

## **EE/CprE/SE 491 WEEKLY REPORT 4**

**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 heard back from the state inspector very early this week and have received some clarity on the do's and don'ts of this project and have actually gotten the go ahead for our design that we presented to Alliant last week. Alliant is taking it up their channels to get another opinion but the inspector that we personally have had contact with thinks the design is feasible as long as we follow applicable code that he pointed out to us. He did give a warning however and say that inspectors have a little subjectivity to what they order for reinspection or not so this has to be very well done and documented in order to avoid different inspectors ordering reinspection. We also had our 2<sup>nd</sup> meeting with our advisor and are still working to gain clarity on the intellectual property and nondisclosure agreements between Iowa State and Alliant that have created a bit of a paper work grey area because Alliant may already have a catch all agreement with Iowa State that supersedes any agreement in this class.

o Past week accomplishments/individual accomplishments:

- Zane Heifner: Met with advisor for a 2<sup>nd</sup> time and is working to solve the Intellectual property questions that we have.
- Derek Drees: Met with the inspector and presented our design brainstorm and received notes and ideas from the inspector on how to make this work and make other inspectors satisfied with the design and installation.
- Brenden Koenighain: Met with advisor for a 2<sup>nd</sup> time and is beginning to narrow down weatherproofing and main manufacturing techniques for the design to see if we need to produce models or find something that already exists to adapt for our purposes.
- Austin Meyer: Met with advisor for a 2<sup>nd</sup> time with Brenden, Zane and Derek and now has a specific list of parts that are approved for use for these connections since we have to use the existing connection on the meter and can't create a new one.

o Pending issues

- We need to resolve this question about the ownership of the intellectual property and if we need to be signing non-disclosures. Alliant is looking through their agreements on file but we are having trouble with an Iowa State contact that can assist us in this.

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 fleshing out the specifics of our design and get a schedule made now that we feel confident in moving forward with this design.