

Enabling High-Penetration Solar PV through Next-Generation Power Electronic Technologies

October 11-12, 2016

National Renewable Energy Laboratory (NREL) | Energy Systems Integration Facility

Agenda

Day 1: October 11, 2016 (12:30 p.m.–5 p.m.)		
Time	Description	Presenter
12:30 p.m.	Registration and networking	
12:45 p.m.	Welcome and Grid Modernization Initiative overview	Ben Kroposki <i>NREL</i>
1:00 p.m.	Opening Keynote—Overview of U.S. Department of Energy’s (DOE’s) SunShot Initiative, Systems Integration, and Power Electronics Programs	Guohui Yuan <i>DOE Office of Energy Efficiency and Renewable Energy (EERE) SunShot Initiative</i>
1:30 p.m.	Keynote Presentation—Power Electronics: Where We Stand Now	Kathleen O’Brien <i>General Electric Global Research Center</i>
2:30 p.m.	Break	
2:45 p.m.	Overview of the workshop	Guohui Yuan
3:00 p.m.	Panel 1—DOE Sunshot Initiative and National Laboratory Research Activities on PV Power Electronics Moderator: Madhu Chinthavali, <i>Oak Ridge National Laboratory</i>	Samer Arafa <i>Solectria Renewables</i> Sudipta Chakraborty <i>NREL</i> Paul Ohodnicki <i>National Energy Technology Laboratory (NETL)</i>
4:30 p.m.	Group discussion to gather input on research activities Moderator: Guohui Yuan	
5:00 p.m.	Close of Day 1 of the workshop	



Day 2: October 12, 2016 (8 a.m.–4:45 p.m.)

<i>Time</i>	<i>Description</i>	<i>Presenter</i>
8:00 a.m.	Continental breakfast and networking	
8:15 a.m.	Welcome and Day 2 overview	Guohui Yuan
8:30 a.m.	Panel 2—Future for PV Power Electronics: Components Moderator: Paul Ohodnicki	Alex Huang <i>North Carolina State University</i> Jeff Casady <i>Wolfspeed</i> Charles Sullivan <i>Dartmouth College</i> Brian MacCleery <i>National Instruments</i>
10:15 a.m.	Break	
10:30 a.m.	Panel 3—Future for PV Power Electronics: Systems Moderator: Sudipta Chakraborty	Robert Erickson <i>University of Colorado Boulder</i> Sandeep Bala <i>ABB Corporate Research Center</i> Leo Casey <i>Google</i>
12:00 p.m.	Lunch and networking	
1:00 p.m.	Breakout Session 1—Research Needs for Next-Generation Power Electronics Components Moderators: Guohui Yuan, Garrett Nilsen, U.S. Department of Energy, Madhu Chinthavali, and Paul Ohodnicki	
2:15 p.m.	Breakout groups report back	
2:30 p.m.	Break	
2:45 p.m.	Breakout Session 2—Research Needs for Next-Generation Power Electronics Systems Moderators: Guohui Yuan, Garrett Nilsen, Sudipta Chakraborty, and Mari Shirazi, NREL	
4:00 p.m.	Breakout groups report back	
4:15 p.m.	Wrap-up and next steps	Guohui Yuan
4:30 p.m.	Workshop ends	