Monday October 9th
Peer Review Agenda

All Day	REGISTRATION		
8:00-8:05am	Facilitator Opening Introductions	James Greenberger	NAATBatt
8:05-8:20am	Welcome and DOE Perspective DOE/OE Program Overview	Imre Gyuk	US Department of Energy/Office of Electricity Delivery and Energy Reliability
8:20-8:30am	DOE/OE/SNL Program Overview	Babu Chalamala	Sandia National Laboratories
8:30-8:40am	DOE/OE/PNNL Program Overview	Vince Sprenkle	Pacific Northwest National Laboratory
8:40-8:50am	DOE/OE/ORNL Program Overview	Michael Starke	Oak Ridge National Laboratory
9:00-9:30am	AM Break		
	Applied Materials I		
	Presentations		
9:30-9:45am	Na-metal Halide battery	Guosheng Li	Pacific Northwest National Laboratory
9:45-10:00am	Aqueous Soluble Organic Flow Batteries	Wei Wang	Pacific Northwest National Laboratory
10:00-10:15am	Na-ion Battery	Xiaolin Li	Pacific Northwest National Laboratory
10:15-10:30	Low Cost Membranes for High Energy Density Non-Aqueous Redox Flow Batteries	Jagjit Nanda	Oak Ridge National Laboratory
10:30-10:45am	Advanced Zinc-Manganese Oxide Batteries	Tim Lambert	Sandia National Laboratories
	Posters Briefs		
10:45-10:50am	Mechanistic Characterization of advanced electrolytes	Vijay Murugesan	Pacific Northwest National Laboratory
10:50-10:55am	Pre-Lithiation of Hard Carbon for Na-ion	Biwei Xiao	Pacific Northwest National Laboratory
10:55-11:00am	Investigation and Optimization of Sodium Metal Halide Batteries at Intermediate Temperature	Hee-Jung Chang	Pacific Northwest National Laboratory
11:00-12:30pm	Lunch, On Your Own		
	Equitable Regulatory Environment/Strategic Outreach		
	Presentations		
12:30-12:45pm	Overview of SNL Analysis and Controls Efforts	Ray Byrne	Sandia National Laboratories
12:45-1:00pm	MISO Analysis	Tu Nguyen	Sandia National Laboratories
1:00-1:15pm	Storage Evaluation Tools	David Copp	Sandia National Laboratories
1:15-1:30pm	WA CEF Valuation Efforts	Patrick Balducci	Pacific Northwest National Laboratory
1:30-1:45pm	Strategic Outreach Overview	Jacquelynne Hernandez	Sandia National Laboratories
2:00-2:30pm	PM Break		

Equitable Regulatory Environment/Strategic Outreach			
	Posters Briefs		
2:30-2:32pm	BPA Damping Control Project	David Schoenwald	Sandia National Laboratories
2:32-2:34pm	HECO Energy Storage Analysis	Jim Ellison, Lee Rashkin	Sandia National Laboratories
2:34-2:36pm	Sterling Municipal Light Department Analysis	Ray Byrne	Sandia National Laboratories
2:36-2:38pm	Behind the Meter Storage Valuation	Tu Nguyen	Sandia National Laboratories
2:38-2:40pm	German Market Analysis	Christoph Lackner, Tu Nguyen	Sandia National Laboratories
2:40-2:42pm	Nonlinear SOC Model Optimization	Tu Nguyen	Sandia National Laboratories
2:42-2:44pm	Distributed Control of Storage	David Copp, Felipe Wilches Bernal	Sandia National Laboratories
2:44-2:46pm	Los Alamos GMLC Analysis	Lee Rashkin, Jim Ellison	Sandia National Laboratories
2:46-2:48pm	Developing the Next Phase of the Global Energy Storage Database	Thu Ngo Matt Tafoya	Sandia National Laboratories CESA
2:48-2:50pm	The DOE/ESS Website & Social Media	Cris Romero	Sandia National Laboratories
2:50-2:52pm	Workforce Development for the Future Grid	Steve Gomez Morgan Henrie	Santa Fe Community College MH Consulting, Inc.
Applied Materials II			
	Presentations		
2:55-3:10pm	Ionic Liquid Flow Battery Materials	Travis Anderson, Leo Small	Sandia National Laboratories
3:10-3:25pm	Advanced Membranes for Vanadium Redox Flow Batteries (VRFB),	Cy Fujimoto	Sandia National Laboratories
3:25-3:40pm	Redox Flow Battery Development	Michael Aziz	Harvard University
3:40-3:55pm	Component Research for Redox Flow Batteries and 'Open' Batteries	Thomas Zawodzinski	University of Tennessee-Knoxville
3:55-4:10pm	Materials Chemistry to Advance Na-Batteries	Erik Spoerke	Sandia National Laboratories
	Posters Briefs		
4:10-4:13pm	Stability Investigations on Binary Additive V/V Electrolyte	Zimin Nie	Pacific Northwest National Laboratory
4:13-4:16pm	Degradation in MV-TEMPO ASO Flow Battery System	Xiaoliang Wei	Pacific Northwest National Laboratory
4:16-4:19pm	An Aqueous Flow Battery Utilizing a Phenazine-Based Anolyte	Aaron Hollas	Pacific Northwest National Laboratory
5:00-7:00pm	Meet & Greet Reception		

Tuesday October 10th
Peer Review Agenda

All Day	REGISTRATION		
8:00-8:10am	Welcoming Remarks		
	Validated Safety & Reliability		
	Presentations		
8:10-8:25am	R&D to Understand Lithium-ion Battery Failures and Mitigate Consequences of Failure	Summer Ferreira	Sandia National Laboratories
8:25-8:40am	Battery Abuse Testing Development	Josh Lamb	Sandia National Laboratories
8:40-8:55am	Modeling Thermochemical Runaway and Its Inhibition in Lithium-Ion Battery Systems	John Hewson	Sandia National Laboratories
8:55-9:10am	Assessment of Battery Reliability Data and Research Needs	David Reed	Pacific Northwest National Laboratory
9:10-9:25am	Update on Energy Storage System Safety Roadmap Codes and Standards Activities	David Conover	Pacific Northwest National Laboratory
9:25-9:55am	AM Break		
	Validated Safety & Reliability		
	Posters Briefs		
9:55-9:57am	Computing Modeling to Understand and Prevent Initial and Cascading Thermal Runaway	Randy Shurtz	Sandia National Laboratories
9:57-9:59am	Determining the Internal Pressure in 18650 Format Lithium Batteries Under Thermal Abuse	Frank Austin Mier	New Mexico Tech
9:59-10:01am	Comparison of Propagation Mitigation Techniques and Strategies	Loraine Torres-Castro	Sandia National Laboratories
10:01-10:03am	Impact of Frequency Regulation on degradation of commercial li-ion batteries	Daiwon Choi	Pacific Northwest National Laboratory
10:03-10:05am	Reliability study of vanadium redox flow batteries by superior stable DHE	Qian Huang	Pacific Northwest National Laboratory
10:05-10:07am	Compliance Guide for Energy Storage Safety	Pam Cole	Pacific Northwest National Laboratory
10:07-10:08am	Thermal Stability of Lithium-ion Batteries as a Function of Chemistry and State of Change	Heather Barkholtz	Sandia National Laboratories
10:08-10:09am	Estimating Lithium-ion Battery Fire Behavior from ARC Data Using CFAST Fire Model	Heather Barkholtz	Sandia National Laboratories
10:09-10:10am	Comparative Electrochemical Performance of Commercial 18650-Format Lithium-ion Cells	Heather Barkholtz	Sandia National Laboratories
	Power Electronics		
	Presentations		
10:10-10:25am	3300 V SiC MOSFETs for Energy Storage Power Electronics	Ranbir Singh	GeneSic
10:25-10:40am	Obstacles to high temperature DC-link capacitor reliability	Harlan Brown-Shaklee	Sandia National Laboratories
10:40-10:55	Advanced Magnetics for High Frequency Link Converters	Todd Monson	Sandia National Laboratories

	Posters Briefs		
10:55-10:57am	Gate Oxide Sentaurus Model for Wide-bandgap Devices	Adam Morgan	North Carolina State University
10:57-10:59am	Reliable High-Performance Gate Oxides for Wide Band Gap Devices	Peter Dickens	Sandia National Laboratories
10:59-11:01am	High Temperature Optocouplers for High Density Power Modules	Zhong Chen	University of Arkansas
11:01-11:03am	Distributed power processing for Li-ion batteries	Satish Ranade	New Mexico State University
11:03-11:05am	Optimal Control of Battery Energy Storage Systems	David Rosewater	Sandia National Laboratories
11:05-12:30pm	Lunch, On Your Own		
	Demonstrations and Analysis/ Special Use-Applications		
	Presentations		
12:30-12:40pm	Overview of the Energy Storage Project Sub-Program	Dan Borneo	Sandia National Laboratories
12:40-12:55pm	Sandia Collaboration Project with UET	Russ Weed	UniEnergy Technologies
12:55-1:10pm	Clean Energy States Alliance Update	Todd Olinsky-Paul	Clean Energy States Alliance
1:10-1:25pm	Sterling Municipal ES Project	Matt Stelmach	Sterling Municipal Light Department
1:25-1:40pm	State Regulatory Efforts	Rebecca O'Neil	Pacific Northwest National Laboratory
1:40-1:55pm	Collaborative Demo for Secondary Use and Use Case Validation	Michael Starke	Oak Ridge National Laboratory
	Posters Briefs		
1:55-1:57pm	Energy Storage Data Submission Guidelines	Cole Benson	Sandia National Laboratories
1:57-1:59m	Energy Storage Demonstration Project with Electric Power Board	Michael Starke	Oak Ridge National Laboratory
1:59-2:01pm	Update on the Natural Energy Laboratory of Hawaii Authority ESS Projects	Laurence Sombardier	Natural Energy Laboratory of Hawaii Authority
2:01-2:03pm	Value of High Power, Short Duration Energy Storage	Matthew Lazarewicz	Helix Power
2:03-2:05pm	PGE Storage Analysis	Patrick Balducci	Pacific Northwest National Laboratory
2:05-2:07pm	Sandia's Energy Storage Project Status	Benjamin Schenkman	Sandia National Laboratories
2:07-2:09pm	Test Results from CEF	Vish Vishwanathan	Pacific Northwest National Laboratory
2:09-2:11pm	Non-linear Battery Model into BSET	Di Wu	Pacific Northwest National Laboratory
2:11-2:20pm	Closing Remarks	Michael Pesin	US Department of Energy/Office of Electricity Delivery and Energy Reliability
2:20-2:35	Closing Remarks	Imre Gyuk	US Department of Energy/Office of Electricity Delivery and Energy Reliability
2:25-4:15pm	**Poster Session**		

6:00pm	Networking Dinner Cruise