

EE/CprE/SE 491 - sdddec19-06

Design and Implementation of a Small Scale Stand Alone Hybrid Solar PV and Wind Energy Generation

WEEKLY REPORT - 7

4/6/19 – 4/12/19

Client and Faculty Advisor: Dr. Venkataramana Ajjarapu

Team Members:

Hussein Ghitan - Meeting Scribe

Blaise Ronspies - Test Engineer

Adam Schroeder - Chief Engineer

Anna Schulte - Meeting Facilitator

Weekly Summary:

The software portion of the lab report has been completed and an answer key has been created. The team was able to reconnect the solar panels and batteries safely. The team began testing on the system.

Past Week Accomplishments:

Adam, Anna, and Hussein reconnected the solar panels and batteries and came to an understanding of how the system currently works. We also found the the connections to the breaker were loose but were able to find a solution for that. Blaise tested the old breaker and drafted plans for adding a safety switch to the battery. With the help of our client's graduate assistant we found several things that are not working properly in the system. The team has not yet identified what the specific problems are but we have begun systematically testing.

Pending Issues:

Our team would like to see a breaker added to the battery input in order to create a safer way to take the batteries out of the system if necessary.

Individual Contributions:

Team Member	Contribution	Weekly Hours	Total Hours
Hussein Ghitan	Replaced the old battery and reconnected the PV panel to the system. Also worked to identify the current system DC output issues.	4	32
Blaise Ronspies	Tested spare breaker, worked with team to debug circuit problems with grad assistant	3	24
Adam Schroeder	Worked on system to ensure connections	4	30

	are correct. Replaced the breaker so that the system has power running through it. Debugged the circuitry for the PV system. Found solution for DC output to work.		
Anna Schulte	Worked on reconnecting the solar panels and doing system testing.	4	26

Plans for Coming Week:

Our team plans to identify the problem with the current system setup and find a solution. Once system is working properly we will complete the hardware portion of the lab experiments and create a solution manual in time for the lab experiments to take place two weeks from now in the EE 452 lab.