

EE 492 Weekly Report 13

11/29/16

Group number: DEC1614
Project Title: Impact of High Photo-Voltaic Penetration on Distribution Systems
Client & Advisor: Iowa State University & Alliant Energy & Venkataramana Ajarapu
Team Members/Role:
Logan Heinen /Team Leader
Difeng Liu/Team Webmaster
Zhengyu Wang /Team Communication Leader
Redouane Zaou /Key Concept Holders

Weekly Summary

Coming back from the long break, our tasks are almost finished on time. We had two meetings on Sunday and Monday for editing and formatting the poster, but both were held by three members. This is a problem, and we all need to focus on the last two weeks. About tasks, we found that there are about 400 simulations need to be done, which is almost impossible since we are not really familiar with how to run OpenDSS via the MATLAB interface. So, we decided change our plan.

Past week accomplishments

1. The poster is ready to be handed in;
2. We chose three months with most interesting load shapes to research;
3. Total load, loss, and variation analysis;
4. Advisor meeting

Pending issues

- ❖ Final document;
- ❖ Run final analysis of worst case scenario and make this data presentable for client;
- ❖ Data analysis.

Individual Contributions

<u>NAME</u>	<u>Individual Contributions</u>	<u>Hours this week</u>	<u>HOURS cumulative</u>
Logan Heinen	Advisor meeting, Poster Editing, Two group meeting, OpenDSS simulation.	6	52
Difeng Liu	One group meeting, Poster Editing OpenDSS simulation.	4	43

Zhengyu Wang	Advisor meeting, Poster Editing, Weekly Report Two group meeting, OpenDSS simulation.	6	49
Redouane Zaou	Advisor meeting, Poster Editing.	4	41

Comments and Extended Discussion

We are one week from our final presentation, and about five days to prepare our final document. We sure have a lot of work to do. The project is not over yet, and we will make sure the simulation is finished so that we can have the worst-case study complete as soon as possible. With running the final analysis of the worst-case scenario, we should present our design to Advisor and deliver all the results to our clients. One more thing to do is to ask for permission of using client's logo in poster and Slides.

Plan for Coming Week

First, we will finish the final data analysis and make our final statement of design. Second, the final document for senior design should be finished by Sunday, and we can format and revise it before the due day. Last but not least, we will update our research results to documents and slides so that we will have complete design process and output when presenting.

Summary of Weekly Advisor Meeting

Because of the time issue, Prof. Ajjarapu wanted us to run a final analysis of the worst-case scenario and make this data presentable for clients and final presentation. He also required us to be careful with logo and confidential work, and anything we need to use for documentation will have permission from client.