WIND ENERGY ADVISORY BOARD MEETING

Amarillo College
September 17, 2008

AGENDA

I. Welcome and Introductions – Dr. Paul Matney

II. Update on program development – Jack Stanley

III. Purpose of today's meeting – Jack Stanley

IV. Review curriculum and course content

V. Industry support of program

VI. Open discussion

VII. Adjournment

Present: Jack Stanley, Ron Faulkner, Cara Crowley, Danita McAnally, Doug Pickle, Ed Nolte, LeAnn Estep (AISD), Monte King (Shell Wind Energy), Pam Zenick (PRPC), Terry Ralston (Edison Mission Energy), Brad Christopher (Edison Mission Energy), Jill Gagnon and Dan Lamce (GE Energy Renewables-by phone), Gary Sage (Sage Oil Vac),

Welcome and Introductions—Paul Matney

Matney thanked everyone for their attendance and introduced participants from AC. He reinforced that Amarillo College is serious about wind energy training in the Texas panhandle and is aggressively moving forward to develop a Renewable Energy program.

Update on Program Development—Jack Stanley

Stanley shared with the group a timeline for implementation of a Renewable Energy program at Amarillo College. The proposal will be sent to the AC Board of Regents on Tuesday, September 23 and submitted to Texas Higher Education Coordinating Board by September 26.

Amarillo College also met with Frank Phillips College, Clarendon College and West Texas A&M University to discuss the possibility of developing wind energy training partnerships.

Purpose of Today's Meeting

Today, Amarillo College expects to receive feedback from the advisory board on the proposed curriculum and course content in the associate degree, a basic certificate and the advanced certificate.

Review of Curriculum and Course Content

The advisory board was given a copy of the proposed curriculum for each of the programs.

Basic Wind Technician Certificate
CETT 1409 (basic electricity course)-ok
ELMT 1305-ok
IEIR 1312-ok

Monte King-Should the Introduction to Wind Energy be offered in the first semester? Stanley indicated the advising process will encourage students to begin with the wind courses. The wind course was placed in the second semester to allow students interested in the program this semester to begin to take required courses already being offered. However, the course can be moved from the second to the first semester.

Terry Ralston-What the highest voltage taught in the program. We are teaching at 480, but 690 is preferred. Amarillo College is not currently wired to handle 690. We can look into the possibility in the future.

ELMT 2341-covers motor controls and relay controls-ok
INTC 2336-ok
CETT 1425-ok
WIND 1300-shift into the first semester

A tower climb is part of the introductory wind energy course. There is a tower available at the Texas Tech Ranch museum in Lubbock. There is also a tower available at TSTC-Sweetwater. Is there a possibility that industry will allow students to complete a tower climb at a private facility? Would the climb be

conducted by an AC instructor or someone from industry? Who would provide harnesses? Will students complete the safety class before the climb test?

WIND 2310

What types of electrical equipment are used in the electrical courses? Are boroscopes used? Training on industry specific equipment needs to be added into courses (WIND 2310). **Students need basic familiarity with testing and diagnostics of equipment**.

If a safety course is added into the Basic Wind Technician certificate, which course can be pushed into a later semester? CETT 1425 Digital Fundaments can be moved into the Advanced Certificate.

ELMT 2341 can be moved to second semester to allow WIND 1300 to move to the first semester.

<u>Advanced Wind Technician Certificate</u>
EPCT 1311-removed from the curriculum; to be replaced with a safety course
WIND 2459-Include basic understanding of fiber optics. Add “the student will be able to SAFELY and successfully….” to the End-of-Course Outcomes
WIND 2355-Add “the student will be able to SAFELY and successfully….” to the End-of-Course Outcomes. Also include basic writing skills for work orders, documentation, etc.

Industry discussed and agreed that two certificates in addition to the associate degree will work well in providing opportunities to both industry and the student.

<u>AAS Renewable Energy/Wind</u>
Courses are in addition to the courses completed in the certificate programs.

IEIR 1343-ok
INMT 2345-ok
WIND 2315-ok
ELMT 2380-will cover soft skills; or a special topics course can be substituted for students who are not able to work

GE interested in developing a summer internship program.

There is a need to promote program to non-traditional gender and ethnicity.

The group agreed to remove EPCT 1311 Introduction to Environmental Science and replace it with EPCT 1307 Introduction to Environmental Safety and Health.

<u>Soft Skills</u>

Soft skills list distributed to the Board was approved and will be incorporated throughout all the programs.

The Board also agreed that SPCH 1318 Interpersonal Communication should be incorporated into the associate degree.

Members of the Advisory Board confirmed their support of the Renewable Energy program offered at Amarillo College and their willingness to support the program via contributions, internships, advisory board participation.

LeAnn Estep from AISD indicated the public school system is very interested in partnering with Amarillo College to transition students into post-secondary education. We need to re-educate students as well as parents in the available career-training opportunities outside the traditional four year college education.

Gary Sage stressed the importance of keeping the information simple enough as we market the program that we don't intimidate students before they enter the program.