8th PV Performance Modeling and Monitoring Workshop

Date:	May 9-10, 2017			
Site:	Tamaya Resort, Santa Anna Pueblo, New Mexico USA			
Day 1		**Tuesday, May 9, 2017**		
7:00	1:00	Breakfast and Registration		
8:00	0:05	Welcome & Introductions	Jim Crimmins	CFV Solar Laboratory
8:05	0:05	Welcome & Introductions	Abraham Ellis	Sandia National Laboratories
8:10	0:05	Workshop Overview	Joshua Stein	Sandia National Laboratories
Session 1		**Solar Resource Data and Uncertainty**	Clifford Hansen (Session Chair)	Sandia National Laboratories
8:15	0:20	Quantifying Gains in Solar Project Value from Quality Satellite and Ground Data	John Gaglioti	GroundWork Renewables
8:35	0:20	Advances in Long-Term Solar Energy Prediction and Project Risk Assessment Methodology Through Non-Normally Distributed Probabilities of Exceedance	John "Skip" Dise	Clean Power Research
8:55	0:20	Update on the Uncertainty Map of SolarGIS Solar Radiation Database	Artur Skoczek	SolarGIS
9:15	0:20	Simulating High-Frequency Solar PV Generation Profiles for Large Portfolios in the SE US	Will Hobbs	Southern Company
9:35	0:20	Clear Sky Irradiance and Temperature Models for Mitigating Sensor Drift in PV System Degradation Analysis	Greg Kimball	SunPower
9:55	**0:35**	**Networking Break**		
Session 2		**Modeling Details and Calibration**	Bruce King (Session Chair)	Sandia National Laboratories
10:30	0:20	Significant Improvement in PV Module Performance Prediction Accuracy Using a New Model Based on IEC-61853 Data	Janine Freeman	National Renewable Energy Laboratory
10:50	0:20	Calibrating Global Diode Models from I-V Curve Measurement Matrices without Short-Circuit Temperature Coefficients	Mark Campanelli	Intelligent Measurement Systems
11:10	0:20	Single-Diode Model with Rs Temperature Dependence: More Accurate Simulation of All Curve Parameters in the IEC 61853-1 Test Data	Kyumin Lee	CFV Solar Laboratory
11:30	0:20	PVMismatch Package for Python	Mark Mikoski	SunPower Corporation
11:50	0:20	Temperature Coefficients and Thermal Uniformity Mapping of PV Modules and Plants	Ashwini Pavgi	Arizona State University
12:10	**1:00**	**Lunch**		
Session 3		**Modeling Software Updates**	Joshua Stein (Session Chair)	Sandia National Laboratories
13:10	0:20	PV*SOL Overview for PV Modeling	Steffen Lindemann	Valentin Software
13:30	0:20	Cell String-Level Energy Production Simulation with Aurora	David Bromberg	Aurora Solar
13:50	0:20	HelioScope Update	Teresa Zhang	Folsom Labs
14:10	0:20	System Advisor Model (SAM) Updates	Janine Freeman	National Renewable Energy Laboratory
14:30	0:20	Modelling PV power optimizers with PVsyst for row-based PV installations	Bruno Wittmer	PVsyst
14:50	0:20	PlantPredict – Solar Performance Modeling Made Simple	Kendra Passow	First Solar
15:10	0:20	Integration of PV-RPM into the System Advisor Model	Geoff Klise	Sandia National Laboratories
15:30	**0:40**	**Networking Break**		
		Moderated Discussion		

Time	Duration	Title	Speaker	Organization
16:10	0:40	What is the future of the PVPMC and how can we increase its value and effectiveness?	PVPMC Team	
16:50	0:10	Day One Wrap Up	Joshua Stein	Sandia National Laboratories
17:00	**1:30**	**Reception Hosted by CFV Solar (open to all participants)**		
18:30	**0:30**	**Break**		
19:00		**Dinner (requires tickets)**		
Day 2		**Wednesday May 10, 2017**		
7:00	1:00	Breakfast		
Session 4		**PV Monitoring and Plant Operations**	Jim Crimmins (CFV Solar)	
8:00	0:20	Applying the Principles of Suns-Voc to PV System Monitoring	Michael Deceglie	National Renewable Energy Laboratory
8:20	0:20	Characterizing PV Modules using Microinverter Data	Nathan Charles	Enphase
8:40	0:20	PECOS Open Source Software for PV Performance Monitoring	Kate Klise	Sandia National Laboratories
9:00	0:20	Optimized PV Performance using State of the Art Monitoring for Increased Asset Value	Juergen Sutterlueti	Gantner Instruments
9:20	0:20	Machine Learning for PV Performance Modeling	Birk Jones	Sandia National Laboratories
9:40	0:20	The Opportunity Cost of DC losses - Quantifying the Impact of Data Analytics Uncertainty and DC Overrate to Lost Revenue	Rob Andrews	Heliolytics
10:00	**0:40**	**Networking Break**		
Session 5		**Bifacial PV Performance and Modeling**		
10:40	0:20	Field Performance of Bifacial PV Modules and Systems	Joshua Stein	Sandia National Laboratories
11:00	0:20	Ray Tracing Models for Bifacial PV Performance	Amir Asgharzadeh Shishavan	University of Iowa
11:20	0:20	Progress Toward Efficient Bifacial Rear Irradiance Models	Sara MacAlpine	National Renewable Energy Laboratory
11:40	0:20	Performance Model for Bifacial PV Modules	Cliff Hansen/ Dan Riley	Sandia National Laboratories
12:00	**1:00**	**Lunch Break**		
		End of Main Workshop		
		PVLIB User's Group Meeting	Cliff Hansen	Sandia National Laboratories
13:00	1:00	What next for PVLIB? Group discussion moderated by Sandia		
14:00	2:00	PVLIB user group. Develop code for PVLIB, build applications, or get help from PVLIB developers.		
16:00	0:00	End of PVLIB Users Group Meeting		