

## EE/CprE/SE 492 Bi-WEEKLY REPORT 1

August 2019 – May 2020

Group number: 28

Project title: New Design Concept for Residential Electric Meter Adapter

Client &/Advisor: Alliant energy/Zhaoyu Wang

Team Members/Role: Zane Heifner – Communication

Brenden Koenighain- Design/Documentation

Derek Drees- Research

Austin Meyer-Testing

o Weekly Summary: This week we completed our first meeting with the 492 team and we also met with our client once again. We not only reported our progress and presented our preliminary 3D model, we also took part in a photo shoot for an advertising campaign for Alliant. This was a fun and new way to assist them with projects within the company.

o Past 2 weeks' accomplishments/individual accomplishments:

**Major group accomplishment: The prototype design was approved so now we must reach out to manufacturers and gather a bill of materials to move into the fabrication phase of the project.**

- Zane Heifner: Zane reached out to his former employer and other possible manufacturers in order to collect quotes and what additional documentation they require to fabricate our project.
- Derek Drees: Derek has begun selecting parts to be used for various parts of the unit that will be bought rather than manufactured to help create our bill of materials.
- Brenden Koenighain: Brenden has begun the process of gathering the necessary documentation for the project. He has begun making measured schematics generated from the 3-D model and has created a parts list from the parts the group has chosen.
- Austin Meyer: Assisted Derek in the production of a bill of materials as well as begun drafting a testing plan formed for once the unit is complete to decide on success and failure criteria and what is important to the success of the design versus failure.

| Team Member        | Contribution  | Hours |
|--------------------|---|-------|
| Zane Heifner       | Began fielding possible manufacturers                                 | 4     |
| Derek Drees        | Began developing bill of materials                                    | 4     |
| Brenden Koenighain | Began additional documentations such as annotated/measured schematics | 4     |
| Austin Meyer       | Began drafting bill of materials and began drafting test plan.        | 4     |

o Pending issues

- We are waiting for possible quotes to come back from the possible manufacturers in order to evaluate their cost and lead time to make sure the project will be completed on time for presentation.

o Plans for the upcoming week: We will need to continue to develop our parts lists/bill of materials and adding additional documentation for the manufacturers based off the process that they use. Doing this for a project such as this is new to us so we will be leaning on Zane and Derek who have the most experience with these types of tasks in the coming weeks while Brenden and Austin will be mostly supporting them.