

## **EE 492 – sdmay19-26**

# **115kV / 34.5kV SOLAR POWER PLANT/SUBSTATION DESIGN PROJECT**

## **Week 5 Report**

*Monday (2/11/2019) – Sunday (2/17/2019)*

*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 discussed some problems about the drawings that we were editing and will edit in future. We finalized what we were doing and started some new drawings.

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

- YJ did safety moment about Cardiac Arrest.
- Then, we discussed the updates on the drawings:
  - Discussed about the drawing the team did so far
  - YJ asked the question about if we are supposed to delete the blue box in communication outside drawing.
  - The team asked that what the SEL-2812MR is and where it should be.
  - Kat asked the question about the line of back-up protection diagram.
  - Patrick requested that the team change the name of new given drawing, keep figuring out the connection of new given drawing.
  - And we discussed the Voltage regulator (Remove).

### **Past Week Accomplishments:**

#### **Katayi Katanga**

- Completed the AC Auxiliary diagram.
- Checked DC Auxiliary diagram and Bank 1 Annunciator diagram.

#### **Nur Shuazlan**

- Completed the DC Auxiliary diagram.
- Checked AC Auxiliary diagram and Bank 1 Annunciator diagram.

#### **Yao Cheah**

- Worked on comm rtu diagram.

**Chufu Zhou**

- Completed the Distributed I/O Board.

**Tam Nguyen**

- Completed the Bank 1 Annunciator diagram.
- Checked DC Auxiliary diagram and AC Auxiliary diagram.

**Pending Issues:**

- Waiting for feedback from the client regarding the drawings.

**Plans For Next Week:****Katayi Katanga**

- Add switch in Back up protection diagram.
- Work on ABS 13 diagram.
- Check ABS 10 diagram, comm rtu diagram, Distributed I/O Board, and AC Schematic.

**Nur Shuazlan**

- Add switch in Primary Relay diagram.
- Work on AC Schematic and ABS 10 diagram.
- Check ABS 13 diagram and comm rtu diagram.

**Yao Cheah**

- Add switch in Installation Relay diagram.
- Work on comm rtu diagram.
- Check Distributed I/O Board, Breaker failure drawing, and ABS 13 diagram.

**Chufu Zhou**

- Work on Layout Drawing 2.

**Tam Nguyen**

- Work on Breaker failure drawing.
- Check AC Schematic and ABS 10 diagram.

**Individual Contributions**

<b>Team Member</b>	<b>Individual Contributions</b>	<b>Hours</b>	<b>Cumulative Hours</b>
Katayi Katanga	Did research on: <ul style="list-style-type: none"> <li>- Project scope</li> </ul> Created/Performed: <ul style="list-style-type: none"> <li>- AutoCAD modification to the diagram</li> <li>- attended all meetings</li> </ul>	6	29
Nur Shuazlan	Did research on: <ul style="list-style-type: none"> <li>- Project scope</li> </ul>	6	29

	<p>Created/Performed:</p> <ul style="list-style-type: none"> <li>- AutoCAD modification to the diagram</li> <li>- attended all meetings</li> </ul>		
Yao Cheah (YJ)	<p>Did research on:</p> <ul style="list-style-type: none"> <li>- Project scope</li> </ul> <p>Created/Performed:</p> <ul style="list-style-type: none"> <li>- AutoCAD modification to the diagram</li> <li>- attended all meetings</li> </ul>	6	28
Tam Nguyen	<p>Did research on:</p> <ul style="list-style-type: none"> <li>- Project scope</li> </ul> <p>Created/Performed:</p> <ul style="list-style-type: none"> <li>- AutoCAD modification to the diagram</li> <li>- attended all meetings</li> <li>- Weekly reports.</li> </ul>	6	28
Chufu Zhou	<p>Did research on:</p> <ul style="list-style-type: none"> <li>- Project scope</li> </ul> <p>Created/Performed:</p> <ul style="list-style-type: none"> <li>- AutoCAD modification to the diagram</li> <li>- attended all meetings</li> </ul>	6	27

Team Hours: 30

Cumulative Team Hours: 141