

***EE/CprE/SE 492 Bi-WEEKLY REPORT 2***

***1/27/2026-2/9/2020***

***Group number: 57***

***Project title: Impact of High Photo-Voltaic Penetration on Distribution Systems***

***Client &/Advisor: Dr. Venkataramana Ajarapu***

***Team Members/Role: Andrew Chaney – Team Leader***

***Kenneth Prell – Project Engineer***

***Daniel Riley – Assistant Project Engineer/Editor***

***Thomas Coleman – Assistant Project Engineer/Document Architect***

**BiWeekly Summary**

During this time period we worked on writing programs that will monitor all of monitor all of the nodes within the systems we are working on and output them in a readable fashion from OpenDSS into MatLab which can then be analyzed easier. We worked on using Matlab to update the opendss model using the matlab COM interface and set up a Git repository so that we can instantly share our program updates with each other without having to send emails to each other.

**Past biweek accomplishments**

- reconvened after the holidays to refamiliarize ourselves with the progress of the project and update our timeline for the coming semester in order to finish the project by week 13 of the semester.
- OpenDSS is now installed on all of the computers in the senior design lab

**Pending issues**

- Make contact with Alliant Energy. Obtain their network specifications and start work on simulation and design
- The programs for monitoring the nodes need more work in order to be finished.

### **Individual contributions**

<b><u>Name</u></b>	<b><u>Individual Contributions</u></b>	<b><u>Hours this Session</u></b>	<b><u>Hours cumulative</u></b>
Daniel	OpenDSS, MatLab, Admin	12	94.5
Andrew	OpenDSS, MatLab	16	102
Kenneth	OpenDSS, MatLab	14	98
Thomas	Matlab, OpenDSS, Admin	14	97

### **Plans for the upcoming week**

- Meet with our advisor (Dr. Ajjarapu) to determine our path forward for future networks (Alliant or synthetic) once we wrap up our work on the 34-node network.

### **Summary of weekly advisor meeting**

- We have not met with our advisor as of the start of this semester. Our plan is to meet with him this biweekly period to discuss the plans to make contact with Alliant Energy or work on a different network to obtain similar research accomplishments for how to install PV in these systems.