



Power system services

Substation services

ABB – your experienced partner for the entire lifecycle of your substation

Expectations

The ABB group is a world leading provider of equipment for the generation, transmission and distribution of electric power.

Customer requirements met by our comprehensive service

General

- Define and realize savings potential
- Access to the latest technologies and systems know-how
- Optimum utilization of resources
- Efficient processes and procedures

Electrical system operation

- Optimize system performance
- Improve system efficiency
- Improve system availability
- Improve system reliability

Maintenance

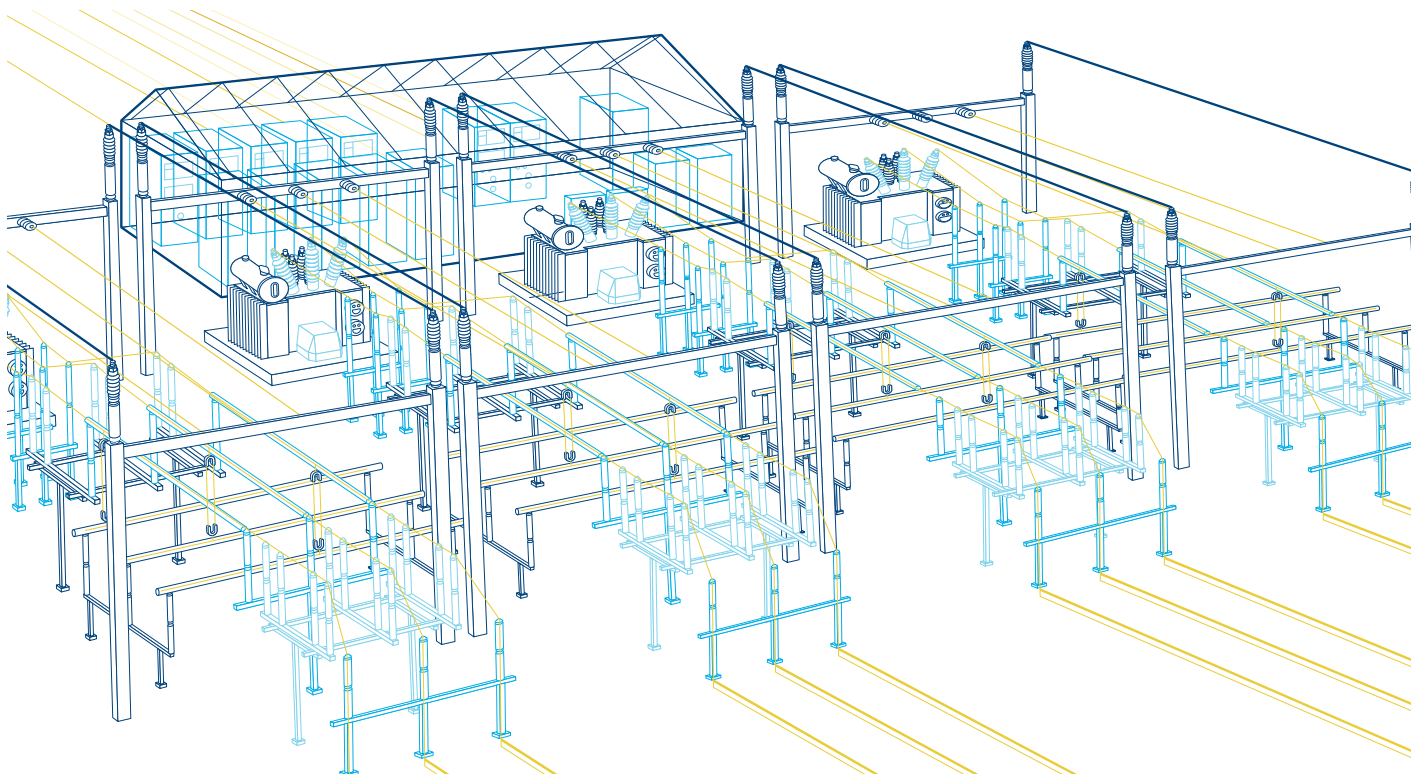
- Efficient maintenance procedures
- Extend equipment lifetime
- Update to the latest technology
- Develop optimum maintenance, retrofit & replacement decisions
- Comply with environmental requirements
- Continuous support for life cycle optimization

Ongoing deregulation, globalization and increasingly wider open market competition, create an environment that presents many new challenges.

In order to be successful, companies must be able to focus on their core activities whilst operating and maintaining their non-core operations with optimal cost efficiency.

Cost reduction is however only part of the solution! Today, compliance with health and safety, quality and environmental standards are prerequisites for carrying out any successful business.

Last but not least, it has to be considered how to maintain the value of the electrical infrastructure at optimized system performance and reliability to ensure continuous delivery of power to all operations.





The customer's key partner

Our customers demand our commitment

High reliability is the key to ensure maximum availability. This can be achieved through employing cost effective maintenance solutions. We feel a responsibility to support our customer in the best possible way to generate the maximum economic value from his operations and to increase the efficiency, reliability and safety of his installation.

Our customers need, our know-how and experience

Full product, system & application know-how has made ABB the leader from HVAC and HVDC installations to automation technology and state-of-the-art distribution systems. This allows ABB, together with its unique experience of electrical infrastructure, to find efficient ways to service our customer's equipment.

Our customers seek for partnership, our local and global presence

Through technology centres, focused factories and a world wide engineering and service network we provide a comprehensive portfolio to service our customer's power system requirements. We are truly a partner whenever and wherever our support is needed.

Our customers need for individual support, our tailored service solutions

Service agreements are developed in close cooperation with our customers to match their business needs. Based on our experiences with customers worldwide and our life cycle experience of a large number of transmission and distribution systems, we offer our tailored service solution for system and maintenance optimization.



A complete portfolio of services

Training

ABB offers comprehensive training for engineers, operators, programmers and maintenance personnel, providing up-to-date technical expertise for products, systems and applications. Training is available at ABB facilities worldwide, at customer sites and online.

Trouble Shooting

Our engineers are trained to provide expert knowledge for troubleshooting and root cause analysis—bringing assets quickly back to operation.

Support & Remote Service

Remote services extend assistance for a wide range of support needs. From telephone and web support, to direct and secure system interaction—we can provide real-time, on-line access to global service experts 24 hours/7 days a week.

Maintenance

Effective time based, condition based or reliable centered maintenance maximizes the reliability of the equipment. ABB service technicians utilize the most advanced diagnostic and repair practices.

Repair

Reliable and efficient repair including logistics support are crucial to maintain continuous plant operations. Our certified repair services provide timely repairs and advanced logistic services to satisfy the specific needs of each customer.

Spare Parts

ABB manages spare parts through specific part depots and programs to minimize capital investment and maximize systems utilization.

Diagnosis & Consulting

ABB experts have a profound knowledge of global best practices in a wide range of electrical installations. We develop and implement service solutions based on industry-specific technologies and competencies to support customers in improving overall equipment effectiveness and return on investment.

Migration

New generations of system components and software increase operating efficiency and extend system life. ABB offers migration strategies for a broad range of products and systems designed to ensure maximum return on investment while enhancing equipment availability, reliability and performance.

Upgrades and Retrofit

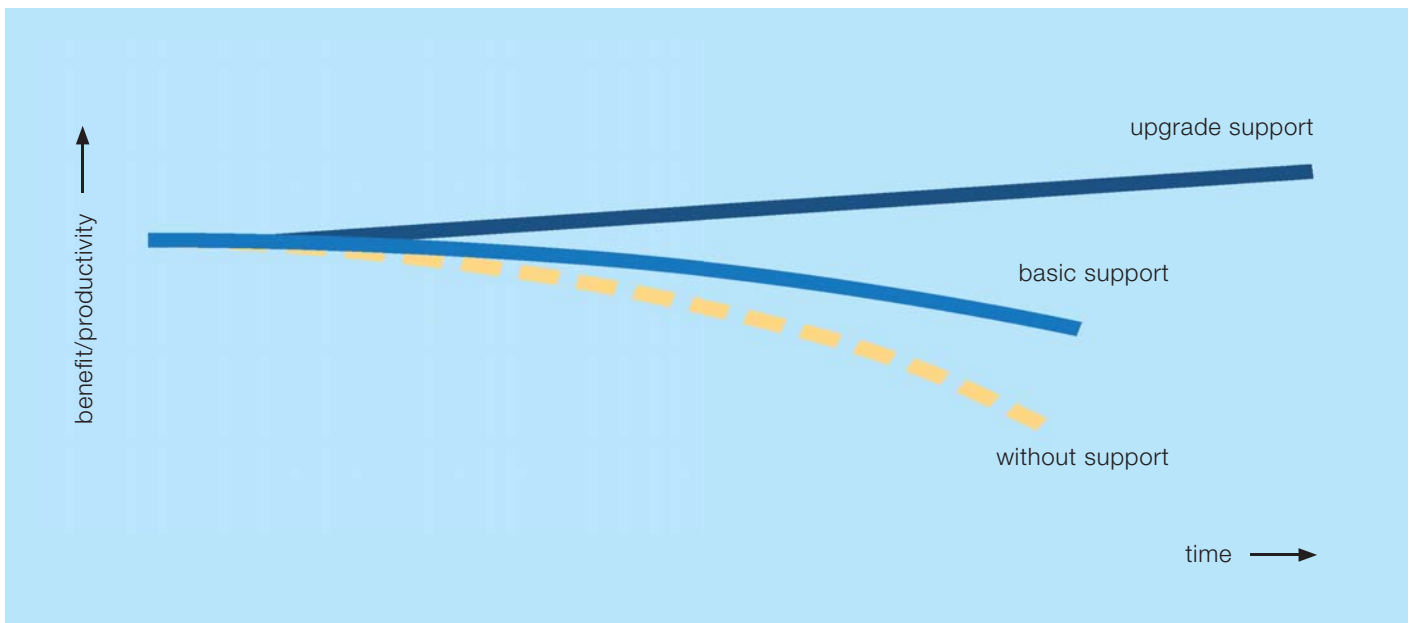
ABB has a complete portfolio of upgrade solutions for existing systems and equipment, integrating traditional and new system and control components to provide operational improvement and ensuring continued system availability. ABB has the expertise required for developing and delivering measurable results through tailored upgrade paths for installed systems and products.

Environmental Service

ABB's offers solutions to satisfy environmental requirements which meet local legislation, regulations and public demands. In line with these regulations ABB takes care of the proper disposal and recycling of installed or returned parts.

Service Contracts and Asset Management

ABB offers service contracts that combine the various service deliveries to meet specific customer requirements. With asset management service ABB takes the full service responsibility and keeps the plant running on a specific operation level at minimized costs



Life cycle management and service contracts

A life cycle challenge

Today's demands on network availability, efficiency and capacity are increasing continuously. In many cases, the systems from earlier technology generations can't meet these new requirements. This is our challenge and we can solve it by utilizing our portfolio of upgrade and retrofit solutions, which includes consulting and engineering activities at all stages of an assets' life cycle. It is important that maintenance activities or retrofits are carried out professionally according to the actual needs for life cycle performance.

Stay young

In today's competitive market, there is a need for modular, scalable solutions where installed technologies can be gradually upgraded by a stepwise approach with minimal impact on system or equipment availability. Fleet screening and condition assessment form the basis for an optimal modernization alternative, ranging from specific retrofit kits for life extension to general upgrade and migration strategies. A site assessment can take benefits into account, which provides the basis for a priority driven retrofit and replacement plan.

Individual live cycle support

Based on life cycle predictions for products and systems, including component reliability analysis, we are able to offer cost effective long-term support and tailored service contracts for the overall system. With the complete competence on both primary and secondary technology ABB can plan and execute the coordinated maintenance activities for the complete system.

Budgeted service costs

Service contracts can be tailored to each customer's precise needs. These packages assure our customers defined service deliveries at specified prices. Service arrangements present several advantages for the customer, reduce their financial risk and allow better management of maintenance budgets.

Substation automation and protection

Substation automation systems enable monitoring and control of primary and secondary equipment in a substation based on process information from protection and control terminals. The automation system can be enhanced with gateway functionality to exchange information between the substation and the network control centre. This contributes to a more effective utilization of all infrastructure.

Substation automation utilized for service

Utilization of automation systems replaces routine maintenance and inspection visits to sites and allows centralised verification and tuning of the system resulting in reduced maintenance costs. Furthermore, accurate information results in faster responses to any component and operation incidents.

Aspects to utilise modern automation solutions for substation service

- Equipment data for optimized maintenance planning
- Remote parameter setting and protection tuning
- Power systems studies, customer specific system analyses
- Time consistent documentation of occurrences reduces time for outage analysis
- Permanent operation monitoring reduces failure impacts
- Better access for troubleshooting and repair
- Optimized utilization of available transmission capacity

Substation automation service

- Power system simulation
- Parameter setting and configuration
- Disturbance analysis and evaluation
- Product upgrading and extension
- Training



Contact us

ABB LTD

Power Systems

Bruggerstrasse 72

5400 Baden, Switzerland

Phone: +41 58 588 26 66

Fax: +41 58 588 18 77

Email: substation.service@ch.abb.com

www.abb.com/substationsservice

Note:

We reserve the right to make technical changes or modify the contents of this document without prior notice. With regard to purchase orders, the agreed particulars shall prevail. ABB AG does not accept any responsibility whatsoever for potential errors or possible lack of information in this document.

We reserve all rights in this document and in the subject matter and illustrations contained therein. Any reproduction, disclosure to third parties or utilization of its contents - in whole or in parts - is forbidden without prior written consent of ABB AG.

Copyright© 2010 ABB

All rights reserved