



# Develop a healthier power system for your hospital

Reduce risk, improve reliability, and increase performance of your electrical system with MPS Enterprise consulting services

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Assess and improve your system

Increase reliability and availability

Optimize design and equipment

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A photograph of a male doctor in a white lab coat and a female nurse in blue scrubs walking through a modern hospital hallway. The doctor is holding a tablet and looking at it, while the nurse looks on. Large windows are visible in the background.

# Assess and improve your hospital's electrical system

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# Improve your electrical system's health and vitality

Boosting electrical continuity and efficiency saves more than just money.

Power problems can have serious consequences on human life, finances, operations, and even a hospital's reputation, so ensuring a healthy electrical distribution system is crucial. With mission-critical systems that require high power availability, reliability, quality, plus a dependable backup power system, identifying problems and proposing solutions is complex and specialized.

MPS Enterprise consulting services provide a dependable electrical assessment you can build on. Backed by decades of electrical system design and manufacturing experience, this unique five-step assessment process supports you in the maintenance, modernization, monitoring, and management of your entire electrical infrastructure.



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# Develop a safer and more energy efficient hospital

Schneider Electric™ professionals work with your teams to analyze your electrical infrastructure to:

- Specify your electrical energy redundancy needs and assess your current capabilities
- Gauge equipment performance and evaluate network robustness
- Rate criticality levels
- Produce plans and share conclusions

MPS Enterprise assessment plans enable you to:

- Comply with standards and regulations
- Maintain high energy availability
- Reduce staff stress and overwork
- Ensure traceability and reduce liability
- Reduce maintenance/emergency/breakdown costs

MPS Enterprise electrical experts deliver their assessments in one to two weeks.

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# Increase patient safety by boosting energy availability and reliability

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# Put an improvement plan into action

An MPS Enterprise assessment reveals hidden risks and provides a roadmap to a healthier power system.

Maintain | Modernize | Monitor | Manage | Act

Working together with your teams, our expert electrical consultants conduct a comprehensive electrical infrastructure analysis to produce detailed and actionable improvement plans for your healthcare facility.



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Enhance electrical reliability through effective maintenance

Get a detailed plan describing necessary maintenance depending on the type and criticality of generators, UPS-s, power factor correction and active filtering, MV/LV switchgear, and power transformers.

You will also receive a maintenance plan strategy and recommendations for periodic verification of items complying with IEC 60364-710.61.



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## Reduce the risk of unplanned outages

The plan provides comprehensive modernization proposals for the equipment at the end of its service life:

- Advice on improving installation performance
- Suggestions on adapting to your new operational needs
- Evaluations of electrical distribution architectures and recommendations to reinforce energy availability performance, including compliance to the IEC 60364-7-710 standard



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Take better control of your facility's electrical network

The monitoring plan gives facility staff the tools they need to manage and control your electrical system:

- Power quality indicators such as, harmonics, power factor, sag/swell, and more
- Power monitoring to reduce recovery time via real-time alarms for sensitive loads
- Power measurement to optimize current and future operating expenses thanks to spare parts management, a maintenance plan, and more
- A report to reinforce asset management factors, such as aging, runtime, and more
- A predictive strategy to anticipate potential device failure



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## Make smart power decisions

The management plan offers a broad range of beneficial recommendations targeting:

- The safety of people working on the equipment
- Service contracts with respect to your subcontracting policy
- Management of spare parts
- Competency management including expertise and training
- Data management



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Maintain | Modernize | Monitor | Manage | [Act](#)

[Improve productivity with effective action plans](#)

MPS Enterprise plans for comprehensive improvement present tools, solutions, and an optimal approach to help you maintain energy availability and reduce costs. You can enhance maintenance staff productivity through an effective maintenance action plan customized for your systems.




Assess and improve your system

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Optimize design and equipment

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A photograph of surgeons in an operating room, wearing blue scrubs, masks, and hairnets. They are focused on a patient lying on a table. A large surgical light is visible above them. The background is slightly blurred, showing other medical equipment and staff.

# Optimize your power system with robust design and equipment

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# Optimize your power system through better planning

An MPS Enterprise assessment reveals hidden risks and provides a roadmap to a healthier power system.

To improve reliability and patient safety, hospitals need highly secure electrical distribution systems with a redundant path and energy sources to feed critical loads, including:

- Double MV incomer plus backup
- MV loop distribution plus automatic reconfiguration
- Redundant, high-quality, low-voltage switchboard
- Double feeding of critical loads, such as operating theaters and security panels

To optimize total lifetime performance and commissioning, the distribution system should use type-tested subassemblies, such as genset, MV/LV automatic transfer switches, a quality LV switchboard, and a UPS for operating theaters.

Long-time performance is supported by effective maintenance.

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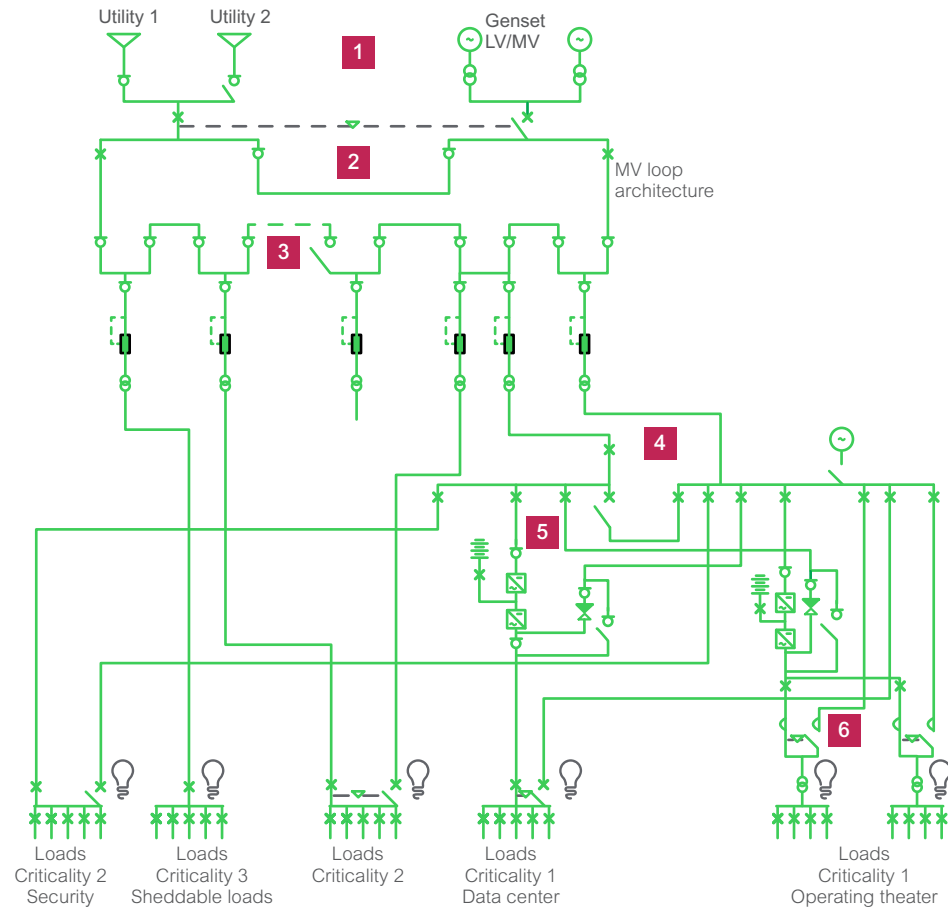
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# Recommended electrical distribution architecture



<b>1. Three sources</b> <ul style="list-style-type: none"> <li>• 2 utilities</li> <li>• + N+1 genset</li> </ul>	<b>3. Open loop</b> <ul style="list-style-type: none"> <li>• Automated reconfiguration</li> </ul>	<b>5. UPS</b> <ul style="list-style-type: none"> <li>• Centralized</li> <li>• Separate incomers</li> </ul>
<b>2. Source changeover system</b> <ul style="list-style-type: none"> <li>• Less than 0.5 s</li> <li>• Double incomer</li> </ul>	<b>4. Physical firewall to limit failure propagation</b>	<b>6. ATS</b> <ul style="list-style-type: none"> <li>• Open transition</li> </ul>




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# Enhance equipment performance with life cycle services

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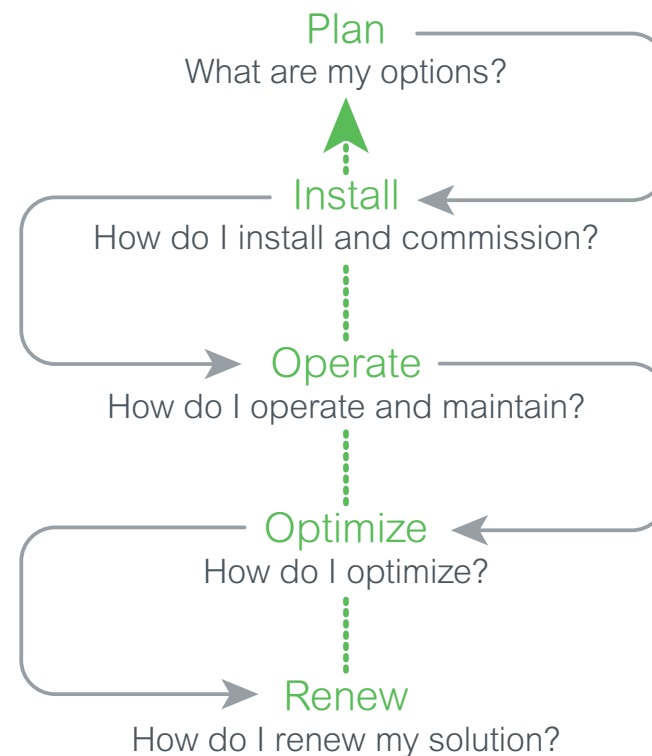
# Extend the life of your equipment

Discover services that meet your equipment's needs throughout its life cycle.

With life cycle services, you can maximize the productivity, safety, and efficiency of your power system and extend the life of your equipment.

MPS Enterprise assessments are part of a comprehensive range of services for your electrical distribution installation.

## Asset Management Life Cycle



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Learn more about increasing patient safety and reducing costs  
with MPS Enterprise consulting services.

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