Team 09

Project Title: Automatic Design of Distance Protection

Date: 10/3/21

Members:

-Individual 1 – Anthony Ruffalo

-Individual 2 - Chye Stecher

-Individual 3 - Josh Vrenick

-Individual 4 - Matthew Dobrzynski

-Individual 5 - Taylor Semple

-Individual 6 - Keegan Kraft

What we've accomplished in the past week/what we've been researching

-Individual 1 - Learning how to run PLECS simulations using python.

-Individual 2 - Used PLECS to observe the waveforms of voltage and current during various types of faults.

-Individual 3 - Worked on getting the PLECS model we made with our client set up on my computer and then running some basic tests on it.

-Individual 4 - Working with PLECS project files provided by the faculty adviser to understand the issue we will be solving later.

-Individual 5 - Used the PLECS model to observe the waveforms of multiple types of faults. With this, I also viewed how the model behaves while not under any fault.

-Individual 6 - Worked with PLECS to observe how each voltage and current waveform changed based on where the fault was and the type of fault that occurred.

What we're planning to do in the coming week

-Individual 1 – Data export and viewing PLECS data using python

-Individual 2 - Continue working with the PLECS model and figure out how we efficiently can export our data for further analysis.

-Individual 3 - Go more in-depth testing and evaluating the PLECS model and reading the research reports that we were sent by our client.

-Individual 4 - Exporting data which features faults for python integration. Learning more about PLECS.

-Individual 5 - Continue working with the PLECS model to observe different behaviors and what each fault contributes to the overall circuit.

-Individual 6 - Continue working with PLECS to further understand the differences between each of the different types of faults.

Issues we had in the previous week

-Individual 1 – Finding documentation for PLECS python support

-Individual 2 - My mac had to update to the latest version of MacOS so PLECs could be properly installed

-Individual 3 - Testing the PLECs model has been a little slow since I'm still learning how to use PLECs. It was also difficult to find time to work on the project with all of the other schoolwork I had to do.

-Individual 4 - Figuring out how to use PLECs was a bit of an issue initially.

-Individual 5 - Different observations have been seen in the waveforms that do not conform with our usual understanding of them. With this, we will ask questions to further our knowledge and figure out the discrepancies.

-Individual 6 - The PLECs results we obtained were not very consistent