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

# Week 8 Report

Monday (3/04/2019) – Sunday (3/10/2019) 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 rest of the drawing we left, W04, W05, and the stated the change we made, and we discussed about the new task assignment, Grounding Calculation, client showed us ground killer and exercise we need to do for the new task. Then, we divided the drawings to everyone to wrap-up for the client.

# **Summary of Client meeting:**

- Tam did safety moment about Cardiac Arrest.
- Then, we discussed the updates on the drawings:
  - W04 drawing need to be verified based on other schematic drawings.
  - The team would go ahead and perform the exercise after spring break.

# **Past Week Accomplishments:**

## Katayi Katanga

- Checked Layout Drawing 4, Layout Drawing 5, and the comm rtu diagram.

## Nur Shuazlan

- Completed Layout Drawing 4.
- Checked Layout Drawing 5 and the comm rtu diagram.

## Yao Cheah

- Completed the comm rtu diagram.
- Checked Layout Drawing 6.

## Chufu Zhou

- Completed Layout Drawing 5.

## Tam Nguyen

- Checked Layout Drawing 4.

## **Pending Issues:**

- Waiting for feedback from the client regarding the drawings.

## **Plans For Next Week:**

#### Katayi Katanga

- Wrap-up AC Auxiliary, Collector One Line diagram, AC 1 diagram, Wiring diagram of the entire solar plant, Feeder 3 drawing, and Layout Drawing 6.

## Nur Shuazlan

- Wrap-up AC 2 diagram, Breaker failure drawing, Layout Drawing 1, Feeder 1 drawing, Bank 1 AUX, and Distributed I/O Board.

#### Yao Cheah

- Wrap-up Installation Relay diagram, Primary Relay diagram, Back-up Protection diagram, Layout Drawing 3, Layout Drawing 4, and Layout Drawing 5.

#### Chufu Zhou

- Wrap-up Feeder 2 drawing, Bank 1 Annunciator, AC schematic, DC Auxiliary, ABS 10, and Feeder One Line diagram.

#### Tam Nguyen

- Wrap-up Layout Drawing 2, Wiring diagram of a single array, Substation key protection diagram, comm outside, comm rtu, ABS 13.

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	47
Nur Shuazlan	Did research on: - Project scope Created/Performed: - AutoCAD modification to the diagram - attended all meetings	6	47

# **Individual Contributions**

Yao Cheah (YJ)	Did research on: - Project scope Created/Performed: - AutoCAD modification to the diagram - attended all meetings	6	46
Tam Nguyen	Did research on: - Project scope Created/Performed: - AutoCAD modification to the diagram - attended all meetings - Weekly reports.	6	46
Chufu Zhou	Did research on: - Project scope Created/Performed: - AutoCAD modification to the diagram - attended all meetings	6	45

Team Hours: 30 Cumulative Team Hours: 231