

## EE 491 Weekly Report | May15-01 | Week 8 (10/20/14 -10/27/14)

**Advisors:** Adam Literski, Dr. Ajarapu      **Client:** Black & Veatch Corporation

**Members (roles):** Matt Backes (Team Leader), Ryan Jerve (Communications Leader), Faran Malik (Communications Leader), Sohail Suryavanshi (Webmaster), Bhargav Gouni (Key Concept Holder), Kiran Rane (Key Concept Holder)

**Project Title:** 69kV / 12kV Substation Design Project

### Weekly Summary:

This week we met as a group on 10/21 and discussed the drawings that we made in the past week. We also worked on the design document assignment. During our advisor meeting we talked with Adam Literski about our drawings and we found out that we had many misconceptions about our project. We now have a much better idea of how to tackle the design work. Dr. Ajarapu was not able to meet with us this past week.

### Meeting Notes:

#### 10/22 Group Meeting with Advisors

Dr. Ajarapu was not able to meet this past week. Matt sent Adam our drawings before our meeting with him and we asked him for feedback. Adam asked us why we were making drawings from scratch instead of modifying the outlines given to us. We had previously thought that all of these documents are only references, but in reality they are meant for us to modify. We were instructed to make an SEL account to access equipment information. Adam told us to look at the differences between our project scope and the basic layout drawings so we can see what we need to modify. We found out that the sectionalized radial bus scheme is the same as the split radial bus scheme. We'll need to make changes to our drawings based on Adam's feedback. We'll be discussing project costs next week.

#### 10/21 Group Meeting

During our weekly team meeting (led by Ryan), we reviewed our drawings. We were unsure of how to draw the one-line diagram and later found out that we were supposed to modify a drawing given to us. We had some questions about some of the labeling on the control house layout (such as what L/O means) and the equipment sizing. We also needed to work on our design document assignment, which Bhargav spearheaded. Individual tasks were also assigned to each team member. They are as follows:

- 1.) Sohail and Matt: Finding the discrepancies between the project scope and the general drawings
- 2.) Bhargav and Kiran: Modify One-line diagram, work on design document
- 3.) Ryan and Faran: Modify Control house Layout drawing

### Pending Issues:

1. Continuing the entire design process
2. Read the entire project scope and use that information for our drawings
3. Modifying our drawings
4. Finish/finalize rough draft of design document

### Plans for Next Week:

Tasks for each team member:

- 1.) Sohail and Matt: Finding the discrepancies between the project scope and the general drawings
- 2.) Bhargav and Kiran: Modify One-line diagram, work on design document
- 3.) Ryan and Faran: Modify Control house Layout drawing

**Current Individual Contributions**

- Matt Backes: Attended weekly meetings. Reading the project scope and finding the discrepancies with the general drawings (4 hours)
  
- Faran Malik: Attended weekly meetings. Modified/Redrew control house layout drawing. Worked on finalizing design document (6 hours)
  
- Ryan Jerve: Attended weekly meetings. Modified control house layout drawing. Worked on design document. Worked on weekly report. (4 hours)
  
- Sohail Suryavanshi: Attended weekly meeting, worked on communication document on tuning and its methods. Reviewed Covington project description. (4 hours)
  
- Bhargav Gouni: Attended weekly meeting, modified one-line diagram (appropriate design schemes were updated based on the project scope and client requirements), worked on design document. (8.5 hours)
  
- Kiran Rane: Attended weekly meeting, modified one-line diagram (appropriate design schemes were updated based on the project scope and client requirements) (6 hours)

**Total contributions for the project:**

- Matt Backes (33.5 hours)
  
- Ryan Jerve (29.5 hours)
  
- Faran Malik (31.5 hours)
  
- Kiran Rane (32 hours)
  
- Sohail Suryavanshi (30.5 hours)
  
- Bhargav Gouni (32.5 hours)