

# U.S. Department of Energy CSP Program Review

Denver Marriott West · Golden, CO · May 17-19, 2011

## ***Tuesday, May 17, 2011***

8:00am-8:15am	Introduction and Welcome
8:15am-8:45am	<b>Abengoa Solar:</b> Development of Next-Generation Parabolic Trough Collectors and Components for CSP Applications
8:45am-9:15am	<b>Alcoa:</b> Reflector Technology Development and System Design for CSP Technologies
9:15am-9:45am	<b>Solar Millennium:</b> Advanced High Temperature Trough Collector Development
9:45am-10:15am	<b>SkyFuel:</b> Development of a High-Concentration, Low-Cost Parabolic Trough System for Baseload CSP Generation
10:15am-10:30am	Break
10:30am-11:00am	<b>Abengoa Solar:</b> Development of Molten-Salt Heat Transfer Fluid Technology for Parabolic Trough Solar Power Plants
11:00am-11:30am	<b>Infinia:</b> 30 kW Maintenance Free Stirling Engine for High Performance Dish CSP
11:30am-12:00pm	<b>Brayton Energy:</b> Brayton Solar Power Conversion System
12:00pm-12:30pm	<b>HiTek Services:</b> Low-Cost Heliostat Development
12:30pm-1:30pm	Lunch
1:30pm-2:00pm	<b>Pratt &amp; Whitney Rocketdyne:</b> Solar Power Tower Receiver Development
2:00pm-2:30pm	<b>Pratt &amp; Whitney Rocketdyne:</b> Achieving Cost Competitive Baseload Electricity with the Molten Salt Power Tower
2:30pm-3:00pm	<b>Abengoa Solar:</b> Baseload Nitrate Salt Central Receiver Power Plant Design
3:00pm-3:30pm	<b>eSolar:</b> Modular and Scalable Baseload Molten Salt Plant Conceptual Design and Feasibility Project
3:30pm-4:00pm	Break
4:00pm-4:30pm	<b>Wilson SolarPower:</b> Brayton-Cycle Baseload Power Tower CSP System
4:30pm-5:00pm	<b>SkyFuel:</b> Design of a High-Temperature Molten Salt Linear Fresnel Collector
5:00pm-5:30pm	<b>SunTrough Energy:</b> Research and Development of an Articulating Planar Fresnel Collector (APFC)
5:30pm	End of Day

**Wednesday, May 18, 2011**

8:00am-8:30am	<b>PPG:</b> High Performance Reflector Panels for CSP Assemblies
8:30am-9:00am	<b>PPG:</b> Next-Generation Low-Cost Reflector
9:00am-9:30am	<b>Abengoa Solar:</b> Development of Advanced Polymeric Reflector for CSP Applications
9:30am-10:00am	<b>3M:</b> Cleanable and Hardcoat Coatings for Increased Durability of Silvered Polymeric Mirrors
10:00am-10:30am	Break
10:30am-11:00am	<b>General Atomics:</b> Thermochemical Heat Storage for CSP
11:00am-11:30am	<b>General Atomics:</b> Baseload Concentrating Solar Power Generation
11:30am-12:00pm	<b>Acciona Solar:</b> Sensible Heat, Direct, Dual-Media Thermal Energy Storage Module
12:00pm-12:30pm	<b>Acciona Solar:</b> Indirect, Dual-Media, Phase Changing Material Modular Thermal Energy Storage System
12:30pm-1:30pm	Lunch
1:30pm-2:00pm	<b>Terrafore:</b> Heat Transfer and Latent Heat Storage in Inorganic Molten Salts for CSP Plants
2:00pm-2:30pm	<b>Terrafore:</b> Using Encapsulated Phase Change Material in Thermal Storage for Baseload Concentrating Solar Power Plants
2:30pm-3:00pm	<b>University of South Florida:</b> Development and Demonstration of an Innovative Thermal Energy Storage System for Baseload Solar Power Generation
3:00pm-3:30pm	<b>Lehigh University:</b> Novel Thermal Storage Technologies for CSP Generation
3:30pm-4:00pm	Break
4:00pm-4:30pm	<b>Texas A&amp;M University:</b> Molten Salt-Carbon Nanotube Thermal Energy Storage for CSP Systems
4:30pm-5:00pm	<b>National Renewable Energy Laboratory:</b> Technologically Relevant Nanomaterials for Thermal Energy Storage in Concentrating Solar Power Plants
5:00pm-5:30pm	<b>Argonne National Laboratory:</b> Dual Purpose Advanced HTFs with Enhanced Thermal Properties and Thermal Energy Storage Capabilities
5:30pm	End of Day

**Thursday, May 19, 2011**

8:00am-8:30am	<b>University of Alabama:</b> Novel Molten Salts Thermal Energy Storage for CSP Generation
8:30am-9:00am	<b>Halotechnics:</b> Deep Eutectic Salt Formulations Suitable as Advanced Heat Transfer Fluids
9:00am-9:30am	<b>Abengoa Solar:</b> Reducing the Cost of Thermal Energy Storage for Parabolic Trough Solar Power Plants
9:30am-10:00am	<b>University of Connecticut:</b> Research and Development for Novel Thermal Energy Storage Systems for CSP
10:00am-10:30am	Break
10:30am-11:00am	<b>Pacific Northwest National Laboratory:</b> Thermochemical Energy Storage for Stirling Concentrating Solar Power Systems
11:00am-11:30am	<b>Infinia:</b> Innovative Application of Maintenance-Free Phase-Change Thermal Energy Storage for Dish Engine Solar Power Generation
11:30am-12:00pm	<b>Infinia:</b> Innovative Phase Change Thermal Energy Storage Solution for Baseload Power
12:00pm-12:30pm	<b>SENER:</b> High Efficiency Thermal Storage System for Solar Plants (HELSOLAR)
12:30pm-1:30pm	Lunch
1:30pm-2:00pm	<b>University of Arkansas:</b> Development and Performance Evaluation of High Temperature Concrete for Thermal Energy Storage for Solar Power
2:00pm-2:30pm	<b>Los Alamos National Laboratory:</b> Hybrid Organic Silicone HTF Utilizing Endothermic Chemical Reactions for Latent Heat Storage
2:30pm-3:00pm	<b>Oak Ridge National Laboratory:</b> Evaluation of Polyaromatic Naphthalene Derivatives as Solar Heat Transfer Fluids
3:00pm-3:30pm	<b>Savannah River National Laboratory:</b> Thermally-stable Ionic Liquid Carriers for Nanoparticle-based Advanced Heat Transfer in CSP Energy Applications
3:30pm-4:00pm	Break
4:00pm-4:30pm	<b>US Solar:</b> CSP Energy Storage – Multiple Technologies Compared
4:30pm-5:00pm	<b>City College of New York:</b> A Novel Storage Method for CSP Plants Allowing Operation at High Temperature
5:00pm	End of Day