installations occurring when electricity prices are low and storage systems selling the stored power later at higher prices – during periods of simultaneous feed-in and storage, electricity flows must be managed intelligently and profitably. Ultimately, the biggest challenge was to convince the local energy supplier that the grid connection would never be overloaded.

ENERGY TRADING

THE SOLUTION

Reichbrandstätter initiated direct discussions with the energy supplier, Energiegenossenschaft Engelsberg. “After a few conversations, they realised that TESVOLT ENERGY’s intelligent software controls the energy storage systems so that they operate in a grid-neutral way, or even contribute positively to the grid,” explains Johannes Mitterreiter. As a result, the specialist company was able to install four TESVOLT FORTON battery storage systems in the courtyard of the company’s premises. They are used entirely for electricity trading and they generate monthly revenues in the four-figure range.

»Trading has led to a new gold rush within the storage industry. But I wanted to try it out first before selling the model to my customers. Now I know for sure that it works. The storage system runs smoothly, generating the predicted revenues. I’ve already sold ten more FORTONS. Customers come to the courtyard, notice the storage system and say, ‘That looks cool. What can it do?’ When I show them the revenues, they want to benefit from energy trading too.”

Johannes Mitterreiter, Managing Director of Reichbrandstätter

THE BENEFITS

With the new TESVOLT FORTON battery storage system and TESVOLT ENERGY, TESVOLT is giving operators of commercial storage systems their first ever opportunity to participate in energy trading – on terms as lucrative as those usually available only for large-scale storage systems.

- **A really fast return on investment**
  When the TESVOLT FORTON is used for energy trading on the electricity exchange, the initial investment generally pays for itself after just a few years.
- **Higher revenues through trader benchmarking**
  TESVOLT ENERGY works with three of Germany’s top traders and pits them against each other. For customers, this translates into higher revenues while eliminating dependence on a single trader.
- **Maximum safety**
  Integrated smoke, heat and gas sensors – along with alarm and aerosol extinguishing systems – ensure maximum safety. What’s more, the storage system requires no liquid cooling.
- **Everything from a single source**
  TESVOLT FORTON battery systems are installed, commissioned and maintained by certified TESVOLT specialist partners. TESVOLT ENERGY manages the combined storage capacity and distributes the proceeds transparently to customers on a monthly basis.

FACTS AND FIGURES

Storage system	4 x TESVOLT FORTON
Energy/output	368 kWh / 184 kW
Cell	High-temperature cell, LFP
Efficiency (battery)	Charging: 98.5%, Discharge: 98.7%
Cycles	15,000 (for energy trading with 2 full cycles per day) 10,000 (when used for self-consumption optimisation, peak shaving, multi-use)
Operating temperature	–20°C to 55°C
Battery inverter	2 x KACO bp gs 92.0 TL3
Installer	Reichbrandstätter GmbH & Co. KG

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