

EE 492 Weekly Report 1

Start Date: May 2024– end of 491

End Date: September 5th

Group number: 18

Project title: Utility Scale Lithium-Ion Energy Storage Project

Client: Burns and McDonnell

Faculty Advisor: Zhaoyu Wang

Team Members/Role:

- ❖ Oksana: Leader—responsible for keeping the team on track; cable sizing and cable schedule report.
- ❖ Sarah: Organizer—responsible for revising, editing, and helping keep track of all our reports; one-line diagram design and one-line diagram report
- ❖ James: Document Report—responsible for the submission of our reports; Inverter quantity; one-line diagram design and one-line diagram report
- ❖ Cole: Point of Contact/Communicator—responsible for meeting and contacting the clients and faculty advisor; AutoCAD site layout design and site layout/ technology justification report.

Weekly Summary:

This week, we met as a team to discuss our semester plans and schedule meetings. We scheduled a meeting with our faculty advisor to discuss our plans for this semester and discuss how we want to improve upon our project from last semester. We also scheduled a meeting with our client for next semester.

Accomplishments from last semester:

As a group:

- One-line diagram
- Cable Schedule
- AutoCAD design of BESS
- Technical reports on each component for our client

Pending Issues:

None so far

Individual Contributions:

Name	Individual Contribution	Hours this reporting period break down	Total hours for the week	Total Hours
Oksana Grudanov	Contact the client to set up a meeting and get info on the new software we could be using	1.0 (Weekly meeting) 0.5 (Emailing client) 0.5 (Advisor meeting)	2.0	2.0
Sarah Ebert	Contacted faculty advisor and set up a meeting and organized schedules	0.5 (Emailing advisor) 1.0 (Weekly meeting) 0.5 (Advisor meeting)	2.0	2.0
Cole Dustin	Set up meeting times with Burns & Mac team	1 (Weekly meeting) 0.5 (Advisor Meeting) 0.5 (Create meetings in Microsoft teams)	2.0	2.0
James Mendenhall V	Complete paperwork to reserve a room for meetings for the semester.	1 (Weekly meeting) 0.5 (Advisor meeting) 0.5 (Room reservation)	2.0	2.0

Plans for the upcoming week:

Determine which software to use between PSSE 35.6 and Spice (LTspice, P-spice, etc). We must ensure we have the appropriate licenses for the software we use for our load flow simulations, short circuit analysis, and cable thermal analysis.

Individual Assignments for the upcoming week:

James: Determine which software we have student access to through Iowa State.

Oksana: Reach out to the client and discuss with our advisor which software they are familiar with and recommend using for this project.

Cole: Set up meetings in Microsoft teams so that our clients can be informed about meeting times, as well as so we stay organized with our meetings.

Sarah: Contact our advisor to set up meetings and discuss our plans for this semester.

Summary of weekly advisor meeting:

In our meeting this week with Professor Wang, we discussed how we are going to approach this semester's tasks. We will be looking into working with PSS/E software to complete various tests on the system we designed last semester. We discussed the components we need to include in order to do these tests, as well as a few questions we can ask our client for more clarification on what we will need to test our system correctly.

Summary of weekly client meeting:

We will meet with our client next week to discuss the plan for this semester.