

ABB Ability™ MySiteCondition Life Cycle Assessment

Ensure the right maintenance for the right equipment at the right time.



You need trustworthy information to make business decisions on where to spend your operational budget. And you need to look ahead to construct a framework for upcoming maintenance measures to ensure long-term equipment reliability.

We understand your needs and the challenges your food and beverage plants face. To help you address these concerns, we offer the MySiteCondition Life Cycle Assessment, part of ABB Ability. With two levels of service available, this assessment can evaluate your medium-voltage equipment, including small transformers and protection relays, as well as low-voltage equipment.

If you want to find the optimum balance between improved performance, reduced cost and quantified risk, talk to us.

Why do you need this service?

Some power system components age more quickly, require more maintenance and are more important to asset reliability and lifetime than others. Knowing and improving the condition of your plant's electrical equipment plays a key role in reducing the likelihood of unplanned downtime, equipment damage and personnel injury.

Getting the right data to the right people is critical, but many factors can make this a challenge:

- · Aging equipment and infrastructure
- Assets being run at full or above capacity
- Loss of expert knowledge due to retirements, layoffs, mergers or change of a plant's ownership
- Limited maintenance budgets
- Siloed or disconnected data about electrical system assets

Maintenance efficiency and effectiveness can be significantly improved by targeting the right equipment at the right time, resulting in about 40 percent savings in maintenance costs.

MySiteCondition provides you with a documented decision-making framework. This comprehensive asset assessment offers you the opportunity to move from a time-based to a reliability-centered maintenance strategy. Such a shift in methodology allows you to:

- Reduce unexpected downtime
- Improve plant reliability and provide a safe working environment
- Focus maintenance resources and repair on the biggest needs
- Move towards less costly condition-based maintenance
- Prioritize asset replacement for optimum budget allocation
- Balance your maintenance efforts between keeping costs down and reliability up

What happens during an assessment?

We understand that each plant's needs are different. We work with you to ensure we have a good understanding of your plant's activities and the impact of your electrical assets on your production processes.

MySiteCondition has two levels of service, depending on your needs and the timing of the assessment. It is based on more than 100 criteria for each piece of equipment and is backed by ABB's know-how and expertise.

The lite version, performed free of charge, involves a visual check of equipment. The full version includes a

thorough inspection and testing of equipment and requires a shutdown.

In both cases, ABB staff carry out a thorough onsite asset assessment. The assessment is supported by a proprietary mobile app that covers a wide range of assets, across many factors such as age, type and brand.

Lite version:

The lite version can be performed as part of an onsite visit by an ABB salesperson. Data is collected though visual observation and personnel interviews, which does limit how much data is available regarding your asset's condition and risk.

This assessment takes approximately five minutes per panel, depending on the differentiation between panels and the extent of their conditions. It generally only takes one visit, and your report is available right away. The report includes a cover page, the asset risk chart and any related figures.

Full version:

The full version is performed by a field service engineer and requires a plant shutdown to conduct a more detailed assessment. It includes the full number of condition and risk data entry points. Because of the shutdown requirement, we recommend that you have this assessment performed in parallel with your plant's maintenance service.

Data is collected by visual observation, personnel interviews and asset testing. This assessment takes approximately an hour per panel, depending on what is already being tested as part of the maintenance service. It takes about two weeks to prepare your customized report.

Typical components of the report include:

- Detailed risk charts visualizing the asset risk profile for each substation and its components
- Technical report, including pictures, to directly target the required needs discovered
- Detailed recommendations for further study or action, along with chronological priorities
- Product life cycle support statements
- Cost-benefit analyses of potential mitigation actions

What happens next?

Based on the report, ABB will recommend measures to increase reliability, reduce risk and improve safety. The analysis and calculations in your report are modeled after the Failure Mode and Effects Analysis (FMEA). This systematic technique for failure analysis was developed to study problems that might arise from malfunctions in different systems.

Some possible areas for improvement and recommendations that could be listed in the report include:

- Spare parts and components
- Safety related upgrades
- Training
- · Maintenance and field services
- · Retrofit and refurbishment options
- · Monitoring and diagnostic actions
- Engineering and consulting services

MySiteCondition offers you the opportunity to move from time-based to a reliability-centered maintenance methodology. By carrying out this assessment and implementing its recommendations, your plant's overall electrical equipment and substation condition can be highly improved.

If you're ready to improve your electrical asset performance and optimize your plant's future maintenance strategy, talk to us to schedule your MySiteCondition assessment today.