



10 Ways a Power Systems Assessment Can Save You Money

How much would an hour of power disruption cost your organization? Businesses lose millions of dollars each year because of unplanned downtime.

Research by the Lawrence Berkeley National Lab
says that large, industrial power users lose

 **\$124,000**
FOR EVERY HOUR OF LOST POWER.

That means that losing power for just one hour five times in a year would cost one of those businesses more than \$600,000.

Yet, power system assessments that could help prevent unplanned downtime often are deemed too expensive or unnecessary — even though the cost to restore power to operations could easily surpass the cost of a power system assessment.

The truth is that Modernization, Performance and Safety (MPS) Assessments can save money by revealing opportunities to modernize, improve performance and help protect employees.

Here are 10 of the many money-saving opportunities offered by power system assessments:



Modernization

1 Identify critical assets within a hierarchy of equipment.

Resources may then be prioritized to support the most important power system requirements, so that in these days of tight budgets, existing resources are optimized for reliability.

2 Determine the true cost of maintaining aging equipment.

Although organizations can save money by using equipment for as long as feasible, eventually all equipment needs to be replaced or upgraded because the cost to maintain surpasses useful value. Organizations often lack the resources required to determine when equipment reaches this point, limiting their ability to make truly informed decisions.

3 Uncover opportunities for modernization of existing equipment.

Not all aging equipment needs to be completely replaced. An assessment can identify where lower-cost and lower-disruption modernization of key components can be used to upgrade existing equipment.

4 Create a long-term plan for addressing obsolescence.

Once aging equipment has been assessed, system managers can create a standard for determining when equipment becomes obsolete. This will help them get ahead of needs and, thus, be more in control of the cost of replacement or upgrade.



Performance

5 Audit system documentation to verify the type and frequency of maintenance operations are in accordance with OEM recommendations.

Keeping equipment properly maintained helps it last longer and perform better. Extending intervals or failing to complete maintenance as required puts power systems at risk for unexpected problems, which tend to be costlier than proper maintenance.

6 Inspect and document that the overall state of the equipment and its environment are within specified operating conditions.

Environmental factors can cause corrosion and other degradation of equipment that is not always obvious until they impact operations. Having clear insight on the state of all equipment allows for proactive management.

7 Address reliability issues and process disruptions.

It is easy to fall into the habit of addressing power system problems as they arise instead of being proactive, but unaddressed problems tend to persist and worsen over time. An assessment can identify how to address reliability issues and process disruptions before they become costlier to address.



Safety

8 Alerts to the presence of imminent hazards requiring immediate action.

An assessment can find hazards that are lurking unaddressed, ready to cause costly downtime and potential worker injury. The earlier operators know about a hazard, the sooner they can address it.

9 Audit workplace safety practices and identify areas of risk that could affect personnel safety.

No one wants to see an employee sustain an injury on the job, especially power system employees who are at high-risk of injury every workday. Mitigating hazards such as arc flash, instead of only providing protective gear, can drastically reduce the risk of cost and injury from power system equipment.

10 Verify and document that the electrical distribution equipment and its environment complies with local, state and/or federal electrical safety codes.

Non-compliance can be costly, but it is a preventable problem. The challenge is that managing complex and often-changing codes can be a full-time job itself. Verifying and documenting equipment compliance is the first step in simplifying this requirement and finding a cost-effective solution.



Insight into power system performance, safety, compliance and improvement opportunities is key to meeting reliability requirements in the most cost-effective manner as possible.

Few organizations employ large staffs to maintain power systems. MPS Assessments can provide this insight as well as actionable guidance on next steps.

For more information on
MPS Assessments,
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