

AURORA®-POWERWORLD® SIMULATOR INTERFACE

Leverage AURORA's speed and agility to efficiently perform locational marginal pricing (LMP) and power flow studies

The AURORA-PowerWorld Simulator Interface supports:

- **Asset valuation at zonal and nodal levels**
- **Detailed production costs**
- **Complete risk and scenario analysis**
- **Results in time for decision-makers**

"The AURORA-PowerWorld Simulator Interface is a flexible LMP modeling tool. I've found the Interface to be very user friendly. The combination of AURORA^{xmp} with PowerWorld's Simulator is a robust LMP modeling tool without the steep learning curve found using other products."

—Jason Jett
Transmission Trader
Xcel Energy

AURORA^{xmp} is the pace-setting power market simulation model. **PowerWorld® Simulator** is the pace-setting power system operation simulation model. Together, they give the industry a dynamic new tool for comprehensive LMP and power flow studies—The **AURORA-PowerWorld Simulator Interface**.

The Unique Strengths of Each Model Form One Powerful Modeling Solution

AURORA is the fastest and most flexible tool available for zonal level analysis. Also, integral to AURORA are unique capabilities for risk, portfolio and long-term analysis. This AURORA framework can be leveraged by Interface users to more efficiently perform detailed strategic, operational, and uncertainty analysis over any time period. Additionally, AURORA supplies Simulator with the detailed hourly data it needs, including area-level loads, total variable costs for each generating unit, area boundary conditions and commitment and dispatch continuity through time.

PowerWorld Simulator is an easy to use and highly visual optimal power flow (OPF) model. Simulator provides dispatch options including OPF, security-constrained OPF (SCOPF), or DC approximations to either OPF or SCOPF. Interface users have access to full Simulator functionality and output graphics including contour maps, one-line diagrams, and power flow maps.

It all makes for a powerful, seamless LMP modeling solution.

Features

- Seamless and automatic data passing.
- Intuitive user-interface.
- Automatic generator control (AGC) status by fuel or technology type.
- Automatic post-processing computations
- Latest .NET, XML technology.
- Additional options for output, storage and diagnostics.
- Full PowerWorld Simulator output available—bus-level LMPs, power flows, generator output levels.

Benefits

- Forecast LMPs—short- or long-term.
- Perform both zonal and nodal-level modeling easily, quickly and completely.
- Customize charts and reports that automatically populate with each study.
- Include generation or transmission outages in studies.
- Model any hours, over any time period.
- Treat unmapped generators fully and consistently.
- Extend model control and automation with Visual Basic scripting.
- Timely support for traders and marketers.
- Value generation and transmission assets, FTRs, and contracts.