**Renewable Energy/Wind Advisory Board Meeting**

**Dec. 1, 2009**

East Campus – Bldg. T, Rm. 106

Agenda

1. Introduction

2. Tour of new lab

3. Lunch

4. Status of wind energy program

5. Industry update

6. Curriculum changes

7. Open discussion

**Present from AC:**

Ron Faulkner, Jack Stanley, Jerry Moller, Trace Megenbier, Ron Mashburn

**Present from Wind Industry:**

Monte King (Shell Oil), Tylan Shelton (Big Sky Wind Development), Sherry Kunka (Sharyland Utilities), Gary Sage (Sage Oil Vac), Linda Weller (Noble Power), Bill Henson (Noble Power)

**Summary of Meeting**

1. Stanley introduced new Wind Energy faculty – Ron Mashburn (Moore County Campus) and Trace Megenbier (Renewable Energy Coordinator). Terry Tucker was unable to attend the meeting.

2. The Advisory Board members were taken on a tour of the electronics, networking, NIDA, and wind energy labs.

3. Broke for lunch.

4. Stanley mentioned that there are 350 wind energy majors with 60 new students for Spring 2010 semester. The Amarillo College website has posted an intent list for students.

Major grant – Level 2 through NSF (National Science Foundation) for $900,000 over 3 year period ($100,000 for equipment, $100,000 for other needs). We will know in January 2010 whether we can hire a Director/Instructor and Lab Technician under this grant. If we do not receive the grant AC will start a program starting in Fall 2010. Amarillo College will continue to look at geothermal, biofuels and ethanol.

Stanley attended the American Wind Energy Association (AWEA) conference about standardized wind curriculum. The curriculum is task driven and is currently in our program. These were approved by AWEA and will be given to the general assembly in May 2010. Program to be approved by AWEA – this will be a standard.

Starting in January 2010 we will offer contract training courses. MET – Houston, TX will be working with the TWC (Texas Workforce Commission) in El Paso, Plainview, Midland/Odessa and Sweetwater. Fast track training to be done in 6 to 7 weeks with a class size of 10 students – our faculty will be teaching these courses, in 30/36 hour blocks. Monte King mentioned that state and federal funds to pay for this training.

The wind energy program has received $5000 in scholarships from Edisson, and $1000 will go to the Dumas – Moore County Campus ($500 per semester/per student). TSTC – Sweetwater indicated they had funds to give for scholarships. Local credit union has given funds for scholarships in the fall. Monte King stated that the criteria would be that the student should have already completed 1 or 2 semesters with a GPA of 2.5 to 3.0. The scholarship will be tax exempt to the student – 5013C.

Ron Mashburn and Trace Megenbier will attend training at ClipperWind free of charge. There is a possibility of providing online classes in for wind energy. The two courses that might be put online are Introduction to Wind Energy and Wind Business. Wind Business could be provided as a short course for the wind business owners, etc.

5. Sherri Kunka with Sharyland Utilities stated that the Panhandle is looking at 300 miles of

transmission lines in Carson and Dickens counties and 4 collection sub-stations. Over

1200 landowners will be contacted about the lines crossing their property along with obtaining easements. Sharyland is working with the Texas Public Utility Commission regarding alternative and preferred routes which will be approved by end of 2010 or 2011. The project should be completed by 2013.

76 wind turbines are being installed in New York and Texas. There are new projects in the New Hampshire area.

Monte King with Shell Wind Energy indicated the scope of operations with regard to wind energy is located primarily in Texas, Arizona, New Mexico, and Colorado – there’s some activity going on at this time. There is a joint project with Shell Canada and it is a 50/50 partnership. Some projects have been slowed down due to the economy.

Gary Sage owner of Sage Oil Vac said that he has joined forces with Mobil Oil UK. Mobil has bought some systems and want to purchase more in the future - CE directives that have to be used when shipping systems to Europe. His company is making in-roads in the business – he’s also systems to Canada.

Ty Shelton with RD Wind Development mentioned his company has projects throughout the Panhandle and New Mexico. Bechtol is partnering with RD Wind Development to help Bechtol get into the wind energy business.

6. Jack Stanley stated that curriculum needs to change yearly because changes and

re-vamping always needs to be done to a program because of changes in the industry.

**The Wind Energy Advisory Board voted and passed the following changes to the wind energy curriculum**:

* Replace: Introduction to Environmental Safety & Health with Wind Safety (WIND 1302).
* IEIR-1312 Distribution Systems has to be taken before ELMT-2341 Electromechanical Systems.
* Replace: ELMT-1305 Basic Fluid Power in our troubleshooting skills. Basic Fluid Power (hydraulics design & engineering) is a class our wind energy students do not need - 90% of course is not needed. Troubleshooting course will address these issues.

Change the associate degree to 62 hours - if we make this change now we will be making room for changes to the curriculum in the future. 12 to 16 hours of what is needed will be taught in this class – not 64 hrs (not needed for our students).

Changes to the wind energy curriculum will be made once a year when the advisory board meets.

AWEA and OSHA are partnering to develop an industry standard.

7. Open Discussion: Sherri Kunka asked about what might happen in the future regarding training for technicians for high voltage transmission lines? Jack Stanley said that he will

be addressing this issue and wants to provide a generic technician to work on

transmission lines.

Ron Faulkner asked Sherri Kunka how many jobs will the transmission lines coming

through this area provide. Sherri said not any at this time – this will be sometime in the

future.

Gary Sage asked if students would be interested in the cleaning of towers and the

blades on wind turbines? Dumas has a painting contractor that is going to be cleaning

towers and blades. Ron Faulkner indicated that AC can put a 60 – 80 (CE) training program together for you. Jack state that we can address setting up a training session for your particular industry needs. Monte King mentioned setting up a graphic to show the different areas in the renewable energy/wind business - graphics might help. Ty Shelton said there are many jobs in the process of project development that people have never thought about when building and installing wind turbines. Jack stated that wind energy is the capstone in renewable energy curriculum and some of the skill sets are the same (i.e. wind/solar/biofuels). Monte asked what about people in this group attending classes in the Dallas high schools or a starting a wind energy club? Jack said it should be a club for renewable energy if one is set up.

Meeting adjourned.