

U.S. Department of Energy Program Review – Opening Plenary

Omni Shoreham Hotel · Washington, DC · May 24-27, 2010

Monday, May 24, 2010 – Regency Ballroom

1:00pm–1:10pm	Introduction and Welcome – John Lushetsky, SETP Program Manager
1:10pm–1:40pm	Keynote Speaker – Henry Kelly, Principal Deputy Assistant Secretary
1:40pm–2:10pm	Keynote Speaker – Sam Baldwin, EERE Chief Technology Officer
2:10pm–2:40pm	Keynote Speaker – Robert Margolis, NREL – Solar Visions Study
2:40pm–3:10pm	Overview of US DOE Solar Energy Technology Program (SETP) – John Lushetsky, SETP Program Manager
3:10pm–3:25pm	Overview of Photovoltaics (PV) Subprogram – Minh Le, SETP Chief Engineer and Acting PV Program Lead
3:25pm–3:40pm	Overview of Concentrating Solar Power (CSP) Subprogram – Tex Wilkins, CSP Program Lead
3:40pm–3:55pm	Overview of Systems Integration (SI) Subprogram – Kevin Lynn, Acting SI Program Lead
3:55pm–4:10pm	Overview of Market Transformation (MT) Subprogram – Charlie Hemmeline, Acting MT Program Lead
4:10pm–4:45pm	The Wall Street View on Solar Power – Speaker TBD

Following the Monday session, there will be a cash bar and snacks available at the hotel.

U.S. Department of Energy Program Review – Market Transformation

Omni Shoreham Hotel · Washington, DC · May 24-27, 2010

Tuesday, May 25, 2010 – Hampton Room

8:15am-8:35am

Solar America Cities – Boston

8:35am-8:45am

Q&A: Solar America Cities – Boston

8:45am-9:15am

Solar America Cities – San Diego

9:15am-9:30am

Q&A: Solar America Cities – San Diego

9:30am-10:00am

Solar America Cities – Portland

10:00am-10:15am

Q&A: Solar America Cities – Portland

10:15am-10:45am

Break

10:45am-11:05am

Solar America Cities – Salt Lake City

11:05am-11:15am

Q&A: Solar America Cities – Salt Lake City

11:15am-11:35am

Solar America Cities – Santa Rosa

11:35am-11:45am

Q&A: Solar America Cities – Santa Rosa

11:45am-1:15pm

Lunch – Lunch Talk – Bettina Weis, Sr. Director Photovoltaics, SEMI PV Group

1:15pm-1:45pm

Solar America Cities – San Francisco

1:45pm-2:00pm

Q&A: Solar America Cities – San Francisco

2:00pm-2:20pm

Solar America Cities – Milwaukee

2:20pm-2:30pm

Q&A: Solar America Cities – Milwaukee

2:30pm-3:00pm

Solar America Cities – Seattle

3:00pm-3:15pm

Q&A: Solar America Cities – Seattle

3:15pm-3:45pm

Break

3:45pm-4:25pm

NREL and Sandia – Utility and Consumer Outreach Lab Support – Blaise Stoltenberg and Beth Richards

4:25pm-4:45pm

Q&A: NREL and Sandia - Utility and Consumer Outreach Lab Support

4:45pm-5:15pm

NREL – Market Transformation Analysis – Barry Friedman

5:15pm-5:30pm

Q&A: NREL – Market Transformation Analysis

6:30pm-8:00pm

Poster Session: SAC Tech Outreach

Wednesday, May 26, 2010 – Hampton Room

8:15am-8:35am **Solar America Cities – Austin**
8:35am-8:45am **Q&A: Solar America Cities – Austin**
8:45am-9:15am **Solar America Cities – New York City**
9:15am-9:30am **Q&A: Solar America Cities – New York City**
9:30am-10:00am **Solar America Cities – San Jose**
10:00am-10:15am **Q&A: Solar America Cities – San Jose**

10:15am-10:45am Break

10:45am-11:05am **Solar America Cities – New Orleans**
11:05am-11:15am **Q&A: Solar America Cities – New Orleans**
11:15am-11:35am **Solar America Cities – Tucson**
11:35am-11:45am **Q&A: Solar America Cities – Tucson**

11:45am-1:15pm Lunch - Lunch Talk – Lisa Frantzis, Managing Director, Navigant Consulting

1:15pm-1:45pm **Solar America Cities – St. Paul**
1:45pm-2:00pm **Q&A: Solar America Cities – St. Paul**
2:00pm-2:20pm **Solar America Cities – Berkeley**
2:20pm-2:30pm **Q&A: Solar America Cities – Berkeley**
2:30pm-3:00pm **Solar America Cities – Madison**
3:00pm-3:15pm **Q&A: Solar America Cities – Madison**

3:15pm-3:45pm Break

3:45pm-4:25pm **NREL and Sandia - Solar America Cities Lab Support – Jason Coughlin and Beth Richards**
4:25pm-4:45pm **Q&A: NREL and Sandia - Solar America Cities Lab Support**
4:45pm-5:15pm **CH2M Hill – Support Activities**
5:15pm-5:30pm **Q&A: CH2M Hill – Support Activities**

Thursday, May 27, 2010 – Hampton Room

8:15am-8:35am	Clean Energy Group – Solar State Partnership Project
8:35am-8:45am	Q&A: Clean Energy Group – Solar State Partnership Project
8:45am-9:15am	Interstate Renewable Energy Council (IREC) – Stakeholder Outreach/Workforce Development
9:15am-9:30am	Q&A: Interstate Renewable Energy Council (IREC) – Stakeholder Outreach/Workforce Development
9:30am-10:00am	North American Board of Certified Energy Practitioners (NABCEP) - Strategic Growth Plan for NABCEP's Solar PV and Solar Thermal Certification and Certificate Programs
10:00am-10:15am	Q&A: North American Board of Certified Energy Practitioners (NABCEP) - Strategic Growth Plan for NABCEP's Solar PV and Solar Thermal Certification and Certificate Programs
10:15am-10:45am	Break
10:45am-11:05am	National Conference of State Legislatures (NCSL) – State Legislative outreach on Solar Technology and Policy Options
11:05am-11:15am	Q&A: National Conference of State Legislatures (NCSL) – State Legislative outreach on Solar Technology and Policy Options
11:15am-11:35am	NREL – Large Scale Integration – Brian Parsons
11:35am-11:45am	Q&A: NREL – Large Scale Integration – Brian Parsons
11:45am-1:15pm	Lunch
<i>1:15pm-3:15pm</i>	Poster Session in Blue Room Pre-Function Area – Solar Instructor Training Network Participants: Florida Solar Energy Center at UCF; North Carolina Solar Center at NCSU; Pennsylvania State University; Hudson Valley Community College; Kennebec Valley Community College; Midwest Renewable Energy Association; The Energy Institute at HCC – Northeast; Salt Lake Community College, Solar Energy International, and Utah Solar Energy Association; California Community College Board of Governors, California Energy Commission, California Centers for Sustainable Energy, and the Labor Management Cooperation Committee
1:15pm-1:45pm	Solar Electric Power Association – Facilitating Utility Use and Integration of Solar Electric Power
1:45pm-2:00pm	Q&A: Solar Electric Power Association – Facilitating Utility Use and Integration of Solar Electric Power
2:00pm-2:40pm	NREL and Sandia – State Labs – Barry Friedman and Tom Mancini
2:40pm-3:00pm	Q&A: Solar NREL and Sandia – State Labs
3:00pm-3:45pm	Break
3:45pm-4:25pm	NREL and Argonne – Environmental Impact – Craig Turchi and John Gasper
4:25pm-4:45pm	Q&A: NREL and Argonne – Environmental Impact

U.S. Department of Energy Program Review – Photovoltaics: Long Term

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Tuesday, May 25, 2010 – Regency Ballroom

8:15am-8:35am	DOE Headquarters - <i>Introduction of Pre-Incubators</i>
8:35am-8:45am	Q&A: DOE Headquarters - <i>Introduction of Pre-Incubators</i>
8:45am-9:05am	EPIR Technologies – <i>High Efficiency Single-Crystal CdTe Solar Cell</i>
9:05am-9:15am	Q&A: EPIR Technologies – <i>High Efficiency Single-Crystal CdTe Solar Cell</i>
9:15am-9:35am	Lightwave – <i>Novel Roll-to-Roll Manufacturable Photonic-Enhanced Thin Film Solar Cells</i>
9:35am-9:45am	Q&A: Lightwave – <i>Novel Roll-to-Roll Manufacturable Photonic-Enhanced Thin Film Solar Cells</i>
9:45am-10:05am	Luna – <i>High Efficiency Organic Solar Cells</i>
10:05am-10:15am	Q&A: Luna – <i>High Efficiency Organic Solar Cells</i>
10:15am-10:45am	Break
10:45am-11:05am	Crystal Solar – <i>Thin Single Crystal Silicon Solar Cells on Ceramic Substrates</i>
11:05am-11:15am	Q&A: Crystal Solar – <i>Thin Single Crystal Silicon Solar Cells on Ceramic Substrates</i>
11:15am-11:35am	Microlink – <i>High Efficiency, Low-Cost, Multijunction Solar Cells Based on Epitaxial Liftoff and Wafer Bonding</i>
11:35am-11:45am	Q&A: Microlink – <i>High Efficiency, Low-Cost, Multijunction Solar Cells Based on Epitaxial Liftoff and Wafer Bonding</i>
11:45am-1:15pm	Lunch - <i>Lunch Talk - Bettina Weis, Sr. Director Photovoltaics, SEMI PV Group</i>
1:15pm-1:35pm	TiSol – <i>Innovative Manufacturing of Dye Sensitized Solar Cells</i>
1:35pm-1:45pm	Q&A: TiSol – <i>Innovative Manufacturing of Dye Sensitized Solar Cells</i>
1:45pm-2:05pm	Banyan – <i>A Flat ATIR Optics Approach to CPV</i>
2:05pm-2:15pm	Q&A: Banyan – <i>A Flat ATIR Optics Approach to CPV</i>
2:15pm-2:35pm	SpectraWatt – <i>Improved Solar Cell Efficiency through the use of an additive nanostructure-based optical downshifter</i>
2:35pm-2:45pm	Q&A: SpectraWatt – <i>Improved Solar Cell Efficiency through the use of an additive nanostructure-based optical downshifter</i>
2:45pm-3:05pm	Ascent – <i>ZnMgO by APCVD Enabling High-Performance Mid-bandgap CIGS on Polyimide Modules</i>
3:05pm-3:15pm	Q&A: Ascent – <i>ZnMgO by APCVD Enabling High-Performance Mid-bandgap CIGS on Polyimide Modules</i>
3:15pm-3:45pm	Break
3:45pm-4:25pm	NREL – <i>PDIL Infrastructure, Engineering, and Integration – Brent Nelson</i>
4:25pm-4:45pm	Q&A: NREL - <i>PDIL Infrastructure, Engineering, and Integration</i>
4:45pm-5:25pm	NREL – <i>Measurements and Characterization – Peter Sheldon</i>
5:25pm-5:45pm	Q&A: NREL – <i>Measurements and Characterization</i>

Wednesday, May 26, 2010 – AM: Regency Ballroom; PM: Palladian Room

8:10am-8:15am	DOE Headquarters – <i>Introduction to Incubator Awards</i>
8:15am-8:35am	The Solar Energy Consortium (TSEC) – <i>Solar Consortium of NY PV R&D Center</i>
8:35am-8:45am	Q&A: The Solar Energy Consortium (TSEC) – <i>Solar Consortium of NY PV R&D Center</i>
8:45am-9:05am	University of Arkansas at Little Rock – <i>Novel PV Devices Based on Polymeric and Carbon Nanostructured Materials</i>
9:05am-9:15am	Q&A: University of Arkansas at Little Rock – <i>Novel PV Devices Based on Polymeric and Carbon Nanostructured Materials</i>
9:15am-9:35am	North Dakota State University – <i>Center for Nanoscale Energy</i>
9:35am-9:45am	Q&A: North Dakota State University Center for Nanoscale Energy – <i>Center for Nanoscale Energy</i>
9:45am-10:05am	Solasta – <i>Nanocoax Solar Cells</i>
10:05am-10:15am	Q&A: Solasta – <i>Nanocoax Solar Cells</i>
10:15am-10:45am	Break
10:45am-11:05am	1366 – <i>Self Aligned Cell – Scaling Up Manufacture of a Cost Effective Cell Architecture for Multi-Crystalline Silicon Photovoltaics</i>
11:05am-11:15am	Q&A: 1366 – <i>Self Aligned Cell – Scaling Up Manufacture of a Cost Effective Cell Architecture for Multi-Crystalline Silicon Photovoltaics</i>
11:15am-11:35am	Solexel – <i>Productization and Manufacturing Scaling of High-Efficiency Solar Cell and Module Products Based on a Disruptive Low-Cost, Mono-Crystalline Technology</i>
11:35am-11:45am	Q&A: Solexel – <i>Productization and Manufacturing Scaling of High-Efficiency Solar Cell and Module Products Based on a Disruptive Low-Cost, Mono-Crystalline Technology</i>
11:45am-1:15pm	Lunch - Lunch Talk - Lisa Frantzis, Managing Director, Navigant Consulting
1:15pm-1:35pm	Innovalight – <i>High-Efficiency, Low-Cost Solar Cells Manufactured Using “Silicon Ink” On Thin Crystalline Silicon Wafers</i>
1:35pm-1:45pm	Q&A: Innovalight – <i>High-Efficiency, Low-Cost Solar Cells Manufactured Using “Silicon Ink” On Thin Crystalline Silicon Wafers</i>
1:45pm-2:05pm	Spire – <i>Manufacturing of High-Efficiency Bi-Facial Tandem Concentrator Solar Cells</i>
2:05pm-2:15pm	Q&A: Spire – <i>Manufacturing of High-Efficiency Bi-Facial Tandem Concentrator Solar Cells</i>
2:15pm-2:35pm	DOE Headquarters - <i>Introduction to University Product and Process Development</i>
2:35pm-2:45pm	Q&A: DOE Headquarters - <i>Introduction to University Product and Process Development</i>
2:45pm-3:05pm	Penn State University – <i>TiO₂ Nanotube Array-Organic Semiconductor Heterojunction Solar Cells for Efficient, Low Cost, Large Area Scalable Solar Energy Conversion</i>
3:05pm-3:15pm	Q&A: Penn State University – <i>TiO₂ Nanotube Array-Organic Semiconductor Heterojunction Solar Cells for Efficient, Low Cost, Large Area Scalable Solar Energy Conversion</i>
3:15pm-3:40pm	Break
3:45pm-4:05pm	Arizona State University – <i>Reliability Evaluation of Concentrator Photovoltaic Modules per IEC Qualification Specifications</i>
4:05pm-4:15pm	Q&A: Arizona State University – <i>Reliability Evaluation of Concentrator Photovoltaic Modules per IEC Qualification Specifications</i>
4:15pm-4:35pm	MIT – <i>Defect Engineering, Cell Processing, and Modeling for High-Performance, Low-Cost Crystalline Si PV</i>
4:35pm-4:45pm	Q&A: MIT – <i>Defect Engineering, Cell Processing, and Modeling for High-Performance, Low-Cost Crystalline Si PV</i>
4:45pm-5:05pm	University of Toledo – <i>High-Rate Fabrication of a-Si-Based Thin-Film Solar Cells Using Large Area VHF PECVD Processes</i>
5:05pm-5:15pm	Q&A: University of Toledo – <i>High-Rate Fabrication of a-Si-Based Thin-Film Solar Cells Using Large Area VHF PECVD Processes</i>
5:15pm-5:35pm	Georgia Tech – <i>Development of Rear Contact Technologies for Next Generation High Efficiency Commercial Si Solar Cells</i>
5:35pm-5:45pm	Q&A: Georgia Tech – <i>Development of Rear Contact Technologies for Next Generation High Efficiency Commercial Si Solar Cells</i>

Thursday, May 27, 2010 – Regency Ballroom

8:15am-8:35am **University of Toledo** – *Improved CdTe PV Modules by Atmospheric Pressure Vapor Deposition*
8:35am-8:45am **Q&A: University of Toledo** – *Improved CdTe PV Modules by Atmospheric Pressure Vapor Deposition*
8:45am-9:05am **University of Delaware** – *Development of a Low Cost Insulated Foil Substrate for Cu(InGa)Se₂ PV*
9:05am-9:15am **Q&A: University of Delaware** – *Development of a Low Cost Insulated Foil Substrate for Cu(InGa)Se₂ PV*
9:15am-9:35am **University of Florida** – *Routes for Rapid Synthesis of CuGaxIn_{1-x}Se₂ Absorbers*
9:35am-9:45am **Q&A: University of Florida** – *Routes for Rapid Synthesis of CuGaxIn_{1-x}Se₂ Absorbers*
9:45am-10:05am **University of Delaware** – *High Efficiency Back Contact Si Heterojunction Solar Cells*
10:05am-10:15am **Q&A: University of Delaware** – *High Efficiency Back Contact Si Heterojunction Solar Cells*

10:15am-10:45am **Break**

10:45am-11:05am **Caltech** – *100 mm Engineered InP-on-Si Laminate Substrates for InP-based Multijunction Solar Cells*
11:05am-11:15am **Q&A: Caltech** – *100 mm Engineered InP-on-Si Laminate Substrates for InP-based Multijunction Solar Cells*
11:15am-11:35am **North Carolina State University** – *Tunable Narrow Band Gap Absorbers for Ultra High Efficiency Multi-junction Solar Cells*
11:35am-11:45am **Q&A: North Carolina State University** – *Tunable Narrow Band Gap Absorbers for Ultra High Efficiency Multi-junction Solar Cells*

11:45am-1:15pm **Lunch**

U.S. Department of Energy Program Review – Photovoltaics: Near Term

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Tuesday, May 25, 2010 – Empire Room

8:15am-8:35am	DOE Headquarters - <i>Introduction to Supply Chain</i>
8:35am-8:45am	Q&A: DOE Headquarters - <i>Introduction to Supply Chain</i>
8:45am-9:05am	Omega Optical, Inc. – <i>Optical Designs for Solar Power Generation</i>
9:05am-9:15am	Q&A: Omega Optical, Inc. – <i>Optical Designs for Solar Power Generation</i>
9:15am-9:35am	Eikos, Inc. – <i>Transparent Coatings for Solar Cell Research Project</i>
9:35am-9:45am	Q&A: Eikos, Inc. – <i>Transparent Coatings for Solar Cell Research Project</i>
9:45am-10:05am	General Electric – <i>Efficiency Enhancing Layers for PV Modules</i>
10:05am-10:15am	Q&A: General Electric – <i>Efficiency Enhancing Layers for PV Modules</i>
10:15am-10:45am	Break
10:45am-11:05am	General Electric – <i>High Energy Yield Distributed Architecture for Large Commercial and Utility-Scale PV Systems</i>
11:05am-11:15am	Q&A: General Electric – <i>High Energy Yield Distributed Architecture for Large Commercial and Utility-Scale PV Systems</i>
11:15am-11:35am	Sierra Solar Power – <i>Low-cost, High-throughput Si Epitaxy System for Solar Cell Manufacturing</i>
11:35am-11:45am	Q&A: Sierra Solar Power – <i>Low-cost, High-throughput Si Epitaxy System for Solar Cell Manufacturing</i>
11:45am-1:15pm	Lunch - <i>Lunch Talk - Bettina Weis, Sr. Director Photovoltaics, SEMI PV Group</i>
1:15pm-1:35pm	Silicon Genesis - <i>Novel kerf-free PV wafering that provides a low-cost approach to generate wafers</i>
1:35pm-1:45pm	Q&A: Silicon Genesis - <i>Novel kerf-free PV wafering that provides a low-cost approach to generate wafers</i>
1:45pm-2:05pm	Varian Semiconductor – <i>Manufacturing single crystal silicon sheets</i>
2:05pm-2:15pm	Q&A: Varian Semiconductor – <i>Manufacturing single crystal silicon sheets</i>
2:15pm-2:55pm	NREL – <i>Industrial CRADA's – John Benner</i>
2:55pm-3:15pm	Q&A: NREL – <i>Industrial CRADA's</i>
3:15pm-3:45pm	Break
3:45pm-4:05pm	Xerocoat – <i>A Low Cost Spray Deposited Solar PV Anti-reflection Coating</i>
4:05pm-4:15pm	Q&A: Xerocoat – <i>A Low Cost Spray Deposited Solar PV Anti-reflection Coating</i>
4:15pm-4:35pm	3M – <i>Flexible Barrier Films</i>
4:35pm-4:45pm	Q&A: 3M – <i>Flexible Barrier Films</i>
4:45pm-5:05pm	Air Products – <i>Enhanced Growth Rate and Silane Utilization in Amorphous Silicon</i>
5:05pm-5:15pm	Q&A: Air Products – <i>Enhanced Growth Rate and Silane Utilization in Amorphous Silicon</i>
5:15pm-5:35pm	Dupont – <i>Flexible Ultra Moisture Barrier Film for Thin-Film Photovoltaic Applications</i>
5:35pm-5:45pm	Q&A: Dupont – <i>Flexible Ultra Moisture Barrier Film for Thin-Film Photovoltaic Applications</i>

Wednesday, May 26, 2010 – Empire Room

8:10am-8:15am	DOE Headquarters – <i>Introduction to TPP Awards</i>
8:15am-8:35am	NREL – <i>Organic Photovoltaics and Advanced Materials</i> – Matt Lloyd
8:35am-8:45am	Q&A: NREL – <i>Organic Photovoltaics and Advanced Materials</i>
8:45am-9:05am	Konarka – <i>Low Cost, Lightweight Solar Modules Based on Organic Photovoltaic Technology</i>
9:05am-9:15am	Q&A: Konarka – <i>Low Cost, Lightweight Solar Modules Based on Organic Photovoltaic Technology</i>
9:15am-9:35am	NREL – <i>Film Silicon</i> – Howard Branz
9:35am-9:45am	Q&A: NREL – <i>Film Silicon</i>
9:45am-10:05am	United Solar Ovonics, Inc. – <i>Low Cost Thin Film Building-Integrated PV Systems</i>
10:05am-10:15am	Q&A: United Solar Ovonics, Inc. – <i>Low Cost Thin Film Building-Integrated PV Systems</i>
10:15am-10:45am	Break
10:45am-11:05am	NREL – <i>Wafer Silicon</i> – Qi Wang
11:05am-11:15am	Q&A: NREL – <i>Wafer Silicon</i>
11:15am-11:35am	Sunpower – <i>Grid-Competitive Residential and Commercial Fully Automated PV Systems Technology</i>
11:35am-11:45am	Q&A: Sunpower – <i>Grid-Competitive Residential and Commercial Fully Automated PV Systems Technology</i>
11:45am-1:15pm	Lunch - Lunch Talk - Lisa Frantzis, Managing Director, Navigant Consulting
1:15pm-1:35pm	NREL – <i>Concentrating Photovoltaics</i> – Daniel Friedman
1:35pm-1:45pm	Q&A: NREL – <i>Concentrating Photovoltaics</i>
1:45pm-2:05pm	Boeing – <i>Concentrator Photovoltaic Power System</i>
2:05pm-2:15pm	Q&A: Boeing – <i>Concentrator Photovoltaic Power System</i>
2:15pm-2:35pm	Amonix – <i>Low Cost High Concentration Photovoltaic Systems for Utility Power Generation</i>
2:35pm-2:45pm	Q&A: Amonix – <i>Low Cost High Concentration Photovoltaic Systems for Utility Power Generation</i>
2:45pm-3:05pm	Soliant – <i>Concentrating Solar Panels: Bringing the Highest Power and Lowest Cost to the Rooftop</i>
3:05pm-3:15pm	Q&A: Soliant – <i>Concentrating Solar Panels: Bringing the Highest Power and Lowest Cost to the Rooftop</i>
3:15pm-3:40pm	Break
3:45pm-4:05pm	NREL – <i>Copper Indium Gallium diSelenide Research</i> – Miguel Contreas
4:05pm-4:15pm	Q&A: NREL – <i>Copper Indium Gallium diSelenide Research</i>
4:15pm-4:35pm	Nanosolar – <i>Delivering Grid-Parity Solar Electricity for the Commercial Market</i>
4:35pm-4:45pm	Q&A: Nanosolar – <i>Delivering Grid-Parity Solar Electricity for the Commercial Market</i>
4:45pm-5:05pm	Dow – <i>Fully Integrated Building Science Solutions for Residential and Commercial Photovoltaic Energy Generation</i>
5:05pm-5:15pm	Q&A: Dow – <i>Fully Integrated Building Science Solutions for Residential and Commercial Photovoltaic Energy Generation</i>
4:45pm-5:05pm	GreenRay – <i>Development of an AC Module System</i>
5:05pm-5:15pm	Q&A: GreenRay – <i>Development of an AC Module System</i>
6:30pm-8:00pm	Poster Session (Located in the Blue Room Pre-Function Area): SBIR - Nanosolar, Inc. (<i>Printed Solar Cell Using Nanostructured Ink</i>); TDA Research, Inc. (<i>Improved Fullerenes for OPV</i>); NanoSonic, Inc. (<i>High Performance, Low-Cost Nanostructured Mirror Surfaces</i>); Midwest Optoelectronics, Inc. (<i>Novel Interconnection Process for Lightweight Flexible</i>)

Photovoltaic Modules); Luminit, LLC (Flexible Spectrum Splitting Holographic Concentrator); SVV Technology Innovations, Inc. (High Performance PV Concentrator); Luna Innovations Incorporated (High-Throughput In-Line PV Manufacturing Diagnostic System); Ultrasonic Technologies, Inc. (In-Line Crack Detection in Silicon Solar Cell Production Using Resonance Ultrasonic Vibrations); Applied Nanotech, Inc. (Non-Contact, Printable Metallic inks for Silicon Solar Cells); Luminit, LLC (Multifunctional UV Curable Sol-Gel Organic Hybrid Nanocomposite Encapsulation System); Crystal Systems, Inc. (Material Utilization and Waste Reduction Through Kerf Recycling)

PV Next Gen Awards – ASU (John Kouvetakis), ASU (Marc van Schilfgaarde), Cal Tech (Harry Atwater), Mayaterials (Richard Laine), MIT (Vladimir Bulovic), MIT (Emanuel Sachs), Penn State (Harry Allcock), Penn State (Joan Redwing), Rochester Institute of Technology (Seth Hubbard), Solexant (Alison Breeze), Solexel (Mehrdad Moslehi), Stanford (Yi Cui), University of Cal-Davis (Adam Moule), University of Washington (Alex Jen), University of Colorado (Josef Michl), University of Michigan (Stephen Forrest), University of South Florida (Christos Ferekides), University of California-San Diego (Edward Yu), University of Delaware (William Shafarman), University of Florida (Jiangeng Xue), University of Illinois (John Rogers), Voxel (David Schut), Wakonda (Leslie Fritzscheier), Stanford University (Peter Peumans)

ARRA Lab Call – NREL (*Generation Inverted Metamorphic Multi-junction (IMM) III-V Solar Cells*); PNNL (*Multilayer Window for Improved Performance in CdTe Solar Cells*); LANL (*Assessment of Silicon Nanowire Architecture for PV Application*); ANL (*Interdigitated Cu₂S Thin Film Photovoltaics*); NREL (*Black Silicon Anti-Reflection: Increased Wafer Silicon Efficiency with Reduced Manufacturing Costs*); NREL (*Imaging Techniques for Statistical Process Control on a Solar Cell Manufacturing Line*); ANL (*Transparent Conducting Coatings for Cost Effective Photovoltaics Manufactured Using Atomic Layer Deposition*); NREL (*Completion of NREL's Process Development and Integration Laboratory, including the Silicon Wafer Replacement Tool*)

Thursday, May 27, 2010 - Empire Room

8:15am-8:35am	NREL – <i>Theory and Computational Science</i> – Stephen Lany
8:35am-8:45am	Q&A: NREL – <i>Theory and Computational Science</i>
8:45am-9:05am	NREL – <i>TCO's</i> – John Perkins
9:05am-9:15am	Q&A: NREL – <i>TCO's</i>
9:15am-9:35am	NREL – <i>Cadmium Telluride</i> – Tim Gessert
9:35am-9:45am	Q&A: NREL – <i>Cadmium Telluride</i>
9:45am-10:05am	NREL – <i>Sensitized Solar Cells</i> – Arthur Frank
10:05am-10:15am	Q&A: NREL – <i>Sensitized Solar Cells</i>
10:15am-10:45am	Break

U.S. Department of Energy Program Review – Systems Integration

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Tuesday, May 25, 2010 – Congressional Room

8:15am-8:35am	NREL – <i>Systems Modeling</i> – Aron Dobos and Christopher Helm
8:35am-8:45am	Q&A: NREL – <i>Systems Modeling</i>
8:45am-9:05am	Sandia – <i>Systems Modeling</i> – Chris Cameron
9:05am-9:15am	Q&A: Sandia – <i>Systems Modeling</i>
9:15am-9:55am	NREL – <i>Photovoltaics Grid Integration</i> – Ben Kroposki
9:55am-10:15am	Q&A: NREL – <i>Photovoltaics Grid Integration</i>
10:15am-10:45am	Break
10:45am-11:25am	Sandia – <i>Photovoltaics Grid Integration</i> – Abe Ellis
11:25am-11:45am	Q&A: Sandia – <i>Photovoltaics Grid Integration</i>
11:45am-1:15pm	Lunch - Lunch Talk - Bettina Weis, Sr. Director Photovoltaics, SEMI PV Group
1:15pm-1:35pm	NREL – <i>Concentrating Solar Power Grid Integration</i> – Brian Parsons
1:35pm-1:45pm	Q&A: NREL – <i>Concentrating Solar Power Grid Integration</i>
1:45pm-2:05pm	New Mexico State University – <i>Solar ABC's</i> – Larry Sherwood
2:05pm-2:15pm	Q&A: New Mexico State University – <i>Solar ABC's</i>
2:15pm-2:35pm	NREL – <i>Codes and Standards</i> – Ben Kroposki
2:35pm-2:45pm	Q&A: NREL – <i>Codes and Standards</i>
2:45pm-3:05pm	Sandia – <i>Codes and Standards</i> – Ward Bower
3:05pm-3:15pm	Q&A: Sandia – <i>Codes and Standards</i>
3:15pm-3:45pm	Break
3:45pm-4:05pm	NREL – <i>Solar Radiometry</i> – Daryl Myers
4:05pm-4:15pm	Q&A: NREL – <i>Solar Radiometry</i>
4:15pm-4:35pm	NREL – <i>Solar Resource Characterization and Forecasting</i> – Dave Renne
4:35pm-4:45pm	Q&A: NREL – <i>Solar Resource Characterization and Forecasting</i>
4:45pm-5:05pm	New Mexico State University – <i>T&E Activities</i> – Andy Rosenthal
5:05pm-5:15pm	Q&A: New Mexico State University – <i>T&E Activities</i>
5:15pm-5:35pm	FSEC – <i>T&E Activities</i> – Bob Reedy
5:35pm-5:45pm	Q&A: FSEC – <i>T&E Activities</i>
5:45pm-6:05pm	NREL – <i>Systems Analysis</i> – Robert Margolis
6:05pm-6:15pm	Q&A: NREL – <i>Systems Analysis</i>

Wednesday, May 26, 2010 – Congressional Room

8:15am-8:35am **NREL – PV Reliability – Sarah Kurtz**
8:35am-8:45am **Q&A: NREL – PV Reliability**
8:45am-9:05am **Sandia – PV Reliability – Jennifer Granata**
9:05am-9:15am **Q&A: Sandia – PV Reliability**
9:15am-9:35am **NREL – PV Test and Evaluation – Bill Marion**
9:35am-9:45am **Q&A: NREL – PV Test and Evaluation**
9:45am-10:05am **Sandia – PV Test and Evaluation – Jennifer Granata**
10:05am-10:15am **Q&A: Sandia – PV Test and Evaluation**

10:15am-10:45am Break

10:45am-11:05am **FSEC/Satcon – Grid-Smart Inverters**
11:05am-11:15am **Q&A: FSEC/Satcon – Grid-Smart Inverters**
11:15am-11:35am **Petra Solar – Development of Economically Viable, Highly Integrated, Highly Modular SEGIS Architecture**
11:35am-11:45am **Q&A: Petra Solar – Development of Economically Viable, Highly Integrated, Highly Modular SEGIS Architecture**

11:45am-1:15pm Lunch - Lunch Talk - Lisa Frantzis, Managing Director, Navigant Consulting

1:15pm-1:35pm **Apollo Solar – An Advanced Grid-tied Inverter, Charge Controller, Energy Monitor and Internet Gateway**
1:35pm-1:45pm **Q&A: Apollo Solar – An Advanced Grid-tied Inverter, Charge Controller, Energy Monitor and Internet Gateway**
1:45pm-2:05pm **Princeton Power – Demand Response Inverter**
2:05pm-2:15pm **Q&A: Princeton Power – Demand Response Inverter**
2:15pm-2:35pm **PV Powered – MPPT and EMS Advancements**
2:35pm-2:45pm **Q&A: PV Powered – MPPT and EMS Advancements**
2:45pm-3:05pm **ComEd – High Penetration**
3:05pm-3:15pm **Q&A: ComEd – High Penetration**

3:15pm-3:45pm Break

3:45pm-4:05pm **SMUD – High Penetration**
4:05pm-4:15pm **Q&A: SMUD – High Penetration**
4:15pm-4:35pm **NREL – High Penetration**
4:35pm-4:45pm **Q&A: NREL – High Penetration**
4:45pm-5:05pm **Florida State University – High Penetration**
5:05pm-5:15pm **Q&A: Florida State University – High Penetration**
5:15pm-5:35pm **UCSD – High Penetration**
5:35pm-5:45pm **Q&A: UCSD – High Penetration**
5:45pm-6:05pm **APS – High Penetration**
6:05pm-6:15pm **Q&A: APS – High Penetration**

U.S. Department of Energy Program Review – Concentrating Solar Power

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Tuesday, May 25, 2010 – Diplomat Room

8:15am-8:55am NREL- *Line Focus Systems* – Chuck Kutscher
8:55am-9:15am Q&A: NREL- *Line Focus Systems*
9:15am-9:35am Sandia – *Line Focus Systems* – Tim Moss
9:35am-9:45am Q&A: Sandia – *Line Focus Systems*
9:45am-10:05am NREL – *Systems Analysis* – Craig Turchi
10:05am-10:15am Q&A: NREL – *Systems Analysis*

10:15am-10:45am Break

10:45am-11:25am Sandia – *Dish Research and Development* – Chuck Andraka
11:25am-11:45am Q&A: Sandia – *Dish Research and Development*

11:45am-1:15pm Lunch - Lunch Talk - Bettina Weis, Sr. Director Photovoltaics, SEMI PV Group

1:15pm-1:35pm SkyFuel - *Commercial Development of an Advanced, High-Temperature, Linear-Fresnel Based Concentrating Solar Power Concept*
1:35pm-1:45pm Q&A: SkyFuel - *Commercial Development of an Advanced, High-Temperature, Linear-Fresnel Based Concentrating Solar Power Concept*
1:45pm-2:05pm 3M – *Cleanable and Hardcoat Coatings for Increased Durability of Silvered Polymeric Mirrors*
2:05pm-2:15pm Q&A: 3M – *Cleanable and Hardcoat Coatings for Increased Durability of Silvered Polymeric Mirrors*
2:15pm-2:35pm Abengoa – *Development of Advanced Polymeric Reflector for CSP Applications*
2:35pm-2:45pm Q&A: Abengoa – *Development of Advanced Polymeric Reflector for CSP Applications*
2:45pm-3:05pm Alcoa – *Reflector Technology Development and System Design for Concentrating Solar Power (CSP) Technologies*
3:05pm-3:15pm Q&A: Alcoa – *Reflector Technology Development and System Design for Concentrating Solar Power (CSP) Technologies*

3:15pm-3:45pm Break

3:45pm-4:05pm Solar Millennium – *Advanced High Temperature Trough Collector Development*
4:05pm-4:15pm Q&A: Solar Millennium – *Advanced High Temperature Trough Collector Development*
4:15pm-4:35pm Abengoa – *Development of Next-Generation Parabolic Trough Collectors and Components for CSP Applications*
4:35pm-4:45pm Q&A: Abengoa (GO18037) – *Development of Next-Generation Parabolic Trough Collectors and Components for CSP Applications*
4:45pm-5:05pm Brayton – *Brayton Solar Power Conversion System*
5:05pm-5:15pm Q&A: Brayton – *Brayton Solar Power Conversion System*

6:30pm-8:00pm **Poster Session (Located in the Blue Room Pre-Function Area):** Lehigh University (*Novel Thermal Storage Technologies for Concentrating Solar Power Generation*), CUNY (*A Novel Storage Method for Concentrating Solar Power Plants Allowing Operation at High Temperature*), General Atomics (*Thermochemical Heat Storage for Concentrated Solar Power*), Abengoa (*Reducing the Cost of Thermal Energy Storage for Parabolic Trough Solar Power Plants*), Abengoa (*Development of Molten-Salt Heat Transfer Fluid Technology for Parabolic Trough Solar Power Plants*), Infinia (*30-kW Maintenance-Free Stirling Engine for High-Performance Dish Concentrating Solar Power*), NREL Line Focus Systems Balance of Plant (Chuck Kutscher), 2009 ARRA lab call award winners (Dileep Singh, Joanna McFarlane, Calvin Curtis, Robert Wegeng, Elise Fox)

Wednesday, May 26, 2010 – Blue Room

- 8:15am-8:35am **Acciona** – *Indirect, Dual-Media, Phase Changing Material Modular Thermal Energy Storage System*
8:35am-8:45am **Q&A: Acciona** – *Indirect, Dual-Media, Phase Changing Material Modular Thermal Energy Storage System*
8:45am-9:05am **Terrafore** – *Heat Transfer and Latent Heat Storage in Inorganic Molten Salts for Concentrating Solar Power Plants*
9:05am-9:15am **Q&A: Terrafore** – *Heat Transfer and Latent Heat Storage in Inorganic Molten Salts for Concentrating Solar Power Plants*
9:15am-9:35am **Infinia** – *Innovative Application of Maintenance-Free Phase-Change Thermal Energy Storage for Dish Engine Solar Power Generation*
9:35am-9:45am **Q&A: Infinia** – *Innovative Application of Maintenance-Free Phase-Change Thermal Energy Storage for Dish Engine Solar Power Generation*
9:45am-10:05am **Texas A&M University** – *Molten Salt-Carbon Nanotube Thermal Energy Storage for Concentrating Solar Power Systems*
10:05am-10:15am **Q&A: Texas A&M University** – *Molten Salt-Carbon Nanotube Thermal Energy Storage for Concentrating Solar Power Systems*
- 10:15am-10:45am** **Break**
- 10:45am-11:25am **Sandia** – *Tower Research and Development – Greg Kolb*
11:25am-11:45am **Q&A: Sandia** – *Tower Research and Development*
- 11:45am-1:15pm** **Lunch - Lunch Talk - Lisa Frantzis, Managing Director, Navigant Consulting**
- 1:15pm-1:35pm **University of Arkansas** – *Development and Performance Evaluation of High Temperature Concrete for Thermal Energy Storage for Solar Power Generation*
1:35pm-1:45pm **Q&A: University of Arkansas** – *Development and Performance Evaluation of High Temperature Concrete for Thermal Energy Storage for Solar Power Generation*
1:45pm-2:05pm **US Solar** – *CSP Energy Storage Solutions – Multiple Technologies Compared*
2:05pm-2:15pm **Q&A: US Solar** – *CSP Energy Storage Solutions – Multiple Technologies Compared*
2:15pm-2:35pm **University of Alabama** – *Novel Molten Salts Thermal Energy Storage for Concentrating Solar Power Generation*
2:35pm-2:45pm **Q&A: University of Alabama** – *Novel Molten Salts Thermal Energy Storage for Concentrating Solar Power Generation*
2:45pm-3:05pm **Symyx/Halotechnics** – *Deep Eutectic Salt Formulations Suitable as Advanced Heat Transfer Fluids*
3:05pm-3:15pm **Q&A: Symyx Halotechnics** – *Deep Eutectic Salt Formulations Suitable as Advanced Heat Transfer Fluids*
- 3:15pm-3:45pm** **Break**
- 3:45pm-4:05pm **PPG** – *High Performance Reflector Panels for Concentrating Solar Power Assemblies*
4:05pm-4:15pm **Q&A: PPG** – *High Performance Reflector Panels for Concentrating Solar Power Assemblies*
4:15pm-4:35pm **Pratt and Whitney** – *Solar Power Tower Receiver Development*
4:35pm-4:45pm **Q&A: Pratt and Whitney** – *Solar Power Tower Receiver Development*
4:45pm-5:05pm **Acciona (GO18152)** – *Sensible Heat, Direct, Dual-Media Thermal Energy Storage Module*
5:05pm-5:15pm **Q&A: Acciona (GO18152)** – *Sensible Heat, Direct, Dual-Media Thermal Energy Storage Module*
4:45pm-5:05pm **University of Connecticut** – *Research and Development for Novel Thermal Energy Storage Systems (TES) for Concentrating Solar Power (CSP)*
5:05pm-5:15pm **Q&A: University of Connecticut** – *Research and Development for Novel Thermal Energy Storage Systems (TES) for Concentrating Solar Power (CSP)*

Thursday, May 27, 2010 – Blue Room

8:15am-8:55am **NREL** – *Advanced Reflectors* – Cheryl Kennedy
8:55am-9:15am **Q&A: NREL** – *Advanced Reflectors* – Cheryl Kennedy
9:15am-9:35am **NREL** – *Advanced Concepts* – Craig Turchi
9:35am-9:45am **Q&A: NREL** – *Advanced Concepts* – Craig Turchi
9:45am-10:05am **NREL** – *Advanced Absorbers* – Cheryl Kennedy
10:05am-10:15am **Q&A: NREL** – *Advanced Absorbers* – Cheryl Kennedy

10:15am-10:45am **Break**

10:45am-11:25am **Sandia** – *Advanced Concepts* – Cliff Ho
11:25am-11:45am **Q&A: Sandia** – *Advanced Concepts* – Cliff Ho

11:45am-1:15pm **Lunch**

1:15pm-1:45pm **NREL** – *Storage Systems* – Greg Glatzmaier
1:45pm-2:00pm **Q&A: NREL** – *Storage Systems*
2:00pm-2:30pm **Sandia** – *Storage Systems* – Nate Siegel
2:30pm-2:45pm **Q&A: Sandia** – *Storage Systems*
2:45pm-3:05pm **NREL** – *Advanced Fluids* – Greg Glatzmaier
3:05pm-3:15pm **Q&A: NREL** – *Advanced Fluids*

3:15pm-3:45pm **Break**

3:45pm-4:05pm **Sandia** – *Advanced Fluids* – Bob Bradshaw
4:05pm-4:15pm **Q&A: Sandia** – *Advanced Fluids*