TUESDAY GENERAL SESSION AGENDA

Tuesday	y, February 14			
Start Time	Presentation Title	Room	Presenter	Presenter Org
8:00 AM	Joint Breakfast with Wind and Water Attendees	Commonwealth Ballroom		
8:45 AM	Facilitator Welcome	Commonwealth Ballroom	Alex Lemke	U.S. Department of Energy
9:00 AM	Wind Director Welcome	Commonwealth Ballroom	Jose Zayas	Wind Energy Technologies Office
9:25 AM	Water Director Welcome	Commonwealth Ballroom	Alejandro Moreno	Water Power Technologies Office
12:30 PM	Lunch Keynote	Commonwealth Ballroom	Guest Speaker	
5:30 PM	Poster Session	Foyer		

Tuesday, February 14							
Start Time	Presentation Title	Room	Session	Presenter	Presenter Org		
8:00 AM	Joint Breakfast with Wind and Water Attendees	Commonwealth Ballroom					
8:45 AM	Facilitator Welcome	Commonwealth		Alex Lemke	U.S. DOE		
9:00 AM	Wind Director Welcome	Commonwealth		Jose Zayas	U.S. DOE		
9:25 AM	Water Director Welcome	Commonwealth		Alejandro Moreno	U.S. DOE		
9:55 AM	Program Lead Presentation	Cavalier C		Jocelyn Brown-Saracino	U.S. DOE		
10:10 AM	Chairperson Welcome and Intro to Panel	Cavalier C		Stu Webster	Chair		
10:25 AM	Overview of Analysis and Modeling	Cavalier C	Analysis	Patrick Gilman	U.S. DOE		
10:40 AM	Cost of Energy, Policy Impact Analysis, and Market Report	Cavalier C	Analysis	Ryan Wiser	Lawrence Berkeley National Laboratory (LBNL)		
11:05 AM	Overview of Stakeholder Engagement	Cavalier C	Stakeholders	Jocelyn Brown-Saracino	U.S. DOE		
11:20 AM	Public Acceptance Baseline Analysis	Cavalier C	Stakeholders	Ben Hoen	LBNL		
11:45 AM	WindExchange and Regional Resource Centers	Cavalier C	Stakeholders	lan Baring-Gould	National Renewable Energy Laboratory (NREL)		
12:15 PM	Reviewer Note Taking						
12:30 PM	LUNCH KEYNOTE	Commonwealth Ballroom		Guest Speaker			
1:30 PM	Recap – Stakeholder Engagement	Cavalier C	Stakeholders	Jocelyn Brown-Saracino	U.S. DOE		

1:35 PM	Collegiate Wind Competition (CWC)	Cavalier C	Stakeholders	Suzanne Tegen	NREL
2:00 PM	Wind for Schools	Cavalier C	Stakeholders	Mark Jacobson	NREL
2:25 PM	Overview of Grid Systems Planning and Operation	Cavalier C	Grid	Charlton Clark	U.S. DOE
2:40 PM	Wind Integration Studies (ERGIS and WWSIS 3)	Cavalier C	Grid	Aaron Bloom	NREL
3:20 PM	Wind Generator Modeling	Cavalier C	Grid	Ben Karlson	Sandia National Laboratories (SNL)
3:40 PM	Stochastic Tool Evaluation	Cavalier C	Grid	Audun Botterud	Argonne National Laboratory (ANL)
4:00 PM	BREAK	Foyer	Grid		
4:15 PM	Recap - Grid Systems Planning and Operation	Cavalier C	Grid	Charlton Clark	U.S. DOE
4:20 PM	Distributed Wind Integration	Cavalier C	Grid	Bri-Mathias Hodge	NREL

4:40 PM	Grid Integration Support, UVIG, IEEE, NERC, IEA Task 25	Cavalier C	Grid	Dave Corbus	NREL
5:00 PM	Concurrent Cooling	Cavalier C	Grid	Jake Gentle	Idaho National Laboratory (INL)
5:20 PM	BREAK	Foyer			
5:30 PM	POSTER SESSION	Foyer			

MARKET ACCELERATION AND DEPLOYMENT

Wednesday, February 15						
Start Time	Presentation Title	Room	Session	Presenter	Presenter Org	
8:00 AM	Joint Breakfast with Wind and Water Attendees	Commonwealth Ballroom				
8:45 AM	Daily Recap	Commonwealth Ballroom		Alex Lemke	U.S. DOE	
9:05 AM	Recap - Grid Systems Planning and Operation	Cavalier C	Grid	Charlton Clark	U.S. DOE	
9:10 AM	Connecting the National Wind Test Center to the Energy Systems Integration Facility	Cavalier C	Grid	Dave Corbus	NREL	
9:35 AM	Analysis Using PMU Data and Dynamic Analysis	Cavalier C	Grid	Eduard Muljadi	NREL	
10:00 AM	Active Power Controls	Cavalier C	Grid	Yingchen Zhang	NREL	
10:25 AM	BREAK	Foyer				
10:40 AM	Overview of Siting, Radar, and Environmental	Cavalier C	Siting	Jocelyn Brown-Saracino	U.S. DOE	
10:55 AM	SNL Wind-Turbine RCS Mitigation	Cavalier C	Siting	Ben Karlson	SNL	
11:20 AM	MIT Lincoln Labs Radar Mitigation R&D	Cavalier C	Siting	Jason Biddle	MIT Lincoln Laboratory	
11:45 AM	Wind Environmental Collaborative Research and Support	Cavalier C	Siting	Karin Sinclair	NREL	
12:10 PM	BREAK	Foyer				
12:30 PM	LUNCH KEYNOTE	Commonwealth Ballroom		Guest Speaker		
1:30 PM	Recap – Siting, Radar, and Environmental	Cavalier C	Siting	Jocelyn Brown-Saracino	U.S. DOE	

1:35 PM	Texturizing Wind Turbine Towers to Reduce Bat Mortality	Cavalier C	Siting	Victoria Bennett	Texas Christian University
2:00 PM	A Biomimetic Ultrasonic Whistle for Use as a Bat Deterrent on Wind Turbines	Cavalier C	Siting	Paul Sievert	University of Massachusetts Amherst
2:25 PM	Rotor-Mounted Bat Impact Mitigation System	Cavalier C	Siting	Myron Miller	Frontier Wind LLC
2:50 PM	Ultrasonic Bat Deterrent Technology	Cavalier C	Siting	Michael Booth	General Electric
3:15 PM	Evaluating the Effectiveness of Ultrasonic Acoustic Deterrents in Reducing Bat Fatalities at Wind Energy Facilities	Cavalier C	Siting	Cris Hein	Bat Conservation International
3:40 PM	BREAK	Foyer			
3:55 PM	Recap - Siting, Radar, and Environmental	Cavalier C	Siting	Jocelyn Brown-Saracino	U.S. DOE
4:00 PM	OSW Environmental Data Aggregation, Analysis and Dissemination	Cavalier C	Siting	Andrea Copping	Pacific Northwest National Laboratory (PNNL)

4:20 PM	Stereo-Optic High Definition Imaging: A New Technology to Understand Bird and Bat Avoidance of Wind Turbines	Cavalier C	Siting	Evan Adams	Biodiversity Research Institute
4:40 PM	Avian Remote Sensing	Cavalier C	Siting	Shari Matzner	PNNL
5:00 PM	Closing Thoughts-Chair	Cavalier C		Stu Webster	Chair / Independent Consultant
5:30 PM	Closing Thoughts-Director	Cavalier C		Jose Zayas	U.S. DOE

MARKET ACCELERATION AND DEPLOYMENT

Thursday, February 16							
Start Time	Presentation Title	Room	Session	Presenter	Presenter Org		
8:00 AM	Joint Breakfast with Wind and Water Attendees	Commonwealth Ballroom					
8:45 AM	Daily Recap	Commonwealth Ballroom		Alex Lemke	U.S. DOE		
9:05 AM	Market Acceleration and Deployment Panel Debrief (closed session)	Cavalier C		Stu Webster	Chair / Independent Consultant		
10:05 AM	Reviewer Note Taking Time	Mezzanine 1					
12:30 PM	LUNCH KEYNOTE	Commonwealth Ballroom		Guest Speaker			
1:30 PM	Reviewer Note Taking Time	Mezzanine 1					

MARKET ACCELERATION AND DEPLOYMENT

Tuesday, February 14

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8:00 AM	Joint Breakfast with Wind and Water Attendees	Commonwealth Ballroom			
8:45 AM	Facilitator Welcome	Commonwealth Ballroom		Alex Lemke	U.S. DOE
9:00 AM	Wind Director Welcome	Commonwealth Ballroom		Jose Zayas	U.S. DOE
9:25 AM	Water Director Welcome	Commonwealth Ballroom		Alejandro Moreno	U.S. DOE
9:55 AM	Program Lead Presentation	Mezzanine 3		Mike Derby	U.S. DOE
10:10 AM	Chairperson Welcome and Intro to Panel	Mezzanine 3		Sandy Butterfield	Chair / Boulder Wind Consulting
10:20 AM	Overview of Innovation, Manufacturing, Reliability, and Testing	Mezzanine 3	Innovation	Megan McCluer	U.S. DOE
10:35 AM	Additive Manufacturing in Wind Turbine Components and Tooling	Mezzanine 3	Innovation	Brian Post	Oak Ridge National Laboratory (ORNL)
11:10 AM	Development of On-Site Tapered Spiral Welding for Large Turbine Towers	Mezzanine 3	Innovation	Eric Smith	Keystone Tower Systems
11:35 AM	Hexcrete Tower for Harvesting Wind Energy at Taller Hub Heights	Mezzanine 3	Innovation	Sri Sritharan	Iowa State University
12:00 PM	Reviewer Note Taking	Mezzanine 3			
12:30 PM	LUNCH KEYNOTE	Commonwealth Ballroom		Guest Speaker	
1:30 PM	Recap - Innovation, Manufacturing, Reliability, and Testing	Mezzanine 3	Innovation	Megan McCluer	U.S. DOE

1:35 PM	Testing Facilities and Capabilities at SNL	Mezzanine 3	Innovation	Jon White	SNL
2:05 PM	Testing Facilities and Capabilities at NWTC	Mezzanine 3	Innovation	Dave Simms	NREL
2:50 PM	Innovative Blade Test Methodology	Mezzanine 3	Innovation	Scott Hughes	NREL
3:10 PM	BREAK	Foyer	Innovation		
3:25 PM	Recap - Innovation, Manufacturing, Reliability, and Testing	Mezzanine 3	Innovation	Megan McCluer	U.S. DOE
3:30 PM	Rotor Reliability (Collaboratives, Monitoring, and O&M)	Mezzanine 3	Innovation	Josh Paquette	SNL
3:50 PM	Drivetrain Reliability (Collaboratives, Monitoring, and O&M)	Mezzanine 3	Innovation	Jonathan Keller	NREL
4:10 PM	Innovative Drivetrain Concepts FOA Phase II: Next Generation Drivetrain	Mezzanine 3	Innovation	Jonathan Keller	NREL

4:30 PM	Online Intelligent Prognostic Health Monitoring	Mezzanine 3	Innovation	Wei Qiao	University of Nebraska-Lincoln
4:50 PM	Reviewer Note Taking	Mezzanine 3			
5:30 PM	POSTER SESSION	Foyer			

RESOURCE CHARACTERIZATION AND TECHNOLOGY RESEARCH, DEVELOPMENT, AND TESTING

Wednesday, February 15

Start Time	Presentation Title	Room	Session	Presenter	Presenter Org
8:00 AM	Joint Breakfast with Wind and Water Attendees	Commonwealth Ballroom			
8:45 AM	Daily Recap	Commonwealth Ballroom		Alex Lemke	U.S. DOE
9:05 AM	Recap - Innovation, Manufacturing, Reliability, and Testing	Mezzanine 3	Innovation	Megan McCluer	U.S. DOE
9:10 AM	Wind Standards Development	Mezzanine 3	Innovation	Jeroen VanDam	NREL
9:35 AM	Advanced High Torque Density Magnetically Geared Generator	Mezzanine 3	Innovation	Jonathan Bird	University of North Carolina at Charlotte
10:00 AM	The Incubation of Next-Generation Radar Technologies to Lower the Cost of Wind Energy	Mezzanine 3	Innovation	John Schroeder	Texas Tech University
10:25 AM	Overview of Atmosphere to Electrons, High-Performance Computing, Resource Characterization, Flow Field Analysis, and Testing	Mezzanine 3	Atmosphere to Electrons	Joel Cline	U.S. DOE
10:40 AM	PRUF: Performance Risk, Uncertainty, and Finance	Mezzanine 3	Atmosphere to Electrons	Jason Fields	NREL
11:05 AM	High-Fidelity Modeling	Mezzanine 3	Atmosphere to Electrons	Mike Sprague	NREL
11:30 AM	BREAK	Foyer			
11:40 AM	Wake Dynamics Measurement, Testing, and Validation	Mezzanine 3	Atmosphere to Electrons	Brian Naughton	SNL
12:05 PM	Wind Plant Flow Control	Mezzanine 3	Atmosphere to Electrons	Alan Wright	NREL
12:30 PM	LUNCH KEYNOTE	Commonwealth Ballroom		Guest Speaker	
1:30 PM	ISDA: Integrated Systems Design and Analysis	Mezzanine 3	Atmosphere to Electrons	Katherine Dykes	NREL

1:50 PM	Recap - Atmosphere to Electrons, High-Performance Computing, Resource Characterization, Flow Field Analysis, and Testing	Mezzanine 3	Atmosphere to Electrons	Joel Cline	U.S. DOE
1:55 PM	MMC: Model Development and Validation	Mezzanine 3	Atmosphere to Electrons	Sue Haupt	PNNL
2:15 PM	WFIP II: Mesoscale Physics and Inflow	Mezzanine 3	Atmosphere to Electrons	Will Shaw	PNNL
2:25 PM	WFIP II: Field Testing	Mezzanine 3	Atmosphere to Electrons	Jim Wilczak	PNNL
2:35 PM	WFIP II: Modeling	Mezzanine 3	Atmosphere to Electrons	Jim McCaa	Vaisala
2:45 PM	WFIP II: Q&A	Mezzanine 3	Atmosphere to Electrons	Will Shaw	PNNL
3:00 PM	BREAK	Foyer			
3:15 PM	Recap - Atmosphere to Electrons, High-Performance Computing, Resource Characterization, Flow Field Analysis, and Testing	Mezzanine 3	Atmosphere to Electrons	Joel Cline	U.S. DOE
3:20 PM	DAP: Data Archive and Portal	Mezzanine 3	Atmosphere to Electrons	Chitra Sivaraman	PNNL
3:40 PM	Overview of Distributed Wind Research, Development, and Testing	Mezzanine 3	Distributed Wind	Patrick Gilman	U.S. DOE
3:55 PM	Distributed Wind Research, Development, and Testing	Mezzanine 3	Distributed Wind	Ian Baring-Gould	NREL
4:15 PM	Competitive Improvement Project	Mezzanine 3	Distributed Wind	lan Baring-Gould	NREL

RESOURCE CHARACTERIZATION AND TECHNOLOGY RESEARCH, DEVELOPMENT, AND TESTING

Thursday, February 16

Start Time	Presentation Title	Room	Session	Presenter	Presenter Org
8:00 AM	Joint Breakfast with Wind and Water Attendees	Commonwealth Ballroom			
8:45 AM	Daily Recap	Commonwealth Ballroom		Alex Lemke	U.S. DOE
9:05 AM	Overview of Offshore Wind Unique Research, Development, and Testing	Mezzanine 3	Offshore Wind	Alana Duerr	U.S. DOE
9:25 AM	Modeling and Validation for Offshore Wind	Mezzanine 3	Offshore Wind	Amy Robertson	NREL
9:50 AM	Wave Impacts on Fixed Offshore Wind Foundations	Mezzanine 3	Offshore Wind	Ralph Nichols	SRNL
10:15 AM	Sediment Transport Impacts on Offshore Wind Projects	Mezzanine 3	Offshore Wind	Jesse Roberts	SNL
10:40 AM	BREAK	Foyer			
10:55 AM	Recap - Offshore Wind Unique Research, Development, and Testing	Mezzanine 3	Offshore Wind	Alana Duerr	U.S. DOE
11:00 AM	Instrumentation Planning for the Offshore Wind Advanced Technology Demonstration Projects	Mezzanine 3	Offshore Wind	Walt Musial	NREL
11:20 AM	Structural Health and Prognostic Management for Offshore Wind Projects	Mezzanine 3	Offshore Wind	Todd Griffith	SNL
11:40 AM	DOE Offshore Wind Lidar Buoy Deployment Program	Mezzanine 3	Offshore Wind	Will Shaw	PNNL
12:05 PM	National Offshore Wind Strategy Supporting Analysis	Mezzanine 3	Offshore Wind	Walt Musial	NREL
12:30 PM	LUNCH KEYNOTE	Commonwealth Ballroom		Guest Speaker	

1:30 PM	Recap – Offshore Wind Unique Research, Development, and Testing	Mezzanine 3	Offshore Wind	Alana Duerr	U.S. DOE
1:40 PM	Turbine Advanced Controls for Offshore Wind Floating Applications	Mezzanine 3	Offshore Wind	Dhiraj Arora	General Electric
2:00 PM	The University of Maine's New England Aqua Ventus I Program	Mezzanine 3	Offshore Wind	Habib Dagher	University of Maine
2:20 PM	Hywind Maine Project	Mezzanine 3	Offshore Wind	Andrea Nina Eugster	Statoil
2:45 PM	WindFloat Pacific Project	Mezzanine 3	Offshore Wind	Kevin Banister	Principle Power, Inc.
3:10 PM	BREAK	Foyer			
3:25 PM	Recap - Overview of Offshore Wind Unique Research, Development, and Testing	Mezzanine 3	Offshore Wind	Alana Duerr	U.S. DOE
3:30 PM	Fishermen's Atlantic City Wind Farm	Mezzanine 3	Offshore Wind	Chris Wissemann	Fishermen's Energy
3:55 PM	Project Icebreaker	Mezzanine 3	Offshore Wind	Dave Karpinski	Lake Erie Energy Development Corporation
4:20 PM	Closing Thoughts-Chair	Mezzanine 3		Sandy Butterfield	Chair / Boulder Wind Consulting
4:35 PM	Closing Thoughts-Director	Mezzanine 3		Jose Zayas	U.S. DOE

RESOURCE CHARACTERIZATION AND TECHNOLOGY RESEARCH, DEVELOPMENT, AND TESTING