

# ABB real-time power system simulation

## Protecting your investment by showing what it can do

What if your operation of the electrical network could be more productive and more efficient? An ABB real-time power system simulation provides valuable information about how different disturbances could affect your network - before they occur.

### Minimize impact on your system

Real-time power system simulation can improve your ability to minimize the effects of a disturbance on your power system and can even prevent disturbances from happening.

### Secure power system operations

Our real-time power system simulation allows you to save money by ensuring that the correct protection and control strategy has been applied to maintain and secure power system operation.

### A copy of your own power network

Combined with our Power System Studies, real-time simulation can create a working replica of your network to show how your network will respond to various conditions.

### Profit from our experience

We are with you, providing expert advice from experienced engineers who understand your network.

## Contact

To find out how our simulations can help your system, contact your local service and sales support team.

For further information visit:

[www.abb.com/substationautomation](http://www.abb.com/substationautomation)

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Substation Automation Products

**ABB real-time power system simulation**  
See how a disturbance affects your network, without affecting your network

Power and productivity  
for a better world™



Power and productivity  
for a better world™



## Your benefits

### Reduce the risk of power failures and outages

ABB real-time power system simulation offers an advanced and effective means of verifying the protection, control, and monitoring systems in your electrical network. Reduce the risk of power failure and outages, and minimize your investment costs, by getting the most efficient measures.

#### Factors which can call for a customized simulation and verification:

- Network topology, such as parallel and multiple terminal line
- Increasing diversity of components in power networks
- High speed protection
- Multi terminal protection
- Long lines with load encroachment
- Introduction of new numerical techniques in protection schemes



## Working together

### Gain valuable knowledge from ABB experts

#### We offer simulation services in the following areas:

- Fault analysis in different locations in the power system
- Breaker operations, such as opening, closing and re-closing
- Variations in short-term network stability
- Power swing analysis
- Different load conditions

#### Test your protection system in our simulator

Quickly predict how your protection devices will behave in response to various disturbances, and learn how to build a stable and reliable power system.

#### Personal consultation

ABB experts are able to simulate transients in your power system and analyze the performance of your protection and control equipment under various operating conditions. We'll help you to study a range of possible disturbances, so you will know exactly how they could impact your systems.

