# EE / CprE / SE 491 – sdmay18

## Group 42: "Power Systems Analysis in an Induction Type Wind Turbine"

October 01 - 07

Client:

Ron Zickefoose

Faculty Advisors:

James McCalley and Nick David

#### **Team Members:**

Ben Zickefoose – Team Lead/Chief Engineer

Melissa Flood - Power Engineer/Meeting Facilitator

Tate Stottmann – Power Engineer/Test Engineer

Matt Miner – Power and Controls Engineer/Meeting Scribe

David Clark – Controls and Embedded Engineer/Report Manager

#### Weekly Summary

Continued researching individually assigned areas. Meeting with Bob Zickefoose.

#### Past Week Accomplishments

Continued researching individually assigned areas. Meeting with Bob Zickefoose.

#### **Pending Issues**

Scheduling a time to speak with Rural Electric Co-op engineers to discuss putting a wind turbine system onto the main grid. Multiple attempts made.

#### **Individual Contributions**

<b>Team Member</b>	Contribution	Hours	<b>Total Hours</b>
Ben Zickefoose	Discussion with Anne Kimber on the EE department buying an NEC code book so that we could have one for a reference related to our project - she agreed. Meeting with Nick David on how our paperwork and reports have been lacking. Discussed ways that we can improve on this in the future to 'save' our project. Meeting with team and discussed setting up regular work days to start racking up some hours and getting stuff done. Meeting with Bailey Akers on contacting some of his contacts from IEEE and	4.5	41.5
	past internships to do an AutoCAD Electrical tuitorial class so that we can have some help in writing our blueprints.		

#### PROGRESS REPORT – 20171007

Melissa Flood	Send an email to NOAA for more information about wind data. Put the existing wind data in a formula for expected output for the wind turbine. Created a color-coded timeline. Created a member task list.	3.5	13.5
Tate Stottmann	Meeting with Nick. Meeting with group to discuss member tasks and begin circuit analysis of wind vein module.	3	22.5
Matt Miner	Looking at other options than PBasic. Thinking about going with Arduino after talking to Ben. was think of Pi to.	2	15
David Clark	Researching how to use the Arduino to act as our controller. The Arduino has more versatility and uses a programming language that more people are comfortable using.	2	26

#### **Comments and Extended Discussion**

None currently.

### Plan for Coming Week

Continue researching individual areas. Meeting with Professor McCalley scheduled.

### **Summary of Advisor Meeting**

Scheduled meeting with Nick David. Discussion about documentation and how to improve on them. Meeting scheduled for Monday 10/09 with Professor McCalley.