

Start Date 2/5/18 – End Date 2/11/2018

Group number: 19

Project Title: Design and Implementation of a small scale standalone Hybrid Solar PV and Wind Energy Generation System

Client & Advisor:

Venkataramana Ajarapu

Team Members/Role:

Christopher Goodrich: Research Engineer

Taylor Mullen: Testing Engineer

Kenny Nguyen: Testing Engineer

Damon Stubbs: Research Engineer

Andrew Wassenaar: Team Leader

Past Week Accomplishments:

- Talked to Client/Advisor about project
- Reviewed prior senior group project and final report to understand what they accomplished
- Advisor tasked each member to understand components of the prior group's project and to simulate it using Simulink
- Then each member would build their component and test it and verify the overall component with each other
- Advisor wants us to each play the role of team leader and a leader was chosen for the 1st couple of weeks

Issues:

- Due to bad weather, the group could not meet with Client/Advisor this week, therefore a clear project plan could not be developed due to not being able to talk to the Client/Advisor
- Project plan and tasks the client wants to complete will change based on next week's group meeting
- Some components in the Simulink project designed from prior senior group would run for a moment and end up in an error. Need to address this with client/advisor to fully understand the overall prior groups project

Individual Contributions:

Name	Individual Contribution	Hours this Week	Cumulative Hours
Christopher Goodrich	Researched how lead acid batteries work and also reviewed the simulink models that we were provided from last semester.	4	8
Taylor Mullen	Research DC to AC converters and implement a simple design of the converter within Simulink.	4	8
Kenny Nguyen	Learn about the load component of prior group's project design, created template for weekly report. Created project plan and revise it.	6	10
Damon Stubbs	Research Solar Panels. Investigated physics behind PV solar panels and tested various Simulink models.	4	8
Andrew Wassenaar	Research the DC Chopper and how it is used to alter a DC voltage. Learned how to model this element in Simulink. Helped organize and delegate jobs for the week	4	8

Plans for coming Week:

- Meet with advisor to fully understand what he wants from the overall project
- Establish what each task the advisor wants us to accomplish first and move from there
- Design a project plan that meets the advisor's wants and needs
- Understand the Simulink model the prior group designed and understand how each component is used