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<td>Author Company</td>
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Solar Integrated Technologies
Renewable Energy Management - Utility Solutions

California ISO Solar Symposium
Grid Management - Solar Power Production
Forecast Performance

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January 29, 2009
SIT Global Install Base
(as of December 31 2008)

240 projects
12 countries
26 MW
The Issue: What is required to Maximize Solar Power Viability

• **Forecast Predictability** - It is important to ensure solar technologies are on equal footing and advance towards the same level of maturity as with other renewable resources already participating in the ISO’s wholesale electricity markets.

• **Renewable Resource Development** - As with the wind program, solar power requires accurate and timely high-tech forecasting and communication tools in addition to industry collaboration.

• **Validation and Reporting Standards** - Solar production forecast systems are typically report information based on the best available data. Grid integration of solar requires specific event based data validation and reporting standards.
How Solar Forecasts are Produced

• Site specific meteorological forecast – Combination of physics based, statistical and site data models
• Vendor specific module and BOS power performance is modeled using extensive historical database.
• Develop a power output forecast with look ahead schedules and values
• Produce Forecast Ensembles including forecast horizons in addition to power prediction error analysis
Questions and Answers