

**EE/CprE/SE 491 - sddec19-06**

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

**WEEKLY REPORT - 3**

2/16/19 – 3/1/19

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:**

This week our team opened the enclosure for the control system to identify how to obtain the intended DC output for a laboratory experiment. While analyzing the system our team discovered that one of the batteries is dead. This could be the reason that the system isn't working, so we placed a request from ETG for a new one with the same specifications. In addition, we have set up a meeting with an engineer with the ETG to inquire about the courtyard PV arrays. Another meeting has been set up with a member of the previous semester's team, to help familiarize ourselves with the operation of existing equipment.

**Past Week Accomplishments:**

Our past week accomplishments included, familiarizing ourselves with the components in the system and finishing our project plan. We also set up multiple meetings that will expand our knowledge base a great deal.

**Pending Issues:**

One of the current batteries is no longer usable and needs to be replaced. We have put in a request to ETG for a new one with the same specifications. We are not sure that the existing setup actually works, though our meeting with the previous group should clear that up. If it does not work, we will have a much more difficult time as we may need to start over. The team also is a little late on setting the team website due some technical difficulties. However, a help request has been made and the team waiting to meet and figure it out.

**Individual Contributions:**

<b>Team Member</b>	<b>Contribution</b>	<b>Weekly Hours</b>	<b>Total Hours</b>
Hussein Ghitan	Made some system voltage measurements and worked on the system connections specifically the controller. Identified the need for new battery and asked Anna to report that for the ETG as well as the client.	2.5	8.5
Blaise Ronspies	Proofread and edited project plan, met and tested existing equipment, finding it not in working order.	2.5	7.5
Adam Schroeder	Worked on connections in the system and diagnosed what components worked/didn't work by testing the voltage drop at different nodes in the circuitry. Reviewed the specifications for the battery that needs to be replaced and sent them to Anna. Observed the solar panels in the courtyard.	2.5	8.5
Anna Schulte	Sent order for battery to the ETG, set up and confirmed meeting with a previous team member, as well as with Matthew Post the ECpE Engineer	2.5	8.5

**Plans for Coming Week:**

After our meeting with the previous group we will be able to operate the equipment. If that is not the case, we will need to seek help and do major troubleshooting, as the scope of the project will change dramatically if the existing equipment is not functional.