

**Wind Energy Technology
Advisory Board Meeting
July 23, 2009
10:00am-12:00pm**



Members Present:

Cory Marquart, U of M-Morris; Chris Burch, enXco; Cris Zimmerman, Xcel Energy; John Dunlop, AWEA; Deb Full & Jim Mikel, EMS; Deb VanDerostyne & Jeremiah Beebout, Outland; Don Webber, Vestas; Wayne Radloff, Suzlon Composite Services; Aaron Thompson, AES; and Dallas Drietz, TRICO. Minnesota West Faculty/Staff: Gary Olsen, Tim McColley, Duane Carrow, Katie Delaney, and Rebecca Weber.

Meeting Minutes:

1) Introductions

Duane Carrow opened the meeting with a brief welcome. Introductions were made.

2) Advisory Board Legislative Audit (*Dennis Hampel*)

In Dennis Hampel's absence, Duane Carrow explained the Legislative Auditors Report of findings specific to the Wind Energy Advisory Board. The committee needs to be industry driven; Faculty members must provide the support for and take ownership of the agenda and workings of this committee; and formal committee officers must be elected. Therefore, our next meeting will be run on a formal scale, including an election of officers. The elected Chair and Vice Chair will run meetings; support will be provided by Minnesota West Wind Energy Instructors. Duane reported that Minnesota West has been very pleased with the amount of input and participation from our members and will continue to meet twice per year. As there is no elected Chair in place, Gary Olsen ran the remainder of the meeting.

3) Enrollment Updates (*Katie Delaney*)

Katie Delaney reported strong numbers in the program. MN West graduated 14 students in May 2009. For the 2009-2010 Academic Year, there are approximately 25 students expected to finish their A.A.S. Degree, while to date there have been 73 new applicants. The maximum number of new students per year remains at 50, so there is still a lengthy waiting list. For the 2010-2011 Academic year, they have already received 22 applications. The Windsmith Certificate will see 25 new students for Fall 2009, in addition to the 15 or so students that will be finishing up their certificate this Academic year.

Gary added they welcome any company to come in and do a presentation and/or onsite interviews in the Spring. Chris Burch stated enXco will have two large projects going up in the area and will be in need of qualified employees. Katie stated that she is working to create a database with job openings/employer listing for the students, both on campus and online, to reference.

4) Placement

a. Internships (*Gary Olsen*)

Minnesota West does not require students to complete an Internship prior to graduation; rather, Gary challenges the students to complete them. Those that were able to secure an internship position have responded with positive feedback. He questioned if a required Internship is a direction we should pursue. And if so, will there be enough openings to accommodate 50 students each summer? Deb V. commented that from Outland's perspective internships have been wonderful learning experiences for all parties. She added that perhaps those students who are required to complete an internship will search more aggressively than those who are not required.

John Dunlop asked if Minnesota West has a clearing house that companies can contact to post internship opportunities. He added that with the growth in programs across the nation, it will be more of a challenge to find them. A formal internship process was questioned and Rebecca explained that within the College a formal Internship contract does require evaluations of the experience by all parties. That process is in place with some programs, but not currently in Wind.

b. Apprenticeships (*Duane Carrow*)

Duane briefing introduced the subject stating that within the state there are some initiatives pushing for Apprenticeships, but industry needs to determine if that is a direction they want to turn.

Brian Wille, with the Dept. of Labor joined via Conference Call. Brian introduced the Apprenticeship model and the steps needed to create an Apprenticeship program within the State. He noted that Apprenticeships are in place for jobs with a higher-than-typical safety risk. Registered Apprenticeships currently in place in MN range from 2,000 hours (1 yr) to 10,000 hours (5 yrs) in which the apprentice works with a journeyman (typically at a 3:1 ratio). He estimated for a Wind Energy Service Technician an

Apprenticeship could be 6,000 hours or 3 years. This figure was based on Brian's research and only an estimate. An Apprenticeship program would prescribe the number of hours of experience required within identified skill sets area of Wind Technicians. Pay begins at 50% of the prevailing journeyman wage increasing to 90% of prevailing wage after 5,000 hours of experience. Brian closed by adding that a registered Apprenticeship needs to be industry driven. The first step would be to identify a formal job process for a Wind Energy Service Technician, as there is not one out there. He offered that he would be glad to help anyone interested in their efforts to move this ahead.

Don Weber cited some of his knowledge of the established Apprenticeship model used in Canada. He also stated that there is a Wind Energy Service Technician Apprenticeship currently being used in Alberta, Canada. Apprenticeships would follow the technician, giving him/her freedom to change jobs. An Apprenticeship Record is an extremely beneficial tool for employers to determine an applicant's skill level. A valid Apprenticeship Licensure could act as a means to remove at-risk individuals from the industry.

Cris Zimmerman commented that there are pros and cons to each option. And that the Feds recently changed the guidelines allowing for three different formats of an Apprenticeship. The traditional model, a task based model, or a Hybrid of the two.

Duane stated an Apprenticeship is more formal than an internship and at the State level there will be further discussion on this topic in the coming months. From the discussion, it was indicated the Advisory Board would be interested in an Apprenticeship program. Minnesota West would buy into an Apprentice Program, providing the training aspect of a hybrid model. Deb F. added that she felt Industry would like to see the same type of Apprentice program nationwide that would allow employees to be mobile across nation. Don suggested AWEA be the organization to develop criteria for all Apprentice programs. Participating educational programs could market and promote their involvement in 'AWEA's Apprentice Program.'

John D. stated he would take the following request back to AWEA:

"The Advisory Board consensus was the AWEA should consider managing apprenticeships across the country. States and state programs could adopt the uniform process established by AWEA. The Board requested that the Educational Working Group consider launching such a program".

5) Program & Curriculum Updates

a. Windsmith Certificate Changes (Gary Olsen/Tim McColley)

Proposed curriculum changes to the Windsmith Certificate were approved as follows:

Current Curriculum:

Course #	Course Title	Credits
ELCO 1100	Electrical Circuit Fundamentals AND	3
ELCO 1105	Electrical Circuit Fundamentals Lab OR	3
ELCO 1101	DC Circuits AND	3
ELCO 1106	AC Circuits	3
FLPW 1100	Fluid Power Hydraulic Theory	4
ELWT 1100	Wind Energy Fundamentals	3
ELWT 1170	Wind Energy OSHA Standards	1
ELWT 1104	Basic Digital Circuits	2
TOTAL CREDITS		16

Proposed curriculum starting Fall 2010:

Course #	Course Title	Credits
ELCO 1101	DC Circuits	3
ELCO 1105	AC Circuits	3
FLPW 1100	Fluid Power Hydraulic Theory	4 to 3
ELWT 1100	Wind Energy Fundamentals	3
ELWT 1170	Wind Energy OSHA Standards Lab	1
ELWT 1160	Env Health Safety Wind	1 to 2
RNEW 1105	OSHA	1
TOTAL CREDITS		16

b. Articulation Agreement with SMSU & Anoka Tech (Tim McColley)

Gerry Toland from SMSU was not able to attend, no update available for the SMSU Articulation agreement.

Tim McColley presented the updates on the Articulation Agreement with Anoka Tech. This agreement was originally initiated by Anoka Tech in March 09. Targeting approval by MN State Colleges and University to be available for Fall 2009 term. It is intended to allow ATC graduates with AAS degree in Construction Electrician or Electrical Engineering Technology to receive an AAS in Wind Energy Technology after one year. Tim requested that if there are any other technical programs that would be a good fit with Wind, he welcomes suggestions.

Deb F. requested that appropriate standards are set in regard to a student's physical health before allowing them to enter the program. She explained that if a student weighs more than 300 pounds, they would not be allowed to wear a climbing harness. Thus, they would not be employable, even after completing a program. Duane instructed Gary and Tim to add an appropriate disclaimer to their program description, Syllabi, and Course Outlines.

Deb V. mentioned Outland has been receiving many calls in regard to our programs, especially the online option. She questioned what our response was to those students. Katie stated that she tells students the Windsmith Certificate is designed only for those that have previous mechanical or electrical experience. If one does not, she recommends they pursue the onsite options. Chris

mentioned that enXco does offer financial incentives to their employees for taking online courses on their own.

6) Wind Energy Development Coordinator (Katie Delaney)

Katie explained as the Wind Energy Development Coordinator her role will be to be a liaison between Industry, High school students, and Minnesota West. She will also work to solidify equipment donations, improve the online Windsmith Certificate, and a host of other projects specific to the Wind Energy program. This position will be terminated January 31, 2010. She added that the Canby Campus has temporarily hired an Interim Campus Marketer, Gus Condezo.

7) Equipment (Gary Olsen)

Gary explained that training equipment is big issue in any college. It is candy to students. Currently we have: An Avanti Manlift, are working to move a tower section up from AES, and will soon be receiving a V47 Gearbox from Vestas. Gary stated that he really wants any company that donates to our program to become our partner. It is critical that we all work together, as it will take all of us.

Tim added that we currently have a large Hydraulic station, but are in need of the bells/whistles that come off a turbine to train students. **Don requested that Minnesota West send a top 20 list of equipment that we could use to all members. Gary and Tim stated they will be compiling such a list and Katie will distribute as soon as possible.**

Duane acknowledged that through grant funding Minnesota West does have funds available to purchase equipment. Perhaps there would be an opportunity for shared/discounted equipment. He estimated that over the next 2 ½ years, we will have approximately \$400,000 to spend on equipment. Don asked if we had ever thought of working with Iowa Lakes and some of the equipment they have on site. Gary stated that is he very open to any communication with Iowa Lakes.

8) Scholarships (Katie Delaney)

Katie informed the Board of the current industry scholarships being offered to our students. They are as follows:

- Vestas Scholar. Two \$2,500 annually to a new and current student pursuing A.A.S. Degree
- Outland as donated one \$500 scholarship. Details are still TBD.
- Otter Tail Power Company donates \$3,000 to be distributed as six \$500 awards to students in the A.A.S. Degree annually.

She also briefly mentioned the new Energy Training Scholarship made possibly through a WIRED Grant. These scholarships are only available to those pursuing the online programs, and can be up to \$1,500.00. John suggested pursuing donor recognition in industry newsletters and the like. Katie confirmed.

9) AWEA Technician Skill Set Meeting Update (Deb Full and John Dunlop)

Deb F. and John D. stated the AWEA Technical Skill Set Meeting was held in Washington D.C on June 29-30. The purpose was to identify a core set of entry level skills for a Wind Turbine Service Technician. They identified five areas: safety, operations, maintenance, electrical, and general work skills. Each one was then broke down to determine the correct definition for the skill. The long term goal is for AWEA to put their 'stamp of approval' on certain institutions that incorporate these core skills in their curriculum. John added that AWEA is currently compiling the information and presenting to the AWEA Board in hopes of approval. There is a lot of pressure on AWEA to keep ball rolling and moving forward on this. AWEA will initiate the next step, but they haven't issued a timeline for the project.

10) Campus Renovations (Rebecca Weber)

Rebecca updated the group on new campus renovations. Gary and Tim offered to tours of the facility.

Gary thanked everyone and stated he appreciated hearing Member input.