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.
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**
predictive training for realistic operator training for daily operations and crisis situations

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**Benefits**

**Lowers 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.

Deep energy expertise
Proven expertise with more than 30 years of experience in process and electrical control

Complete portfolio
The most comprehensive range of process and electrical control solutions

Superior technologies
ABB listens to our customers and is constantly investing in advanced technology solutions such as the Energy Management PPM

Comprehensive support and accountability
Continuity of care with one service agreement to interact with for the entire plant: process, electrical and power management

Customer-driven
Closely collaborate with customers to understand their needs before helping them design the right strategy for optimized energy performance

Scalability
Our worldwide footprint and wide-ranging capabilities enable us to innovate for current and future challenges
For more information, please contact:
ABB Inc.
Operating in more than 100 countries.
new.abb.com/oil-and-gas/products/automation/process-power-simulator