



Powerhouse is a patented electrical control system that recycles a facility's otherwise wasted power, storing and using it to constantly balance and optimize voltage throughout the system, reducing demand levels and total power consumption.

Installed at a primary power source, Powerhouse is the only existing technology able to successfully capture electricity, store it, and use it to optimize power quality and lower kilowatt demand.

PERFORMANCE:

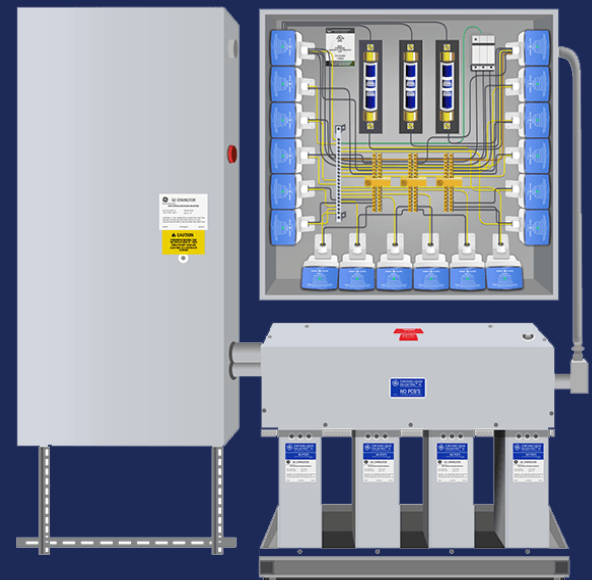
- Impacts KW demand and KWH by 10% and higher
- Extends Equipment Life Expectancy
- Lowers Equipment Maintenance Costs
- Boosts, Balances, & Stabilizes Three-Phase Voltage
- Increases Power Factor enabling more usable power
- Captures power normally lost and conditions it for use
- Reduces Carbon Footprint
- Impacts Total Harmonic Distortion

BENEFITS:

- Turnkey solution includes design, engineering, installation, and finance options
- Performance guarantees
- Service contracts are available
- Brilliant Source Energy will facilitate grants to offset up to 50% of the cost

WHAT IS POWERHOUSE?

POWERHOUSE IS AN INNOVATIVE ELECTRICAL CONTROL SYSTEM THAT RECYCLES WASTED POWER IN FACILITIES.



It captures otherwise lost electricity, stores it, and uses it to constantly optimize voltage, reducing demand levels and total power consumption.



LIGHTING



SURGE SUPPRESSION



WIRELESS CONTROL

IMPLEMENTING POWER FACTOR CORRECTION (PFC) IN REAL-WORLD SETTINGS HAS YIELDED NUMEROUS BENEFITS ACROSS VARIOUS INDUSTRIES. HERE ARE SOME SPECIFIC ADVANTAGES THAT HAVE BEEN OBSERVED:

REDUCED ENERGY COSTS

Lower Utility Bills: Many utilities charge penalties for low power factor; correcting it can lead to significant savings on monthly bills. Some businesses have reported reductions of 10-30% in their electricity expenses.

IMPROVED SYSTEM EFFICIENCY

Enhanced Equipment Performance: Power factor correction reduces the amount of reactive power required from the utility, which can lead to better utilization of electrical equipment and improved overall system efficiency.

INCREASED CAPACITY

Better Utilization of Infrastructure: By improving the power factor, facilities can often increase their load capacity without needing to upgrade transformers or other infrastructure, allowing them to handle more equipment within existing limits.

REDUCED RISK OF OVERLOADING

Extended Equipment Life: With an improved power factor, currents in the electrical system are reduced, leading to lower heat generation and less stress on equipment. This can lead to longer lifespans for motors, transformers, and other components.

MINIMIZED VOLTAGE DROP

Improved Voltage Stability: PFC can help stabilize voltage levels across the facility, reducing voltage drop issues that might affect sensitive equipment and processes.

DECREASED HARMONIC DISTORTION

Better Power Quality: Power factor correction can mitigate issues related to harmonic distortion in the electrical system, improving the quality of power supplied to critical loads.

ENHANCED SUSTAINABILITY

Reduced Carbon Footprint: By operating more efficiently, facilities can reduce their overall energy consumption, contributing to lower carbon emissions and a smaller environmental footprint.

COMPLIANCE WITH REGULATIONS

Meeting Standards: In some regions, regulations require industries to maintain a certain power factor. Implementing PFC helps ensure compliance with these standards, avoiding potential fines.

IMPROVED RELIABILITY

Fewer Outages: A better power factor can lead to more stable electrical systems, helping to prevent outages and disturbances that could disrupt operations.



REAL-WORLD EXAMPLES

MANUFACTURING FACILITY:

One company implemented PFC and saw a decrease in energy costs by over 20%, enabling reinvestment into further operational upgrades.

DATA CENTER:

Another organization improved their power factor from 0.7 to 0.95, reducing their demand charges significantly and optimizing power usage for their servers.

Overall, power factor correction not only leads to financial savings but also enhances the reliability and efficiency of electrical systems, making it a worthwhile investment for many organizations.

