

C.E. (System Control Centre),



REPORT ON SYSTEM DISTURBANCE / PLANT FAILURE

Power Station: **Kotmale Power Station** Date: 13/10/2013 Time: 17:50 hrs

Failure at a Glance: At 17:50 hrs Unit 01 tripped with indications Stator Earth Fault Protection at PH and Transformer Protection Operated at SY.

Pre-fault condition:

Generators

Unit No.	MW	MVAr	Voltage kV	AVR on/off	Governor	Remarks
01	56	10	13.5	ON	Auto, EP1	Frequency Control
02	46	0	13.9	ON	Auto, EP2	-
03	52	0	13.6	ON	Auto, EP2	-

Transmission Lines

Transmission Line	MW	MVAr	A	kV
Vic 01	109	26	300	226
Vic 02	108	25	290	224
Anu 02	75	37	200	224
Biy 01	180	49	490	223
Biy 02	179	52	150	223
UK 01	57	7	150	225
UK 02	61	5	210	225

(b). Nature of failure:

Equipment	Auto/Man trip	Time of tripping	Indications/Remarks
Unit 01	Auto	17:50 hrs	At Power House 1. Inlet Valve Closing Trip - Red 2. Stator Earth Fault Protection - Red 3. Substation Protection Operated - Red At Control room 1. Electrical Trip Relay Operated 2. Transformer Protection Operated At Relay Room RAA3=U1T-T Generator T/F 1 panel D9.125.113, D9.125.107 and D9.125.307 relays operated

3. Restoration

Equipment	Restored time
Unit 01	

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

At 17:50 hrs Unit 01 tripped with indications Stator Earth Fault Protection at PH and Transformer Protection Operated at SY. Found a dead crow near the Unit 01 Earthing Transformer. Unit 01 was kept at standstill position for further inspections.

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

Crows and other birds in all substations cause earthing of high voltage lines. How to avoid such reoccurrence is being studied.
No equipment malfunctions.

ELECTRICAL ENGINEER
Maintenance
Ceylon Electricity Board
Kotmale Power Station
MAWATURA

M. Jayasinghe
13/10/2013

6. Remarks

This has happened due to earthing occurred at the earthing Transformer at S/y. Due to overlapping of protection zones station earth fault relay has operated.

.....
Officer In-Charge of the Power Station

Date: 13/10/2013

CHIEF ENGINEER

Kotmale Power Station
Copy: DGM (MC) - f.i. Pl. Ceylon Electricity Board
MAWATURA