

Wind Technology Advisory Minutes
November 23, 2021
10am Via Zoom

ATTENDANCE

Ethan Allsopp, Mortenson Construction; Terri Cummings, DACC; Greg Hansbraugh, DACC; Brant Patnode, IEA; Mark Steward, IEA; Brian Wagaman, Moss Enterprises

REPORTS

Greg Hansbraugh gave a report on the direction of the alternative energy program. When the program first started the focus was on wind energy. The past year this focus has switched to combined renewables allowing the addition of solar.

Several initiatives to implement cross-curricular have been added. The sustainable concept in our aquaponics lab has permitted the college to “go green.” Three 100 watt solar panels, along with a 200 watt wind turbine have been installed. This combined renewable energy system charges 3 stored energy generators synced together. The output power is up to 2400 watts uninterrupted, which will run most, if not all, the aquaponics system, including LED lighting. The system continuously charges during the day, and with the addition of the wind turbine, will charge the system 24 hours a day as long as there is approximately a 9-10 mph wind. The generators being synced together means a greater power output, and a long draw rate. This means that the continuous charging of the output system should not drop below 50% of our power needs for that section of the greenhouse with the aquaponics system in full use. The goal is to have the Aquaponics Lab in the greenhouse be a 100% sustainability pod.

The meeting was summarized with reports on the growing potential in this field. Projections show by 2030 there will be a 40% deficit of workers in Wind Energy and the need to get the information about the program into the hands of potential students.

OLD BUSINESS

There was no old business to discuss.

NEW BUSINESS

Purchase of Amatrol Training Equipment located in Sioux City, IA was considered for purchase. This equipment would be valuable for more enhanced hands-on learning of SCADA systems, PLC’s and wind turbine operation and troubleshooting.

During discussion of curriculum E. Allsopp suggested the need to focus more on hands-on reading of schematics and wiring that is incorporated into the equipment. A new course was proposed that would include more practical applications/electrical safety. Some of the specifics covered in

MFRG 220 (Mechanical Diagnosis and Repair) were examined and the group agreed creating a course for Industrial Maintenance application would also be helpful.

Due to the safety concerns in the Wind Energy sector the members analyzed the potential of adding an OSHA 30 Construction class to the program. See action items.

Action Items

- Greg Hansbraugh--New Course Development for a hands-on Introduction to Electronics for Wind Energy--for Fall 2022 implementation.
- Greg Hansbraugh--Check into feasibility of developing a course in Industrial Maintenance Application.
- Terri Cummings and Mark Stewart--Mark will provide information about OSHA 30 Construction and Terri will research OSHA Construction possibilities.
- Greg Hansbraugh --Follow up with IEA about introductions for HR in Dallas, TX.

ITEMS FROM THE FLOOR

A demonstration on the educational online curriculum/modules from Brian Wagaman from Moss Enterprises resulted in the members agreeing that those educational training tools should be implemented into the Wind Energy Program.

IEA informed the members about the training site in Dallas and the possibility of providing internships. IEA will make introductions with the proper H.R. contact. Greg will follow-up with IEA.

DATE of NEXT MEETING

TBD--Fall 2022

MINUTES SUBMITTED by:

Respectfully submitted,

Lisa J. Osborne

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