

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)**
- We had another meeting with Dr. Ajarapu 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, was unable to attend the meeting, so we did not contact Darin since some of our questions could be answered by Ankit. Our goals for next week are listed below:
 - ❖ Summarize the previous groups work and questions for Darin
 - ❖ Go through the Alliant System in more depth and truly understand the data
 - ❖ Obtain voltage profile and other diagrams of system
 - ❖ Obtain a plot of the load locations on the system
- **Past week accomplishments (please describe as what was done, by whom, when)**
 - Nat Summitt: Worked on simulating the Alliant feeder to obtain different plots and diagrams, went through Alliant files. Prepared questions for Darin. Went more in depth into the previous group's files.
 - 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. Went more in depth into the previous group's files.
 - 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. Went more in depth into the previous group's files.

- Mark Szkody: 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. Went more in depth into the previous group's files.
 - 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. Went more in depth into the previous group's files.
- **Pending issues (if applicable)**
- None

○ **Individual contributions**

<u>NAME</u>	<u>Individual Contributions</u>	<u>Hours this week</u>	<u>HOURS cumulative</u>
Nat Summitt	Summarized previous group's work, analyzed Alliant files, ran simulations, prepared questions for Darin	4	22
Wyatt Lauer	Summarized previous group's work, analyzed Alliant files, ran simulations, prepared questions for Darin	4	21
Sam Searls	Updated website, analyzed Alliant files, prepared questions for Darin	4	22
Mark Szkody	Summarized previous group's work, analyzed Alliant files, ran simulations, prepared questions for Darin	4	22
Abdul Waasay Mirza	Summarized previous group's work, analyzed Alliant files, ran simulations, prepared questions for Darin	4	21

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

- Nat Summitt: Prior to meeting with Dr. Ajarapu 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 Ankit on Monday to discuss some OpenDSS questions and group Wednesday night to discuss

everyone's findings and results. Possibly contact Darin in group meeting with Ankit and Dr. Ajarapu with any leftover questions.

- Wyatt Lauer: Prior to meeting with Dr. Ajarapu 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 Ankit on Monday to discuss some OpenDSS questions and group Wednesday night to discuss everyone's findings and results. Possibly contact Darin in group meeting with Ankit and Dr. Ajarapu with any leftover questions.
 - Sam Searls: Prior to meeting with Dr. Ajarapu 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 Ankit on Monday to discuss some OpenDSS questions and group Wednesday night to discuss everyone's findings and results. Possibly contact Darin in group meeting with Ankit and Dr. Ajarapu with any leftover questions. Continue updating the website.
 - Mark Szkodyn: Prior to meeting with Dr. Ajarapu 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 Ankit on Monday to discuss some OpenDSS questions and group Wednesday night to discuss everyone's findings and results. Possibly contact Darin in group meeting with Ankit and Dr. Ajarapu with any leftover questions.
 - Abdul Wassay Mirza: Prior to meeting with Dr. Ajarapu 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 Ankit on Monday to discuss some OpenDSS questions and group Wednesday night to discuss everyone's findings and results. Possibly contact Darin in group meeting with Ankit and Dr. Ajarapu with any leftover questions.
- **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, discussed our problems with understanding some of the data given to us and talked about possible solutions to those problems, prepared goals for next meeting (keep going through files on our own to gain an even better understanding, prepare questions for the next meeting, summarize the previous groups work for Darin (and prepare and questions for him)).