
Black & Veatch's 138kV/13.8kV Substation Design Project

SDMay18-06

Faculty Advisor: Dr. Ajjarapu

EE 491 Weekly Report 7

Date: to 11/2-11/8

Andrew Brown	-Meeting, Communication, & AutoCAD Director
Eric Fritz	-Test Engineer, Design Engineer
Brent Hines	-Materials, Executive Budget lead, Design Engineer
Gavin Christensen	-Chief Design Engineer
Weng Hoong Loo (Terry)	-Scheduling, Design Engineer

Summary of Progress this Report

- Finished the next draft of the key protection plan.
- Our contact at Black & Veatch offered several suggestions which we then added into the design.
 - Back circle. This makes it easier to check that we're making necessary changes.
 - In the 'drafted by' and 'engineer' area place the company in the following way: CAB\ B&V
 - We changed the substation name to Jack Trice Substation.
 - We change the Station number and added the number as a signature.
 - We removed all brands left from the previous organization that worked on the design.
 - Label the red arrow in the KPP with the name from the one-line diagram.
 - Make sure if something is on the diagram that we know what it is and what it means.
- Started revising the AC schematics

Pending Issues

- Continue to work on the AC schematics

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Andrew Brown	Lightning talk 3 presentation, Revised Gantt Chart, Modified connection diagrams	8	67
Gavin Christenson	Lightning talk 3 presentation, assisted Brent on AC protection diagrams, printed out panel documents and made handwritten changes, reviewed various other diagrams given to us initially, identified some changes that could be made in those diagrams	9	60
Eric Fritz	Lightning talk 3 presentation, weekly meetings, and official communication documents. Recorded the details of the meeting with Black and Veatch and reported them in the prescribed bulleted format.	8	59
Brent Hines	Weekly meetings, Lightning talk 3 presentation, updated team website to look like the homepage, finalized AC protection documents, look over bus panel arrangements, made changes corresponding to the project scope and one line diagram. Made changes to the feeder relay systems 1,2 and 3, and bus panel arrangements	10	68

	for each relay.		
Weng Hoong Loo (Terry)	Weekly Meetings, technical challenges in class presentation slides presentation, looked into the changes of AC protection document, upkeep of cloud storage	8	59

Plans for Coming Week

- Finalize work on the AC protection schematics
- Begin working on panel arrangement schematics