

Battery Energy Storage



Flexible operation and enhanced capacity

[siemens-energy.com](https://www.siemens-energy.com)

A Battery Energy Storage System (BESS) serves as an ideal solution to improve your flexible operation ability.

The energy transition with increasing utilization of variable renewable energy puts grid systems under growing strain to stabilize the grid.

BESS consists of battery technology with rapid and reliable response combined with cutting-edge power electronics and controls which enables a power plant to provide fast response and a number of ancillary services to the grid.

Adding a BESS to a power plant can offer black start capability, both for grid services and the power plant itself.

It also enables an optimized operation e.g. by acting as a reserve for primary frequency response, allowing the power plant to operate at full load with optimum efficiency and provide the balancing services meanwhile.

A BESS upgrade from Siemens Energy could provide your existing power plant with new features, extended operation and new business opportunities:

- Increased MW for peaking capacity
- Wholesale arbitrage (buying/reselling on energy market)
- Enhanced frequency control
- Provision of other ancillary services such as operating reserves, voltage support and black-start
- Optimization of power plant operation (increased efficiency, lower emissions, avoided starts/stops)
- Stabilization of electrical island mode and UPS (Uninterruptible Power Supply)



Siemens Energy can provide you with solutions for flexible operation which enables enhanced profitability.

Published by

Siemens Energy AB
Industrial Applications
Slottsvagen 2-6, 612 31 Finspong, Sweden
For more information, please contact
Web: [siemens-energy.com](https://www.siemens-energy.com)
Customer Support Center: Germany: +49 180 524 70 00
E-Mail: support@siemens-energy.com
© Siemens Energy, 2021

Siemens Energy is a trademark licensed by Siemens AG.
Subject to changes and errors. The information given in this document only contains general descriptions and/or performance features which may not always specifically reflect those described, or which may undergo modification in the course of further development of the products. The requested performance features are binding only when they are expressly agreed upon in the concluded contract.