Cable Care

ABB Power Cables
Service Products
High preparedness with ABB Cable Care ensures efficient repair in case of fault.

Cable failure rarely occurs. If they do, the main reasons are often external damage like anchor strikes or dragging fishing nets. To ensure a fast and cost-effective repair, it is important to plan for future support and spare parts management. By using ABB’s Cable Care services, you can reduce downtime and associated revenue losses in the event of a cable fault.

Your cable system supplies power to thousands, maybe even millions of people. A systematic approach to service is a cost-effective way to reduce downtime during a potential cable fault. A cable fault might never occur, but if it does – then ABB can be prepared to help you immediately.

Health and safety is always a primary concern in our service delivery and we offer a complete service portfolio, including several options of service support packages based upon your specific needs. Let us take care of your cable system, so that you can focus on your core business throughout the life cycle of your cables.

Cable Care – a modular-based agreement

Choose from the extensive range of Cable Care services. The scope of each selected service is defined in the Service Level Agreement (SLA).
Service Level Agreement
Adapted to your needs

A Service Level Agreement (SLA) gives you a guarantee that your cable service is delivered exactly as you expect.

Signing a service level agreement with ABB is the safest way to minimize cable downtime in the event of cable damage. SLA customers are prioritized and guaranteed agreed service performance under all circumstances.

The agreement ensures that maintenance and repair services are performed in a rapid, safe and cost effective manner. It is designed as a framework for your service activities and is flexible in terms of the extent of preventive and reactive work.

You can customize an SLA so that it contains a few of or all of our cable care services. The agreement stipulates precisely what you can expect from our service delivery. Every component of a service is quantified by set parameters so that you can measure and follow up that we deliver according to agreement.

Fees, rates, scope of support and service provision are defined under a customer-specific framework. The SLA specifies the extent of each service measure, the frequency of service provision, the time to service provision and the resources allocated to perform service.

ABB’s SLA is available for both onshore and offshore cable systems, worldwide.

Service highlights:
- Customized to customer requirements
- Scope of service quantified in detail
- Applicable to all ABB cable services
- Available for onshore and offshore cable systems

Main benefits:
- Minimized cable downtime
- Fast, safe and cost-effective service
- Fixed rates, cost control
ABB will do regular inventory of your spare parts, report status, re-supply storage and replace parts if requested.

If a cable problem should occur, it is important to know that all the necessary spare parts are readily available.

Every power cable system needs spare parts during a repair. Some spare parts are subject to ageing and whose function will deteriorate over time, including tape and rubber parts. ABB’s Cable spare parts management service offers you a structured method to ensure spare parts availability at all times.

The ABB service team will inspect your spare part stock to make sure it is sufficient to carry out cable repair. This includes spare cables, spare joints and cable accessories. If required, ABB will provide storage, efficiently maintained and fully allocated for each customer.

A yearly report will be submitted to you following inspection, including recommendations and prioritizations for corrective action, for example the replacement of expired spare parts and consumables.

Depending on preference, you can choose to carry out recommended replacements of parts yourself, or hand over this task to ABB.

Service highlights:
- Inventory of existing storage
- Recommendations for replacement of outdated spare parts
- Re-supply of storage

Main benefits:
- Guaranteed parts availability
- Increased preparedness for cable damage
- Improved reliability
- Less downtime
Resources on call
Guaranteed expert availability

Enjoy the peace of mind of knowing that ABB cable experts will be available if a problem occurs.

The Resources on Call Service means ABB experts are always available for you in case of a cable problem. At fixed daily rates, you are offered the peace of mind of knowing that there is no price negotiating necessary to add to the stress if downtime and loss of revenue strikes.

You are guaranteed an instant telephone contact with one of our cable engineers, within 30 minutes. Depending on the problem, initial fault analysis will be carried out after finishing the customer's fault reporting over the phone. Your report during the call also forms the basis of our evaluation of the problem and preparation of fault detection on site.

The mobilization of a repair operation can start directly after the call, if needed. The ABB preparedness comprises the full spectrum of onsite support, fault location, emergency cut and seal and a jointing team including repair equipment and tools.

Guaranteed response times for on-call, fault location, cut and seal and repair ensures that the right resources are available at the right time.

Service highlights:
- Guaranteed cable expert availability
- Telephone support included
- Fully equipped repair preparedness team
- Initial fault detection included

Main benefits:
- Reduced time to repair
- Availability of skilled personnel
- Fixed daily rate and fee
Fault location services
Locate the fault using efficient methods

Skilled field experts, Ph.D. technology specialists and high-tech ROV equipment are required to pinpoint a cable fault.

Cable downtime can be costly in the form of loss of income, penalties and customer badwill. But the spare cable is also a costly and limited resource. So, accurate fault location is vital to do a cost-efficient repair using the minimum amount of spare cable.

Fault location is a complex undertaking, especially off shore. It requires well timed logistics including timing of different phases of the operation and the availability of vessels.

ABB operates a service van that is fully equipped to make all the necessary field measurements. All components have been tested and calibrated to work as a complete system solution, reducing error sources to an absolute minimum.

Despite the high-tech equipment, successful fault location requires skilled and experienced specialists. Backed by ABB's technical department, ABB service engineers use and combine methods to find and locate the part of a cable where the fault has occurred.

Depending on distance and signals, measurements from the cable ends will give a first good idea of what part of the cable to start pin-pointing the fault. Then our ROV (Remotely Operated Vehicle) will be used during off-shore to find the location of a fault with a high measurement accuracy.

Service highlights:
- Initial fault location using fully equipped service van
- Efficient methods to locate cable fault
- ROV and thumper to pinpoint fault with high accuracy
- Team of field engineers and tech department

Main benefits:
- Fast fault detection
- Reduced time to repair
- Enable a cost-efficient repair
ABB cable jointers are trained specialists with all the necessary certificates and licenses required for cable jointing and termination works.

Jointing is a craft that requires solid experience, both for extruded and mass impregnated (MI) cables. ABB’s repair experts are sourced from our inhouse installation department, which means they spend all their time on jointing and termination work.

ABB delivers total solutions including personnel and all the equipment necessary for jointing, including jointing houses and our ABB designed paper lapping machine when jointing MI cables. As total solution providers, we also take total responsibility for the entire jointing and termination process.

By using pre-tested and sea certified equipment only, ABB ensures that all equipment is fully functional once it gets on board the vessel, should the repair be off shore. This is an important aspect in order to have a time efficient repair operation.

**Service highlights:**
- Certified jointing specialists
- ABB certified personnel only
- Complete jointing solutions
- Sea certified equipment

**Main benefits:**
- Time efficient repairs
- High quality results
- Efficient project execution
Repair preparedness plan
Preparedness plan based on customer conditions

Roles, responsibilities and procedures are defined in advance to take effective action when a cable fault has occurred.

Preparation is key to successful repair work. You may have all the necessary equipment, vessel and parts under control. But if drawings for equipment layout on board are missing, or if the personnel do not hold the necessary certificates, repairs will be delayed at best.

In the ABB Repair Preparedness Plan, potential scenarios are described. Is the cable located in deep or shallow water? Does it run close to or crossing a gas line? Factors such as these affect the choice of vessel, work method, procedures and what permits are required.

At landfalls, permits to dig may be required. Who issues a permit in the relevant country? How long will it take? The better the information, the easier to get a permit fast. ABB will assist you in applying and make sure work is carried out in line with your safety routines.

The plan will be yearly reviewed, based on technical development, market, environmental and asset conditions, together with you in a cable repair preparedness workshop.

Service highlights:
- Defining roles and responsibilities in repairs
- Checklist for necessary preparation
- Scenarios, procedures and preparation for actual conditions
- Supporting customer permit applications

Main benefits:
- Efficient execution of repair
- Reduced time to repair
- Yearly revision of plan
Marine resource plan
Right vessel and equipment ensure an efficient repair

Marine resource planning ensures availability to the right vessel for each specific repair job at sea.

To reduce the time from an outage to mobilizing the repair, ABB will draft a turn-key marine operation contract. The contract, which is commercially pre-negotiated, will be used as the fundamental scope description, outlining a generic time schedule.

Without a marine resource plan, vessel availability, market conditions or site elements at the actual repair site may jeopardize the opportunity to obtain vessels or alternative marine platforms required for repair work.

As a leading cable installation provider, ABB keeps an extensive network of ship owners and brokers. We can on short notice select the right vessel for a specific task. We also take full responsibility for the equipment on board, measurements and the necessary safety permits for vessel, personnel and cable.

ABB will provide information from marine brokers to support and enhance the yearly preparedness planning updates. Marine surveys can be performed to secure the information required to keep the preparedness plans and documentation updated.

Service highlights:
− Extensive broker network
− Plan covering cable, vessel and personnel
− Yearly update of plan

Main benefits:
− ABB handles all the interfaces
− Reduced time to repair
− One point of contact
Turn-key repair
From initial fault location to final documentation

ABB can support you with a turn-key repair operation, regardless of cable location and voltage levels.

ABB has the capability of supplying you with a turn-key repair operation. ABB will handle all interfaces between owners of the different services, so in effect, you will have one point of contact at ABB. The service covers everything from initial fault location to project management of repair work and final documentation.

Choosing a turn-key repair operation means you are relieved of the risk and administration involved in managing several contracts. There is also seamlessness between the technical systems used in each service.

ABB works to the highest HSE requirements and every operation begins by preparing an HSE plan that needs to be approved, and followed, by the customer.

Repairs might be needed in many different environments, work in a tunnel differs substantially from repairs in an offshore wind farm. ABB has experience of repairs at many different locations and will be able to successfully deliver your turn-key solution, whatever the cable location.

Service highlights:
− All ABB cable care service included
− All cable locations and voltage levels covered
− Certified ABB service personnel only
− HSE plan ensures highest HSE standards

Main benefits:
− Reduced time to repair
− Cost control
− One point of contact