

# Week 11 Meeting



11/12/18

Team Leader: Nur

Other Team Members: Katayi, Ahmed, Chufu, Tam, YJ

Advisor: Dr. Ajjarapu

# Safety Moment: Food Safety

To prevent food-related illnesses, you have to keep hot food hot and cold food cold. This advice is important in warm summer weather, when foods at room temperature can spoil even more rapidly.

Cleanliness is also vital to food safety. Washing your hand and cleaning food preparation surfaces, containers and utensils can also stop the spread of foodborne disease.



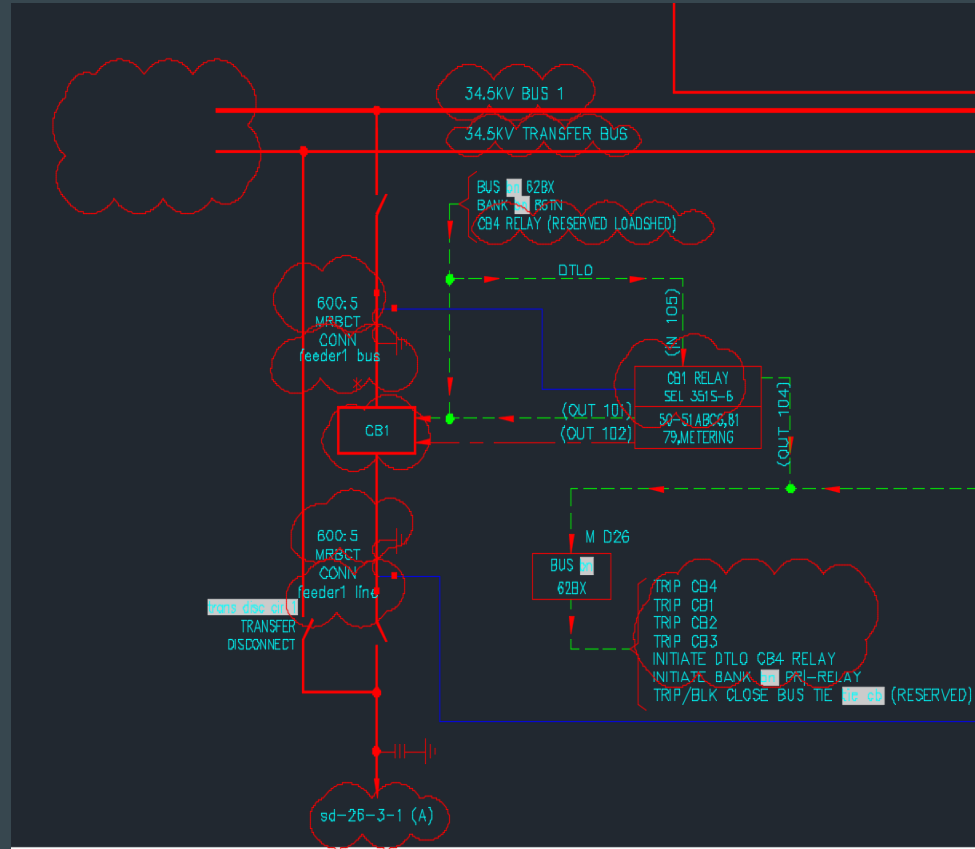
# Topics

- Updated Key Protection Diagram
- Updated It Relay Diagram
- Questions



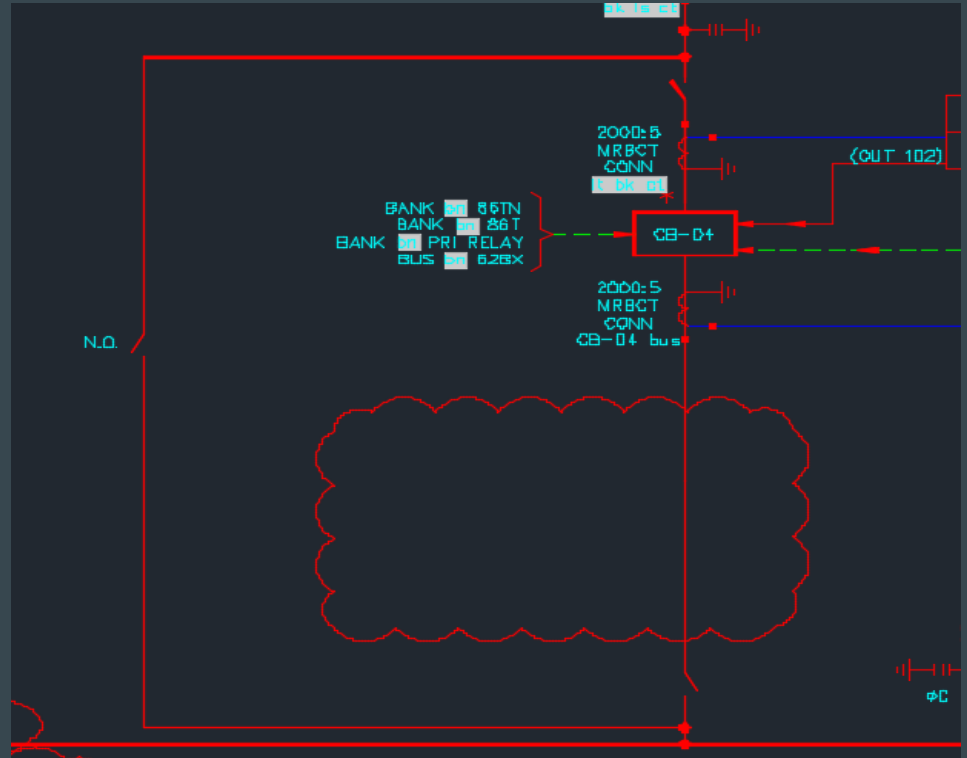
# Key Protection - Low Side

- We deleted mobile connections and changed the rating of the buses and the ratio of the MRBCT
1. What is the B in MRBCT? What does the ratio mean in 600:5 MRBCT?
  2. How do we go about replacing SEL - 351Ss with the SEL - 351Ss with ethernet?



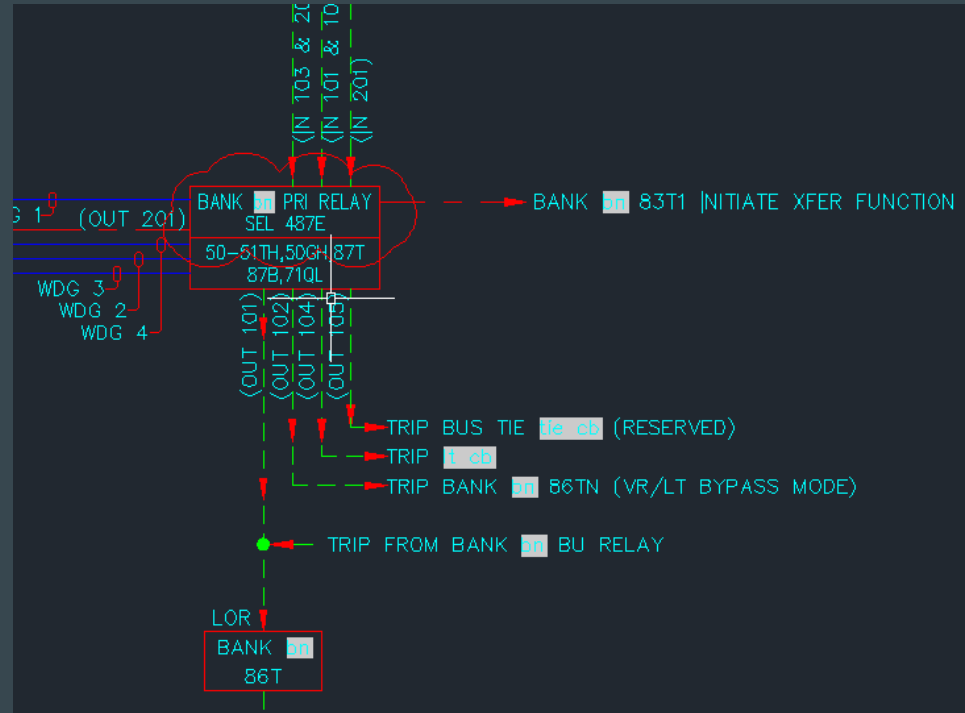
# Key Protection

- We deleted the voltage regulator since it's not within our project scope



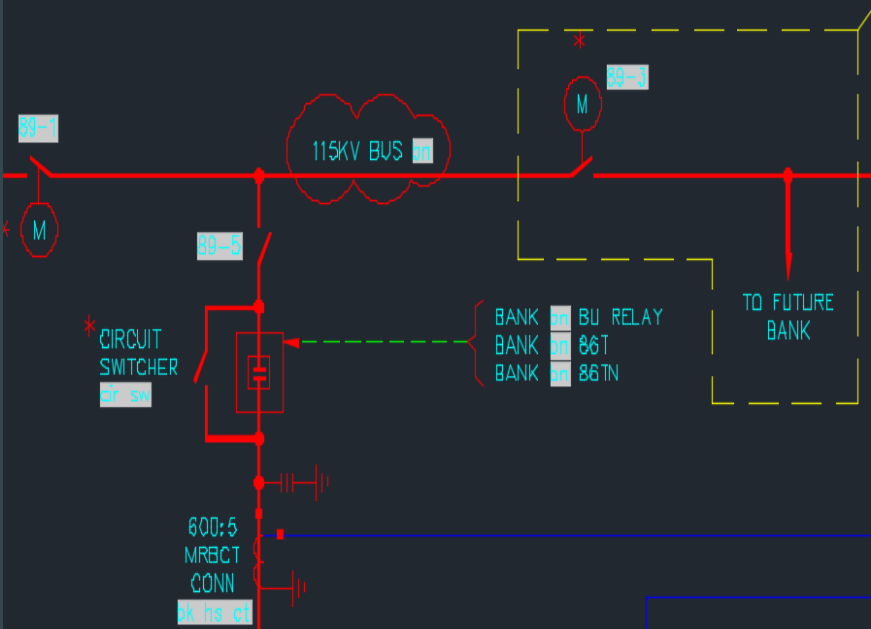
# Key Protection

- Added the correct relay type



# Key Protection - High Side

- Placed the rating of the bus







# It Relay - Input Connections

- Reviewed functions of inputs according to project scope.

2 4

RELAY

NUMBER	TERMINAL	INPUTS		TEST SW - POLE(S)	
		FUNCTION	DWG	NAME	POLE(S)
IN101	A17-A18	CB 4 52a	THIS DWG		
IN102	A19-A20	RECLDSE INITIATE FROM BANK 1 PRI RELAY	THIS DWG		
IN103	A21-A22	TRIP CDIL MONITOR	THIS DWG		
IN104	A23-A24	CB 4 ALARMS	THIS DWG		
IN105	A25-A26	DRIVE TO LOCKOUT (BANK 1) DR BKR FAIL	THIS DWG		
IN106	A27-A28	SUPERMSE MANUAL TRIP (PB, SUPV OUT07)	THIS DWG		
IN201	B25-B26	ALARMS	THIS DWG		
IN202	B27-B28	BANK 86TN TRIP STATUS	THIS DWG		
IN203	B29-B30	BANK 86T TRIP STATUS	THIS DWG		
IN204	B31-B32	SPARE			
IN205	B33-B34	SPARE			
IN206	B35-B36	SPARE			
IN207	B37-B38	SPARE			
IN208	B39-B40	SPARE			

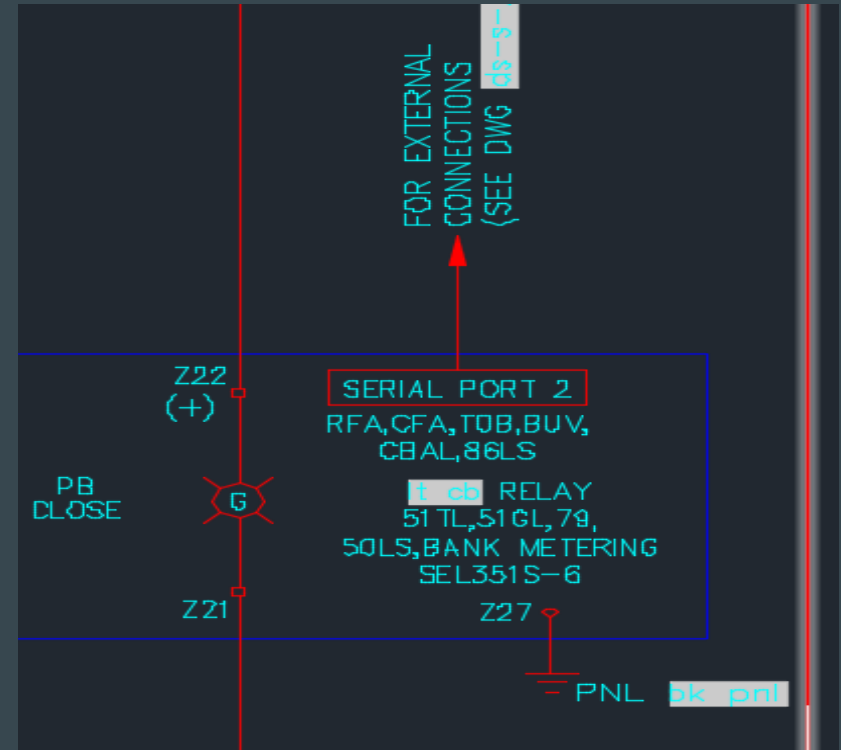
# It Relay - Output Connections

- Reviewed functions of outputs according to project scope.


OUTPUTS					
NUMBER	TERMINAL	FUNCTION			
OUT101	A01-A02	TRIP CB 4	THIS DWG	RTS3	POLES A-B
OUT102	A03-AD4	CLOSE CB 4 (SUPV, AUTO RECLOSE)	THIS DWG		
OUT103	A05-A06	SPARE		RTS3	POLES E-F
OUT104	A07-A08	SPARE		RTS3	POLES G-H
OUT105	A09-A10	SPARE		RTS3	POLES I-J
OUT106	A11-A12	SPARE			
OUT107	A13-A14	SUPV TRIP CB 4	THIS DWG	RTS3	POLES C-D
ALARM	A15-A16	To SEL-2440 Status I/O			
OUT201	B01-B02	SPARE			
OUT202	B03-B04	SPARE			
OUT203	B05-B06	SPARE			
OUT204	B07-B08	SPARE			
OUT205	B09-B10	SPARE			
OUT206	B11-B12	SPARE			
OUT207	B13-B14	SPARE			
OUT208	B15-B16	SPARE			
OUT209	B17-B18	SPARE			
OUT210	B19-B20	SPARE			
OUT211	B21-B22	SPARE			
OUT212	B23-B24	SPARE			

# It Relay - Connections

1. In the ds-s-22-4 It rel drawing, do we delete the thing that's connected to PORT 2 since PORT 2 shouldn't be connected to anything? Where is Port 5 and what is a Cisco switch?



# Title Block

DRAFTED BY: sd-may19-26	<input type="checkbox"/> PRELIMINARY <input type="checkbox"/> APPROVAL	TITLE: OWETHU SUBSTATION 115/34.5KV AC SINGLE LINE DIAGRAM 60 MW SUBSTATION			
DESIGNED/CHECKED BY: CB, EN (B&V)	<input type="checkbox"/> AS BUILT				
ENGINEER: sd-may19-26	DATE _____ NAME _____	LOCATION: ESTANCIA, NM			
DETAIL PROJECT NO: —					
BM/FUNDING PROJECT: —					
DATE ISSUED: 10/30/2018		SCALE: NONE	SCALE FACTOR: 1	STA NO: —	REV: 1

# Drawing List

<b>Drawing List</b>	
<b>Drawing Number/Name</b>	<b>Description</b>
sd-26-1-1 singlearray	Wiring diagram of a single array
sd-26-1-1 powerplant	Wiring diagram of the entire solar plant
sd-26-2-1 collector	Collector diagram
sd-26-3-1 feeder	Feeder diagram
sd-26-4-1 key prot	Substation key protection diagram
sd-26-4-1 it rel	Installation relay diagram
sd-26-4-1 pri rel	Primary relay diagram
sd-26-4-1 ethernet port	Ethernet port diagram
sd-26-4-1 bu relay	Back-up protection diagram

# Action Items From Last Week

1. Will we use the single or double bus system? Will we keep the transfer bus?
2. What is the mobile connect?

# Questions

1. What is the B in MRBCT? What does the ratio mean in 600:5 MRBCT?
2. How do we go about replacing SEL - 351Ss with the SEL - 351Ss with Ethernet
3. In the ds-s-22-4 It rel drawing, do we delete the thing that's connected to PORT 2 since PORT 2 shouldn't be connected to anything?
4. In the ds-s-22-4 It rel drawing, we can find Port 2 but not Port 5. Where is it?
5. What is the Cisco switch, and where is it located?