Wednesday 19 October 2022

TIME	MEETING
0900 - 1200	***Individual Task Meetings*** Task 41 Meeting Task 54 Meeting Task 52 Cold Climate Working Group Meeting
1200 – 1400	Lunch
1400 – 1745	***Joint Task Meetings by Topic*** 1400-1445 <u>Session 1: Turbulence measurements and the impact of temperature on turbulence</u> Lead: Alexander Stoekl • What turbulence measurement capabilities are available from lidar? • What capabilities or outputs are needed to support measurements for distributed wind? • <u>Session 2: Cold climate siting</u> Lead: Timo Karlsson • Why is it important to consider ice throw risk and the likelihood of icing as two separate things? • How do we estimate icing risk to people living/working near (distributed) wind turbines? • How are new or existing ice throw risk assessment tools relevant to distributed wind turbines? 1445-1500 Transition 1500-1545 <u>Session 3: Resource assessment for isolated systems with adverse weather conditions</u> Lead: Julia Gottschall • How can lidar be deployed in remote communities with cold or adverse weather conditions? • Could a short-term lidar deployment coupled with reanalysis products provide a sufficient (accurate) wind resource assessment? • What are the opportunities/challenges of lidar deployment in cold climates? • What are the characteristics specific to distributed wind that lidar needs to address?

	<u>Session 4: Understanding icing</u> Lead: Marc Defossez • How can we achieve a better understanding of icing at the lower heights typical for distributed wind? (Distributed wind turbines often have 50 m towers or shorter while the ice atlas data are typically at heights of 80 to 150 m). • How can lidar be used for icing detection or prediction? 1545-1600 Transition 1600-1645 <u>Session 5: Lidar business models for distributed wind</u> Lead: Alice Orrell • What business models already exist or are needed for the distributed wind market (e.g., rental, purchase, data as a service)? • What does the market for lidar for distributed wind need to be to convince lidar OEMs to participate in this market? • What lidar characteristics are needed for distributed wind? • What are the use cases? • How could costs be reduced (e.g., reduction of features, simpler equipment, reducing complexity of components, shorter distance range)? <u>Session 6: Scaling down icing technology solutions</u> Lead: Ian Baring-Gould • Can icing technology solutions (and mitigation strategies) developed for large turbines be scaled down and applied to distributed wind turbines? • What solutions are already available in the market? 1645-1700 Transition 1700-1745 <u>Closeout Session</u> Lead: Ian Baring-Gould • 5 minute summary presentation from each session • Other observations from the day's meetings
1900	Dinner

Thursday 20 October 2022

TIME	MEETING
0900 - 1200	***Individual Task Meetings*** Task 41 Meeting Task 54 Meeting Task 52 Complex Terrain Working Group Meeting
1200 – 1400	Lunch
1400 – 1600	***University Research Collaborative Student Symposium 2022*** Lead: Trudy Forsyth (remote) and Ian Baring-Gould Welcome and Introduction: Ian Baring-Gould Future Opportunities: David Wood **Presentation 1**: *Turbulence in Lichtenegg*, Daniel Oesterreicher, University of Applied Sciences FH Technikum Wien (in person) **Presentation 2**: *Lifecycle Assessment of Small Wind Turbines*, Jake Wood, Murdoch University (pre-recorded) (Academic Sponsor: Jonathan Whale) **Presentation 3**: Tilt-induced Yaw Misalignment of a Small Wind Turbine, Lucas Price-Nowak, Hanze University of Applied Sciences (virtual) (Academic Sponsor: Gerard Scheppers) **Presentation 4**: California Polytechnic State University (Academic Sponsor: Patrick Lemieux) **Presentation 5**: OPEN Closing Discussion