

Report Period: Oct 12- Oct 18

Advisor: James D. McCalley

*Members: Joseph Miller, Chandler Cox, Owen Swanberg, Aladdin Adam,
Mohammad Habib, Zachary Lewis*

Project Title: 138kV Cyclone Substation Design

❖ **Summary of Progress in this Period**

During this period the plan-view team finalized the plan-view by accurately spacing equipment and conductors. The plan-view is coming along quite well and is expected to be completed by the date agreed upon with Burns & McDonnell of 10/23/2020. Research into elevation-views began so that the team could produce prints which would fulfill client expectations. The goal of the research was to elucidate what the elevation-views should include. The bill of materials was also updated per equipment on the one-line diagram. Work was also done on the next version of the design document.

❖ **Pending Issues**

- What are the relevant section cuts to be considered for the elevation views?
- Where should the bus supports be located on the plan-view?

❖ **Plans for Upcoming Reporting Period**

The plan-view will be reviewed via the team's QA/QC process to ensure accuracy. The plan-view will then be submitted to Burns & McDonnell for their independent review on 10/23/2020. The work in the elevation view will continue such that it stays on track to be completed by 11/06/2020. The team will also begin to work on the foundation layout and the conduit/raceway plan which also need to be completed by 11/06/2020. Research into grounding and lightning studies will also be conducted so that the team can understand the scope of work required for these studies.
