

EE 492 Weekly Report 12

11/15/16

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

The second instructor meeting is well finished, and we have our presentation cover almost everything we had so far. Since we are going to move forward in the next month, we will update further information and research results to our slides. Next big thing is the client deliverables, and we will focus on the tasks meanwhile we do the poster and final document. Because of the Thanksgiving Break, we will 2 weeks of tasks, and it will be a busy week.

Past week accomplishments

1. Meeting and presenting with course instructor;
2. Improve and update our website;
3. Meeting to prepare for poster;
4. Running PV in our test system and collect data;
5. Compare data and do analysis.

Pending issues

- ❖ Poster;
- ❖ We need to choose the lowest instance on the monthly load shapes;
- ❖ Simulate the load shape with varying PV penetration levels;
- ❖ Simulate the 24 hour monthly load shapes with varying PV penetration;
- ❖ Data collection should be taken in 1 region at a time.

Individual Contributions

<u>NAME</u>	<u>Individual Contributions</u>	<u>Hours this week</u>	<u>HOURS cumulative</u>
Logan Heinen	Advisor meeting, Instructor meeting, Slides Editing, Website Editing, Group meeting, OpenDSS simulation.	5	46
Difeng Liu	Advisor meeting, Instructor meeting, Website Editing, Group meeting, OpenDSS simulation.	4	39
Zhengyu Wang	Advisor meeting, Instructor meeting, Slides Editing, Weekly Report Group meeting, OpenDSS simulation.	5	43
Redouane Zaou	Instructor meeting, Slides Editing,	3	37

Comments and Extended Discussion

Since the long break is coming, we must work on the project and documents harder during the rest time. It seems like we are still on the right track according to the feedback from our instructor. So, we should keep working on our target, and we will finish the senior design shortly. By the way, we missed member during all kind of meetings, and we need to make sure that everyone can be on the same page and move forward together.

Plan for Coming Week

Next week is break, and everyone should consider about the two-week tasks and do individual study. And the separated work of poster is announced too, so everyone can focus on their own part of work.

Summary of Weekly Advisor Meeting

Prof. Ajarapu was satisfied with our feedback from instructor meeting, and he asked us to have more detailed research on the impact of high penetration PV systems. With more output data, we will be capable and confident with our deliverables.