

C.E. (System Control Centre),



REPORT ON SYSTEM DISTURBANCE / PLANT FAILURE

Power Station: **Kotmale Power Station** Date: 13/11/2014

Time: 12:33 hrs

Failure at a Glance: At 12:33 hrs, Unit 01 at Kotmale Power Station tripped with indication Transformer Protection Operated. (CBs 320 & 330 also tripped). 11kV dam site supply CB HAD1 also tripped.

Pre-fault condition:

Generators:

Readings at 12:30 hrs

Unit No.	MW	MVAr	Voltage kV	AVR on/off	Governor	Remarks
01	40	40	14.2	ON	Auto,ep1	Frequency control
02	52	35	14.2	ON	Auto,ep2	-
03	-	-	-	-	-	-

Transmission Lines:

Readings at 12:00 hrs

Transmission Line	MW	MVAr	A	kV
Vic 01	102	13	275	226
Vic 02	101	11	271	224
Anu 01	41	28	131	223
Anu 02	41	28	130	223
UK 01	39	6	96	225
UK 02	39	5	99	225
Biy 01	145	85	447	223
Biy 02	142	88	453	223

(b). Nature of failure:

Equipment	Auto/ Man trip	Time of tripping	Indications/Remarks
Unit 01, CB 320 & 330	Auto	12:33 hrs	At Power House Red Indications: <ul style="list-style-type: none">• Substation protection operated At Relay Room +RAA1=U1 Gen. Cable ExTr F87T Relay <ul style="list-style-type: none">• Relay Pickup• 2nd Harmonic BLK• 5th Harmonic BLK ExTr F87N Relay <ul style="list-style-type: none">• Relay Trip• Relay Pickup• LV Ref D1RP 220kV Anu OHL 1 F871 Diff Main 1 <ul style="list-style-type: none">• N Pickup +RAB1=U2 Gen. Cable ExTr F87T Relay <ul style="list-style-type: none">• Relay Pickup

3. Restoration

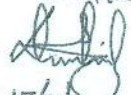
Equipment	Restored time
CB 320 & 330	13:18 hrs
Unit 01	13:21 hrs

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

At 12:33 hrs, Unit 01 at Kotmale Power Station tripped with indication Transformer Protection Operated. (CBs 320 & 330 also tripped). 11kV dam site supply CB HAD1 tripped. A lightning strike took place near vicinity of the switchyard at the same time. After resetting all the indications CBs 320 & 330 were switched on with the consent of EEM and SCC. Unit 1 also started with the consent of EEM and SCC after resetting all the indications.

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

Tripping may occurred due to the outside disturbance.
Similar case was found in previous occasion. Informed 220 kV Protection
Development Project Engineer for checking their protection co-ordination.


13/11/2014.

6. Remarks

Recently protection setting were changed under
the 220kV PD project. This was informed to
PD Engineer for checking protection coordination.



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Officer In-Charge of the Power Station

Date: 13/11/2014

CHIEF ENGINEER

Kotmale Power Station

Copy: DGM (MC) - ~~Chief~~ Electricity Board

MAWATURA