

Notes from AMS RES Meeting June 1, 11 a.m. mountain

Attendees: Larry Berg (PNNL, for Jennifer States), Cegeon Chan, Stan, Julie, Andy, Gary, Jerry, and Melinda.

1.) Approve minutes of April 20 meeting – Done.

2.) AWEA Windpower, highlights

Jerry reported that this year's conference has ~ 17,000 participants, lower than the ~20,000 in 2009 in Chicago. Low natural gas prices are making it harder for developers to get financing for wind farms, and this may have contributed to the reduced number of conference attendees. However, this year there were numerous international participants, especially from Asia. The kickoff with Ted Turner and Denice Bode focused on the benefits of wind energy. Melinda reported on the participation of NOAA's director of policy, Sally Yozell, at the conference and a few side-meetings with industry leaders. One action that came from these meetings was that AWEA's Michael Goggin will finalize the AWEA position paper on forecasting. Stan reported on a few sides meetings, one on metrics in particular. DOE needs metrics to define and justify budgets. To make investments in wind resource assessment, we need to better understand forecast uncertainty and complex flow uncertainty, and create metrics to quantify these values.

3.) AMS Washington Forum, highlights - Melinda

Melinda reported on the AMS Washington Forum in Washington, D.C., April 26-28. The five cross-cutting themes identified by meeting participants at the conclusion of the meeting were the need for: 1.) new and sustained environmental observations; 2.) crisp metrics demonstrating the value of weather and climate information; 3.) collaboration among federal agencies and among the private, public, and academic sectors; 4) for users' needs and local issues to inform and guide creation and delivery of climate services; and 5.) improved communication with the public about climate change (and de-stigmatize the word "climate"). The flagging economy and federal deficit necessitate that the enterprise do more with less. The AMS Commission on the Weather and Climate Enterprise and its Board on Enterprise Economic Development annually host this meeting to assemble members of the weather, water, and climate community along with senior federal agency representatives, congressional staff, and leaders in the private and academic sectors.

4.) AMS RES Position Statement – Andy

Andy reported that Paul Higgins (of the AMS Policy Office) had pointed out that position statements are supposed to be initiated by the AMS Council, who would then select a drafting team. Gary suggested that, rather than abandoning this effort, we ask Keith to take this idea to the Council to see if they support it. Stan floated the idea of considering AMS partner with AWEA on the AWEA forecast position statement, to have a joint statement. Another option is to seek AMS's endorsement of the AWEA statement. We left these proposals to discuss further next month.

***Action item: Melinda and Andy to follow up on asking Keith to present our draft statement to the Council to see if they would support having a writing team draft a statement in accordance with AMS procedures.

5.) AMS Summer Community Meeting – Andy

Andy reported on the Aug. 8-11 AMS Summer Community in Boulder. Two renewable energy sessions are planned, though exact times and dates are TBD.

Offshore wind energy discussions will include: Data Needs for Offshore Energy

- Jeff Freedman (AWS Truepower) - Offshore data needs based upon work with developers in the Northeast
- Calvert Stan (DOE) - Data needs results from DOE Offshore Energy Public Meeting
- Angel McCoy (BOEMRE) - BOEMRE's data needs for permitting and longer term environmental impacts
- Len Pietrafesa (NC State Univ) - Expanding Network of Networks Framework to Offshore Coastal Region
- David Green (NOAA) - Data Needs and the revamped AMS Offshore Annual Partnership Topic (APT)

Solar energy discussions will include: Challenges and Barriers to Integrating High Levels of Solar Energy onto the Grid

- John Manobianco (MESO, Inc.) - Major challenges for forecasting solar irradiance and power at the commercial scale
- Richard Perez (SUNY/Clean Power) - Challenges on day-ahead and multi-day forecasting
- Bryan Hannegan (EPRI) - Integration challenges on future grid
- Kevin Lynn (DOE) - Technical and cost barriers to large scale deployment
- Mark Ahlstrom (WindLogics) - New Market Rules for Solar Energy

6.) AMS TCWCNEE (Jan. 2012)

Jerry reported that a call for papers has been sent. Planned sessions include:

- Energy Data and User Groups
- Energy Decision Support Applications
- Short Range Forecasting for Energy
- Medium/Long Range Forecasting for Energy
- Climate Assessments for Energy
- Renewable Energy Applications
- Renewable Energy Infrastructure and Implementation
- Energy Policy
- Education in Energy Meteorology
- Special Topics in Energy

7.) MHK – Earle, Paul

No report. Melinda noted that Paul is out doing field work this week.

8.) NCF & Uncertainty Analysis of Same Wind Farm by Multiple Organizations
Jerry discussed an analysis recently performed by EWEA and presented at a Wind Resource Assessment Technology Workshop. In summary, there were 37 analyses by 35 organizations from 16 countries of a simple 28 MW wind farm (14 turbines), with one 50 m mast with a four year record and a long-term reference station of 14 years. The results range from 91 to 113 GWh (21%) for predicted annual energy production with a standard deviation of 4.4% (based on 34 data points). Derived P90 values have a range from 73 to 99 GWh (29%) with a standard deviation of 7.2%. This analysis illustrates the uncertainty in wind resource assessment.

9.) Data Bankability

Our guest, Kevin Stenson, was unable to join us today. We will discuss this at next month's meeting. Julie reported that Gisella Kroess of UniCredit (http://refffwallstreet.com/index.php?option=com_content&view=article&id=207&Itemid=77) participated in a panel on Resource Assessment at AWEA last week, and that Giselle suggested that remote sensing data may be bankable from her perspective. Giselle might be receptive to helping us move any statements forward. Julie will help connect us with Giselle as we discuss data "bankability."

10.) Upcoming meetings:

- Next AMS RES July 13, 11 a.m. mountain
- June 23-24 Offshore resource assessment and design conditions, D.C.
- AMS Summer Community Meeting, Aug. 8-11, Boulder
- AWEA Offshore Windpower, Oct. 11-13, Baltimore
- AWEA Wind Resource and Project Energy Assessment Workshop, Dec. 14-15, Seattle