EE/ CprE 491 – ssddec18-19 Weekly Report
2/13/18 – 2/20/18
Group number: 19
Project Title: Design and Implementation of a small scale standalone Hybrid Solar PV and Wind Energy Generation System
Client & Advisor:
Venkataramana Ajjarapu
Team Members/Role:
Christopher Goodrich: Reasearch Engineer
Taylor Mullen: Testing Engineer
Kenny Nguyen: Testing Engineer
Damon Stubbs: Research Engineer
Andrew Wassenaar: Team Leader

Past Week Accomplishments:

- Continued talk about client/professor about project
- Continuation review of prior groups project
- Simulate components of prior groups project and gather results

Issues:

- Needed to understand how each component and result connected with one another
- Needed to have a clear design for project
- Results of components were varying but semi-correct
- Results needed to be explained more in depth and on a physical level

Individual Contributions:

Name	Individual Contribution	Hours this Week	Cumulative Hours
Christopher Goodrich	Researched how a battery works, ratings of batteries, and how they charge and discharge. I also plotted the discharging characteristics of a battery using simulink.	4	12
Taylor Mullen	Develop and understanding of how and battery works with and without an MPPT and test within Simulink.	4	12

Kenny Nguyen	Develop and simulated how resistor affects the PV array and how MPPT is needed in our project. Tested in Simulink and graphed power, current, and voltage of system created.	3.5	13.5
Damon Stubbs	Researched PV physics. Modeled various responses to PV power, voltage, and current output. Researched relationships behind correlations.	4	12
Andrew Wassenaar	Attend weekly meeting with professor and status meeting with team. Research the MPPT. Document both how it works and how it is implemented in our system.	4.5	12.5

Plans for coming Week:

- Meet with professor and recommend design ideas to add to current project
- Establish which design is reasonable to complete and move forward with design
- Finish up presentation with client about Simulink components and how they interact with one another and understand each component on a physical level
- Continue to design, revise, and improve project plan
- Start and finish design document base on design client approves of