ABB FACTS Customer Service

FACTS Care
Upgrades
ABB is a pioneer and the recognized market leader in the FACTS field. Developments move quickly, technical know-how increases and provide users improved functionality and features. Because of this, once an installation has been in service for a number of years, and technology has shifted, an upgrade will increase the lifetime of the installation.

**Meeting demands today and tomorrow**
There is an ever-growing need for new and efficient solutions for power transmission. Continued urbanization, energy trading between regions and the increasing use of renewable energy sources place more stringent demands on new and existing infrastructure.

For decades, ABB’s FACTS installations have enabled more efficient power transmission and distribution, improved voltage control and power quality, and increased efficiency of industrial processes around the globe.

**Thousands of Mvar in operation worldwide**
ABB’s range of FACTS products offers a flexible solution for grid optimization. Since the 1950s, these solutions have contributed to substantial reductions in carbon dioxide emissions and optimal use of energy resources. They have ensured sustainability and security of the power supply for today and tomorrow.

FACTS technologies from ABB provides its customers with high performance and stable power transmission. Utilities and industries around the world are benefitting from the increased reliability and availability provided by their installed FACTS system.

**FACTS Care**
During the entire lifecycle of your FACTS System your company should be able to focus on its core business. The foundation for reliability and availability of the system starts early in the system lifecycle. FACTS Care Customer Support Agreement enable you to rest assured throughout all phases the lifecycle.

**Upgrades**
In order to maintain an installation’s high availability and reliability for a longer period of time, it is important to think about maintenance and the need for future support. Choosing to proactively upgrade the installation before a severe outage occurs will save both valuable time and money. Additionally, an upgrade will increase the lifetime of the installation.
 Upgrade now?

Being proactive and planning an upgrade is far better than waiting for a breakdown. ABB offers services to evolve or upgrade the installation to the next generation, no matter if it was originally delivered by ABB or by another manufacturer.

The need for an upgrade mainly depends on a combination of the availability of spare parts and the general condition of the equipment. As systems approach and exceed 15 years of service, significant breakdowns are more likely to occur. It does not matter where the equipment was originally made because the major issues are generally still the same when a failure occurs – a lack of knowledge and available spare parts.

We recommend that you keep track of all events and failures, including the minor ones. Statistics show that a series of minor incidents and some major failures with increasing frequency will eventually lead to a breakdown.

 Wait or upgrade now
Even if your system is working properly for a long period of time with only minor incidents occurring sporadically, it is a known fact that insufficiently maintained systems will eventually deteriorate. This means that the choice is either to be proactive and plan ahead, or to wait for a breakdown to occur.

Being passive and waiting for a breakdown before upgrading can lead to a two year down period, resulting in reduced production and transmission capability. On the other hand, being proactive and planning your upgrade early will allow for a shorter down period (less than two months) that can be planned to fit around the system production cycle.

Upgrade checklist

When dealing with complex technology, it is always difficult to be certain of what approach is best to take to secure long term reliability. ABB has the resources and knowledge to guide you to the best decision for your requirements.

So if any of the following options apply to you, you should contact ABB to do a risk analysis:

- Plan for preventive maintenance available?
- Problems to acquire spare parts?
- Need for higher reliability and availability?
- Relying on inhouse competence of key persons?
- Have recently done corrective maintenance?
- Have had several minor incidents the past year?
- Have a need for increased operating efficiency?
- Need better cost efficiency?
Benefits

With modern equipment, maintenance cost can be reduced. So, with an ABB upgrade of your SVC/SC you will not only secure capacity and production of your facility, you will also cut your costs in the long run.

Driving forces for upgrading projects
There are several reasons to upgrade a system. First, many installations are critical for the supported system, network, or industry. Additionally, there are challenges to maintain competence in limited and obsolete technologies when key staff members leave the company. Finally, parts from Other Equipment Manufacturers (OEM) may be unavailable, which causes long lead times and higher costs. Upgrades allow the user to mitigate these risks.

Lower maintenance costs
Upgrading your SVC/SC will help you keep maintenance costs on a controlled level, thanks to better design and state of the art controlling and monitoring. For instance, a 20 year old SVC facility that is completely upgraded to modern ABB standards can halve your maintenance costs.

Increasing reliability and availability
Upgrades affect the system lifecycle, its value and production capacity. Insufficient maintenance and support will shorten the lifecycle, whereas preventive maintenance, support and other services prolongs the lifecycle. An upgrade significantly increases reliability and availability, while extending the lifetime even more.

Securing capacity and extending system lifecycle

Benefits of upgrading
- extended operational lifetime
- protection solution
- increased operating efficiency
- solves potential spare parts problems
- access a new generation of FACTS Care services
- higher availability
- better cost efficiency
- improved performance
- extended system lifetime
- higher reliability
- optimized functionality
- redundant system
- easier technical support
Upgrade options

With ABB you have the choice to do a complete upgrade of your SVC installation, or to go step by step and replace the parts you are most concerned about. Flexibility and customer needs are our top priority.

Digital control system
MACH2 is a flexible and programmable control system for FACTS applications with the latest Human Machine Interface with roll down windows and secure handling operations. With MACH2 you get a self monitoring system that controls itself and your site.

Thyristor
The new Thyristor Valve has a more robust electrical and mechanical design, which means that the valve gives better self-protection. The mechanical design of the device is more compact, which results in easier access for maintenance.

Cooling system
Less is more with a modern cooling system. Fewer components and a simplified design lead to less maintenance. With the new cooling system we will achieve higher reliability, easier maintenance (redundant pumps) and operation & monitoring integrated in SVC control system.

Protections
When making a control upgrade, do consider protection integration. It reduces the amount of hardware, improves the monitoring and diagnostics. The need for maintenance is reduced. ABB can supply a variety of protections.
FACTS Care service products

FACTS customer support empowers our customers throughout all phases of the installation’s lifecycle. Our Customer Support Agreements are the foundation for a long-term partnership.

24/7 Support
24/7 Support is available regardless of time or place. 24/7 secures business continuity for utilities and industries, and their customers around the world.

Corrective maintenance
Corrective maintenance is our emergency service. It aids finding, isolating and rectifying the fault and restoring the system. It assures that there are skilled ABB personnel on standby, to assist you in the case of any problems.

Preventive maintenance
Preventive Maintenance helps our customers to check the condition of their system and its components. It will determine the best solution to ensure system performance, safety, availability and reliability.

Remote Service
Remote Service satisfies the need for fast, efficient fault analysis, in combination with data analysis and respect for our customers security concerns.

Training
Knowledge is something intangible, obtained in theory and hands-on. ABB offers various kind of trainings for all types of FACTS Systems.

Spare parts
The right part, in the right place, and at the right time. The goal is to protect our customer from unknown and unexpected trouble related to spare parts support.

Updates
Updates ensure that the system is up-to-date and optimized and can be done in a few simple steps.

Upgrades
An upgrade will increase the lifetime of your facility, boost capacity and production, and also save valuable time and money.