



Power Management Solutions (PMS)



Challenges & Overview



Today's electric power systems face numerous challenges, including

- Aging infrastructure, workforce, & equipment
- Increasing renewable energy sources & independent power producers (IPPs)
- Lacking interoperability
- Inflexible & growing demand
- Data deluge

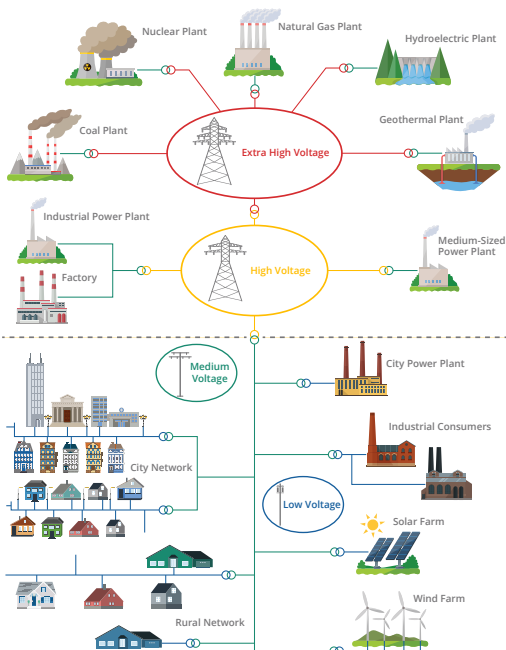
The *OptiRamp* Power Management System (PMS) solution helps you overcome these challenges by

- Monitoring and optimizing power assets from producers to consumers
- Managing by exception (anomaly)
- Centralizing people and operations to make faster & better decisions
- Making losses visible
- Reducing total operating expenses

Total Value Stream



The *OptiRamp* PMS solution spans the entire value stream, from power generation in individual power plants to electricity distribution and transmission to the overall power grid.



Solution Overview



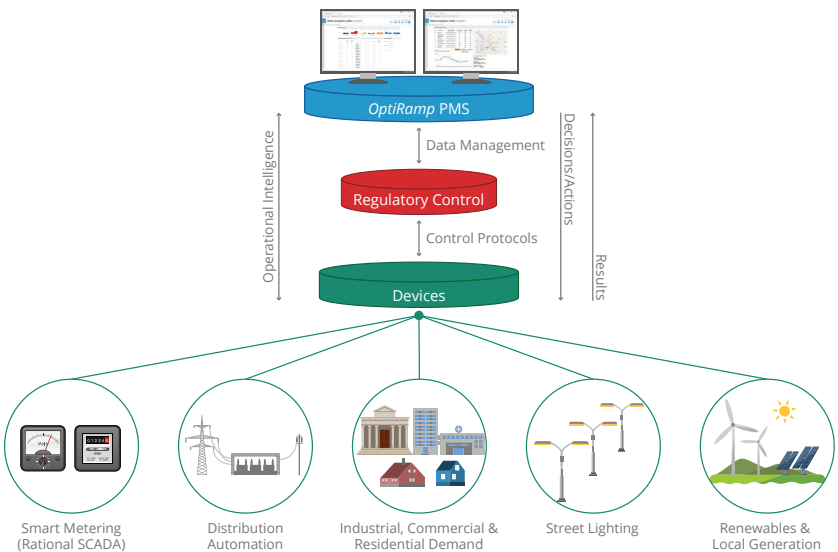
OptiRamp PMS

- Manages & transforms data into actionable information & operational intelligence
- Reduces energy, operating, & maintenance costs
- Optimizes overall grid performance & stability
- Accurately simulates the power system with real-time data as well as displays responses to disturbances & different operating scenarios
- Provides Inter-Island Mode, or decouples & isolates large system sections, without negatively impacting overall simulation model integrity
- Visualizes power system operation & critical data that may be viewed through a web browser

Solving the Smart Grid



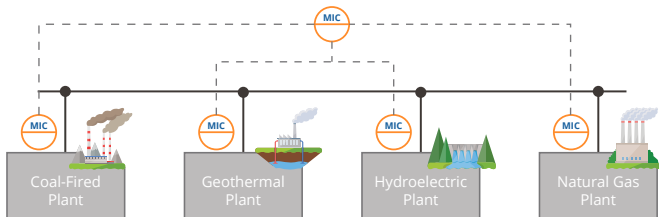
A smart, digital grid solves Industrial 4.0 and Internet of Things (IIoT) challenges by managing large data volumes and transforming it into actionable data and operational intelligence.



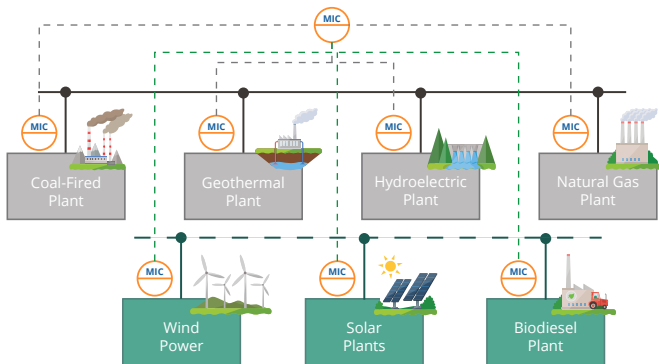
Regulatory Control



OptiRamp PMS provides automatic regulatory control to ensure grid health and to automatically adjust power output across the power system in response to disturbances/power use.



Example Traditional Grid with *OptiRamp* PMS



Renewables

Example Traditional Grid & Renewable Energy Sources with *OptiRamp* PMS

OptiRamp Digital Power Solutions



S&C offers the following additional solutions that may be used in conjunction with the *OptiRamp* PMS solution to solve your power system challenges:

- Automatic Generation Control (AGC)
- Digital Power Plant (DPP)
- Grid Optimization
- Smart Load Shedding
- Turbomachinery Control





For more information about *OptiRamp* Solutions, contact one of our representatives. For a complete listing of our worldwide locations, visit our website at www.optiramp.com.

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