

EE 491 Weekly Report 1

Start Date: January 23

End Date: February 6

Group number: 18

Project title: Utility Scale Lithium-Ion Energy Storage Project

Client &/Advisor: Burns and McDonnell, Zhengdao Wang

Team Members/Role:

- ❖ Oksana: Leader; responsible for keeping the team on track
- ❖ Sarah: Organizer; responsible for revising, editing, and helping keep track of all our reports.
- ❖ James: Document Report; responsible for the submission of our reports.
- ❖ Cole: Point of Contact/Communicator; responsible for setting up meetings and contacting the clients and faculty advisor.

Weekly Summary:

This week, we were introduced to our project and met for the first time with the team. We started by working through our team contract. We set up weekly meetings for us as a team to work on any reports or research in our initial meeting. During that first meeting as a team, we sent out emails to our faculty member and the client to set up an initial meeting and talk about the project; then, we decided when a suitable meeting time would be for the client for our weekly meetings. Once we had our initial meeting with the client, we set up roles for each team member and finalized our team contract. We also decided to contact another company for help finding a location for our battery. After that meeting, we understood what could be expected for this semester of work and what would be completed the following semester. Finally, we started to work on our weekly report as a team and contacted our faculty members to set up weekly meetings with them outside of the time we had reserved as a team and with our client. We also gathered information regarding the parameters of the project.

When we met with our client on 02/05, we were able to go more in-depth with the project since we signed NDAs. The battery will be a 25MW, 4-hour test system. It has a 20-year cycle and will have two augmentations throughout the life of the battery. The client also stated that it is a 10% BOL (build over life). We will need to determine a 7-15 acre, flat plot of land for this project. We will also need to verify the substation location.

Additionally, we need to get more familiar with Auto CAD and read more of the information our client sends us in the next couple of days.

Past Week Accomplishment:

Nothing new to be added as it is the first week of working on the project.

As a group:

- worked on the team contract on 01/25 during a weekly team meeting
 - We decided on each individual role for the team members
 - We discussed meeting times for us as a group and with the client
 - We added what was expected per team member and what would be in place for individuals who do not follow the contract
- Reached out to faculty advisor and industry point of contact via email on 1/25
- Met our industry point of contact (Matt Pfeiffer and his team at Burns and McDonnell) on a teams call on 1/29
 - Received NDA's for our project
- Met with our advisor to introduce ourselves and talk about our project with him and had him sign the NDA on 02/05
- Received project parameters from Burns & McDonnell during meeting 02/05
- We set up a timeline for the next week on what we want to accomplish before the next meeting

Individually

- James: Organized and summarized technical documents. Proofread others' emails and the team contract. I revised and finalized the weekly report.
- Oksana: I worked on the team contract and the weekly report for week 1. I also helped edit and proofread any emails we sent out this week for our faculty advisor and client. Additionally, I discussed the next steps we needed to take moving forward with meetings and how we want to structure our meetings with the client and faculty advisor to stay on track with our timeline. I also emailed our faculty member to set up an in-person meeting to discuss the project, sign the NDA, and inform him of any specifics we received about the project.
- Cole: I am the main point of contact for our client. I am responsible for communicating, setting up, and organizing team meetings with our client, which I did for the past two weeks. I reserved rooms for us to collaborate in and helped write emails and revise other documents.
- Sarah: I edited and submitted the final draft of our team contract. I also sent an email to a local utility company at the advice of our industry advisor. It will be helpful to have contact with detailed knowledge of the local utilities when determining the site location for our battery.

Pending Issues:

none so far

Individual Contributions:

Name	Individual Contribution	Hours this report	Hours cumulative
Oksana Grudanov	Worked on documents such as the team contract and weekly report. Helped with emails sent out to faculty and client	4.5	4.5
Sarah Ebert	Worked on and submitted the Team Contract. Emailed a contact at another company to help find a potential location for our battery.	5	5
Cole Dustin	Set up meetings and reserve rooms for our meetings	5	5
James Mendenhall	proofread emails, edited and revised team contract, responsible for technical documentation moving forward	4.5	4.5

Plans for the upcoming week:

We need to decide on a final location for our project. We need to work with Professor Wang and/or the utility company on this. We also need to familiarize ourselves with AutoCad for our designs. We are supposed to receive updates and more information via teams about our project in the next couple of days.

Summary of weekly advisor meeting:

We met with our advisor in person this week. Professor Wang suggested we learn the parameters of project requirements. We were able to gather this information in the meeting with Burns & McDonnell.