

EE / CprE / SE 491 – sdmay18

Group 42: “Power Systems Analysis in an Induction Type Wind Turbine”

October 29 – Nov 04

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

Working with ETG to upload software in the motor’s lab. Researching specific areas. Working with fundamental and non-fundamental testing procedure. Make phone calls and setting up time with REC.

Past Week Accomplishments

Still trying to reach our point-of-contact with Rural Electric Coop (REC). Continued to sift through wind data and controller data but multiple team members. Tate worked with AutoCAD Electric and gpIEDA; while Matt worked with MATLAB, Simscape and Simulink. Meeting with client and supplemental engineer to discuss direction and the microcontroller.

Pending Issues

Finally, got a meeting scheduled with REC representative.

Individual Contributions

Team Member	Contribution	Hours	Total Hours
Ben Zickefoose	Sent multiple emails to try to coordinate a meeting with REC reps and the consulting engineers they use to set up a meeting with them. Phone call and discussion with client asking them to give us more information on financial aspects of the project and other material they had on structural drawings. Reading through wind power books. Team meeting/discussion on setup for meeting with REC company reps and their consulting engineer with associated phone calls and emails. Set up meeting time for 11/15	5	58.5

PROGRESS REPORT – 20171104

Melissa Flood	Emailed ETG to upload ASMG onto MATLAB Simulink in the Motors lab. Found various standards that apply to our project.	4	38.5
Tate Stottmann	Reviewed Project Plan.	2	37.5
Matt Miner	Going over Design plan grading we got and need to change fundamental and non-fundamental testing part.	2	37.5
David Clark	Searching specifications for new microcontroller design. Building circuit design in Eagle.	4	42

Comments and Extended Discussion

None currently.

Plan for Coming Week

Continue researching individual areas. Meeting as a group to discuss current layout of wind turbine. Discussion about REC documentation.

Summary of Advisor Meeting

No advisor meeting.