Advisors: Venkataramana Ajjarapu   **Client:** Venkataramana Ajjarapu
Members (roles):
- Daoxi Sun- *web master*
- Riley O'Connor- *team leader*
- Trevor Webb-*communication leader 1*
- Shihao Ni – *web master*
- Xiaokai Sun- *communication leader 2*
- Ben Ryan- *concept holder*

Project Title: Hybrid Solar Wind Generation System

Weekly Summary

The main goal this week was to advance the model of our design in Simulink. The solar team and wind team each began separate models, and once each model simulates the way we want it to the two will be put together for one comprehensive model.

Each group made progress with the simulations from last week to this week, but neither model is complete yet.

The entire group was able to meet with our advisor. They looked over what we had done so far and gave us some helpful advice for trouble shooting our models and checking each step as we progress to ensure that everything is working properly.

After some discussion the solar team was able to overcome a miscommunication with the advisor and can now demonstrate their device simulations in the way the advisor wants them to be demonstrated. Wind team is struggled with the turbine simulation.

Meeting notes:

General Notes

I. Present solar material and wind material to our advisor

II. Focus on trouble shooting our simulations

III. The Solar team must prove they are correctly modeling input and boosting

IV. The Wind team must . . .

10/2   Group Meeting with Advisors

Duration: *60 min*   **Members Present:** *All*

Purpose and Goals:
Present relevant background information over our project to both our advisor and our fellow group members. Both the solar and wind teams now have Simulink models, but were not complete models.

Achievements:
Both groups were struggling with simulation errors, and both largely benefited from the advice of using a step-by-step approach to simulating and constantly verifying results along the way.

The solar team was able to discover the method that the advisor wants their simulations input to be proven, and initial runs show that input is being modeled correctly as well as boosted correctly.

The wind team was able to build up the turbine simulation but there are still some problem with coupling the turbine and the generator. New circuit may be added to handle the lacking power or exceeding load problem.

Pending issues
1. Simulating the solar generation and wind generation aspects in Simulink.
2. Modeling based on different conditions.
3. Combining the two models into one comprehensive model

Plans for next week
1. Wind team: (Ben, Xiaokai, Shihao) will meet to continue work on wind simulations
2. Solar team: (Riley, Daoxi, Trevor) will meet to advance work on solar simulations
3. Each team will also develop results that can be presented at our next meeting with our advisor and his grad student. The individual solar and wind simulations should be largely completed by our next meeting with our advisor.

Individual Contributions (this week)
Daoxi Sun: 8
- Attended weekly advisor meeting
- Worked on Solar Simulink model
- Worked on design document

Riley O'Connor: 9
- Worked on Solar Simulink model
- Attended weekly advisor meeting
- Worked on design document

Trevor Webb: 8
- Worked on Solar Simulink model
- Attended weekly advisor meeting
- Updated information in the weekly report

Shihao Ni: 8
- Attended weekly advisor meeting
- Research for turbine simulation
- Work on design document

Xiaokai Sun: 8
- Attended weekly advisor meeting
- Build up the turbine simulation
- Editing weekly report.

Ben Ryan: 8
- Researched Matlab Simulink models and wind generation components
- Adjust the parameters of the turbine and generator
- Reconfirm the functionality of the circuit with our turbine
- Work on design document

Total contributions for the project
Daoxi Sun (43 hr)
Riley O'Connor (44.5 hr)
Trevor Webb (42.5 hr)

Shihao Ni (43 hr)
Xiaokai Sun (43 hr)
Ben Ryan (44 hr)