

OpenUC

Unit Commitment/Transaction Evaluation

In today's competitive energy market environment, the right tool is needed for deciding how and when to operate generation resources. Whether you operate within an energy market or independently, an optimal generation resources plan is necessary to your operation.

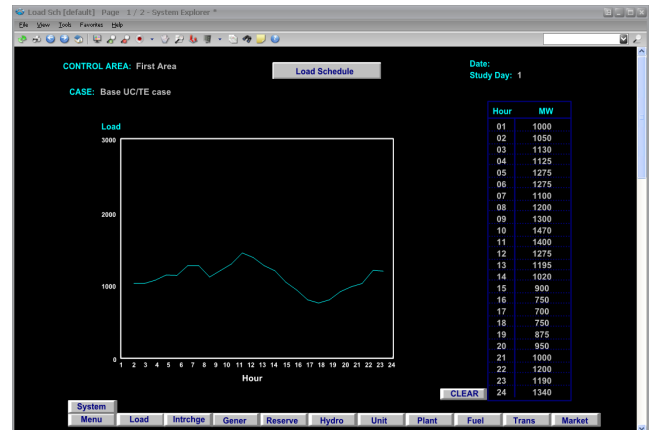
OSI's **OpenUC™** (Unit Commitment) product helps determine the optimal schedule and loading patterns for generation resources. Optimal scheduling minimizes operating costs, including hourly production costs, start-up and shut-down costs, idle costs and maintenance costs, while satisfying projected demands and other system operation constraints, including load forecasting; net interchange scheduling; system losses; plant crew constraints; available status; operating limits; minimum up and down times; and ramp limits.

OpenUC is used in evaluating interchange scheduling maintenance scheduling, load management and other system characteristics. **OpenUC** can also be implemented in conjunction with OSI's Short-Term Hydro Scheduling product to determine the optimum generation schedule for hydrothermal systems.

In an energy market environment, **OpenUC** executes in a 'market' mode, wherein the objective function becomes maximizing profits, as opposed to minimizing operational costs. **OpenUC** can additionally be run in a 'real-time mode, for reevaluating and tuning daily resource plans.

OpenUC includes a Transaction Evaluation function, used for studying the cost/benefit of proposed transactions in future periods of up to 168 hours. The Transaction Evaluation function supports three evaluation modes:

- **Economy A Mode:** Analysis with fixed commitment.
- **Economy B Mode:** Analysis with variable optimized commitment.
- **Block Mode:** Analysis with fixed commitment of a transaction that is divided into multiple blocks of energy.



OpenUC's rich set of features include:

- Multiple generation scheduling algorithms are available to handle difficult types and sizes of generation resources
- Study periods of up to seven days
- Support for half hour and one hour study intervals
- Unlimited number of study and saved cases
- Powerful case comparison capability
- Seamless integration with Hydro Scheduling applications
- Real-time execution to refine the approved generation plan and drive its implementation through the Automatic Generation Control application
- Detailed Transaction Evaluation results for enhanced visibility and tracking of energy trading decisions

OpenUC provides a simple yet powerful set of user interface displays through OSI's **OpenView™** .NET based Graphical User Interface. These displays provide visibility on all data used and provided by **OpenUC**. The **OpenUC** data (input and output) is also available through any of the standard OSI system APIs to facilitate easy integration of **OpenUC** with external systems.

OpenUC is your essential tool for diligently managing your generation resources, especially within this era of ever-increasing growth in power demands.

Product specifications in this document are subject to change without notice.