

AWEA Wind Technical Standards Committee  
Draft Minutes  
Tuesday, August 11, 11:00 AM – 12:30 PM, Eastern  
Conference Call

Minutes

- Welcome: Brian Kramak, UL
- Roll Call: AWEA Staff
  - The meeting met quorum: 20 voting members attended. This group needs 19 to meet quorum.
- Approval of June meeting minutes: Brian Kramak, UL
  - A 30-day approval ballot will be posted.
- AWEA Update: AWEA Staff
  - Membership status
    - AWEA staff provided an overview of WTSC membership breakdown. The group is in balance. Here is the breakdown:

Interest Category	Count	
Consultants	7	19%
General Interest	6	16%
Owners/Operators/Developers	7	19%
Producers	8	22%
Technical	9	24%

- ANSI PINS submittals
  - AWEA Small Wind Turbine Standard
    - The PINS was submitted June 1 with a 30-day comment period that ended July 1.
- ANSI BSR8 submittals
  - 61400-26-1
    - The BSR 8 was submitted June 26 with a 45-day public comment period that ended August 10.
  - AWEA Small Wind Turbine Standard
    - The BSR 8 has been submitted to ANSI. AWEA staff is waiting to hear from ANSI on the 45-day public comment date. Staff will update the group when the info is received.
  - Kirk Morgan, Barr Engineering, asked about where to go for ANSI guidance. Brian Kramak, UL LLC, noted a first place to start is the AWEA Standards Development Procedures, [click here to download](#). In addition, please contact AWEA staff at [standards@awea.org](mailto:standards@awea.org) with any ANSI questions.
- Subcommittee and Task Force Updates
  - Electrical Task Force, Chairs: Chris Petrola, Acciona Energy and Mike Edds, Pattern Energy Group
    - Mike Edds provided an update:
      - The focus of the group is to evaluate US standards and see how they relate to international standards.
      - Mike noted they have reached out to IEEE to make sure they are not duplicating efforts. The group is also reaching out to additional groups.
      - Brian Kramak, UL LLC, noted that it sounds like the task force is well represented.
  - AWEA-1 Subcommittee (61400-1), Chair: Dan Brake, NextEra Energy
    - Dan noted that the addendum is ready.

- AWEA staff shared that the PINS for this was submitted in May, next step is to submit the BSR-8. The next step is to get an official copy of 61400-1 for Dan's group to add their additions.
  - AWEA-24 Subcommittee (61400-24), Chair is needed
    - This group still needs a chair.
    - The focus of this subcommittee is to a national adoption.
    - Brian Kramak, UL LLC, asked the group to reach out to their networks.
    - Kirk Morgan, Barr Engineering, suggested reaching out to NOAA or NASA to find an expert. Michele Mihelic, AWEA, noted that it's a conflict for agencies, but ok for Labs. Kirk found this group at NOAA: The National Severe Storms Laboratory <https://www.nssl.noaa.gov/research/lightning/>.
    - Tim Morse, Exponent, noted he will check with his team internally.
    - Dayton Griffin, DNV GL, noted he will check on his end.
    - Brian Kramak suggested a call with potential chairs and Brian McNiff to provide background.
  - Offshore Wind Subcommittee: Walt Musial, NREL
    - Walt provided an update. There are five working groups: OCRP, Floating, Metocean, Geotech and Geophysical, and Submarine Cables.
    - The groups are developing recommended practices and working in parallel. OCRP will be the first group to have a draft ready in October for the Offshore Wind Subcommittee to approve. Once approved by the subcommittee it will go to the WTSC for approval and next steps.
    - The rest of the groups will follow with drafts end of this year/early 2021.
    - Walt mentioned a workshop that was held February 11-12th at NREL's Flatirons Campus near Boulder, CO. BOEM, BSEE, and NREL hosted an industry and stakeholder workshop to discuss the development of U.S. Offshore Wind Electrical Safety Standards. The workshop proceedings are available online, [click here](#).
  - Structures Subcommittee, Chairs: Kirk Morgan, Barr Engineering Company and Jomaa ben Hassine, Kleinfelder, Inc.
    - The standard and the technical report is underdevelopment.
    - Kirk noted that the subcommittee is in the 2<sup>nd</sup> round of comments. The group is a little behind schedule and they expanded the scope to include a turbine base specific to the US.
    - Jomaa provided an update on the technical report, Cyclic Degradation in the Geotechnical Design of Wind Turbine Foundations. There are 33 participants. The group is divided into 6 groups that coincide with the sections of the report. A draft is expected by the end of the year.
  - TR-1 Subcommittee, Chairs: Brian Kramak, UL and Mike Optis, NREL
    - Brian provided the update. He noted that the group recently got back on track and they are cleaning up comments. A draft for the subcommittee to review will be ready in a few weeks. The goal is to release a draft to the WTSC by the end of September.
  - SWT-1 Subcommittee, Chairs: Brent Summerville, Small Wind Certification Council; Mike Bergey, Bergey Windpower Co.; and Jeroen van Dam, NREL
    - Brent provided the update. He noted that the subcommittee roster was approved by ballot. The draft document is out for ballot and open for 30-day comment from the WTSC. AWEA staff submitted the BSR8 to ANSI, staff is waiting to hear back from ANSI on the public comment dates.
    - Brent is providing an update on SWT-1 ad the IEA Wind Task 41 virtual meeting on August 18.
- Next Meeting
  - Thursday, November 5, 2020 – Teleconference. Please note AWEA has switched to Microsoft Teams, a new invite for the November 5 call will be sent.
- New Business Items

- Introduction of [ENTR Alliance](#) Charles Henderson. If quorum met, and introduction of topic has enough interest, put to a vote forming a subcommittee lead by Charles to create an ANSI technical report on implementation of IEC 61400-25 naming convention based on the open sourced SCADA International data tag naming convention in conjunction with data transmittal via Docker Container for data analysis and model sharing amongst interested parties. Current O&M groups interested include EDPR, Clearway, Pattern, APEX Clean Energy, Leeward Renewable Energy. Other interested 3<sup>rd</sup> parties include NREL, UL. This has weak ties to AWEA TR-1 document because of ties to [NREL's Open OA](#) which may become part of the Docker environment.
  - Charles provided an overview of the ENTR Alliance, it is an open source web-based platform for standardizing of TAGs. There is a connection through meta data. Once the data is mapped it connects with Open OA and other data sources. Data is pushed to the cloud and gives analysts immediate access.
  - Brian Kramak, UL LLC, noted that the platform has an open source list of existing names from SCADA International. He noted that for TR-1 they are going to add an example trying to use NREL's Open OA.
  - Linkesh Diwan, HSB, asked if Charles was familiar with [NREL's Orange Button Solar Data Exchange](#) initiative, ENTR Alliance sounds similar. The exchange is online resource for the solar industry to share, sell, or retrieve solar data and connect with colleagues.
  - Brian Kramak noted this could make a good technical report. He is going to finalize proposal and get back to the WTSC.
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**APPENDIX:**

Ballots: All ballot results will be posted online, [click here](#).  
 These ballots will close July 12.

- Approval Ballot for WTSC Membership ARESCA
- Approval of AWEA 61400-26-1 (20XX) Availability for wind energy generation systems draft
- Approval of WTSC Subordinate Group Rosters

This ballot will close July 31

- Approval of SWT-1 Subcommittee Roster

**ATTENDEES:**

<b>Voting Members</b>		
<b>Company</b>	<b>Member</b>	<b>Type</b>
ARESCA	Brake, Dan	Primary
Avangrid Renewables	Morris, Christopher	Primary
Barr Engineering Company	Morgan, Kirk	Primary
Clear Wind	McCabe, Matt	Primary
Exponent	Morse, Timothy	Primary
GE Renewable Energy	Helton, Mark	Primary
Kleinfelder Inc.	Ben Hassine, Jomaa	Primary
National Renewable Energy Laboratory	van Dam, Jeroen	Primary
NRG Systems	Cole, Rob	Primary
nVent	Bendlak, Tom	Primary
Pattern Energy Group LP	Edds, Michael	Primary
Penn State University	Stewart, Susan W.	Primary
Siemens Gamesa Renewable Energy	Sharifi, Masoud	Primary

Small Wind Certification Council	Summerville, Brent	Primary
Spire Engineering Services LLC	Sheppard, Robert	Primary
Terra-Gen LLC	Hu, Yuanlong	Primary
The Hartford Steam Boiler Inspection & Insurance Company	Diwan, Linkesh	Primary
UL LLC (Group Chair)	Kramak, Brian	Primary
Vestas North America	Taylor, Trevor	Primary
Wsb-Hawaii (Secretary)	Bollmeier, Warren	Primary
<b>Observers and Guests:</b>		
<b>Company</b>	<b>Name</b>	<b>Type</b>
AEP Renewables	Li, Brian C.	Observer
Bureau of Safety and Environmental Enforcement	Oliver, Christopher	Observer
Canadian Wind Energy Association - CanWEA	McKay, Phil	Observer
ENTR Alliance	Charles Henderson	Guest
General Electric Power Systems	Gillespie, Toby	Observer
National Renewable Energy Laboratory	Musial, Walt	Observer
UL LLC	Zgonena, Tim	Observer
Vestas North America	Nissim, Maya	Observer
	Jan Hanson	Guest

DID NOT ATTEND:

<b>Voting Members</b>
<b>Company</b>
Acciona Energy USA Global LLC
Advanced Insulation Systems LLC
ArcVera Renewables
Avanti Wind Systems
Bergey Windpower Co. Inc.
Boulder Wind Consulting
Bureau of Safety and Environmental Enforcement
DNV GL (Vice Chairperson)
Elevator Industry Work Preservation Fund
Energy Systems Integration Group (ESIG)
Intertek
Keystone Engineering Inc.
Leeward Renewable Energy
RE Innovations LLC
U.S. Department of Energy
University of Texas at Austin
V-Air Wind Technologies