

**sdmay23-27: 115kV/34.5kV Solar Power Plant & Substation Design Project**

Week 8 Report

November 11 - November 18

**Team Members**Madison Lakomek — *Meeting Minutes Taker*Brooke Nelson — *Researcher*Ashton Randolph — *Researcher*Jacob Miller — *Researcher*Jenna Runge — *Researcher*Madissen Lawrence — *Researcher*Zachary Zimmerman — *Researcher*Omer Karar — *Team Leader***Summary of Progress this Report**

We completed several different substation configurations. We began working on the final presentation for EE 491 and organizing the work for finishing the presentation and design document. In order to brief our client, Black & Veatch, on our progress, we convened twice as a group

**Pending Issues**

We need to add two redundant breakers to transmission lines, and we wish to move the breakers away from the transformer. We'll remove the ones closest to the transformer before isolating them with the middle breaker.

**Plans for Upcoming Reporting Period**

Before our faculty committee presentation, we will review what has been done and speak with Ajarapu to prepare more. We'll also work on the project's design and start the CAD. The following week, we will continue to meet to begin all the preliminary stages of developing a substation. Work through the final portions of the design document and complete the presentation to present at the end of the semester.

**Individual Contributions**

Team Member	Contribution	Weekly Hours	Total Hours
Madison Lakomek	Attended the Ajarapu meeting and the Black and Veatch meeting. Started going through the final presentation and design document.	3	0
Brooke Nelson	Attend Ajarapu meeting, Black & Veatch, and began looking over final documentation and presentation for class.	3	0
Ashton Randolph	Attend Ajarapu meeting, Black & Veatch, and began looking over final documentation and presentation for class.	3	0

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Jacob Miller	Attended all meetings, revised substation layout and feeder voltages, researched substation components.	4	0
Jenna Runge	Attended all meetings, worked on outlining the final presentation for class.	3	0
Madissen Lawrence	Attended all meetings, worked on the final report for EE 491.	3	0
Zachary Zimmerman	Attended all meetings, worked on researched transformers for project, assisted with substation one-line design, and assisted with final report.	3	
Omer Karar	This past week, I designed the substation, going through more than three different configurations to get to our final product. I showed up for the normal Black & Veatch Company group meeting. In addition, I went to Ajjarapu's scheduled weekly meetings.	6	0

**Gitlab Activity Summary**Nothing to report.

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