

C.E. (System Control Centre),

### REPORT ON SYSTEM DISTURBANCE / PLANT FAILURE

Power Station: **Kotmale Power Station**

Date: 05/11/2014

Time: hrs 15:34

**Failure at a Glance:** At 15:34 hrs Victoria line 02 (220 kV CB 220 tripped and CB 210 & CB 230 were in open position as per the request by SCC) tripped. Victoria line 02 auto recloser is in switched off position after 220 kV protection habilitation work under "Rehabilitation Electricity Supply – Jaffna Region Transmission Line Project – Lot C.A: Protection Panel Replacement Works"

#### **Pre-fault condition:**

Generators

Unit No.	MW	MVAr	Voltage kV	AVR on/off	Governor	Remarks
01	40	30	14.0	ON	AUTO	15:30 hrs Readings
02	40	35	14.3	ON	AUTO	15:30 hrs Readings
03	62	25	14.1	ON	AUTO	15:30 hrs Readings

Transmission Lines (Readings at 15:00 hrs)

Transmission Line	MW	MVAr	A	kV
Vic 01	104	27	286	226
Vic 02	102	25	282	224
Anu 01	77	15	199	224
Anu 02	OFF	-	-	-
UK 01	72	26	192	225
UK 02	73	24	194	225
Biy 01	209	99	614	224
Biy 02	205	102	615	224

(b). Nature of failure:

Equipment	Auto/Man trip	Time of tripping	Indications/Remarks
Victoria line 02	Auto	15:34 hrs	<b>At Control room</b> Victoria line 02 CB 220 Trip Circuit Faulty  <b>At Relay room</b> Victoria line 02 <ul style="list-style-type: none"><li>• F871 Diff. Main 1 Relay<ul style="list-style-type: none"><li>- 'N Pickup</li></ul></li><li>• F21 Dist. Main 2 Relay<ul style="list-style-type: none"><li>- STUB/PDR OPTD</li></ul></li></ul>

**3. Restoration**

Equipment	Restored time
Victoria Line 02 (CB 220)	15:50 hrs

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

220 kV Circuit Breaker 220 tripped and above indications were present after tripping. As instructed by SCC, CB 220 was closed at 15:50hrs after resetting the indications.

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

At this time 220 kV CB230 was taken for maintenance. Tripping happened due to CB230 pole discordance. This was a maloperation of protection tripping. Case was informed to 220 kV Protection Development Project Engineers to rectify the issue.

**6. Remarks**

This was due to a maloperation of protection scheme. Protection scheme was recently upgraded by protection board under protection development project, they have been informed fine.

*[Signature]*  
07/11/2014

**CHIEF ENGINEER**  
..... Kotmale Power Station .....  
Officer In Charge of the Power Station  
Electricity Board  
MAWATURA  
*[Signature]*  
10/11

Date: 2014/11/05

Copy: DGM (MC) – f.i. Pl.