EE 492 WEEKLY REPORT 6

Group number: May1728

Date: 2/14/17-2/20/17

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

Client &/Advisor: Alliant Energy/ Dr. Ajjarapu

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)

- We had another meeting with Dr. Ajjarapu on Thursday at 11:50 A.M. to discuss what our plan is for our analysis of the Alliant system. During the meeting, we talked about needing to gain a better understanding of the Alliant files. Ankit, the graduate TA helping us, walked us through the files to show us the importance of each file. For the meeting next week, our goals are:
 - Summarize the previous groups work for Darin
 - ❖ Go through the Alliant System in more depth and understand the data
 - Prepare questions for Darin about the Alliant system
 - Obtain voltage profile and other diagrams of system

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

- Nat Summitt: Contacted previous group leader, worked on simulating the Alliant feeder to obtain different plots and diagrams, went through Alliant files. Prepared questions for Darin.
- Wyatt Lauer: Summarized previous group's work, and worked on analyzing and simulating the Alliant system to get a base case for future comparison. Prepared questions for Darin.
- Sam Searls: Updated the website, summarized previous group's work, worked on analyzing and simulating the Alliant system to get a base case for future comparison.
 Prepared questions for Darin.

- Mark Szkodyn: Summarized previous group's work, and worked on analyzing and simulating the Alliant system to get a base case for future comparison. Prepared questions for Darin.
- Abdul Wassay Mirza: Summarized previous group's work, and worked on analyzing and simulating the Alliant system to get a base case for future comparison. Prepared questions for Darin.

Pending issues (if applicable)

None

Individual contributions

| <u>NAME</u> | Individual Contributions | <u>Hours this</u> <u>week</u> | HOURS cumulative |
|-----------------------|---|----------------------------------|---------------------|
| Nat Summitt | Summarized previous group's work, analyzed Alliant files, ran simulations, prepared questions for Darin | 5 | 18 |
| Wyatt Lauer | Summarized previous group's work, analyzed Alliant files, ran simulations, prepared questions for Darin | 5 | 17 |
| Sam Searls | Updated website, analyzed Alliant files, prepared questions for Darin | 6 | 18 |
| Mark Szkodyn | Summarized previous group's work, analyzed Alliant files, ran simulations, prepared questions for Darin | 5 | 18 |
| Abdul Waasay Mirza | Summarized previous group's work, analyzed Alliant files, ran simulations, prepared questions for Darin | 5 | 17 |

o Plan for coming week (please describe as what, who, when)

Nat Summitt: Prior to meeting with Dr. Ajjarapu on Thursday at 11:50 A.M., continue
analyzing the Alliant files, finalize list of questions for Darin, summarize last groups
work, and continue running simulations for the Alliant system. Meet with group
Wednesday night to discuss everyone's findings and results.

- Wyatt Lauer: Prior to meeting with Dr. Ajjarapu on Thursday at 11:50 A.M., continue
 analyzing the Alliant files, finalize list of questions for Darin, summarize last groups
 work, and continue running simulations for the Alliant system. Meet with group
 Wednesday night to discuss everyone's findings and results.
- Sam Searls: Prior to meeting with Dr. Ajjarapu on Thursday at 11:50 A.M., continue
 analyzing the Alliant files, finalize list of questions for Darin, summarize last groups
 work, and continue running simulations for the Alliant system. Meet with group
 Wednesday night to discuss everyone's findings and results. Continue updating the
 website.
- Mark Szkodyn: Prior to meeting with Dr. Ajjarapu on Thursday at 11:50 A.M., continue analyzing the Alliant files, finalize list of questions for Darin, summarize last groups work, and continue running simulations for the Alliant system. Meet with group Wednesday night to discuss everyone's findings and results.
- Abdul Wassay Mirza: Prior to meeting with Dr. Ajjarapu on Thursday at 11:50 A.M., continue analyzing the Alliant files, finalize list of questions for Darin, summarize last groups work, and continue running simulations for the Alliant system. Meet with group Wednesday night to discuss everyone's findings and results.

Summary of weekly advisor meeting (if applicable/optional)

 Discussed our approach to analyzing the Alliant files and worked on a better way of approaching the system, Ankit walked us through the data files to gain a better understanding of how the system was handed to the last group, prepared goals for next meeting (go through files on our own to gain a better understanding, prepare questions for Darin, summarize the previous groups work for Darin as well).