

EE 491 Weekly Report MAY15-21 Week 3 (9/29/14-10/05/14)

Advisors: Venkataramana Ajarapu

Client: Venkataramana Ajarapu

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 refine the first 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.

The entire group was able to meet with our advisor and his grad student. 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.

Meeting notes:

General Notes

- I. Present solar material and wind material to our advisor
- II. Focus on trouble shooting our simulations

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 basic Simulink models, but were not complete models. The advisor and his grad student were able to give guidance for progressing with the 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.

Pending issues

1. Simulating the solar generation and wind generation aspects in Simulink.
2. Modeling based on different conditions.

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
- Researched for Simulink models
- Created boost converter part of simulation
- Edited the power point for presentation

Riley O'Connor: 8

- Researched project plans and created outline, wrote overview and block diagram sections
- Read materials for Simulink session
- Worked on Solar Simulink model
- Attended weekly advisor meeting

Trevor Webb: 7

- Wrote the deliverables and risks sections for the project plan
- Worked on Solar Simulink model
- Attended weekly advisor meeting
- Updated information in the weekly report

Shihao Ni: 8

- Researched Matlab Simulink models
- Debug the simulation and discussed with the graduate student assistant
- Attended weekly advisor meeting

Xiaokai Sun: 8

- Research related wind generation material on web
- Researched Matlab Simulink models
- Built up the power-bridge part of simulation
- Attended weekly advisor meeting
- Editing weekly report.

Ben Ryan: 9.5

- Researched Matlab Simulink models and wind generation components
- Created Simulink model
- Contributed sections to the project plan

Total contributions for the project

Daoxi Sun (14 hr) ,

Riley O'Connor (14.5 hr)

Trevor Webb (13 hr)

Shihao Ni (15 hr)

Xiaokai Sun (14 hr)

Ben Ryan (16 hr)