#### **KIRINDIWELA 132/33kV GRID SUBSTATION**

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Note: There are two options for the Disconnector Switch.

- 1. HMI with the default Disconnector Switch.
- 2. The Modified Disconnector Switch according to the HMI view of Kegalle GSS.

See Figures: - Kirindiwela 132/33kV Grid Substation (SLD With default Disconnector Switch)
Kirindiwela 132/33kV Grid Substation (SLD With New Disconnector Switch)

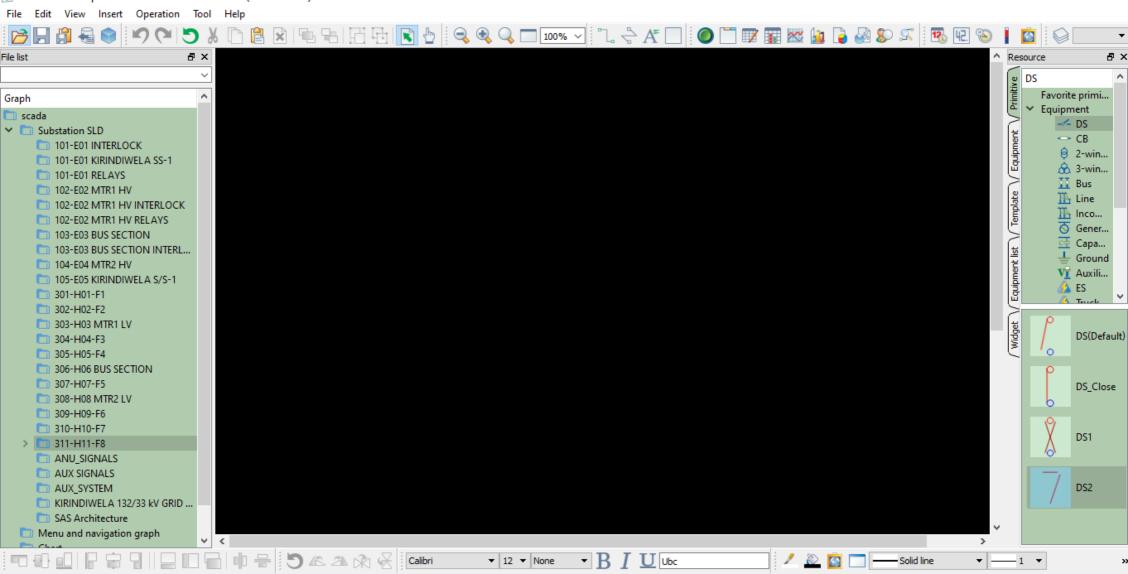
102-E02 MTR1 HV With default Disconnector Switch

102-E02 MTR1 HV With New Disconnector Switch (modified by Primitive editor)

#### **Project Tree**

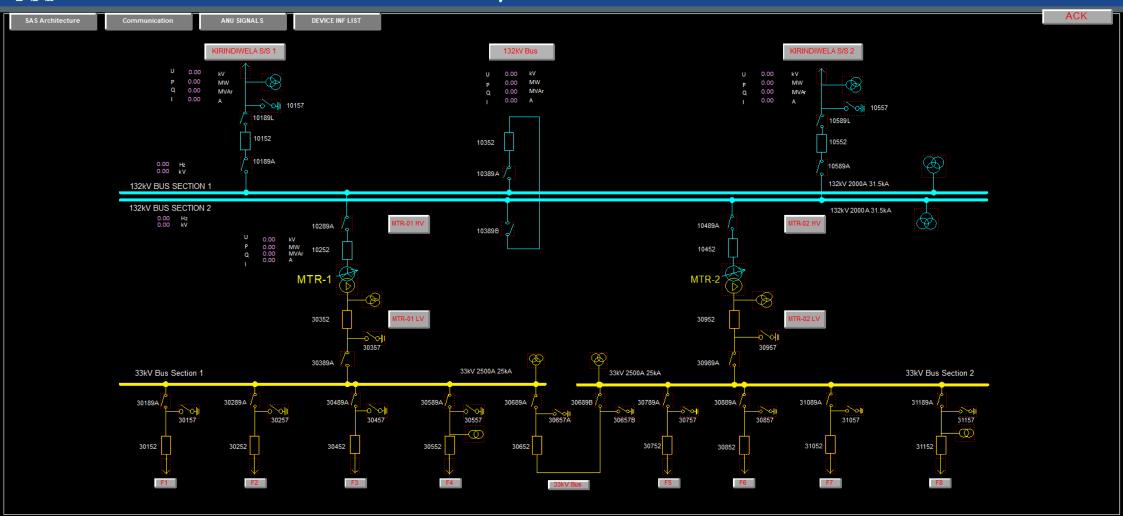
#### **❖** Substation

- Main SLD
  - SAS Architecture
  - Communication List
  - Annunciator Signals
  - Device Information List
  - Auxiliary Signals
- Line Bay
  - Line Bay View
  - Protection Relay
  - Interlock
- > Transformer Bay
  - Transformer Bay View
  - Protection Relay
  - Interlock
  - AVR Signals
- Bus Section
  - BS Bay View
  - Protection Relay
  - Interlock



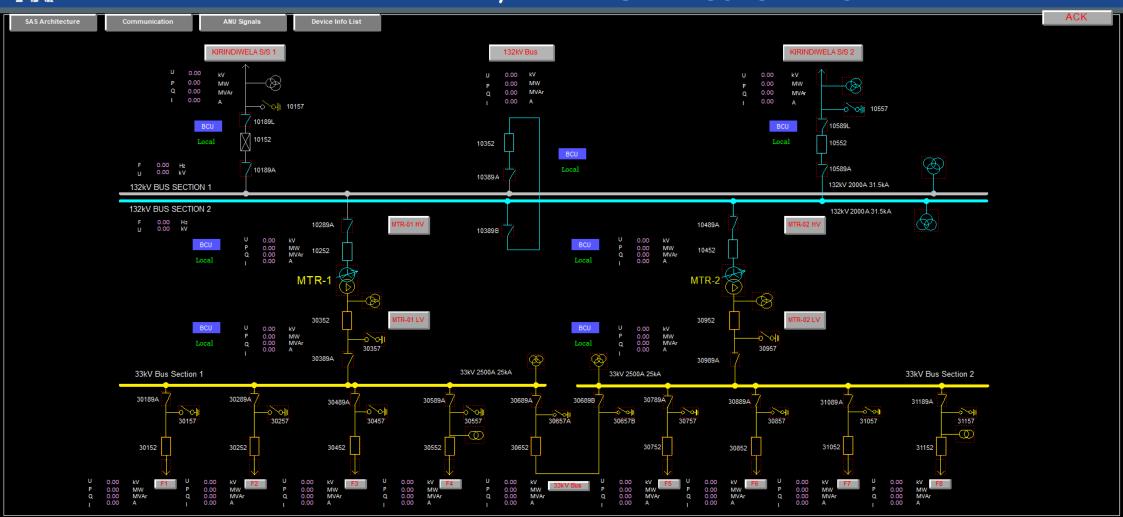


## KIRINDIWELA 132/33 kV GRID SUBSTATION





## KIRINDIWELA 132/33 kV GRID SUBSTATION





### 101-E01 KIRINDIWELA SS-1



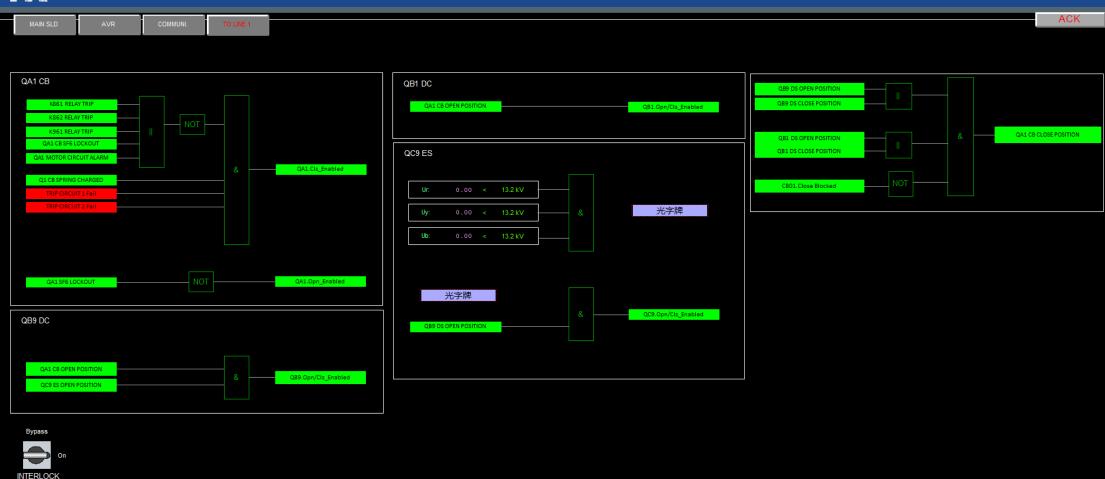


### 101-E01 RELAYS





### 101-E01 INTERLOCK





### 102-E02 MTR1 HV





### 102-E02 MTR1 HV



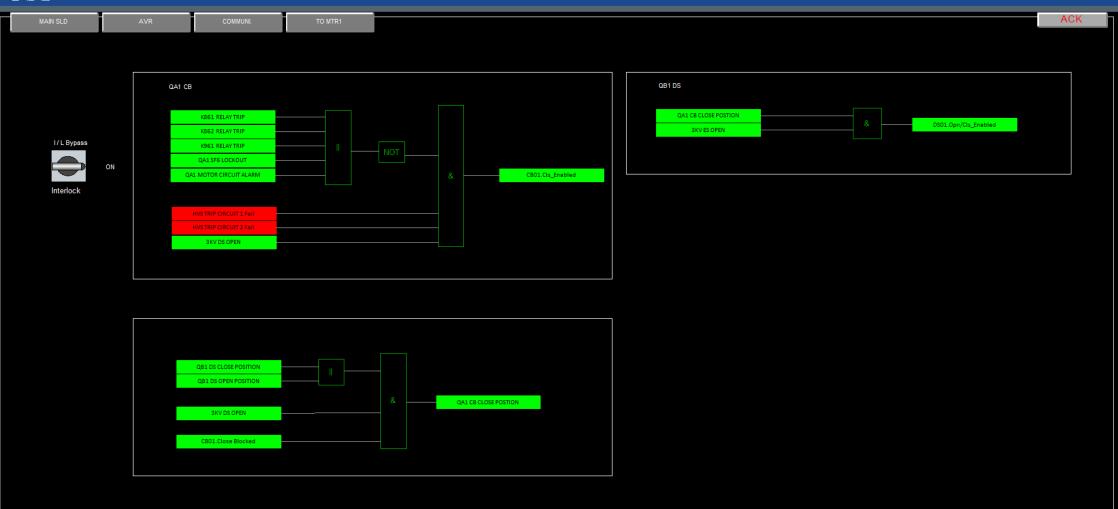


### 102-E02 MTR1 HV RELAYS





## 102-E02 MTR1 HV INTERLOCK



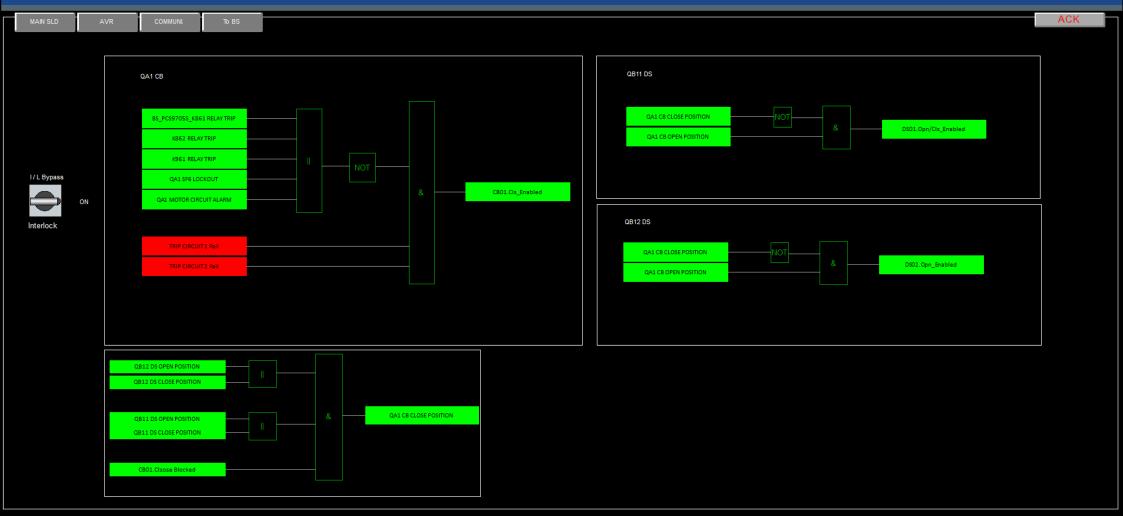


#### 103-E03 BUS SECTION





## 103-E03 BUS SECTION INTERLOCK





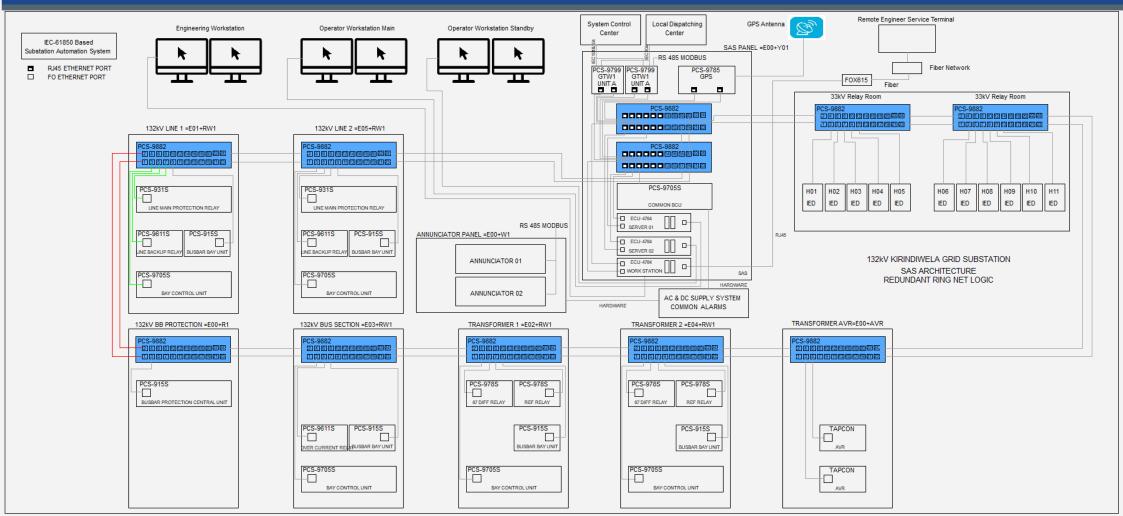
## ANU SIGNALS

Net 1 status

			Net 2 status
			COLLECT REPORT 1
MAIN TANK 33Q1 LOW TRIP	MCCB TRIP FOR BREATHER (LTC) ALARM	MCCB TRIP FOR MAIN SOURCE (MAIN) ALARM	HIGH VOLTAGE WINDING TEMPERATURE TRIP
O.L.T.C. 33Q2 LOW TRIP	MAIN TANK 33Q1 HIGH ALARM	MCCB TRIP FOR MAIN SOURCE (SUB) ALARM	LOW VOLTAGE WINDING TEMPERATURE TRIP
MAIN TANK 63D1 TRIP	MAIN TANK 33Q1 LOW ALARM	FAN1 & FAN2 THERMAL TRIP ALARM	TERITARY VOLTAGE WINDING TEMPERATURE TRIP
O.L.T.C. FOR LOW VOLTAGE 63D1 TRIP	O.L.T.C. 33Q2 HIGH ALARM	FAN3 THERMAL TRIP ALARM	OIL TEMPERATURE TRIP
O.L.T.C. FOR TERTIARY VOLTAGE 63D2 TRIP	O.L.T.C. 33Q2 LOW ALARM	FAN4 THERMAL TRIP ALARM	HIGH VOLTAGE WINDING TEMPERATURE ALARM
BUCHHOLZ (PRESSURE)	BUCHHOLZ (GAS) ALARM	FAN MCCB TRIP ALARM	LOW VOLTAGE WINDING TEMPERATURE ALARM
O.L.T.C. FOR LOW VOLTAGE 96D1 TRIP	BREATHER SYSTEM FAILURE (MAIN TANK) ALARM	MCCB TRIP FOR TM1 ALARM	TERITARY VOLTAGE WINDING TEMPERATURE ALRM
O.L.T.C. FOR TERTIARY VOLTAGE 96D2 TRIP	BREATHER SYSTEM FAILURE (LTC) ALARM	MCCB TRIP FOR BREATHER (MAIN TANK)	OIL TEMPERATURE ALARM



### SAS





# Communication list

Main SLD

	Name	IED address	Net A IP	Net B IP	Net A status
1	3S_PCS9705S	22	198.120.0.22	198.121.0.22	
2	KIRA1_PCS9705S	97	198.120.0.97	198.121.0.97	
3	MT1_PCS9705S	21	198.120.0.21	198.121.0.21	
4	MT1_M1_PCS978S	24	198.120.0.24	198.121.0.24	
5	KIRA2_PCS9705S	25	198.120.0.25	198.121.0.25	
6	MT2_PCS9705S	26	198.120.0.26	198.121.0.26	
7	KIRA1_PCS931S	28	198.120.0.28	198.121.0.28	
8	KIRA1_PCS9611S	29	198.120.0.29	198.121.0.29	
9	P141 Basic Feeder protection relay	30	198.120.0.30	198.121.0.30	
10	3S_PCS9611S	27	198.120.0.27	198.121.0.27	
11	MT1_M2_PCS978S	31	198.120.0.31	198.121.0.31	
12	F87B_CU_MAIN	32	198.120.0.32	198.121.0.32	
13	F87B_BU_KIRA1	33	198.120.0.33	198.121.0.33	
14	F87B_BU_TR01	34	198.120.0.34	198.121.0.34	
15	AA1TH10	36	198.120.0.99	198.121.0.99	
16	103	35	198.120.0.35	198.121.0.35	
17	ED001	100	198.120.0.100	198.121.0.100	
18					
19					
20					
21	<b>4</b>				•



# Device information list

MAIN SLD				_		
BI Measurement Metering	TP	Control				
		Point name	Point type	Latest value	Refreshing time	Date updated
System  KIRINDIWELA_GSS	1	BS_PCS9705S_TrigDFR_BI	BI		1970-01-01 05:30:00.000	1970-01-01 05:30:00.000
BS_PCS9705S KIRA1_PCS9705S	2	BS_PCS9705S_TrigDFR_Man	BI		1970-01-01 05:30:00.000	1970-01-01 05:30:00.000
MT1_PCS9705S	3	BS_PCS9705S_TrigDFR_Quality	BI		1970-01-01 05:30:00.000	1970-01-01 05:30:00.000
MT1_M1_PCS978S KIRA2_PCS9705S	4	BS_PCS9705S_Fail_BoardConfig	BI		1970-01-01 05:30:00.000	1970-01-01 05:30:00.000
KIRIH03	5	BS_PCS9705S_Fail_BoardInit	BI		1970-01-01 05:30:00.000	1970-01-01 05:30:00.000
∴MT2_PCS9705S ∴KIRA1_PCS931S	6	BS_PCS9705S_Fail_ProcLevelConfig	BI		1970-01-01 05:30:00.000	1970-01-01 05:30:00.000
	7	BS_PCS9705S_Fail_Device	BI		1970-01-01 05:30:00.000	1970-01-01 05:30:00.000
BS_PCS9611S	8	BS_PCS9705S_Fail_Setting_OvRange	BI		1970-01-01 05:30:00.000	1970-01-01 05:30:00.000
···MT1_M2_PCS978S ···F87B_CU_MAIN	9	BS_PCS9705S_Fail_Settings	BI		1970-01-01 05:30:00.000	1970-01-01 05:30:00.000
F87B_BU_KIRA1	10	BS_PCS9705S_Fail_Sample	BI		1970-01-01 05:30:00.000	1970-01-01 05:30:00.000
F87B_BU_TR01  Substation	11	BS_PCS9705S_Fail_Memory	BI		1970-01-01 05:30:00.000	1970-01-01 05:30:00.000
···AA1TH10 ····Synthetic information	12	BS_PCS9705S_Fail_Output	BI		1970-01-01 05:30:00.000	1970-01-01 05:30:00.000
Synthodo información	13	BS_PCS9705S_Ok_TimeSyn	BI		1970-01-01 05:30:00.000	1970-01-01 05:30:00.000
	14	BS_PCS9705S_LinkState_LAN1	BI		1970-01-01 05:30:00.000	1970-01-01 05:30:00.000
	15	BS_PCS9705S_LinkState_LAN2	BI		1970-01-01 05:30:00.000	1970-01-01 05:30:00.000
	16	BS_PCS9705S_LinkState_LAN3	BI		1970-01-01 05:30:00.000	1970-01-01 05:30:00.000
	17	BS_PCS9705S_LinkState_LAN4	BI		1970-01-01 05:30:00.000	1970-01-01 05:30:00.000
	18	BS_PCS9705S_GAIm_Overall	BI		1970-01-01 05:30:00.000	1970-01-01 05:30:00.000
	19	BS_PCS9705S_GAIm_CfgFile	BI		1970-01-01 05:30:00.000	1970-01-01 05:30:00.000
	20	BS_PCS9705S_B01.GOOSE_Link00.GAIm_ADisc	BI		1970-01-01 05:30:00.000	1970-01-01 05:30:00.000
	21	BS_PCS9705S_B01.GOOSE_Link00.GAIm_BDisc	BI		1970-01-01 05:30:00.000	1970-01-01 05:30:00.000
1	22	BS_PCS9705S_B01.GOOSE_Link01.GAIm_ADisc	BI		1970-01-01 05:30:00.000	1970-01-01 05:30:00.000