

**Renewable Energy Grids Over Time**  
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To facilitate more extensive adoption of renewable distributed electric generation, the U.S. Department of Energy launched the Renewable Systems Interconnection (RSI) study during the spring of 2007. The study addressed the technical and analytical challenges that must be addressed to enable high penetration levels of distributed renewable energy technologies. This RSI study addresses grid-integration issues as a necessary prerequisite for the long-term viability of the distributed renewable energy industry, in general, and the distributed PV industry, in particular.