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Power Up With a Load Management System: Setting Up a Load Management System

Part 2 of a 3-part series

By

Isaac Frampton
Senior Engineer
KOHLER Power Systems

Part one of this three-part series focused on appropriate applications of load management to help control load priorities and improve power quality to critical loads. This installment will explore setting up load management systems, determining load priority orders, and methods of shedding loads.

QUESTIONS TO ASK DURING LOAD MANAGEMENT SETUP

While load management setup is application-specific and depends on facility engineers to determine triggers to activate load management, there are four questions to answer in the process that are consistent for any setup:

1. Which loads need to be managed?
2. What is the load priority order?
3. How will the loads be shed?
4. How is load shed coordinated?

WHICH LOADS NEED TO BE MANAGED?

Load management systems may prioritize loads based on the load type or importance. Load importance may vary widely depending on the application and facility, but often fall generally within one of the following categories:

Non-Critical Loads

These are loads that, if removed, will have a minimal impact on people's safety. Some common examples include:

- Chillers
- HVAC compressors/pumps
- Elevators
- Luxury equipment such as swimming pools, hot tubs, etc.
- Office or commercial space.

Important Non-Critical Loads

These are loads that keep people comfortable and generally would not cause life-threatening situations if temporarily removed. Some common examples include:

- Air handlers
- Non-emergency lighting
- Medical imaging systems

Critical loads

These are loads that, if removed, could potentially cause life-threatening situations. Some common examples include:

- Generator support systems such as fuel transfer pumps, louver controls, and remote display panel alarms
- Emergency lighting
- Fire pumps
- Life-support systems
- Safety equipment such as navigation or propulsion systems, air supplies, etc.
- Communication systems such as computer servers or telephone switchboards