

C.E. (System Control Centre),



**REPORT ON SYSTEM DISTURBANCE / PLANT FAILURE**

Power Station: **Kotmale Power Station** Date: 01/02/2016

Time: 16:46 hrs

**Failure at a Glance:** At 16:46 hrs. Unit 02 –Transformer Protection operated at Kotmale Power Station with the indication

Transformer Protection operated.

**Pre-fault condition:**

Generators:

Readings at 16:30 hrs

Unit No.	MW	MVar	Voltage kV	AVR on/off	Governor	Remarks
01	-	-	-	-	-	
02	-	-	-	-	-	
03	60	25	14.3	ON	Auto,ep2	

Transmission Lines:

Readings at 16:00 hrs

Transmission Line	MVar	MW	A	kV
Vic 01	28	79	226	227
Vic 02	26	78	221	226
Anu 01	23	10	74	225
Anu 02	23	10	75	226
UK 01	7	32	78	227
UK 02	5	32	80	227
Biy 01	-68	-150	435	225
Biy 02	-70	-148	440	225

(b). Nature of failure:

Equipment	Auto/Man trip	Time of tripping	Indications/Remarks
Unit 02-Transformer	Auto	16:46	At Power House • Substation protection operated At Relay room Cabinet RAB.1 U02: F87T • Relay Trip • Relay Pickup • Diff Trip • 2 <sup>nd</sup> harmonic Block F87N • Relay Trip • Relay Pickup • LV REF

			At Control Room White Indications <ul style="list-style-type: none"> <li>• 420 Trip Cct faulty</li> <li>• 430 Trip Cct faulty</li> <li>• Transformer protection operated</li> </ul>
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**3. Restoration**

Equipment	Restored time
Unit 02	18:38hrs on 01/02/2016

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

At 16:46 hrs, Unit 02 Transformer at Kotmale Power Station tripped with indication Transformer Protection operated. Electrocuted animals were located on top of the Earthing transformer. A common IR reading was taken after the incident with the consent of Protection Division (Asset Management Hydro). Protection mechanism was inspected by Asset management unit (Eng.Kushna).

Insulation resistance readings:  
 1min/10min : 382/865 Mohm

*[Handwritten Signature]*  
 2016/02/01

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

Happened due to electrocuted squirrel on top of the Earthing Transformer. Total IR was taken & it was within acceptable range. (1 min - 382 MΩ, 10 min - 865 MΩ).

*[Handwritten Signature]*  
 01/02/2016

**6. Remarks**

Fault is due to a electrocuted squirrel. IR readings are within the accepted limit. According to the AMHE no issue in operating the protection fully & settings.

*[Handwritten Signature]*

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 Officer In-Charge of the Power Station

Date: 01/02/2016

**CHIEF ENGINEER**

Kotmale Power Station

Copy: DGM (MC) Ceylon Electricity Board

**MAWATURA**