# EE 492 – sdmay19-26 115kV / 34.5kV SOLAR POWER PLANT/SUBSTATION DESIGN PROJECT

# Week 2 Report

Monday (1/21/2019) – Sunday (1/27/2019) Client: Black & Veatch Advisor: Venkataramana Ajjarapu Team Email: sdmay19-26@iastate.edu

### **Team Members:**

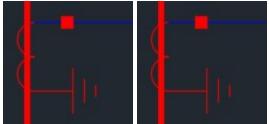
Katayi Katanga Nur Shuazlan Yao Cheah Chufu Zhou Tam Nguyen

### Weekly Summary:

This week, we had one meeting with our client, Black and Veatch. In our meeting with the client, we showed them the updates that we made from last semester drawings (such as collector and feeder diagrams, key protection diagrams, and AC three line diagrams). Also, we showed them what we changed in DC feeder diagrams (these diagrams were started from the beginning of this semester). Then, we started working on relays diagrams, back-up protection diagram, bank auxiliary diagram, and bank annunciator diagram.

### **Summary of Client meeting:**

- Kat did safety moment about the workplace.
- Then, we discussed the changes that were made on the feeder 1 drawing. The same changes were made on the other two feeder drawings according to which CB the feeders are connected to. Cole will get back to us regarding the A22 connection of the feeder drawings, and the team should finish the relay drawings by next meeting.
- Then, we discussed the drawing list, and the team needs to edit the drawing list according to the feedback from the client.
- Lastly, we had a question about the pictures below



- Cole said that the red dots represent polarities, and it is important that they are correct.

## Past Week Accomplishments:

#### Katayi Katanga

- Worked on AutoCAD for Feeders 1 and 3 drawings and revisions.
- Reviewed Key protection drawing.
- Edited drawing list showing the names of all the AutoCAD drawings we are going to create.

#### Nur Shuazlan

- Worked on AutoCAD for AC 2 diagram.
- Reviewed the AutoCAD AC 1, key protection, and Feeder 2 diagrams.
- Looked over Primary Relay drawing.
- Edited drawing list showing the names of all the AutoCAD drawings we are going to create.

#### Yao Cheah

- Worked on AutoCAD for key protection diagram.
- Worked on AutoCAD for IT relay, looked over Primary Relay drawing.
- Edited drawing list showing the name of all the AutoCAD drawings we are going to create.

#### Chufu Zhou

- Worked on AutoCAD for key protection diagram.
- Worked on AutoCAD for IT relay, looked over Primary Relay drawing.
- Edited drawing list showing the name of all the AutoCAD drawings we are going to create.

#### Tam Nguyen

- Checked the AC2 diagram and DC Feeder 1 diagram.
- Completed the DC Feeder 2 diagram.

#### **Pending Issues:**

- Waiting for feedback from the client regarding the drawings.

#### **Plans For Next Week:**

#### Katayi Katanga

- Work on Back-up protection diagram.
- Check Installation relay diagram and Bank 1 AUX diagram.

#### Nur Shuazlan

- Work on Primary relay diagram.
- Check Installation relay diagram and Bank 1 Annunciator diagram.

#### Yao Cheah

- Work on Installation relay diagram.
- Check Primary relay diagram and Back-up protection diagram.

#### Chufu Zhou

- Work on Bank 1 AUX diagram.
- Check Primary relay diagram and Bank 1 Annunciator diagram.

#### Tam Nguyen

- Work on Bank 1 Annunciator diagram.

- Check Bank 1 AUX diagram and Back-up protection diagram.

# **Individual Contributions**

Team Member	Individual Contributions	Hours	Cumulative Hours
Katayi Katanga	Did research on: - Project scope Created/Performed: - AutoCAD modification to the diagram - attended all meetings	6	11
Nur Shuazlan	Did research on: - Project scope Created/Performed: - AutoCAD modification to the diagram	6	11
Yao Cheah (YJ)	<ul> <li>attended all meetings</li> <li>Did research on: <ul> <li>Project scope</li> </ul> </li> </ul>	6	10
	<ul> <li>Created/Performed:</li> <li>AutoCAD modification to the diagram</li> <li>attended all meetings</li> <li>Website update</li> </ul>		
Tam Nguyen	Did research on: - Project scope Created/Performed: - AutoCAD modification to the diagram - attended all meetings	5	10
Chufu Zhou	Did research on: - Project scope Created/Performed:	6	9

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Team Hours: 29 Cumulative Team Hours: 51