

## Hexcrete Tower for Harvesting Wind Energy at Taller Hub Heights (DE-EE0006737)

### Workshop 3 - HEXCRETE COMMERCIALIZATION WORKSHOP

**Date:** June 22 and 23, 2016

**Location:** Crowne Plaza Denver Airport Convention Ctr, Denver, CO

**Overall Objective:** Present wind resources at elevated hub heights and showcase Hexcrete technology as an excellent choice for constructing tall wind turbine towers and reducing levelized cost of energy (LCOE).

**Workshop Format:** Technical presentations and panel discussion

**Organizers:** Sri Sritharan and Julianne Krennrich

#### AGENDA

<b>Activity – June 22, 2016 (Atrium)</b>		<b>Time</b>
1. Workshop Reception (Heavy hors d'oeuvres & cash bar)		6:30 pm – 8:00 pm
<b>Topic/Activity – June 23, 2016 (Vail Room)</b>		<b>Time</b>
2. Continental Breakfast and Registration		7:45 am
3. <a href="#">Introduction</a> – <i>Sri Sritharan, ISU</i>		8:30 am
<b>Keynote Presentation - 1</b>		
4. <a href="#">U.S. DOE Wind Program Overview</a> – Enabling Wind Nationwide – <i>Megan McCluer, DOE</i>		8:45 am
<b>Hexcrete Tower Technology</b>		
5. <a href="#">Concept and Benefits</a> – <i>Sri Sritharan, ISU</i>		9:15 am
6. Tower Design – <i>Robert Peggar, ISU</i>		9:30 am
7. Tower Optimization – <i>Elaine Tang, SIEMENS Corporate Tech.</i>		9:45 am
8. Foundation Design – <i>Markus Wernli, BergerABAM</i>		10:00 am
<b>Coffee Break</b>		10:15 am
9. Tower Fabrication and Structural Testing – <i>Todd Culp, Coreslab Omaha; and Sri Sritharan, ISU</i>		10:30 am
10. Tower Assembly, Scheduling and LCOE – <i>Phil Barutha, ISU; David Jeong, ISU; and Tyler Stehly (NREL)</i>		10:45 am
11. Q/A and Discussion – <i>Julianne Krennrich (Lead)</i>		11:10 am
<b>Tall Wind Characterization</b>		
12. Wind Energy Potential in the Midwest at Higher Hub Heights – <i>Gene Takle, ISU</i>		11:30 am

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13. Using SoDAR Wind Profiling to Characterize Winds at Hub Height and Beyond – <i>Nic Wilson, Vaisala</i>	11:45 am
14. Q/A and Discussion – <i>Sri Sritharan (Lead)</i>	12:00 pm
<i>Lunch (Atrium)</i>	12:10 pm
<b>Keynote Presentation – 2 (Vail Room)</b>	
15. Opportunities for Wind Power in Low- and Mid-Quality Resource Regions – <i>Eric Lantz, NREL</i>	1:00 pm
<b>Panel Discussion – Hexcrete/Tall Tower Implementation</b> <i>Lead: Jason Cottrell, NREL; Members: Markus Wernli, BeregrABAM; Kirk Morgan, BARR; Chandler Thomas, Mortenson; and David Dieter, Midstate Precast</i>	
16. Introduction - <i>Jason Cotrell, NREL</i>	1:30 pm
17. SWOT Analyses of Hexcrete Technology – <i>Markus Wernli, BergerABAM</i>	1:40 pm
18. Foundations for Tall Towers – <i>Kirk Morgan, BARR</i>	2:00 pm
19. Scheduling and Crane Considerations – <i>Chandler Thomas, Mortenson</i>	2:10 pm
20. Precast Industry Considerations – <i>David Dieter, Midstate Precast</i>	2:20 pm
21. Q/A and Discussion – <i>Jason Cotrell (Lead)</i>	2:30 pm
22. Next steps: Overview of commercialization path, schedule and ISU role – <i>Sri Sritharan, ISU and Markus Wernli, BergerABAM</i>	3:00 pm
23. Closure of Workshop – <i>Julienne Krennrich, ISU</i>	3:15 pm
<i>Coffee Break</i>	3:20pm
<b>Discussion on Prototyping of a Hexcrete Tower (Vail Room) – Participation Optional</b> <i>Lead: Sri Sritharan, ISU; Julienne Krennrich, ISU</i>	
24. Implementation strategy	3:30 pm
25. Joint Industry Partnership (JIP)	3:45 pm
26. Discussion and Q/A	4:00 pm
27. Identify Potential Members for JIP	4:30 pm
28. Adjourn	5:00 pm