

C.E. (System Control Centre),

REPORT ON SYSTEM DISTURBANCE / PLANT FAILURE

Power Station: **Kotmale Power Station** Date: 06/12/2015 • Time: 17:27 hrs

Failure at a Glance: At 17:27 hrs Biyagama Line 1/Biyagama Line 2 tripped from Kotmale side.

Pre-fault condition:

Generators:

Readings at: 17:00 hrs

Unit No.	MW	MVar	Voltage kV	AVR on/off	Governor	Remarks
01	50	05	13.5	AVR	auto	<i>Free- Control</i>
02	37	10	13.5	AVR	auto	-
03	-	-	-	-	-	-

Transmission Lines:

Readings at: 17:00 hrs

Transmission Line	MVar	MW	A	kV
Vic 01	11	145	388	225
Vic 02	10	144	385	224
Anu 01	23	-41	122	223
Anu 02	23	-41	122	223
UK 01	7	60	148	225
UK 02	6	59	151	225
Biy 01	-45	-208	567	223
Biy 02	-49	-205	567	223

(b). Nature of failure:

Equipment	Auto/Man trip	Time of tripping	Indications/Remarks
Biyagama 1	Auto	17:27 hrs	At Relay Room: <ul style="list-style-type: none">• F871 Main 1 Protection<ul style="list-style-type: none">○ General Trip○ R Pickup○ Y Pickup○ N Pickup○ Diff. Trip○ 21/67N CR.Send• F872 Main 2 Protection<ul style="list-style-type: none">○ R Pickup○ Y Pickup○ N Pickup○ Diff. Trip

			<ul style="list-style-type: none"> ○ Carrier Send ○ Carrier Received
Biyagama 2	Auto	17:27hrs	<p>At Relay Room:</p> <ul style="list-style-type: none"> ● F871 Main 1 Protection <ul style="list-style-type: none"> ○ General Trip ○ R Pickup ○ Y Pickup ○ N Pickup ○ Diff. Trip ○ CR ● F872 Main 2 Protection <ul style="list-style-type: none"> ○ R Pickup ○ Y Pickup ○ N Pickup ○ Diff. Trip ○ Zone1/1B trip ○ Carrier Send ○ Carrier Received
Anuradapura 1	N/A	N/A	<p>At Relay Room:</p> <ul style="list-style-type: none"> ● F871 Main 1 Protection <ul style="list-style-type: none"> ○ Line 1: 50/51N OC -3Ph 1P/Inverse Ti:Pickup ● F21 <ul style="list-style-type: none"> ○ R ph pickup ○ Y ph pickup ○ B ph pickup ○ N pickup
Anuradapura 2	N/A	N/A	<p>At Relay Room:</p> <ul style="list-style-type: none"> ● F871 Relay <ul style="list-style-type: none"> ○ Line 1: 50/51 OC -3ph /1p Inverse Ti:pickup ○ R Pickup ○ Y Pickup ○ B Pickup ○ N Pickup ● F21 <ul style="list-style-type: none"> ○ R-ph pickup ○ Y-ph pickup ○ B-ph pickup ○ N-pickup
Victoria -01	N/A	N/A	<p>At Relay Room:</p> <ul style="list-style-type: none"> ● F871 Relay <ul style="list-style-type: none"> ○ Line 1: 50/51 OC -3ph /1p Inverse Ti:pickup ○ R Pickup ○ Y Pickup ○ N Pickup ○ VT Fuse Fail ○ Com Fail


			<ul style="list-style-type: none"> • F872 <ul style="list-style-type: none"> ○ R-ph pickup ○ Y-ph pickup ○ N-pickup ○ 21/67N Carrier received
Victoria -02	N/A	N/A	At Relay Room: <ul style="list-style-type: none"> • F871 Relay <ul style="list-style-type: none"> ○ Line 1: 50/51 OC -3ph /1p Inverse Ti:pickup ○ R Pickup ○ Y Pickup ○ N Pickup ○ VT Fuse Fail • F872 <ul style="list-style-type: none"> ○ R-ph pickup ○ Y-ph pickup ○ N-pickup ○ 21/67N Carrier received
Upper Kotmale -01	N/A	N/A	<ul style="list-style-type: none"> • RED 670 <ul style="list-style-type: none"> ○ Ground Fault • Siprotec 754s2 <ul style="list-style-type: none"> ○ Ground Fault
Upper Kotmale -02	N/A	N/A	<ul style="list-style-type: none"> • RED 670 <ul style="list-style-type: none"> ○ Ground Fault • Siprotec 754s2 <ul style="list-style-type: none"> ○ Ground Fault

3. Restoration

Equipment	Restored time
Biyagama 1/2	17:43

4. Brief description of incident by officer in charge [OEE] at that time:

At 17:27 hrs Biyagama Line 1 and 2 tripped from Kotmale. Informed SCC and restored the line after clearing all the indication as per the instructions by SCC.


06/12/2015

5. Remedial actions taken to avoid reoccurrence of such failure / [EE (C&I/ EEM)'s note]:

Happened due to an outside disturbance.


07/12/2015

6. Remarks

Failure is due to an outside disturbance.



CHIEF ENGINEER
Kobrali Power Station
CAYON Electricity Board
Officer In-Charge of the Power Station

Date: 06/12/2015

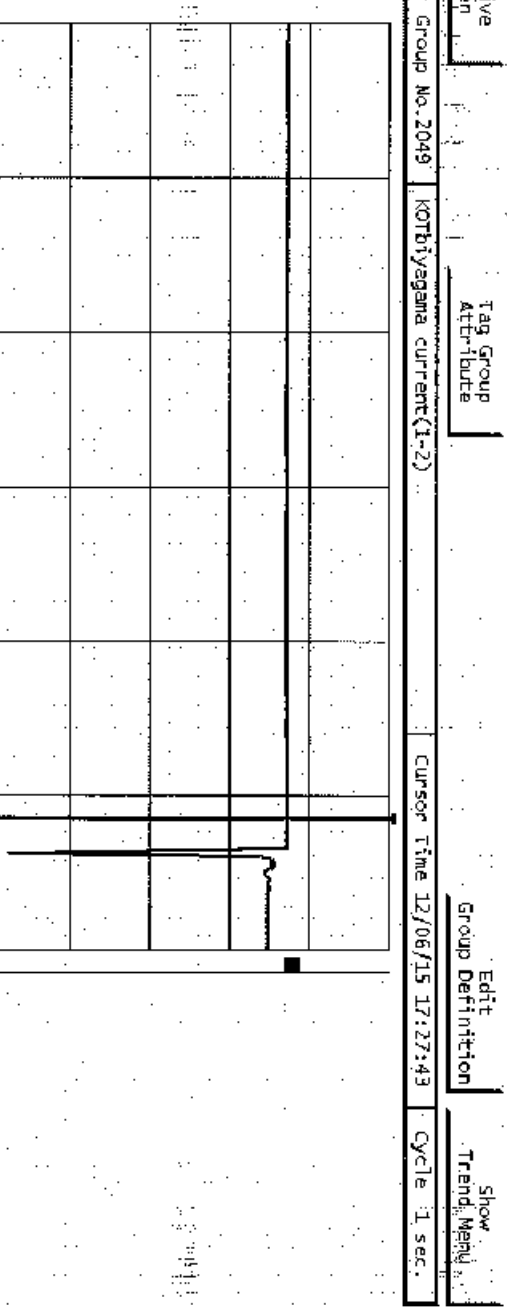
Copy: DGM (MC) - f.i. Pi.

System: KTOP502 Menu: BaseList: WinList: EditWindow: WinClose: RunSum: Predd: School: Function: Syntool: Chgmode: SenJ/C: Report

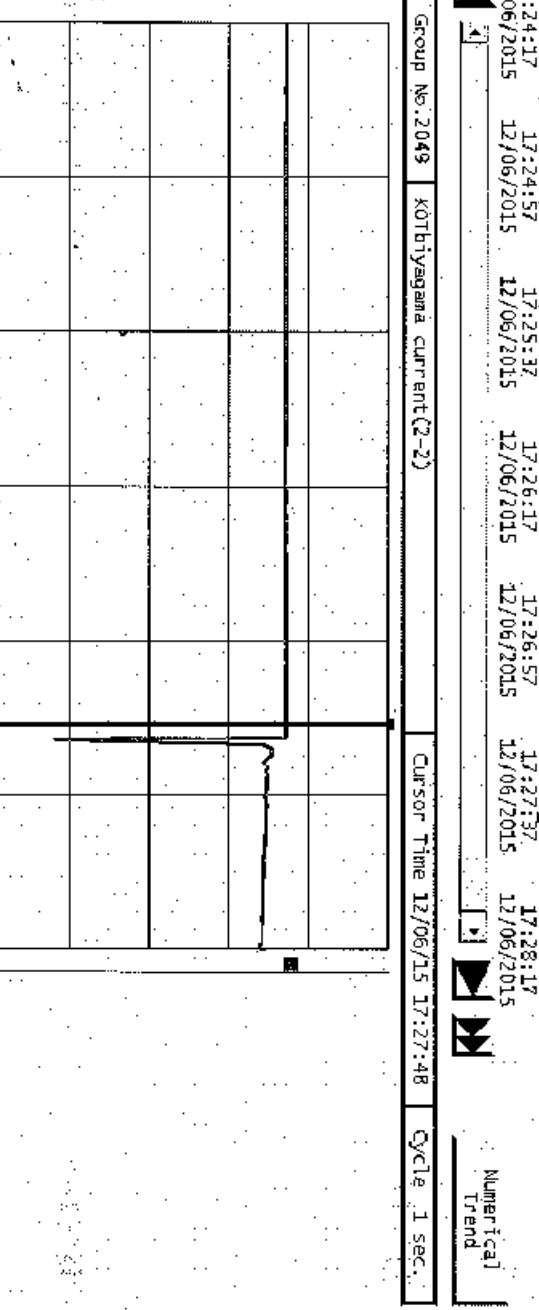
Trend Graphic (Double)

Station No. 112 : KTOP502 OPE/Normal Sun Dec 06 2015 18:06:37

Group	Storage	Relative
Ref'd	Ref'd	Screen
Unit 1	Cursor Value	
SI_A10068.PV	223.9	
SI_A10072.PV	223.5	
SI_A10071.PV	223.8	



Tag Name	Cursor Value
SI_A10084.PV	223.4
SI_A10087.PV	223.6
SI_A10038.PV	223.2



Start Time: 17:24:46 Range: 4 min. End Time: 17:28:46

12/06/2015 17:25:26 12/06/2015 17:26:06 12/06/2015 17:26:46 12/06/2015 17:27:26 12/06/2015 17:28:06 12/06/2015 17:28:46

Numerical Trend

Historical [Left Arrow] [Right Arrow]