

EE/CprE/SE 491 WEEKLY REPORT 6

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: We were thrown a curveball this week and our last idea had to be scrapped because after meeting with a different state inspector there was a different outcome from their meeting and Alliant felt that the shell design would be under too much scrutiny from inspectors. That being said we have once again changed the design and are now pushing forward with a raceway that turns at a 90 degree angle with the help of bus bars to make the turn without bending wire past its approved bend radius.

o Past week accomplishments/individual accomplishments:

- Zane Heifner: We have signed some documents but Zane is still working out the final pieces of our IP agreement.
- Derek Drees: Heard back from Alliant and altered the design to include bus bars to make a 90 degree turn and is looking into materials for a possible prototype
- Brenden Koenighain: Beginning work on making a design that can be altered in length as to fit flush to any meter.
- Austin Meyer: Looking into approved bus bars and connectors to make the turn in a safe and approved manner as to keep risk to customers at a minimum.

o Pending issues

- We will need to go backwards on some design work in order to create this new design after the scrapping of our previous design. We will have to alter the calendar accordingly and wait to see what materials Alliant can provide for prototype construction.

o Plans for the upcoming week: We will continue to look for channels to resolve the issues with our intellectual property ownership and will begin the modification of our plans to fit the new design into place. We will make alterations to the calendar and begin prepping the design document for the final presentation of our in progress project at the end of the semester.