

EE 492 Weekly Report 11

11/6/16

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

By combining two systems, we create a new system with all correct line codes, 5 capacitors, and 1 original voltage regulator. The main idea of this week is to add solar PV system to the combined test system and generate voltage, power profiles and do some data analysis. Besides, we will have our second meeting with course instructor in next week. By next Wednesday, we will have our slides ready for presenting, so we need create a PowerPoint file for the meeting during this week. This week starts to be busy.

Past week accomplishments

1. Editing the old system with new input implements
2. Editing the new system with voltage regulator from the old system
3. Inserting monitors to observe and generate load shapes and voltage profiles
4. Meeting for editing slides for 492 course meeting

Pending issues

- ❖ PowerPoint file need to be finished soon
- ❖ Need insert complete and fully functional solar PV system to the test system
- ❖ Explore how system work under different condition
- ❖ Be prepared to present

Individual Contributions

<u>NAME</u>	<u>Individual Contributions</u>	<u>Hours this week</u>	<u>HOURS cumulative</u>
Logan Heinen	Group meeting, Editing two systems, Editing outlines of slides;	4	41

Difeng Liu	Group meeting, Database research, Editing outlines of slides;	4	35
Zhengyu Wang	Group meeting, Editing two systems, Editing outlines of slides, Weekly report;	4	38
Redouane Zaou	Group meeting, Editing outlines of slides.	4	34

Comments and Extended Discussion

In order to solve some of the confusions we had with the new OpenDSS distribution system, we scheduled a meeting with our client on next Monday. We hope most of them can be solved, and a complete and fully functional system is highly wished to have for us. In this week, we start to prepare for the second course meeting with instructor in next week. First of all, we create an outline to guide ourselves to editing a well-organized slide for presentation. And we will have to keep moving forward in the future weeks on solar PV system and working scenarios discussions so that we can finish the project deliverables as soon as possible.

Plan for Coming Week

In the coming week, we will work on the slides editing since the second meeting with instructor is coming soon. During the meeting, we shall cover most of our technical achievements and progresses. To present well and clearly, we have to work hard on the PowerPoint and practice. If we can handle the OpenDSS research at the same time, it will be perfect.

Summary of Weekly Advisor Meeting

Prof. Ajjarapu was not available to meet at the regular time, and we will schedule another meeting with him soon.