



ABB Ability™ Process Power Manager

Ensuring a reliable and stable energy supply

The risks and costs of unplanned downtime due to energy supply issues continue to increase for energy-intensive process facilities. Any power disruption can cause devastating losses. ABB Ability™ Process Power Manager ensures reliable and stable electricity supply to process industry plants. With intelligent power balancing and predictive planning capabilities, ABB Ability™ Process Power Manager automates actions to optimize operational efficiency and minimize costs.

The high cost of downtime

When energy-intensive process industries experience unscheduled downtime, the tangible cost of the disturbance is typically measured in the millions of dollars. Indirect costs such as safety issues, profit potential losses and under utilization of resources amplify its impact.

Power supply events are among the biggest threats to manufacturers, especially energy-intensive process companies. This threat is intensifying as worldwide energy demand increases.

In today's competitive landscape, no one can afford downtime. When disturbances occur, rapid

recovery is critical. To prevent unscheduled downtime due to energy supply issues, companies in the energy sectors are looking for opportunities to more effectively manage their power supply. Further heightening their desire to achieve better energy management are the following market drivers:

Market drivers for better energy supply:



Minimizing unplanned downtime
Plants need a reliable energy supply and the ability to quickly restore reactive power to minimize losses.



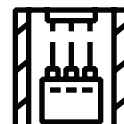
Increasing efficiency
Escalating operational costs coupled with profitability challenges are forcing producers to become more efficient.



Managing aging assets
Plants need to optimize the life of equipment with better asset utilization.



Enhancing safety
Blackouts and unreliable electricity increase safety risks. With improved power supply reliability, plants can limit exposure to unsafe situations and keep their people and plant safe.



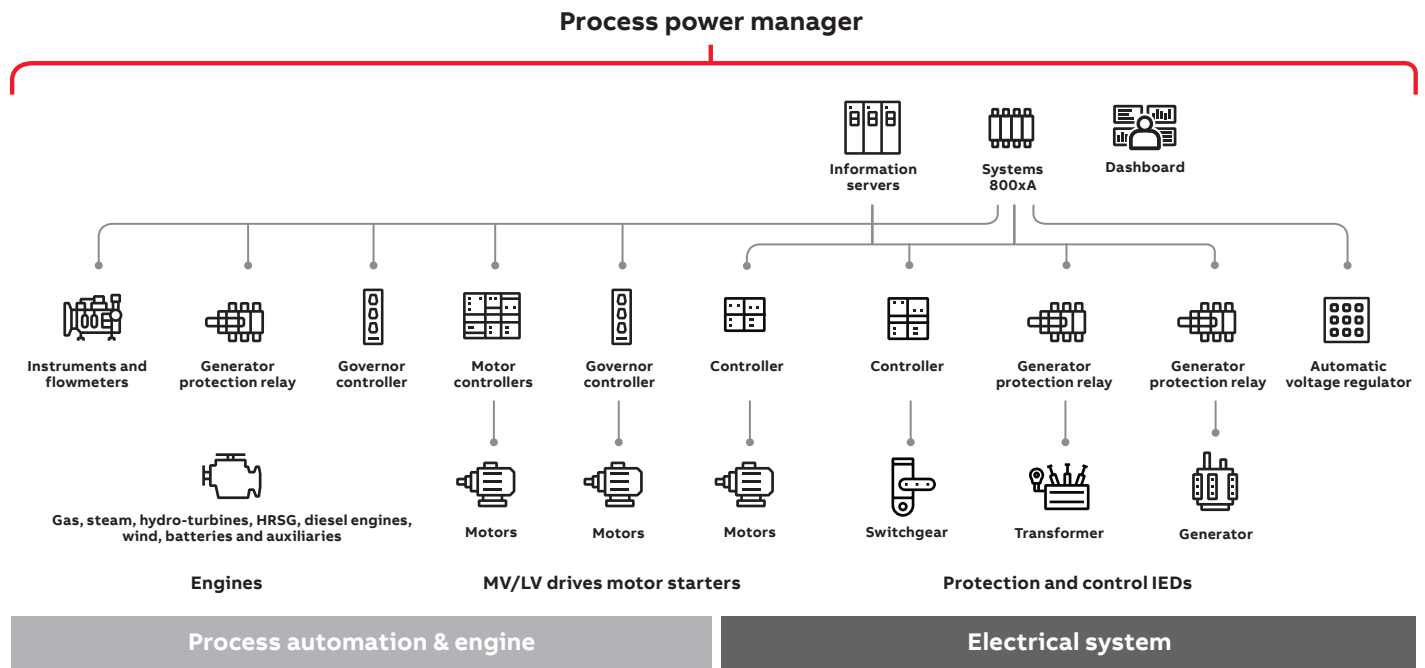
Leveraging multiple power sources
New energy assets within the plant present increased management complexities and risks.

ABB Ability™ Process Power Manager; ensuring a reliable and stable energy supply

ABB Ability™ Process Power Manager helps enable a more reliable and stable electricity supply to process industries. Leveraging ABB's System 800xA to seamlessly integrate electrical switchgear with the control system,

ABB Ability™ Process Power Manager gives operators better visibility and information, accelerating effective decision making and driving the optimal use of total power resources.

ABB Ability™ Process Power Manager provides a comprehensive overview of your power generation and distribution as well as your auxiliary packages.



Features and benefits

ABB Ability™ Process Power Manager

ABB Ability™ Process Power Manager delivers power management and control of your electrical infrastructure so you can ensure a stable power supply throughout your plant.



Integration
with ABB System
800xA process and
electrical control
systems



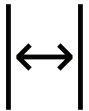
Power balancing
and predictive
planning to avoid
disturbances or
blackouts



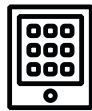
Remote access
of plant equipment
for operation,
collaboration and
diagnostics



Load shedding
and recovery



Scalability
to support large,
complex electrical
systems



Flexibility
to provide
automated functions
and/or process-
dependent functions



Dynamic tripping
of loads, which can
be preconfigured or
manually configured
to a set of priorities



Simulation training
provide realistic
operator training for
daily operations and
crisis situations

Benefits

Lowens capex costs with single installation and commissioning, leading to less cabling and a smaller footprint

Increases uptime by automating reactions based on priority or criticality

Improves efficiency and expedites decision making through an overview of the electrical system

Enables better decisions with comprehensive and deep visibility

Improves health & safety and mitigates environmental impacts

Drives ROI by increasing energy efficiency

Minimizes downtime by ensuring faster recovery of power and production after a failure

Optimizes network and minimizes footprint

Total power management and control of your electrical infrastructure

Unlike competing solutions, ABB Ability™ Process Power Manager delivers fast-acting blackout prevention with dynamic network determination, especially for complex electrical networks with multiple substations and power sources.

ABB Ability™ Process Power also supports automated, efficient, stable energy distribution through scalable and robust power control modules—another differentiating benefit.

Three unique competitive differentiators



Dynamic network determination

Delivers fast-acting blackout prevention, especially valuable for complex electrical networks with multiple substations and power sources



200 load-shed priorities

Save critical loads while minimum load is shed, minimizing unnecessary over-sheds



Scalable & robust power control modules

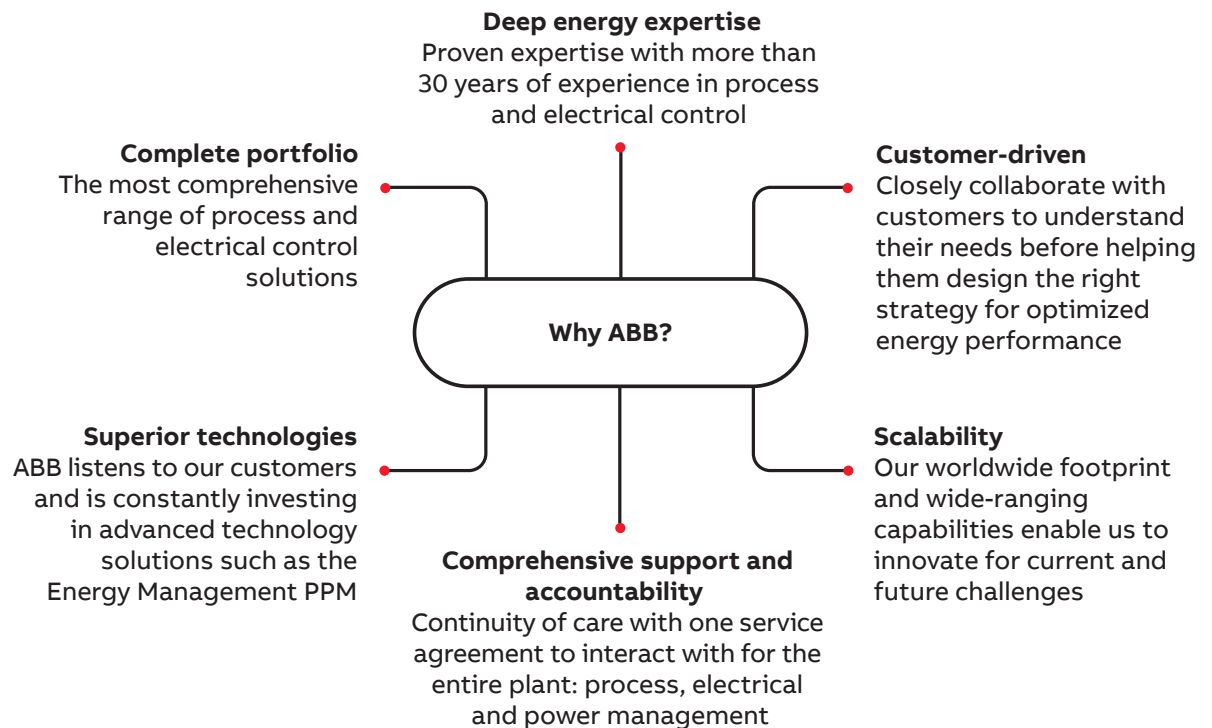
Manage of synchronization, active and reactive power control and distribution of multiple power generation sources—automatically

Why ABB

Deep domain expertise coupled with leading process power technologies delivers superior results

For more than 40 years, we've been helping process industry facilities improve their energy performance. ABB offers seamless integration with existing process control systems so that

your operators have one system to manage and maintain. Customers benefit from having an accountable, single point of contact for the entire plant—process, electrical and power management.





For more information, please contact:
ABB Inc.
Operating in more than 100 countries.
**[new.abb.com/oil-and-gas/products/
automation/process-power-simulator](https://new.abb.com/oil-and-gas/products/automation/process-power-simulator)**