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14 March, 2013

Lord Dalgety
Electricity Commission
Tu'atakilangi
Nuku'alofa

Dear Lord Dalgety

Compliance Reporting for the Month of March, 2013

In accordance with the reporting requirements of the Electricity Concession Contract and in response to your request for additional information as specified in the suggested MOU dated May 2012, TPL submits the following reports for the month of March, 2013.

1. System Loss Report – February, 2013
2. Reliability Measures – February, 2013
3. Monthly Outage Events – February, 2013

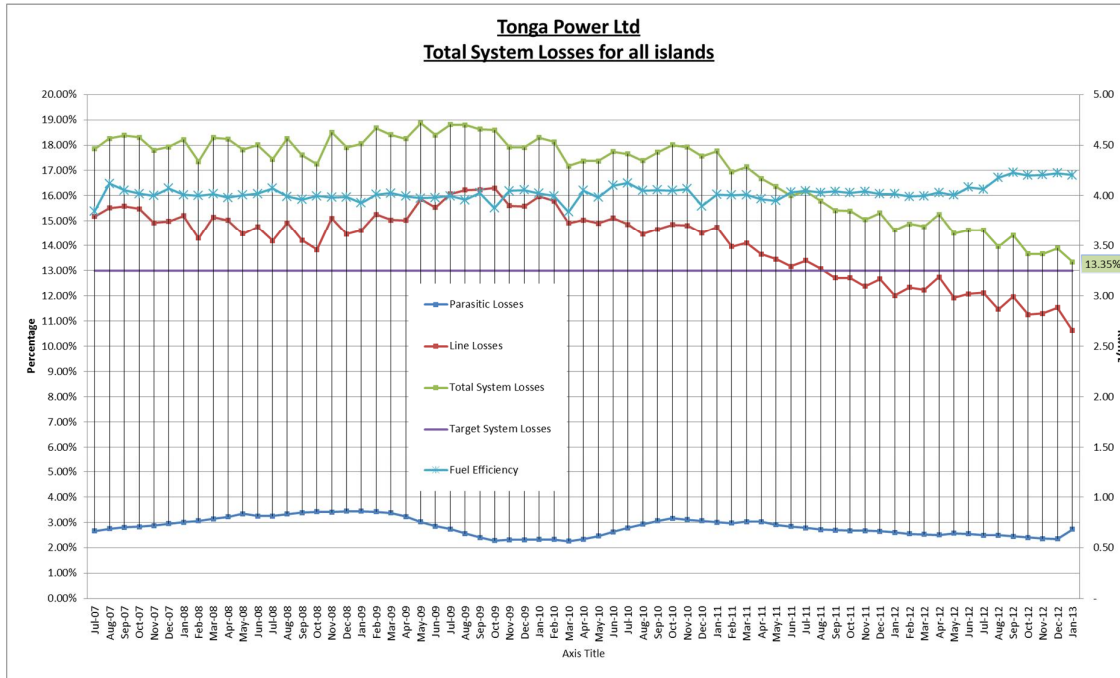
The above report items are described in detail below.

1. System Loss Report

The following graph illustrates the past 12 months moving average (smoothed) of systems losses for all four islands for the period July 2007 – January 2013. The graph indicates that the total losses for all four islands have slightly decreased from 13.89% (December, 2012) to 13.35% (January, 2013). All four islands' moving averages have not changed much through the month. However, on a real time basis (disregarding 12 months moving average), Tongatapu losses have increased from 9.68% in December 2012 to 13.04% in January 2013. Whilst Vavau and Eua real time basis losses have increased, Haapai losses have decreased significantly.

Fuel efficiency for all four islands has slightly decreased from 4.22 Kwh/L in December, 2012 to 4.20 Kwh/L in January, 2013.

Please refer to the attached excel file 'System Loss Report February 2013' for further details.



2. Reliability Measures

SAIDI minutes (measuring average total duration of interruption per connected customer) for the month of February, 2013 have increased from 177.39 (January 2013) to 282.85 (February 2013) minutes (see the table below).

Reliability Measures											
SAIDI Monthly Performance				CAIDI Monthly Performance				SAIFI Monthly Performance			
Month	2010/11	2011/12	2012/13	Month	2010/11	2011/12	2012/13	Month	2010/11	2011/12	2012/13
Jul	7.74	4.74	638.62	Jul	60.7	143.09	90.44	Jul	0.13	0.03	7.06
Aug	935.29	4.51	57.31	Aug	443.33	161.45	148.47	Aug	2.11	0.03	0.39
Sep	933.55	59.19	5.66	Sep	477.69	649.6	92.61	Sep	1.95	0.09	0.06
Oct	9.35	253.89	16.05	Oct	64.33	243.63	11.23	Oct	0.15	1.04	1.43
Nov	4.35	25.49	150.73	Nov	123.68	69.34	62.32	Nov	0.04	0.37	2.42
Dec	20.42	115.19	74.28	Dec	19.48	358.97	33.78	Dec	1.05	0.32	2.2
Jan	984.8	622.62	177.39	Jan	889.45	280.26	114.76	Jan	1.11	2.22	1.55
Feb	162.32	3010.76	282.85	Feb	131.96	412.1	363.77	Feb	1.23	7.31	0.78
Mar	296.37	23.32		Mar	219.53	55.81		Mar	1.35	0.42	
Apr	157.89	336.9		Apr	63.18	219.97		Apr	2.5	1.53	
May	8.22	294.55		May	222.5	98.59		May	0.04	2.99	
Jun	62.22	14.72		Jun	387.96	66.45		Jun	0.16	0.22	

Four of the major HV faults contributed to the SAIDI losses are described below:

Report Date	Fault Description	Repair Comment	Customers Off
16/02/2013	SHUT DOWN FEEDER 1 for pole replacements	Shut down all the power from Mailletaha to Tufumahina	5021
26/02/2013	CLOSED SIA'ATOUTAI TO TE'ELIU	CLOSED INLINE FUSE FROM SIA'ATOUTAI TO FATAI AT 2317	1599
14/02/2013	Shut down	Susi and the crew shut down all power line from Makaunga to Niutoua [Install new transformer]	1500
02/02/2013	Power off Navutoka - Niutoua	Power off from Navutoka to Niutoua causes by HV line broken at Kolonga due to coconut tree felt on HV line ... Repair disconnect HV line and reconnect it again...Power Shut Down at 0036am and power on again at 0203.... Material uses : IPC 16-95 x 4	1200

CAIDI minutes (measuring average total duration of interruption per interrupted customer) for the month of February 2013 have also increased from 114.76 minutes (in January, 2013) to 363.77 (February, 2013) minutes (see the table above).

SAIFI (measuring average number of interruptions per customer); however, has decreased from 1.55 (January 2012) to 0.78 (February, 2013). Refer to the table above.

3. Monthly Outage Events

Planned/Unplanned Outage Events	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13
Generator problem	0	2	0	2	2	2	3	1
HV Lines	8	12	15	11	11	12	9	42
HV Transformer	10	9	12	6	2	4	6	16
HV Pole	2	0	1	0	4	2	1	1
LV Lines	37	22	28	34	34	12	61	69
Service lines	238	238	340	255	291	301	235	354
Customer premises	173	190	209	192	244	201	234	221
Street Lights	27	26	15	15	221	217	224	155
Meter	3	8	7	6	1	5	3	6
Total	498	507	627	521	810	756	776	865

There were total of 865 fault events for the month of February, 2013 affecting 11,843 customers. As per the table above, the number of fault events has increased to 865 events in February, 2013 from 776 events in January, 2013. The faults were mostly constitutes of customer (221 faults), street lights (115 faults) and service lines (354 faults). In February 2013, service line faults have increased significantly due to bad weather. Most of the customer services faults include fuses at the service line tap off point for a premise. Most of the street light faults were caused by the poor state of street lights mainly around control box equipment. This causes the staff to receive many complaints of light strings being left off at night, or perhaps left on in the daytime.

The complete list of outage events can be found in the attached Outage Events February 2013 file.

Should you have any queries with the information provided, please do not hesitate to contact me.

Yours Faithfully,
 Ajith Fernando
 Risk & Compliance Manager
 Tonga Power Limited

Attachments:

- System Loss Report February 2013
- Reliability Measures February 2013
- Outage Events February 2013