May1727

Project Title: Stand-alone Hybrid Solar/Wind Power Plant

Advisors: Dr. Venkataramana Ajjarapu & Ankit Singhal

Team Member – Roles

Nathaniel Byrne - Group Leader

Brian Gronseth - Solar Tech. lead

Jeffrey Szostak - Wind Tech. Lead

Matthew Lee - Communications Lead

Mike Trischan - Key Concept Holder

Eric Cole - WebMaster

Executive Summary:

Reconvening after winter break we held our first meeting of the semester as a team and with our advisor. We were able to discuss our goals and updates to the project timeline. We made sure our advisor's expectations for EE492 were clear and that all parts of the project were clear and set up a plan for the rest of the semester.

Past Week Accomplishments:

Solar team finished simulating and began the process of making sure each component of hardware is represented accurately in simulation. We have also begun the process of making sure hardware components are working properly.
The team established open times during the week in which we could all meet up. We then approached Dr. Ajjarapu and had a meeting with him and established a weekly meeting time. At our meeting, we discussed what parameters pertaining to the project have changed over winter break. We then discussed possible solutions to our standing problems and created deadlines for them. We also made improvements on the Simulink Files and got both of our large Simulink files (simulating a wind turbine and a solar panel) to work. We finally talked to WESO and planned a presentation at the next WESO meeting Monday night 23-Jan-2016. At the meeting, we plan to strengthen our relationship with WESO so that we may better assist one another with our goals.
Group mutually investigated the hardware briefly. Matt continued some more work on the solar simulations. Sam may have continued with Wind Simulations. I helped Brian contact Kyocera. Micheal and Jeffery did something regarding WESO.
I continued work on the overall wind turbine simulation model and discussed how we would be able to use the WESO wind turbine with Nick.
Established weekly meeting times, presented our project at a general meeting for weso (the student org letting us use their turbine), worked on simulations
Met as a group to re-discuss project goals, deadlines and set an overall timeline.

Individual Contributions:

Name	Hours this week	Cumulative	Contribution
Nathaniel Byrne	5	40	I helped Brian contact Kyocera, they should be attempting to respond to my email account. I helped investigate the hardware with the others. I attended our meeting with Ajjarapu.
Brian Gronseth	4	38	Emailed kyocera about solar panel information to explore the option of either getting a new panel set, or combining older panels with a new panel for more output.
Jeffrey Szostak	4	56.4	I talked to WESO and secured us the presentation at the Monday meeting. I also discussed methods to figure out the parameters pertaining to the Wind Turbine. We will continue

			the discussion Monday night. I also emailed Matt Post and asked what the next step is in respect to placing the Turbine on ISU's campus.
Matthew Lee	3.5	49.3	Got the solar simulation up and running. Formatted the project report. Updated Ajjarapu
Mike Trischan	4	52	Established meeting times, created presentation, helped on fine tuning the simulations
Eric Cole	3	48	I continued work on the overall wind turbine simulation model and discussed how we would be able to use the WESO wind turbine with Nick.

Summary of Weekly Advisor Meeting:

Laid out the plan for the next couple weeks and what the end goal is for the project.
Our first Advisor meeting with Dr. Ajjarapu went rather well. It lasted roughly an hour and we discussed what changed over winter break. He also gave us guidance as to how we can better achieve our goals.
Ajjarapu gave us instructions in finding information regarding several things, I don't remember all of it. He told us to contact Kyocera for solar panel comparability.
None
Talked about our goals for the upcoming semester
Rescheduled meetings to fridays at 1pm

Plan for Next Week:

Run the hardware and take data on irradianice
Talk to WESO, refine the Simulink models, take the next steps in regards to setting up the Turbine on the campus.
We are waitning for imformation regarding Kyocera, WESO, and Ankit whom give us further guidance. We will access everything at tomorrows meeting.
Continue fixing model. Find out when we can use the WESO turbine and start taking our equipment to the turbine.
Work on simulations some more, get acclimated to the hardware portion for solar team
Wind Team's objectives are: 1. Finish the Simulink Model 2. Test Wind Turbine to determine its parameters. 3. Look into what hardware we already have and see how we can incorporate the hardware into the project. Solar team tasks are as listed: 1. Test batteries to see if they will charge (with ankit?) 2. Demonstrate working simulink model with hardware parameter verification 3. Call kyocera about solar panels 4. Set hardware up and test components

Pending Issues:

None
Securing permission to set up the Wind Turbine on ISU's campus.
Simulink Model does not show proper results and assumptions used for the input of the generator are showing not to be accurate.
None
NA

Comments/Extended Discussion:

Na
None.
As of now, I still haven't been received by Kyocera.
None
NA
NA