

EE/CprE/SE 491 - sdddec19-06

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

WEEKLY REPORT - 2

2/9/19 – 2/15/19

Client and Faculty Advisor: Dr. Venkataramana Ajarapu

Team Members:

Hussein Ghitan - Meeting Scribe
Blaise Ronspies - Test Engineer
Adam Schroeder - Chief Engineer
Anna Schulte - Meeting Facilitator

Weekly Summary:

During our weekly meeting with Dr. Venkataramana Ajarapu we presented our basic understanding of the PV energy system as well as our understanding of the status of the project that has been completed by the previous senior design groups.

Past Week Accomplishments:

The main goal of the last week work and activities is the project's understanding. The project advisor has directed the team during the past meetings to understand the hardware and the software of the project. The team was directed to give a small presentation about each component of the project starting from the PV panel and its specifications, max power generation, maintenance and weather dependency. PV array specs and properties were presented by Adam. Anna presented the control system, which is a huge part of the project because it ensures the safety to the other project's components and to all members working on the assignment. A basic understanding about the DC to AC inverter was presented by Hussein. Blaise discussed the possibilities of the AC and DC loads as well as the maximum load that can be used in the system and the necessity of a battery.

Pending Issues:

Some members of the team are still waiting for lab access to be granted.

Individual Contributions:

Team Member	Contribution	Weekly Hours	Total Hours
Hussein Ghitan	Researched and presented on Inverter.	3	6
Blaise Ronspies	Researched effects of load, presented on battery and load.	3	5
Adam Schroeder	Researched and presented on PV array	3	6

Anna Schulte	Researched and presented on controller	3.5	6
--------------	--	-----	---

Plans for Coming Week:

All members are to familiarize themselves with the basic concepts from EE332, Semiconductor Materials and Devices. Identify and familiarize ourselves with the components in the lab. This requires us to all have lab access by next week, which we have requested.