

C.E. (System Control Centre),



REPORT ON SYSTEM DISTURBANCE / PLANT FAILURE

Power Station: **Kotmale Power Station**

Date: 15/08/2016

Time: 17:42 hrs

1. Failure at a Glance:

At 17:42hrs Unit 03 tripped (CB 520 & 530) with the indication Transformer Protection Operated.

2. Pre-fault condition:

Generators:

Readings at 17:42:00 hrs (MW & MVar from SCADA trend graphs, other readings are as per operator observations)

Unit No.	MW	MVar	Voltage kV	AVR on/off	Governor	Remarks
01	-	-	-	-	-	
02	-	-	-	-	-	
03	27.8	15.5	13.8	ON	Auto,ep2	

Transmission Lines:

Readings at 17:42:00 hrs (as per Trend graphs on SCADA)

Transmission Line	MW	MVar	A	kV
Victoria 1	7.4	21.9	61	229.7
Victoria 2	7.3	20.7	60	228.5
Anuradhapura 1	67.6	5.8	137	227.8
Anuradhapura 2	1.4	23.2	63	227.9
Upper Kotmale 1	22.9	8.8	51	229.3
Upper Kotmale 2	22.7	6.8	53	229.7
Biyagama 1	77.9	54.1	238	227.6
Biyagama 2	76.0	54.6	242	227.6

Nature of failure:

Equipment	Auto/Man trip	Time of tripping	Indications/Remarks
Unit 3	Auto	17:42hrs	At Power House <ul style="list-style-type: none">Substation Protection Operated At Control Room <ul style="list-style-type: none">Mechanical Trip Relay OperatedEmergency ShutdownGovernor Oil System AbnormalNon Urgent Electrical Fault540 Trip Circuit Faulty
Unit 3 T/F	Auto	17:42hrs	At Control Room <ul style="list-style-type: none">Transformer Protection Operated

			At Relay Room <u>F87T TF Diff relay</u> <ul style="list-style-type: none"> • (1) Relay Trip • (2) Relay Pickup • (3) Diff Trip • (9) 2nd Harmonic BLK <u>TF F87N Prot. Relay</u> <ul style="list-style-type: none"> • (1) Relay Trip • (2) Relay Pickup • LV Ref <u>TR F67N OC/EF Relay</u> <ul style="list-style-type: none"> • R Ph Pickup • B Ph Pickup
--	--	--	---

3. Restoration

Equipment	Restored time
Unit 3 & T/F Bank	18:24 hrs

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

At 17:42hrs Unit 03 tripped (CB 520 & 530) with the indication Transformer Protection Operated. Found a burnt dead squirrel under the earthing transformer of Unit 3. As it was evident enough to decide that the transformer protection has operated due to the dead squirrel, Unit 3 transformer bank was energized and the Unit 3 was restarted with the consent of EEM after resetting the indications.

John B mb
 Eng. I.A.B. M.S. IHALAGEDARA
 Electrical Engineer (Operations)
 Kotmale Power Station

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

Tripped due to animal intrusion.

[Signature]
 Eng. U.S. DUNUKEDENIYA
 Electrical Engineer (Maintenance)
 Kotmale Power Station

6. Remarks

This is due to a animal intrusion. MC has been restarted after taking remedial actions.

[Signature]

.....
 Officer In-Charge of the Power Station
 Eng. C.S. GUNASEKARA
 Chief Engineer
 Kotmale Power Station

Date: 15/08/2016

Copy: DGM (MC) – f.i. Pl.