

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 the NDA's being ready to go so we can use the Alliant files and we discussed tasks for the next meeting time. For the meeting next week, our goals are:
 - ❖ Research the standards used by utilities/general distribution standards
 - ❖ Get a base understanding of the Alliant System
 - ❖ Understand the feeder to get a base case for future comparison
 - ❖ Obtain voltage profile and other diagrams of system
- **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
 - Wyatt Lauer: Researched the standards used by utilities and the standards used in distribution systems (power quality standards, etc.) helped with simulations of Alliant system.
 - Sam Searls: Updated the website and worked on simulating the Alliant feeder to obtain different plots and diagrams.
 - Mark Szkodyn: Worked on simulating the Alliant feeder to obtain different plots and diagrams and helped with research of distribution standards.
 - Abdul Wassay Mirza: Researched the standards used by utilities and the standards used in distribution systems (power quality standards, etc.), helped with simulations of Alliant system.

○ **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	Contacted previous group leader, worked on simulations of the Alliant feeder	5	13
Wyatt Lauer	Researched distribution and utility standards, worked on the simulations of the feeder	4	12
Sam Searls	Continued working on the website, worked on the simulations of the feeder	4	12
Mark Szkodyn	Worked on the simulations of the Alliant Feeder and helped research standards	5	13
Abdul Waasay Mirza	Researched distribution and utility standards, worked on the simulations of the feeder	4	12

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

- Nat Summitt: Planning to talk to Darin Lamos on the phone next week to get a better understanding of the project and to get some questions answered. Prior to meeting with Dr. Ajarapu on Thursday at 11:50 A.M., finalize the presentation for the meeting, continue running simulations on the Alliant feeder to get a base case for comparison.
- Wyatt Lauer: Prior to meeting with Dr. Ajarapu on Thursday at 11:50 A.M., finalize the presentation for the meeting, continue running simulations on the Alliant feeder to get a base case for comparison.
- Sam Searls: Prior to meeting with Dr. Ajarapu on Thursday at 11:50 A.M., finalize the presentation for the meeting, continue running simulations on the Alliant feeder to get a base case for comparison. Continue updating the website.
- Mark Szkodyn: Prior to meeting with Dr. Ajarapu on Thursday at 11:50 A.M., finalize the presentation for the meeting, continue running simulations on the Alliant feeder to get a base case for comparison.

- Abdul Wassay Mirza: Prior to meeting with Dr. Ajarapu on Thursday at 11:50 A.M., finalize the presentation for the meeting, continue running simulations on the Alliant feeder to get a base case for comparison.
- **Summary of weekly advisor meeting (if applicable/optional)**
 - Discussed the status of the NDA's, able to use the Alliant files now, decided what our first tasks are going to be for simulating the system