

2019 PROJECT PEER REVIEW

U.S. DEPARTMENT OF ENERGY
WIND ENERGY TECHNOLOGIES OFFICE

U.S. DEPARTMENT OF
ENERGY

Office of
**ENERGY EFFICIENCY &
RENEWABLE ENERGY**

HOSTED AT THE HILTON ALEXANDRIA OLD TOWN
1767 KING ST | ALEXANDRIA, VA 22314

April 30, 2019 Technology Development						
Start	End	Project Name	Track	Session	Room	Presenter
8:00 AM	8:30 AM	Breakfast			Grand Ballroom A&B	
8:30 AM	9:00 AM	DOE - Program Director, WETO - Valerie Reed	Plenary	Plenary	Grand Ballroom A&B	Reed
9:00 AM	9:30 AM	Keynote Speaker - Henrik Stiesdal	Plenary	Plenary	Grand Ballroom A&B	Stiesdal
9:30 AM	9:50 AM	DOE - Assistant Secretary, EERE - Daniel Simmons	Plenary	Plenary	Grand Ballroom A&B	Simmons
9:50 AM	10:20 AM	Overview of MA&D Program	Plenary	Plenary	Grand Ballroom A&B	Brown-Saracino
10:20 AM	10:50 AM	Overview of TD Program	Plenary	Plenary	Grand Ballroom A&B	Derby
10:50 AM	11:05 AM	Break				
11:05 AM	11:20 AM	Overview of Analysis & Modeling	Plenary	Analysis and Modeling	Grand Ballroom A&B	Gilman
11:20 AM	11:50 AM	Modeling & Analysis to Inform WETO R&D	Plenary	Analysis and Modeling	Grand Ballroom A&B	Wiser
11:50 AM	12:20 PM	Distributed Wind Research, Development, and Testing (PNNL)	Plenary	Analysis and Modeling	Grand Ballroom A&B	Orrell
12:20 PM	1:20 PM	Lunch			Grand Ballroom A&B	
1:20 PM	1:45 PM	Land Based and Offshore Wind Plant Technology-Characterization and System Cost of Energy Analysis Involving Data Collection, Model Development, and Analysis Activities	Plenary	Analysis and Modeling	Grand Ballroom A&B	Lantz
1:45 PM	2:10 PM	Offshore Wind Strategy Follow on Analysis	Plenary	Analysis and Modeling	Grand Ballroom A&B	Barter
2:10 PM	2:35 PM	Techno-Economic Modeling, Analysis and Support for HQ Taskers/Urgent Needs	Plenary	Analysis and Modeling	Grand Ballroom A&B	Lantz
2:35 PM	2:50 PM	Future Work for NREL Wind Analysis	Plenary	Analysis and Modeling	Grand Ballroom A&B	Lantz
2:50 PM	3:05 PM	Transition				
3:05 PM	3:20 PM	Overview of Offshore Specific R&D	Technology Development	Offshore Specific R&D	Grand Ballroom C	Norton
3:20 PM	3:50 PM	Cost Of Energy reduction for offshore Tension Leg Platform (TLP) wind turbine systems through advanced control strategies for energy yield improvement, load mitigation and stabilization	Technology Development	Offshore Specific R&D	Grand Ballroom C	Norton
3:50 PM	4:20 PM	Project Icebreaker	Technology Development	Offshore Specific R&D	Grand Ballroom C	Wagner
4:20 PM	4:35 PM	Break				
4:35 PM	5:05 PM	Aqua Ventus	Technology Development	Offshore Specific R&D	Grand Ballroom C	Dagher
5:05 PM	5:35 PM	Offshore Resource Characterization	Technology Development	Offshore Specific R&D	Grand Ballroom C	Shaw
5:35 PM	6:05 PM	Optional: Peer Reviewer Debrief			Madison	

2019 PROJECT PEER REVIEW

U.S. DEPARTMENT OF ENERGY
WIND ENERGY TECHNOLOGIES OFFICE

U.S. DEPARTMENT OF
ENERGY

Office of
**ENERGY EFFICIENCY &
RENEWABLE ENERGY**

May 1, 2019 Technology Development						
Start	End	Project Name	Track	Session	Room	Presenter
8:00 AM	8:30 AM	Breakfast			Grand Ballroom A&B	
8:30 AM	8:50 AM	Keynote Speaker - Bill Mahoney	Plenary	Plenary	Grand Ballroom A&B	Mahoney
8:50 AM	9:20 AM	Overview of WETO Communications & Operations	Plenary	Plenary	Grand Ballroom A&B	Hartman
9:20 AM	9:30 AM	Transition				
9:30 AM	10:00 AM	Overview of Atmosphere to Electrons (A2e)	Technology Development	A2e	Grand Ballroom C	Robinson
10:00 AM	10:30 AM	Atmospheric Science - A2e PRUF	Technology Development	A2e	Grand Ballroom C	Fields
10:30 AM	10:45 AM	Break				
10:45 AM	11:35 AM	Atmospheric Science - A2e: Mesoscale Physics and Inflow: WFIP 2 (+FOA awardee)	Technology Development	A2e	Grand Ballroom C	Shaw, Turner
11:35 AM	12:15 PM	Atmospheric Science - MMC - Model Development & Validation	Technology Development	A2e	Grand Ballroom C	Haupt
12:15 PM	1:15 PM	Lunch			Grand Ballroom A&B	
1:15 PM	1:55 PM	Wind Plant Science - High-Fidelity Modeling	Technology Development	A2e	Grand Ballroom C	Sprague
1:55 PM	2:25 PM	Wind Plant Science - Rotor Wake Measurements & Predictions for Validation	Technology Development	A2e	Grand Ballroom C	Moriarty
2:25 PM	2:55 PM	Wind Plant Science - Advanced Flow Control Science for Wind Plants	Technology Development	A2e	Grand Ballroom C	Fleming
2:55 PM	3:15 PM	Wind Plant Science - Small Business Vouchers - WindESCo	Technology Development	A2e	Grand Ballroom C	Fleming, King
3:15 PM	3:30 PM	Break				
3:30 PM	4:00 PM	Integrated Systems Design - Multi Physics Model Validation & UQ	Technology Development	A2e	Grand Ballroom C	Jonkman
4:00 PM	4:30 PM	Integrated Systems Design and Analysis	Technology Development	A2e	Grand Ballroom C	Barter
4:30 PM	5:00 PM	Integrated Systems Design and Analysis (OSW)	Technology Development	A2e	Grand Ballroom C	Robertson
5:00 PM	5:05 PM	Break				
5:05 PM	5:20 PM	Overview of Distributed Wind R&D	Technology Development	Distributed Wind R&D	Grand Ballroom C	Gilman
5:20 PM	5:50 PM	Distributed Wind Research, Development, and Testing	Technology Development	Distributed Wind R&D	Grand Ballroom C	Baring-Gould
5:50 PM	6:20 PM	Optional: Peer Reviewer Debrief			Madison	

2019 PROJECT PEER REVIEW

U.S. DEPARTMENT OF ENERGY
WIND ENERGY TECHNOLOGIES OFFICE

U.S. DEPARTMENT OF
ENERGY

Office of
**ENERGY EFFICIENCY &
RENEWABLE ENERGY**

May 2, 2019 Technology Development						
Start	End	Project Name	Track	Session	Room	Presenter
8:00 AM	8:30 AM	Breakfast			Grand Ballroom A&B	
8:30 AM	8:50 AM	Keynote Speaker - Paul Donley	Plenary	Plenary	Grand Ballroom A&B	Donley
8:50 AM	9:10 AM	Multi-Year Program Plan	Plenary	Plenary	Grand Ballroom A&B	Ahlgrimm
9:10 AM	9:20 AM	Transition				
9:20 AM	9:35 AM	Overview of Testing Infrastructure Program	Technology Development	Testing Infrastructure	Grand Ballroom C	Ahlgrimm
9:35 AM	10:05 AM	Testing Facilities and Capabilities at NWTTC	Technology Development	Testing Infrastructure	Grand Ballroom C	Simms
10:05 AM	10:35 AM	Testing Facilities and Capabilities at Sandia: Field Test Facilities - DOE Turbine Facilities and Test Sites O&M	Technology Development	Testing Infrastructure	Grand Ballroom C	Berg
10:35 AM	10:45 AM	Break				
10:45 AM	11:00 AM	Overview of Standards Support & International Engagement	Technology Development	Standards Support & International Engagement	Grand Ballroom C	Ahlgrimm
11:00 AM	11:30 AM	Wind Standards Development	Technology Development	Standards Support & International Engagement	Grand Ballroom C	van Dam
11:30 AM	11:40 AM	Break				
11:40 AM	11:50 AM	Overview of Technology to Market Activities & Small Business Voucher Program	Technology Development	Technology-to-Market / Small Business Vouchers	Grand Ballroom C	Lemke
11:50 AM	12:10 PM	Technology to Market (T2M)	Technology Development	Technology-to-Market / Small Business Vouchers	Grand Ballroom C	Lemke, Aston
12:10 PM	12:45 PM	Small Business Vouchers - Micron/NIRE/SkySpecs	Technology Development	Technology-to-Market / Small Business Vouchers	Grand Ballroom C	Paquette, Ennis, Berg
12:45 PM	1:45 PM	Lunch			Grand Ballroom A&B	
1:45 PM	2:00 PM	Overview of Advanced Components, Reliability, and Manufacturing	Technology Development	Advanced Components, Reliability, & Manufacturing	Grand Ballroom C	Ring
2:00 PM	2:30 PM	Optimized Carbon Fiber Composites for Wind Turbine Blades	Technology Development	Advanced Components, Reliability, & Manufacturing	Grand Ballroom C	Ennis
2:30 PM	3:00 PM	Big Adaptive Rotor	Technology Development	Advanced Components, Reliability, & Manufacturing	Grand Ballroom C	Paquette
3:00 PM	3:15 PM	Break				
3:15 PM	3:45 PM	Additive Manufacturing in Wind Turbine Components and Tooling	Technology Development	Advanced Components, Reliability, & Manufacturing	Grand Ballroom C	Post
3:45 PM	4:05 PM	Small Business Vouchers - Tower Technology	Technology Development	Technology-to-Market / Small Business Vouchers	Grand Ballroom C	Veers
4:05 PM	4:35 PM	Wind Turbine Blade Durability and Damage Tolerance	Technology Development	Advanced Components, Reliability, & Manufacturing	Grand Ballroom C	Paquette
4:35 PM	4:50 PM	Break				
4:50 PM	5:10 PM	Small Business Vouchers - Sentient	Technology Development	Technology-to-Market / Small Business Vouchers	Grand Ballroom C	Ennis
5:10 PM	5:50 PM	Wind Turbine Drivetrain Reliability	Technology Development	Advanced Components, Reliability, & Manufacturing	Grand Ballroom C	Keller
5:50 PM	6:20 PM	Optional: Peer Reviewer Debrief			Madison	

2019 PROJECT PEER REVIEW

U.S. DEPARTMENT OF ENERGY
WIND ENERGY TECHNOLOGIES OFFICE

U.S. DEPARTMENT OF
ENERGY

Office of
**ENERGY EFFICIENCY &
RENEWABLE ENERGY**

HOSTED AT THE HILTON ALEXANDRIA OLD TOWN
1767 KING ST | ALEXANDRIA, VA 22314

April 30, 2019 - Market Acceleration & Deployment						
Start	End	Project Name	Track	Session	Room	Presenter
8:00 AM	8:30 AM	Breakfast			Grand Ballroom A&B	
8:30 AM	9:00 AM	DOE - Program Director, WETO - Valerie Reed	Plenary	Plenary	Grand Ballroom A&B	Reed
9:00 AM	9:30 AM	Keynote Speaker - Henrik Stiesdal	Plenary	Plenary	Grand Ballroom A&B	Stiesdal
9:30 AM	9:50 AM	DOE - Assistant Secretary, EERE - Daniel Simmons	Plenary	Plenary	Grand Ballroom A&B	Simmons
9:50 AM	10:20 AM	Overview of MA&D Program	Plenary	Plenary	Grand Ballroom A&B	Brown-Saracino
10:20 AM	10:50 AM	Overview of TD Program	Plenary	Plenary	Grand Ballroom A&B	Derby
10:50 AM	11:05 AM	Break				
11:05 AM	11:20 AM	Overview of Analysis & Modeling	Plenary	Analysis and Modeling	Grand Ballroom A&B	Gilman
11:20 AM	11:50 AM	Modeling & Analysis to Inform WETO R&D	Plenary	Analysis and Modeling	Grand Ballroom A&B	Wiser
11:50 AM	12:20 PM	Distributed Wind Research, Development, and Testing (PNNL)	Plenary	Analysis and Modeling	Grand Ballroom A&B	Orrell
12:20 PM	1:20 PM	Lunch			Grand Ballroom A&B	
1:20 PM	1:45 PM	Land Based and Offshore Wind Plant Technology-Characterization and System Cost of Energy Analysis Involving Data Collection, Model Development and Analysis Activities	Plenary	Analysis and Modeling	Grand Ballroom A&B	Lantz
1:45 PM	2:10 PM	Offshore Wind Strategy Follow on Analysis	Plenary	Analysis and Modeling	Grand Ballroom A&B	Barter
2:10 PM	2:35 PM	Techno-Economic Modeling, Analysis and Support for HQ Tasks/Urgent Needs	Plenary	Analysis and Modeling	Grand Ballroom A&B	Lantz
2:35 PM	2:50 PM	Future Work for NREL Wind Analysis	Plenary	Analysis and Modeling	Grand Ballroom A&B	Lantz
2:50 PM	3:05 PM	Transition				
3:05 PM	3:20 PM	Overview of Stakeholder Engagement & Workforce Development	Market Acceleration & Deployment	Stakeholder Engagement & Workforce Development	Potomac	Yancey, Brown-Saracino
3:20 PM	3:50 PM	WindExchange and Regional Resource Centers	Market Acceleration & Deployment	Stakeholder Engagement & Workforce Development	Potomac	Baring-Gould
3:50 PM	4:20 PM	Collegiate Wind Competition	Market Acceleration & Deployment	Stakeholder Engagement & Workforce Development	Potomac	Baring-Gould
4:20 PM	4:50 PM	Wind for Schools	Market Acceleration & Deployment	Stakeholder Engagement & Workforce Development	Potomac	Baring-Gould
4:50 PM	5:20 PM	Optional: Peer Reviewer Debrief			Madison	

May 1, 2019 - Market Acceleration & Deployment						
Start	End	Project Name	Track	Session	Room	Presenter
8:00 AM	8:30 AM	Breakfast			Grand Ballroom A&B	
8:30 AM	8:50 AM	Keynote Speaker - Bill Mahoney	Plenary	Plenary	Grand Ballroom A&B	Mahoney
8:50 AM	9:20 AM	Overview of WETO Communications & Operations	Plenary	Plenary	Grand Ballroom A&B	Hartman
9:20 AM	9:30 AM	Transition				
9:30 AM	9:50 AM	Environmental Research: Program Overview & National Lab Research	Market Acceleration & Deployment	Environmental Research	Potomac	Brown-Saracino
9:50 AM	10:35 AM	Wind Operational Issue Mitigation (NREL)	Market Acceleration & Deployment	Environmental Research	Potomac	Hein
10:35 AM	11:05 AM	Wind Operational Issue Mitigation (PNNL)	Market Acceleration & Deployment	Environmental Research	Potomac	Copping
11:05 AM	11:10 AM	Break				
11:10 AM	11:25 AM	Environmental Research: Overview of Eagle FOA	Market Acceleration & Deployment	Environmental Research	Potomac	Brown-Saracino
11:25 AM	11:55 AM	Detection and Perception of Sound by Eagles and Surrogate Raptors	Market Acceleration & Deployment	Environmental Research	Potomac	Marr
11:55 AM	12:25 PM	Understanding the Golden Eagle Sensory World to Enhance Detection and Response to Wind Turbines	Market Acceleration & Deployment	Environmental Research	Potomac	Tisch
12:25 PM	1:25 PM	Lunch			Grand Ballroom A&B	
1:25 PM	1:55 PM	A Heterogeneous System for Eagle Detection, Deterrent, and Wildlife Collision Detection for Wind Turbines	Market Acceleration & Deployment	Environmental Research	Potomac	Johnston
1:55 PM	2:15 PM	Eagle Take Minimization System (Laufer)	Market Acceleration & Deployment	Environmental Research	Potomac	Tisch
2:15 PM	2:45 PM	Evaluating the Effectiveness of a Detection and Deterrent System in Reducing Golden Eagle Fatalities at Operational Wind Facilities	Market Acceleration & Deployment	Environmental Research	Potomac	Allison
2:45 PM	3:15 PM	Evaluating the Effectiveness of a Camera-Based Detection System to Support Informed Curtailment and Minimize Eagle Fatalities at Wind Energy Facilities	Market Acceleration & Deployment	Environmental Research	Potomac	Allison
3:15 PM	3:30 PM	Break				
3:30 PM	3:45 PM	Environmental Research: Overview of Bat FOA	Market Acceleration & Deployment	Environmental Research	Potomac	Brown-Saracino
3:45 PM	4:05 PM	A Biomimetic Ultrasonic Whistle for Use as a Bat Deterrent on Wind Turbines	Market Acceleration & Deployment	Environmental Research	Potomac	Brown-Saracino
4:05 PM	4:25 PM	Texturizing Wind Turbine Towers to Reduce Bat Mortality	Market Acceleration & Deployment	Environmental Research	Potomac	Brown-Saracino
4:25 PM	4:45 PM	Rotor-Mounted Bat Impact Mitigation System	Market Acceleration & Deployment	Environmental Research	Potomac	Brown-Saracino
4:45 PM	5:05 PM	Ultrasonic Bat Deterrent Technology	Market Acceleration & Deployment	Environmental Research	Potomac	Kinzie
5:05 PM	5:25 PM	Evaluating the Effectiveness of Ultrasonic Acoustic Deterrents in Reducing Bat Fatalities at Wind Energy Facilities	Market Acceleration & Deployment	Environmental Research	Potomac	Hein
5:25 PM	5:55 PM	Optional: Peer Reviewer Debrief			Madison	

May 2, 2019 - Market Acceleration & Deployment						
Start	End	Project Name	Track	Session	Room	Presenter
8:00 AM	8:30 AM	Breakfast			Grand Ballroom A&B	
8:30 AM	8:50 AM	Keynote Speaker - Paul Donley	Plenary	Plenary	Grand Ballroom A&B	Donley
8:50 AM	9:10 AM	Multi-Year Program Plan	Plenary	Plenary	Grand Ballroom A&B	Ahlgrimm
9:10 AM	9:20 AM	Transition				
9:20 AM	9:35 AM	Overview of Siting & Wind Radar Mitigation	Market Acceleration & Deployment	Regulatory & Siting	Potomac	Gilman
9:35 AM	10:05 AM	Siting - Radar Wind-Turbine RCS Mitigation	Market Acceleration & Deployment	Regulatory & Siting	Potomac	Karlson
10:05 AM	10:35 AM	Siting - Radar Wind-Turbine RCS Mitigation MIT Lincoln Labs	Market Acceleration & Deployment	Regulatory & Siting	Potomac	Biddle
10:35 AM	11:05 AM	National Wind Turbine Database and Location Impacts R&D	Market Acceleration & Deployment	Regulatory & Siting	Potomac	Hoehn
11:05 AM	11:20 AM	Break				
11:20 AM	11:35 AM	Overview of Advanced Grid Integration	Market Acceleration & Deployment	Grid Integration	Potomac	Fu
11:35 AM	12:05 PM	Operational and Strategic Implementation of Dynamic Line Rating for Optimized Wind Energy Generation Integration	Market Acceleration & Deployment	Grid Integration	Potomac	Gentle
12:05 PM	12:35 PM	Market and Reliability Opportunities for Wind on the Bulk Power System	Market Acceleration & Deployment	Grid Integration	Potomac	Lau
12:35 PM	1:35 PM	Lunch			Grand Ballroom A&B	
1:35 PM	2:05 PM	North American Renewable Integration Study	Market Acceleration & Deployment	Grid Integration	Potomac	Brinkman
2:05 PM	2:35 PM	Power System Reliable Integration Support to Achieve Large Amounts of Wind Power (PRISALA)	Market Acceleration & Deployment	Grid Integration	Potomac	Corbus
2:35 PM	2:50 PM	Break				
2:50 PM	3:20 PM	Providing Ramping Service with Wind to Enhance Power System Operational Flexibility	Market Acceleration & Deployment	Grid Integration	Potomac	Hodge
3:20 PM	3:50 PM	WindView: An Open Platform for Wind Energy Forecast Visualization	Market Acceleration & Deployment	Grid Integration	Potomac	Hodge
3:50 PM	4:20 PM	Understanding the Role of Short-term Energy Storage and Large Motor Loads for Active Power Controls by Wind Power	Market Acceleration & Deployment	Grid Integration	Potomac	Gevorgian
4:20 PM	4:50 PM	Optional: Peer Reviewer Debrief			Madison	