#### IEA Task 41 Distributed Wind In-person and Virtual Meetings

Boulder, Colorado

26 - 28 October 2023

Ian Baring-Gould, <u>ian.baring-gould@nrel.gov</u> Danielle Preziuso, <u>danielle.preziuso@pnnl.gov</u> Trudy Forsyth, <u>trudyforsyth2@gmail.com</u>



Zoom: https://pnnl.zoomgov.com/j/1616701801?pwd=L1NCOUpWRFE5aTFTd3d0VjlpbTV3Zz09 Meeting ID: 161 670 1801

Passcode: 099832

### Wednesday 25 October 2023

18:30 MST

Informal Arrival Gathering and Dinner Aloy Thai 2720 Canyon Blvd, Boulder, CO 80302 <u>https://www.aloythai.com/</u>

### Thursday 26 October 2023

Time	Session	Lead	Format
	Virtual Session		
07:00 – 7:30 MST			
15:00 – 15:30 EU CET	Welcome and Introductions	Ian Baring-Gould	Virtual
21:00 – 21:30 AWST			
07:30 – 10:00 MST	Work Package #1a: Research to Inform		
17:30 – 18:00 EU CET	Standards		
23:30 – 24:00 AWST			
	Intro		
	<ul> <li>Overview of work packages</li> </ul>		
	- WP1A-1: data mining	Dr. Mark Runacres	Virtual
	Presentation(s) of ongoing related work		
	- Currently available data sets		
	- Do we have enough data? If not, what		
	else are we looking for?		

	- Lidar and turbulence: do we include		
	Lidar data?		
	Group discussion		
	- Which turbulent features do we want to		
	use in the classification (WP1A-2), which		
	classification techniques, who can help?		
10:00 – 14:30 MST	Break and lunch on your own		
14:30	Arrive at the NREL Flatirons Campus		
	We will arrange carpools to campus. Please		
	let Ian, Trudy, or Danielle know if you need		
	transportation.		
15:00 – 16:30 MST	Work Package #4: Information		
23:00 – 00:30 EU CET <sup>*</sup> 05:00 – 06:30 AWST <sup>*</sup>	Dissemination		
	Intro		
	<ul> <li>Fact sheet template posted on Task</li> </ul>		
	SharePoint		
	- Task 41 video(s)		
	Presentation(s) of ongoing related work		
	<ul> <li>Report out on the Small and Medium</li> </ul>		
	Wind Energy conference and future		
	events – Tonny Brink	Danielle Preziuso	Uvbrig
	<ul> <li>Initial Planning and Zoning Summary</li> </ul>	Ian Baring-Gould	Hybric
	Table – Trudy Forsyth		
	Group discussion		
	<ul> <li>Capstone publication</li> </ul>		
	o Topic		
	o Scope		
	o Lead		
	Next steps		
	- Need for additional outreach materials?		
	<ul> <li>Planned conference participation</li> </ul>		
16:30 – 17:00 MST	Break		
17:00 – 19:00 MST	Work Package #3: Grid and System		
01:00 – 03:00 EU CET <sup>*</sup> 07:00 – 09:00 AWST <sup>*</sup>	Integration		
	Intro	Dr. Asma Aziz	
	- Reorganizing and focus on microgrid	Dr. Andrea Kraj	Hybrid
	grids, behind-the-meter and front-of-the meter	Ian Baring-Gould	

19:30 MST	Informal Team Dinner Location TBD		
03:00 – 03:15 EU CET 09 <u>:00 – 09:15 AWST</u>	Closeout Session	Ian Baring-Gould	Hybrid
<b>19:00 – 19:15 MST</b>		lon Daving Could	ام تد مار ا
	join WP3?		
	- Next steps? Other partners who want to		
	Group discussion		
	Energy		
	meter – Andrea Kraj, Core Renewable -		
	behind-the-meter and front-of-the-		
	on the state-of-the-art of micro-grids		
	<ul><li>Caitlyn Clark, NREL</li><li>Thesis summary on comparative studies</li></ul>		
	- HOPP and value of wind resiliency –		
	on HPS – Ian Baring-Gould, NREL		
	- US case studies and near-term research		
	Renewable Energy		
	<ul> <li>Canadian case studies and near-term research on HPS – Andrea Kraj PhD, Core</li> </ul>		
	Cowan University - Canadian case studies and near-term		
	research on HPS – Asma Aziz PhD,		
	- Australian case studies and near-term		
	Presentation(s) of ongoing related work		

# Friday 27 October 2023

Time	Session	Lead	Format
	Virtual Session		
<b>07:00 – 07:30 MST</b> 15:00 – 15:30 EU CET	Welcome Back	Ian Baring-Gould	Virtual
21:00 – 21:30 AWST	Work Package #1b: Research to Inform Standards – Loads Assessment and Modeling		
<b>07:30 – 10:00 MST</b> 15:30 – 18:00 EU CET 21:30 – 24:00 AWST	Intro - WP1b – Summary Objectives Ohjectives Nilestones Next Steps	Dr. Francesco Castellani Dr. David Wood	Virtual

	Presentation(s) of ongoing related		
	work		
	<ul> <li>"OpenFast SWT simulation" –</li> </ul>		
	David Wood		
	<ul> <li>"Bio-Inspired and Multiple Blades</li> </ul>		
	SWT configurations" – Francesco		
	Castellani		
	Group discussion		
10:00 – 11:45 MST	Break		
	Arrive at the NREL Flatirons		
	Campus		
11:45	We will arrange carpools to campus.		
	Please let Ian, Trudy, or Danielle know		
	if you need transportation.		
12.00 12.00 MCT	Lunch		
12:00 – 13:00 MST	Lunch will be provided on campus.		
13:00 – 14:00 MST	Tour of NREL's Flatiron Campus		In-Person
	Work Package #6: Social Science Research – Human Dimensions		
	Intro - WP challenge: Tarquti Energy cannot contribute to the valuation exercise. They need to prioritize other work.		
<b>14:00 – 16:00 MST</b> 22:00 – 00:00 EU CET 04:00 – 06:00 AWST <sup>*</sup>	<ul> <li>Presentation(s) of ongoing related work</li> <li>Lessons learned on acceptance and hurdles of small wind in Austria</li> </ul>	Dominic Bolduc Alex Hirschl	Hybrid
	<ul> <li>Group discussion</li> <li>Collaborative work in groups per each country (e.g., google mind map or survey) on experiences with approval procedure in other countries.</li> <li>Group discussion about other potential contributors to this valuation exercise and motivation to convince them to participate.</li> </ul>		

	<ul> <li>Next steps</li> <li>Find members of Task 41 to contribute with a chapter in the deliverable. Topic: experiences with approval procedure of small wind.</li> <li>Find another community/project for this WP</li> </ul>	
16:00 – 16:30 MST	Break	
<b>16:30 – 17:30 MST</b> 00:30 – 1:30 EU CET <sup>*</sup> 06:30 – 07:30 AWST <sup>*</sup>	Closeout Session	Hybrid
18:00 MST	Hosted Dinner at Trudy's Ho	ouse

8460 W. 106<sup>th</sup> Ave. Broomfield, CO 80021

## Saturday October 28 2023

Time	Session	Lead	Format
	Arrive at Hotel Boulderado		
	2115 13th St, Boulder, CO 80302		
	Coffee and hot beverages will be		
08:45-9:00 MST	provided.		Hybrid
	We will arrange carpools to the hotel.		
	Please let Ian, Trudy, or Danielle know if		
	you need transportation.		
09:00 – 11:00 MST	Work Package #5 – Innovation and		
17:00 – 19:00 EU CET	<b>Technical Specifications</b>		
23:00 – 01:00 AWST	5.1 - Cold climate specification		
	5.2 - Recyclability & Sustainability		
	Intro		
	- Delay on milestone M5-1 with Task		
	54: Unable to last Winterwind and		
	the annual Task 54 meeting is at the	Ignacio Cruz	
	same time as ours in Calgary. We	Dominic Bolduc	Hybrid
	need to find another date.	David Wood	
	Presentation(s) of ongoing related work		
	<ul> <li>Recent work undertaken by Nergica</li> </ul>		
	regarding technical specifications in		
	cold climate for small to medium		
	size wind turbine deployed in		
	northern Canada (~10-15min)		

1:00 MST	Personal time or gro	TBD Dup outdoor activity in B	oulder
12:00 MST	Informal lunch		
01:00 – 01:15 AWST <sup>*</sup>			
	Closeout Session	Ian Baring-Gould	Hybrid
19:00 – 19:15 EU CET	Classout Session	lan Paring Cauld	Llubrid
11:00 – 11:15 MST			
	March 2024.		
	might delay D5-1 that was due fo	or	
	- Reschedule Task 54 meeting. Thi	S	
	Next steps		
	climate specifications		
	- Task member concerns about co	Ч	
	Group discussion		

### Sunday October 29 2023

For those staying for the NAWEA / Wind Tech conference, we can discuss a day trip into the Colorado Rockies or we can recommend some locations where people could spend Saturday and/or Sunday night.

<sup>\*</sup> Will occur the following day in the listed time zones.