

Group number: May1728

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

Client &/Advisor: Alliant Energy/ Dr. Ajarapu

Team Members/Role: Nat Summitt/Team Leader, Sam Searls/Team
Webmaster, Wyatt Lauer/Communications, Mark Szkodyn and Abdul Waasay
Mirza/New Developments

- Weekly Summary (Short summary about what you did this week)

Met with Dr. Ajarapu and his graduate student Ankit on Wednesday, September 28. During the meeting the following items were discussed and agreed to have the following completed by our next meeting time, Wednesday, October 5:

1. Each person is to complete an OpenDSS simulation of the IEEE 34-bus case and each person must use a different load from the load profile given to us.
2. Times were discussed for the possibility of touring the power plant in Washington, Iowa in the future.
3. We also discussed the results of the 4 bus hand calculation problem that was completed prior to the meeting.

- Past week accomplishments (please describe as what was done, by whom, when)

- Wyatt Lauer: Completed OpenDSS simulation of different load case for 34 bus system and agreed with group on times for power plant tour.
- Nat Summitt: Completed OpenDSS simulation of different load case for 34 bus system and agreed with group on times for power plant tour.
- Sam Searls: Completed OpenDSS simulation of different load case for 34 bus system and agreed with group on times for power plant tour.
- Mark Szkodyn: Completed OpenDSS simulation of different load case for 34 bus system and agreed with group on times for power plant tour.

- Abdul Waasay Mirza: Completed OpenDSS simulation of different load case for 34 bus system and agreed with group on times for power plant tour.
- Pending issues (if applicable)
 - None at this time
- Individual contributions

<u>NAME</u>	<u>Individual Contributions</u>	<u>Hours this</u>	<u>HOURS</u>
		<u>week</u>	<u>cumulative</u>
Mark Szkodym	OpenDSS simulation of different load on 34 bus system and worked with group on weekly report	2	10
Sam Searls	OpenDSS simulation of different load on 34 bus system and worked with group on weekly report	2	10
Abdul Waasay Mirza	OpenDSS simulation of different load on 34 bus system and worked with group on weekly report	2	10
Wyatt Lauer	OpenDSS simulation of different load on 34 bus system and worked with group on weekly report	2	10
Nat Summitt	OpenDSS simulation of different load on 34 bus system and worked with group on weekly report	2	14

- Comments and extended discussion
- Plan for coming week (please describe as what, who, when)
 - Abdul Waasay Mirza: Finish simulations, meet with group Monday, October 3 at 4 pm, and meet with Dr. Ajjarapu on Wednesday, October 5 at 4 pm.
 - Nat Summitt: Finish simulations, meet with group Monday, October 3 at 4 pm, and meet with Dr. Ajjarapu on Wednesday, October 5 at 4 pm.
 - Sam Searls: Finish simulations, meet with group Monday, October 3 at 4 pm, and meet with Dr. Ajjarapu on Wednesday, October 5 at 4 pm.
 - Wyatt Lauer: Finish simulations, meet with group Monday, October 3 at 4 pm, and meet with Dr. Ajjarapu on Wednesday, October 5 at 4 pm.
 - Mark Szkodym: Finish simulations, meet with group Monday, October 3 at 4 pm, and meet with Dr. Ajjarapu on Wednesday, October 5 at 4 pm.

- Summary of weekly advisor meeting (if applicable/optional)

Talked about hand calculation problem from last week, possible tour of power plant in Washington, Iowa, and set goal for next meeting of each person doing individual simulations for different loads in OpenDSS.