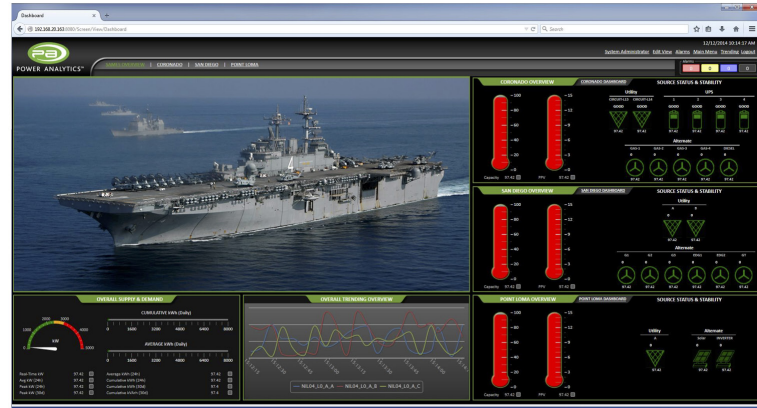**Paladin® SmartGrid™** enables the on-line management and control of "hybrid" power infrastructure incorporating both traditional utility power and on-premise power generation, e.g., co-generation, solar power, wind turbines, battery storage, etc.

Because the unpredictability of alternative energy sources influenced by weather conditions, it is increasingly difficult to ensure the reliability of power systems employing them. So if a facility is attempting to use public utility power as sparingly as possible – i.e. to achieve energy savings and environmental goals – a real-time balancing act is essential to ensure that power systems reliability is never jeopardized.

Paladin SmartGrid is designed for the dynamic nature of alternative energy sources, to meet both energy management goals, and the high levels of availability and reliability. It "remembers" the business and operational goals of a facility (e.g., only use utility power during off-peak hours, except when system reliability falls below 99.99%) and is continually diagnosing system performance in real-time… while making intelligent predictions about how to seamlessly transition from one energy source to another.

By optimizing the power performance of all aspects of a microgrid, Paladin SmartGrid delivers immediate energy conservation and substantial cost savings.

It manages energy consumption on sites employing multiple energy sources, whether they are focused on a single objective – such as minimizing annual energy cost, carbon footprint, peak load, or public utility consumption – or a combination of objectives that vary by time, costs, energy source reliability, etc.

As organizations increasingly seek to supplement their utility power with on-premise power generation, Paladin SmartGrid:

• Serves as a master controller for intelligent microgrid designs, monitoring and electricity trading (i.e., selling power back into the public grid)

• Monitors the microgrid's power quality, utilization and capacity in real-time, in order to offer excess capacity to the Smart Grid

• Monitors all transactions between public electric service and microgrid infrastructure

• Maintains rate and pricing information for management of private-public exchange
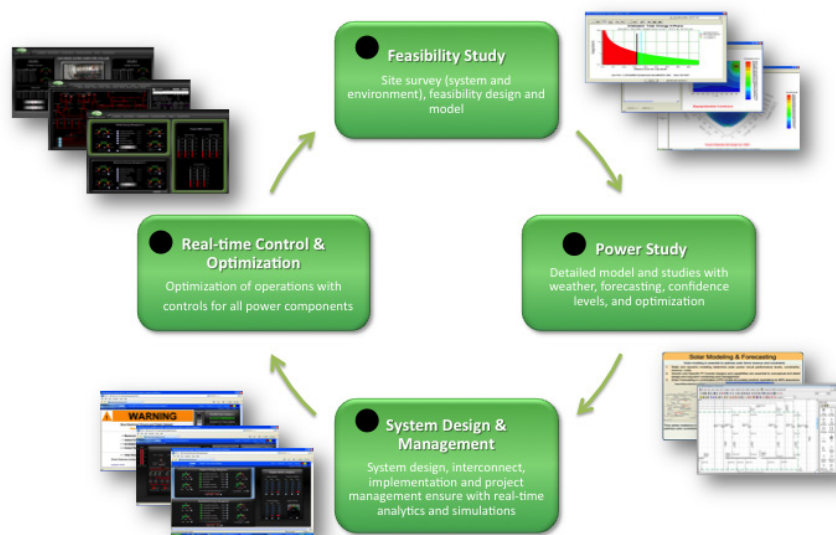
Save your facility thousands of dollars, eliminate downtime and optimize business continuity.

Power Analytics' Paladin® Software Suite is the only solution to provide analytical foresight and optimization for your power system infrastructure. Considering that nearly 80 percent of business downtime is caused by internal electrical power problems, today's organizations require this real-time intelligence, management and control of their electrical infrastructure.

Paladin is the only solution capable of going beyond SCADA and simple monitoring by measuring and diagnosing the operational health of your electrical network with a proven, patented process. Our solution begins with the design and system analysis of your electrical network, ensuring that it is "perfect on paper." This model then becomes the foundation by which the real-time version is compared using powerful solution engines to provide "model-validated" analytics. This comparison and analysis enables the capture of interactions and outcomes arising from system complexities with the ability to zero in on potential problems before they become catastrophic events.

Used by the power industry for more than 25 years, Power Analytics' software solutions have surged to the forefront of the electrical system planning, operation and smart grid market space for use in energy intensive, mission-critical facilities and microgrids. With our full suite of technology, you can intelligently manage your network and facility data to transform energy consumption costs and multiple generation sources into a saleable asset.

Feasibility Study
Site survey (system and environment), feasibility design and model

Power Study
Detailed model and studies with weather, forecasting, confidence levels, and optimization

System Design & Management
System design, interconnect, implementation and project management ensure with real-time analytics and simulations

Real-time Control & Optimization
Optimization of operations with controls for all power components

The Paladin Suite:
- Predicts equipment failures, system overloads, under-utilization and harmonics issues
- Operates agnostically regardless of equipment manufacturer or vendor-specific architecture
- Delivers energy savings, downtime savings and utility penalty savings

Trusted in the design and operation of some of the world's most mission-critical facilities, Paladin products currently protect more than $100 billion in customer assets including financial data centers, air traffic control sites, military installations, deep sea oil platforms, and power generation and distribution facilities.