Generation Management Systems
Overview

Generation utilities, independent power producers and energy market participants have been successfully using OSI’s generation management suite of applications worldwide for more than a decade. OSI technology has been at the forefront of managing the generation and supply of electricity for various capacities and generation capabilities.

From large global energy concerns with thousands of MW of generation capacity, to small energy concerns with tens of MW of generation capacity, numerous customers have used our generation management technology to meet optimal system performance and regulatory compliance.

Whether it’s Hoover Dam, the largest power plant in China, or the world’s largest underground hydro power plant in Labrador, Canada, OSI technology has been instrumental in the efficient monitoring, control and regulation for a combined generation capacity of more than 750,000 MW worldwide.

OSI’s generation and market suite of applications enables many market participants in various energy markets to efficiently, reliably and optimally participate in their regional market operations. Our customers in ERCOT, PJM, MISO, CAISO, IESO, SPP, NYISO and other markets worldwide are active participants of these markets using OSI technology.
Modules

**OpenAGC™**

Automatic Generation Control and Dispatch

OpenAGC is a highly reliable analysis and control algorithm that can be easily integrated into an existing control center environment. OpenAGC has been designed specifically to separate generation resources into control groupings, enabling individual generator assignments to separate control groupings or areas.

**OpenMOS™**

Market Operations System

OpenMOS is an open, systems-based product that provides a complete communication and response package for utilities in centralized energy markets. OpenMOS is fully integratable within the monarch™ environment and can be adapted to the specifics of any zonal or nodal market where XML is used for communications.

**OpenECA™**

Energy Market Control Algorithm

OpenECA reads deployment instructions received from energy markets and automatically implements them within OSI’s OpenAGC product. OpenECA eliminates the need for manual review of instructions by operators, offering a more reliable, efficient means of data interfacing. OpenECA supports all major energy markets, including MISO, SPP, ERCOT, CAISO and IESO.

**OpenTMS™**

Transaction Management System

OpenTMS provides schedule information to the automatic generation control (OpenAGC) function for real-time implementation of the approved schedules within a simple and elegant web-enabled GUI. OpenTMS also provides schedule information to other applications through a simple API. Automatic import of schedules from tags is an additional benefit.
OpenIA™
Inadvertent Accounting
OpenIA is a simple web-based graphical user interface that pulls from multiple sources to view all net scheduled and actual interchange information. OpenIA provides up-to-the-hour inadvertent information to the automatic generation control (OpenAGC) function for real-time implementations of unilateral payback.

OpenEA™
Energy Accounting
OpenEA puts operational-critical billing and accounting data—both real-time and historical—at your fingertips and ready for electronic and printed reporting. OpenEA has numerous pre-formatted reports, enabling users to easily generate any number of reports tailored to their specific needs.

OpenSTLF™
Short Term Load Forecasting
OpenSTLF is a simple and reliable short-term load forecasting tool that relies on neural-network techniques to predict loads with the highest accuracy. OpenSTLF supports multiple load areas or feeders and has the capability to forecast up to 35 days into the future. A feature-rich user interface is supported, consisting of various tabular and graphical representations.

OpenUC™
Unit Commitment/Transaction Evaluation
OpenUC is the essential tool for diligently managing generation resources, helping to determine their optimal schedule and loading patterns. OpenUC is used in evaluating interchange scheduling, maintenance scheduling, load management and other system characteristics.
About Open Systems International

Open Systems International (OSI)—headquartered in Minneapolis, Minnesota—provides open, state-of-the-art and high-performance automation solutions to utilities worldwide. OSI's solutions empower its users to meet their operational challenges, day in and day out, with unsurpassed reliability and a minimal cost of technology ownership and maintenance.

www.osii.com