

C.E. (System Control Centre),

REPORT ON SYSTEM DISTURBANCE / PLANT FAILURE

Power Station: **Kotmale Power Station** Date: 23/09/2015 Time: 17:34 hrs

Failure at a Glance: At 17:34 hrs Anuradhapura Line 2 tripped from Kotmale with indications 1st/
2nd main protection operated and Backup protection operated at control room.

Pre-fault condition:

Generators:

Readings at: 17:34 hrs

Unit No.	MW	MVar	Voltage kV	AVR on/off	Governor	Remarks
01	-	-	-	-	-	-
02	30	15	14	on	auto	-
03	60	-	13.7	on	Manual	-

Transmission Lines:

Readings at: 17:34 hrs

Transmission Line	MVar	MW	A	kV
Vic 01	38	05	108	227
Vic 02	38	04	106	226
Anu 01	27	-07	79	225
Anu 02	27	-07	79	225
UK 01	2	56	140	227
UK 02	3	58	147	227
Biy 01	-78	-115	368	225
Biy 02	-80	-112	372	225

(b). Nature of failure:

Equipment	Auto/Man trip	Time of tripping	Indications/Remarks
Anuradhapura 2	Auto	17:34 hrs	<p>At Control Room</p> <ul style="list-style-type: none">• 1st/2nd Main Protection Operated• Backup Protection Operated• Inter-trip received <p>At Relay Room:</p> <ul style="list-style-type: none">• F871 Main 1 Protection<ul style="list-style-type: none">○ General Trip○ R Pickup○ N Pickup○ Zone 1/Z1B Trip

			<ul style="list-style-type: none"> ○ Diff. Trip ○ 21/67N Carrier Send ○ 21/67N Carrier Received ○ AR Lockout ● F21 Main 2 Protection <ul style="list-style-type: none"> ○ Trip ○ Alarm
Anuradhapura 1	Auto	17:34 hrs	<p>At Control Room</p> <ul style="list-style-type: none"> ● 1st/2nd Main Protection Operated ● Backup Protection Operated ● AR operated <p>At Relay Room:</p> <ul style="list-style-type: none"> ● F871 Main 1 Protection <ul style="list-style-type: none"> ○ General Trip ○ R Pickup ○ N Pickup ○ Zone 1/Z1B Trip ○ Diff. Trip ○ VT fuse failed ○ 21/67 NCR Received ● F21 Main 2 Protection <ul style="list-style-type: none"> ○ R Pickup ○ N Pickup ○ Zone 1/Z1B Trip ○ VT fuse failed ○ 21/67 NCR Carrier Received ○ 21/67 NCR Carrier Send ○ AR OPTD
Biyagama 1	N/A	N/A	<p>At Relay Room:</p> <ul style="list-style-type: none"> ● F871 Main 1 Protection <ul style="list-style-type: none"> ○ N Pickup ● F872 <ul style="list-style-type: none"> ○ N pickup
Biyagama 2	N/A	N/A	<p>At Relay Room:</p> <ul style="list-style-type: none"> ● F871 Main 1 Protection <ul style="list-style-type: none"> ○ N Pickup ● F872 <ul style="list-style-type: none"> ○ N pickup
Upper Kotmale 1	N/A	N/A	<p>At Relay Room:</p> <ul style="list-style-type: none"> ● 7SA52 Main 2 Protection <ul style="list-style-type: none"> ○ Ground Fault

Upper Kotmale 2	N/A	N/A	At Relay Room: <ul style="list-style-type: none"> 7SA52 Main 2 Protection <ul style="list-style-type: none"> Ground Fault
Generator 01	Stand still	17:34 hrs	Shaft current protection operated.

3. Restoration

Equipment	Restored time
Anuradhapura 2	21:00 hrs

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

At 17:34 hrs Anuradhapura Line 1 tripped from Kotmale with indications 1st/ 2nd main protection operated and Backup protection operated at control room. Informed SCC and restored the line after clearing all the indication as per the instructions by SCC.

[Signature]
2018/09/28

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

Happened due to an outside disturbance.

[Signature]
25/9/2015

6. Remarks

Fault is due to an outside disturbance

[Signature]

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Officer In-Charge of the Power Station

Date: 23/09/2015

CHIEF ENGINEER
Kotmale Power Station
Ceylon Electricity Board

Copy: DGM (MC) – f.i. PI. MAWATURA