

Report Period: Sep 28 - Oct 11

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**

Work has been continued on the one-line diagram and the plan-view. The one-line was submitted to Burns & McDonnell for review on 10/09/2020, we are currently awaiting comments on this drawing. The plan-view has major equipment placed and the bus support spacing calculations have been conducted. The plan-view is on schedule to be completed by 10/23/2020. After work was completed on the one-line work began on the elevation view. The current progress for the elevation view has been preliminary research to understand what needs to be included on the drawing.

❖ **Pending Issues**

- We are still awaiting drawings for the MOAB for the plan-view. The client has been working to resolve this.
- We need to start reading the standards for lightning protection to understand what the calculations will entail
- We need to read the standards for grounding to create a grounding plan which meets specifications

❖ **Plans for Upcoming Reporting Period**

By the next reporting period we will complete the plan-view and submit the drawing to Burns & McDonnell for their comments. Work will continue on the elevation view. Team members will research standards when they have time to be ready to perform the calculations for the grounding and lightning studies. We also will begin work on the foundation layout and conduit/ raceway plans.
