AWEA Wind Standards Committee  
DRAFT MEETING Minutes  
Monday, May 7, 2018 1:00 p.m. – 4:00 p.m. Central  
Chicago Convention Center, McCormick Place, Room W470A

Attendance:

<table>
<thead>
<tr>
<th>Company</th>
<th>Name</th>
<th>Role</th>
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<tbody>
<tr>
<td>Leeward Renewable Energy</td>
<td>Grife, Ronald</td>
<td>Group Chair</td>
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<tr>
<td>DNV GL</td>
<td>Griffin, Dayton</td>
<td>Vice Chairperson</td>
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<tr>
<td>American Wind Energy Association</td>
<td>Mihelic, Michele</td>
<td>Secretariat</td>
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<tr>
<td>Avanti Wind Systems Inc.</td>
<td>Metzinger, Luke</td>
<td>Member</td>
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<tr>
<td>Barr Engineering Company</td>
<td>Morgan, Kirk</td>
<td>Member</td>
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<tr>
<td>Elevator Industry Work Preservation Fund</td>
<td>Barrett, Carisa</td>
<td>Member</td>
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<tr>
<td>Exponent</td>
<td>Morse, Timothy</td>
<td>Member</td>
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<tr>
<td>National Renewable Energy Laboratory</td>
<td>van Dam, Jeroen</td>
<td>Member</td>
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<tr>
<td>NextEra Energy Resources</td>
<td>Brake, Dan</td>
<td>Member</td>
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<td>Pentair</td>
<td>Bendlak, Tom</td>
<td>Member</td>
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<td>Siemens Gamesa Renewable Energy</td>
<td>Amos, John</td>
<td>Member</td>
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<td>Underwriters Laboratories Inc.</td>
<td>Zgonena, Tim</td>
<td>Member</td>
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<tr>
<td>National Renewable Energy Laboratory</td>
<td>Musial, Walt</td>
<td>Observer</td>
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<tr>
<td>Tempest Group, Inc.</td>
<td>Cuenin, Cynthia</td>
<td>Observer</td>
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<td>WSB-Hawaii</td>
<td>Bollmeier, Warren</td>
<td>Observer</td>
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<tr>
<td>Acciona</td>
<td>Deloof, Karl</td>
<td>Guest</td>
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<tr>
<td>Acciona</td>
<td>Perez, Alex</td>
<td>Guest</td>
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<td>Bachmann</td>
<td>Sherwin, Bob</td>
<td>Guest</td>
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<td>GE</td>
<td>Olson, Dan</td>
<td>Guest</td>
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<td>GE</td>
<td>Pfeiffer, Mitchell</td>
<td>Guest</td>
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<td>Intertek</td>
<td>Jain, Anant</td>
<td>Guest</td>
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<tr>
<td>Lightning</td>
<td>Shi, Joe</td>
<td>Guest</td>
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<td>NRG Systems</td>
<td>Fischer, Mike</td>
<td>Guest</td>
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<tr>
<td>Tempest</td>
<td>Amin</td>
<td>Guest</td>
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<tr>
<td>UL</td>
<td>Pappas, Diane</td>
<td>Guest</td>
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<tr>
<td>West Texas - UL testing Facility</td>
<td>Neil, Byron</td>
<td>Guest</td>
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AGENDA ITEMS

1) Welcome

2) Roll Call

  a) Quorum was not met, all action items must be balloted
i) Guest Attendees: 11
Observing Members: 2
Voting Members: 12 of 49

3) Approve Minutes from Previous Meeting

4) Action Items

5) AWEA WSC Action Items
   a) ANSI Audit
      i) WSC Procedures
         (1) AWEA is currently being audited by ANSI. The process started in April. AWEA
             staff will continue to update the committee as the process continues.
         (2) This the first ANSI audit for AWEA, with the trigger of the first standards
             publication – SWT-1 (2016)
         (3) AWEA is currently on its third round of questions with ANSI
         (4) ANSI strongly recommended that the Standards Development Procedures
             should not be submitted for approval as there will be recommendations from
             ANSI on changes to the procedures.
   b) Wind Standard Committee Membership Categories
      i) Membership Participation - recent new memberships approved by ballot of the
         membership include:
         (1) Luke Metzinger for Avanti Wind Systems, Warren Bollmeier for WSB-Hawaii,
             Cynthia Cuenin for Tempest Group, and Ben Lanz for IMCORP have all been
             approved by ballot.
      ii) Proposed WSC name change:
          (1) WSC is viewed as too generic and conflicting with the other AWEA standards
              committees, i.e., Wind Workforce Standards and Wind Environmental, Health,
              and Safety Committees
          (2) Various alternatives were discussed: Wind Design Committee, Wind Design
              Standards Committee, Technical and Testing Standards Committee, and Wind
              Technical Standard Committee. The latter was chosen as the best. A ballot will
              be sent for committee approval
          (2) We also reviewed the Charter for the WSC, staff will post the charter to
              workspace.
   2) AWEA WSC Standard Development Action Items
      a) Expedited Adoption IEC Standards
         i) Review status of expedited standards development
         (1) IEC 61400-1 Edition 1,
             (a) Create a subcommittee to review this standard for adoption. Dan Brake
                 expressed interest in chairing the subcommittee
(2) IEC 61400-24
   (a) Create a subcommittee to start the national adoption of this standard. During the expedited adoption process, there were a number of comments that AWEA needed to review and reference UL and NFPA standards.

(3) IEC 61400-26 - turbine availability
   (a) Currently, -26 has three separate Technical Specifications, which is currently proposed to combine into one Standard. Bob Sherwin suggested that the Committee wait until the Standard emerges, and then consider expediting the standard adoption.

b) ANSI Standards Development (regular process)
   i) Review status of standards under development
      (1) TR-1 – Brian Kramak (fill in provided by John Bosche)
         (a) Windfarm power performance – the standard will include non-prescriptive approach except for determination of uncertainty. The committee can expect to see a draft in a year or so.

      (2) Offshore Subcommittee – Walt Musial - Status Report
         (a) OCRP 2012 - need to update and to make the process more transparent. Walt indicted they won't create new standards, but will create a roadmap to navigate the hundreds of standards already out there. Identified 5 sub-groups:
            1. OCRP 2 maintenance
            2. Floating WIND
            3. Metocean
            4. Geotechnical
            5. Off-shore submarine cable
         (ii) Possible 6th sub-group - on Environmental, Health, and Safety Issues
            1. After a discussion the WEHSSC (Safety) committee should take the lead in terms of developing the EHS standards with respect to Offshore systems, Walt should make a proposal to the AWEA WEHSSC and report back to the WSC.

   (3) Structure Subcommittee – Kirk Morgan
      (a) RP2011
         (i) Kirk reported that the scope for the Subcommittee has been drafted and it will be to staff for balloting.

(4) other
ii) Discussion and Action items
   (1) ASME A17.8 – Wind Turbine Elevator Standards
It is clear that there are design and safety aspects, as well as potential legal and potential cost compliance issues for the wind industry. The Committee agreed to coordinate with the WEHSSC Service Lift Subcommittee to report back to the WSC. Anyone interested in participating should reach out to staff.

3) Non-AWEA WSC Initiatives
   a) Improving coordination with other Standard Developing Bodies

4) Proposed Meeting Schedule
   a) In person Meeting May 2018, Chicago, IL - WINDPOWER 2018
   b) Teleconference Fall 2017: August 16, 2018 @ 2:00 p.m.
   c) Teleconference Winter 2017: November 15, 2018 @ 2:00 p.m.
   d) In Person Meeting February 2019, San Diego, CA

5) Additional Items
   a) An issue was raised regarding the co-designation of UL 6141 (large WTs). Staff will reballot the codesignation question and coordinate with UL.
   c) Adjourn (4:35PM)

Action Items

1) Staff to Ballot:
   a) Minutes from the February 2018 Meeting
   b) Rename the Wind Standards Committee to Wind Technical Standards Committee
   c) Scope of the Structures Subcommittee
   d) Creation of the -1 Subcommittee (confirm with Dan Brake on Chair)
   e) Create -24 Subcommittee (need to identify a chair)
   f) UL 6141 codesignation
   g) Future Meeting dates

2) Put -26 into a parking lot

3) Update Committee on ANSI Audit, as needed

6) Contact members of the committee on member in good standing – participation versus non-participation