

EE/CprE/SE 491 – sdmay20-15

Substation Design

Week 10 Report

January 13th-27th

Client:

Burns & McDonnell

Faculty Advisor:

James McCalley

Team Members:

Kaitlyn Ziska – Professor Client Liaison

Brian Mace – Chief Engineer

Brandon Kaas – Scribe

Salvador Salazar – Meeting Facilitator

Justin Fischbach – Test Engineer

Robert Huschak – Report Manager

Past Week Accomplishments:

ORGANIZATIONAL ACCOMPLISHMENTS:

- Work with Team and Client to discuss end goals for the project
- Start AC & DC studies

TECHNICAL ACCOMPLISHMENTS:

- Start rough draft of DC Study to be turned in by 1/31/2020
 - Identify each component in substation and their operating currents for a worst-case scenario

- Determine the lowest battery size acceptable for supply the station with enough power to clear a fault and close by itself.
- Determine battery charger size to be powered by the ssvt
- Complete a write up explaining the choices made in the study
- Start rough draft of AC Study to be turned in by 2/7/2020
 - Identify running conditions for the substation(ie, weather types and location data)
 - Determine worst-case scenario for full loading on the ssvt and chose a size that meets the specifications given by Burns&McDonnell
 - Create a write up for each decision made in the study

Individual Contributions:

Team Member	Weekly Hours
Kaitlyn Ziska	10
Brian Mace	10
Brandon Kaas	10
Salvador Salazar	10
Justin Fischbach	10
Robert Huschak	10