

A Comprehensive Power Review Is Ideal When:

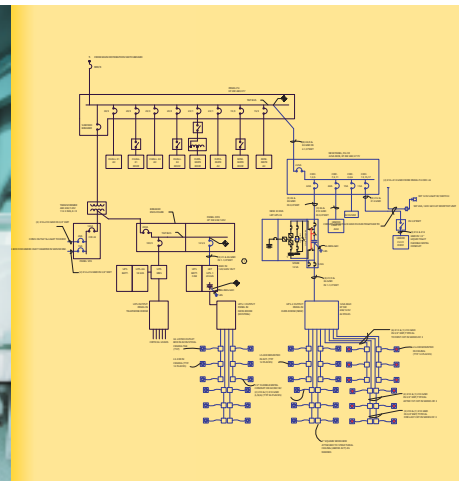
- Sites have been acquired and/or gone through power infrastructure enhancements — where the true equipment inventory, redundancy, and power system health is unknown or in question.
- Facilities have experienced changes to the data center infrastructure, load changes, and/or missing or inaccurate electrical one-line diagrams.
- There is a need to determine the integrity of the facility's power system.

An In-Depth Picture of Your Critical Power Systems

The backbone of your mission-critical facility is your power infrastructure. Ensuring the proper operation of your power system and its ability to deliver power when and where it is needed will maximize your availability.

The Facility Power Audit from Emerson Network Power reviews your existing power system to identify what equipment you have in place. And, then audits it to expose potential risks. Specifically, we provide:

- Equipment Inventory
- One-Line Drawing Verification
- Electrical Audit
- Recommendations to Maximize Availability.



Know Where You Stand Today. Plan For Tomorrow.

The electrical infrastructure of a critical facility can be a very complicated and interconnected system. Devices added or removed in one part of the facility can have an effect on the operation of other equipment across the organization.

Knowing you have an accurate picture of your total power system is the only way you can successfully deliver the level of availability that is necessary to sustain business continuity.

Equipment Inventory

Purpose

Determine your facility's data center power infrastructure equipment inventory.

What We Do

- Determine the existence of the following equipment that comprises a data center power infrastructure.
 - UPS
 - Precision Air Conditioning
 - Batteries
 - DC Power
 - Switchgear
 - Generators
- Tag each device.
- Describe equipment, manufacturer, and model number.

What You Get

A detailed report listing each piece of power infrastructure equipment by data center.



One-Line Drawing Verification

Purpose

NFPA 70E requirements mandate accurate, up-to-date single-line diagrams. These documents are essential for documenting, troubleshooting, and communicating information about your power systems.

What We Do

- Verify existence of as-built drawings and that they are adequately available.
- Verify a process is in place to ensure that as-built drawings are maintained in a current condition.
- Evaluate design redundancy of critical systems (N, N+1, N+2...) and whether all critical equipment can be maintained without a shutdown.

What You Get

A detailed report that outlines the findings by site, highlights design redundancy, and makes recommendations for improvement.



The Facility Power Audit gives you peace-of-mind by providing a health check of your power infrastructure.

Electrical Audit

Purpose

Evaluate the integrity of your facility's power system to maximize availability of the mission-critical infrastructure.

What We Do

- Determine when/if load bank testing was performed on generator and UPS/batteries.
- Perform a single point of failure analysis, which will identify critical failure points in the system.
- Determine capacity of all switchgear from the main to mission-critical PDUs (voltage, amperage, phase).
- Determine current being drawn through all UPS equipment and breakers from the main to mission-critical PDUs (this information will be determined by reading existing meters, if available; otherwise, a clamp-on amp meter will be used).
- Perform analysis comparing measured current and power rating for all breakers from the main to mission-critical PDUs as well as any imbalances; note any areas of concern.
- Determine kW and KVA loading on each UPS and compare to rating of UPS.
- Evaluate the rated capacity of each generator versus UPS rated capacity ratings and note if generator full load rating is <150% of UPS rating.
- Perform a harmonic snapshot at the main breaker switchgear as well as the load side of each UPS and note any anomalies.
- Determine whether breakers are labeled down to the PDU.
- Determine load per rack/PDU. Often times this is not viable without risking a shutdown of the connected server loads. If this risk exists, these measurements will not be taken; rather, the FLA rating of the equipment within the racks will be documented and added to the analysis.

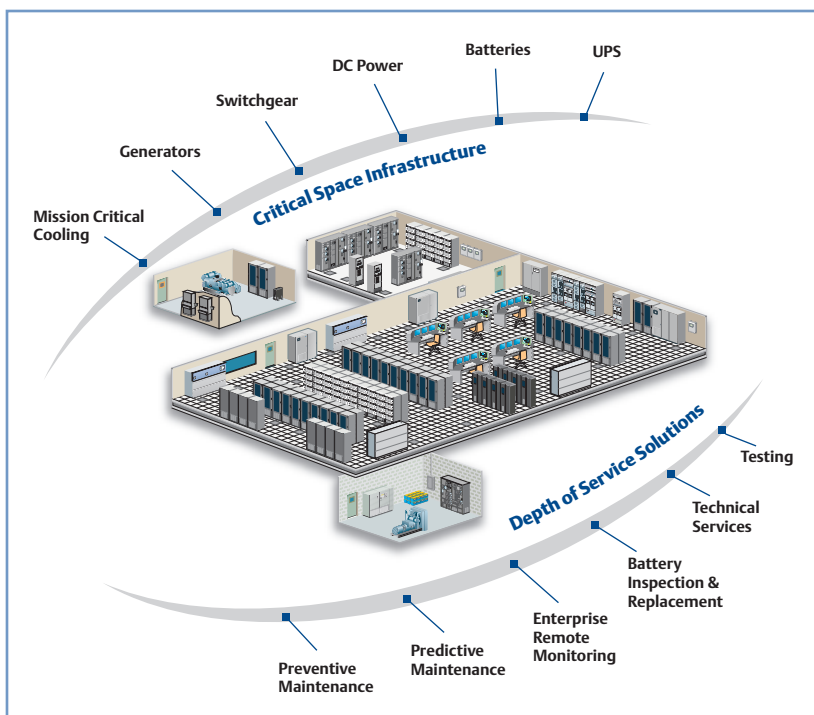
The power usage measurements taken during the electrical audit are only valid for the instant in time when the measurement is taken. There may be other times when the IT equipment is being utilized more fully.

What You Get

A detailed report describing findings and recommendations determined as a result of the procedures listed above.



The Largest Service Organization in the World Dedicated to Maximizing Availability of Infrastructure Required for Mission-Critical Systems



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