C.E. (System Control Centre),

REPORT ON SYSTEM DISTURBANCE / PLANT FAILURE

Power Station: **Kotmale Power Station** Date: 19/06/2014 Time: 08:00 hrs

Failure at a Glance: At 08:00 hrs Unit 01 at Kotmale power Station tripped with indication Electrical Trip Relay operated and AVR failure.

Pre-fault condition:

Generators

Unit No.	MW	MVAr	Voltage kV	AVR on/off	Governor	Remarks
01	50	5	13.5	ON	Auto,ep1	Frequency control
02	-	-	-	-	-	-
03	-	-	-	-	-	-

Transmission Lines

Transmission Line	MW	MVAr	A	kV
Vic 01	06	12	0.04	230
Vic 02	05	11	0.04	228
Anu 01	-22	20	0.09	228
Anu 02	off	off	off	off
Biy 01	-23	-29	0.09	227
Biy 02	-20	-28	0.10	227
UK 01	03	04	0.007	229
UK 02	03	03	0.009	229

(b). Nature of failure:

Equipment	Auto/ Man trip	Time of tripping	Indications/Remarks
Unit 01	Auto	08:00 hrs	At Power House Red Indications: • Generator protection operated • Inlet Valve close Trip White indications: • Excitation system fault Generator protection relay codes(for Prot.Eng reference) • @07:59.02. 833 054 40 Start ON • 843 002 DX9.Trip ON • 948 005 Gen Trip ON • 959 053 40 Trip off At Control Room

			White Indications: • Electrical trip relay operated. • AVR failure • Non urgent electrical fault • Non urgent mechanical fault

3. Restoration

Equipment	Restored time
Unit 01	08:57 hrs(19/06/2014)

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

The Unit 01 which was at frequency control operation tripped at 08:00 hrs on 19/06/2014. The indications were Electrical trip relay operated/ AVR failure. The incident was initiated with the auxiliary power change over from HAD 05 to HAD 06.

The generator protection relay unit was reset and problem disappeared after that. No indications of alarms were available at AVR alarm list.

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

The trip signal was initiated by supply -Low voltage signal from the excitation system.

checked., supply fuses, MCB for PCB supply, MCB for I2V supply to thyristor converter. and verified that no fault at the exciting syst. Root cause under investigation.

EEC(C&I)

6. Remarks Under investigation to find out whether this has occured due to the recent changes done (time settings) of protection relay by AMHE branch.

20/6

CHIEF ENGINEER
Kotmale Power Station
Ceylon Electricity Board
MAHIYANGANA

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Officer In-Charge of the Power Station

Date: 2014/06/19

Copy: DGM (MC) – f.i. Pl.