



P.O BOX 429, NUKU'ALOFA, Tel: (676) 27-390 Fax: (676) 23-047 Email: jvanbrink@tongapower.to

22 October 2012

Lord Dalgety
Electricity Commission
Tu'atakilangi
Nuku'alofa

Dear Lord Dalgety

Compliance Reporting for the Month of October

In accordance with the reporting requirements of the 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 October 2012.

1. Service & Metering Reporting Standards
2. Quarterly Capex Update
3. Quarterly Regulated Asset Value (RAV) Update
4. System Loss Report
5. Reliability Measures
6. Monthly Faults Events
7. Tariff Review Proposal

Additional reporting items:

8. Generator Security Profile

The above report items are described in detail below.

1. Service & Metering Reporting Standards

TPL comply with all service and metering standards and meet all the performance targets specified in the Schedule 1 of the Concession Contract except for one overall standard (B2. Electricity quality & reliability) to which it partially complies. In accordance with this standard, TPL is as yet unable to fully test the voltage at the end of the feeders in the outer islands, due to the cost of the required permanent loggers and to lack of resources. The Tongatapu voltage is being logged at the power station and samples were taken at the ends of the feeders to provide a correlation until permanent facilities can be fitted. The voltage is also logged at the power station in the outer islands but samples cannot currently be taken at the end of the feeders.

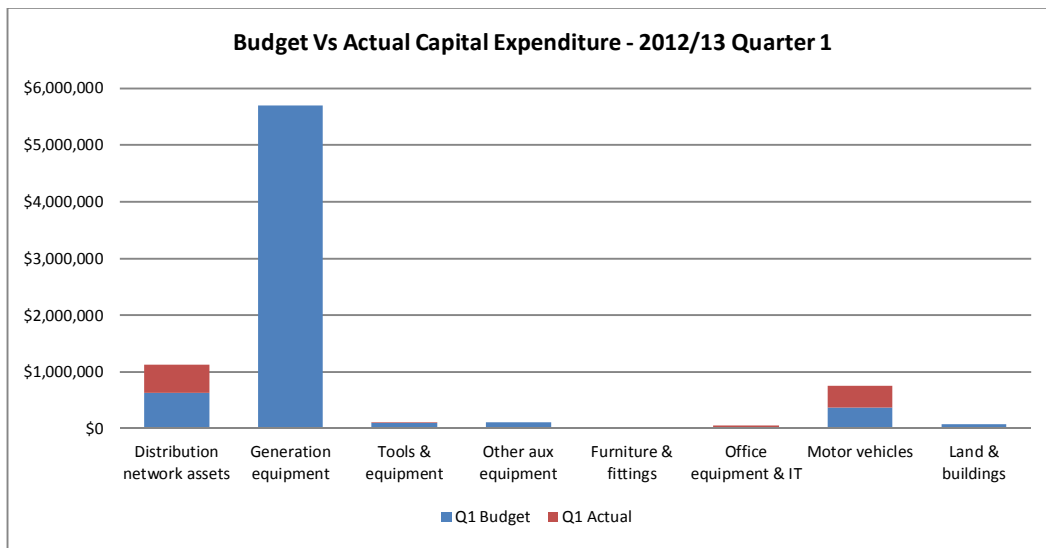
A World Bank project is commencing, the aim is for this additional equipment to be installed at the ends of the feeders on all islands so as to help satisfy the testing for this service standard completely. The cost of this is estimated at around T\$200,000.

As a result of fully complying with service and metering reporting standards, TPL has not paid any penalties to the public for last six months period.

The above standards are now managed through TPL’s Quantate Software and an extract of this comprehensive compliance report from Quantate is attached with this report for reference.

2. Quarterly CAPEX Update

The graph below shows the capital expenditure for the first quarter of the 2012/13 financial year. A new generator (2.88MW MAK Generator No. 8) was forecast to be procured by now, based on demand analysis (see Section 8: Generation Security Profile), for Tongatapu to achieve the N-1 security. As a result of flat demands the project did not proceed as planned in the first quarter and now it has been postponed until after October 2012. Other capital expenditure has been moved into future months, to reflect phasing changes. Note that the generation expenditure shown below assumed full commitment of expenditure for the new generator, in effect once the project commences, expenditure will be reflected in several staged payments.



Distribution capex followed the first quarter budget. About T\$0.5million were spent on replacing ageing/missing LV/HV poles¹, replacing new transformer structures and meter replacements capex items. In addition, about T\$375,000 was spent on motor vehicles including two cranes and two new cars. With regard to IT, computer and networking equipment was purchased costing about T\$50,000 in total.

Refer to the excel files ‘Capex Summary for the Regulatory Period 2008-2015’ and ‘Capex Reconciliation July-Sept 2012’ for further information on first quarter capital expenditure.

¹ Note that “missing” poles are those locations where in previous years poles had been removed to be used elsewhere, thus creating double length spans.

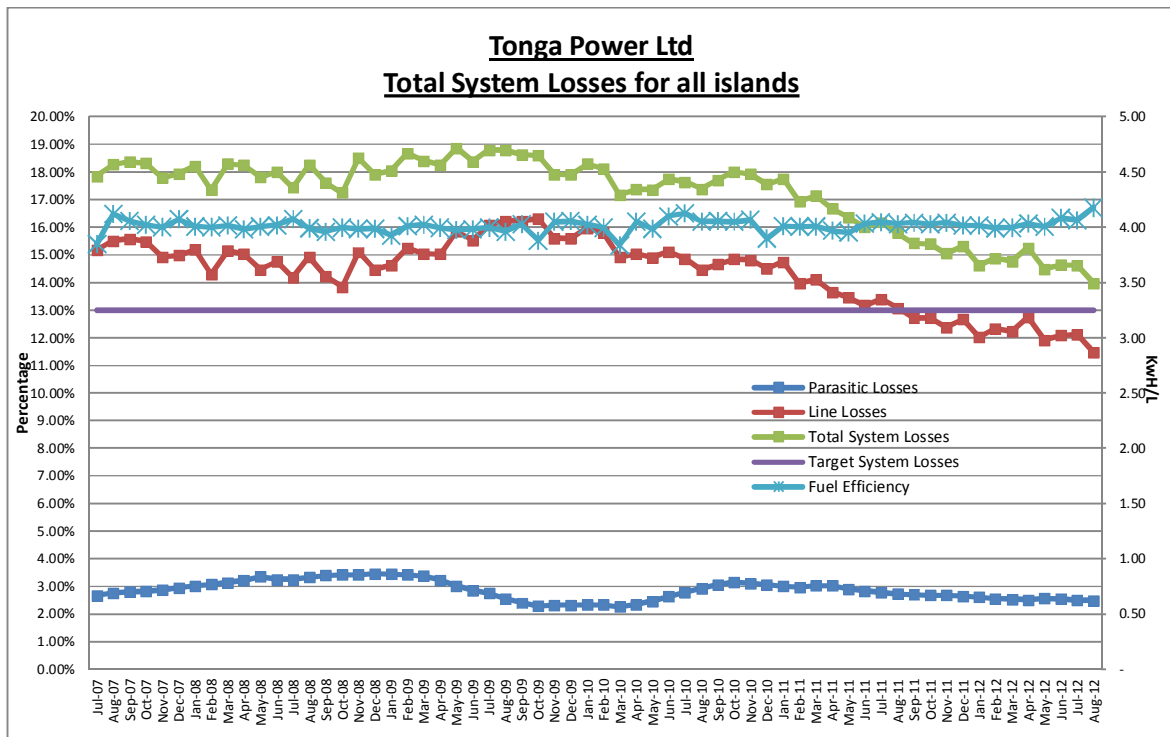
3. Quarterly Regulatory Asset Value (RAV) Update

Decription	2008-09	2009-10	2010-11	2011-12	2012-13 Q1
Opening Net Book Value	30,123,378	29,512,275	32,667,062	36,964,833	38,203,683
Generation Capital Expenditure	-	2,350,792	1,912,142	52,767	-
Distribution Capital Expenditure	385,605	1,952,145	3,638,383	3,483,179	505,270
Office Computers & Equipment	33,279	87,064	463,620	106,854	51,912
Furniture & Fixtures	4,007	13,221	20,532	18,850	5,921
Tools & Equipment	55,206	114,239	133,812	61,455	646
Vehicles	213,121	638,415	503,709	159,492	375,045
Other Auxiliary Equipment	1,348	31,467	93,001	-	-
Building	128,863	80,944	463,462	28,359	-
Disposals and Retirements	-	(329,007)	(614,553)	-	0
Depreciation on Opening RAV	(1,369,244)	(1,369,244)	(1,369,244)	(1,369,244)	(342,311)
Depreciation New Assets	(63,289)	(415,248)	(947,092)	(1,302,862)	(344,491)
Closing Estimated RAV	29,512,275	32,667,062	36,964,833	38,203,683	38,455,675

The new RAV is recorded as T\$38,455,675 as at 30 September 2012.

4. System Loss Report

As shown in the graph below, the total system losses have decreased further in the month of August 2012. The 12 months rolling average has decreased from 14.7% (in July) to 13.9% (in August), closing in for the target 13%. In fact month on month reduction is from 16% (in July) to 9.3% (in August). While monthly changes reflect losses they are impacted by meter reading cycles, and hence is not such an accurate measure of gains made, but it does show the trend. Each of our four island grids has shown a reduction over the last month.

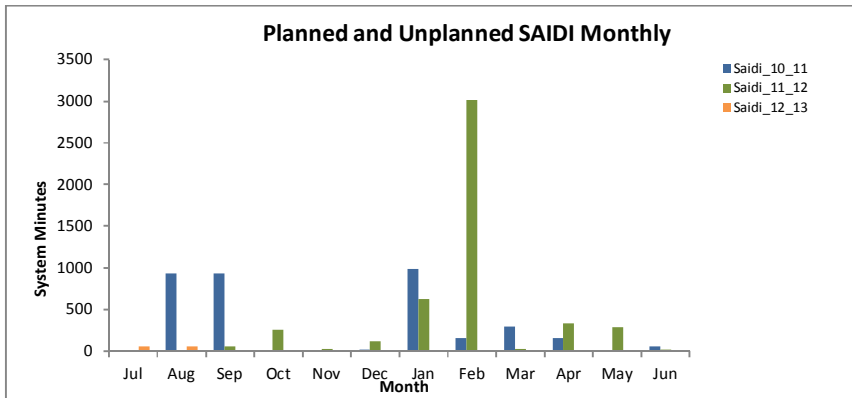


The ongoing improvement is due to ongoing activities covering installation of new meters, identification and reduction of theft, efficiency in billing, and decreasing inaccuracy of meter reading etc. In addition our ongoing network improvements are contributing to the reduction of technical losses.

There are a number of Network Improvement Projects under development that will continue to decrease the system losses . The projects include:

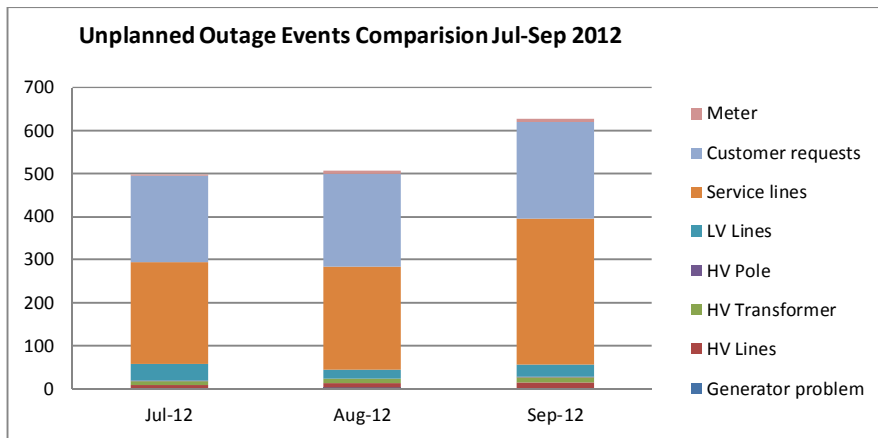
- Tonga Village Network Upgrade Project – Tongatapu, NZ Aid
- Proposed Nuku’alofa LV upgrades (replacing old insulators and conductors)
- Prepay metering
- Advanced Metering Infrastructure Development – TPL (this will enable TPL to target reduction of line losses in a number of ways such as decreasing the night time peak load)
- Meter replacement programme that reduces faulty readings, tampering and theft, and that eventually enables maintaining accuracy of billing database.

5. Reliability Measures



SAIDI minutes for the month of September 2012 have decreased dramatically to 5.66 minutes as affected HV faults were not severe in nature. Further information on SAIDI, SAIFI, and CAIDI can be found in the attached excel file ‘Faults Report Graphs 2012-09’.

6. Monthly Faults Events



The total number of outages has increased from 507 in August to 627 in September. Service lines outages have increased from 238 in August to 340 in September 2012. Further details of the monthly faults events can be found in the attached file ‘Monthly Events 2012-09’.

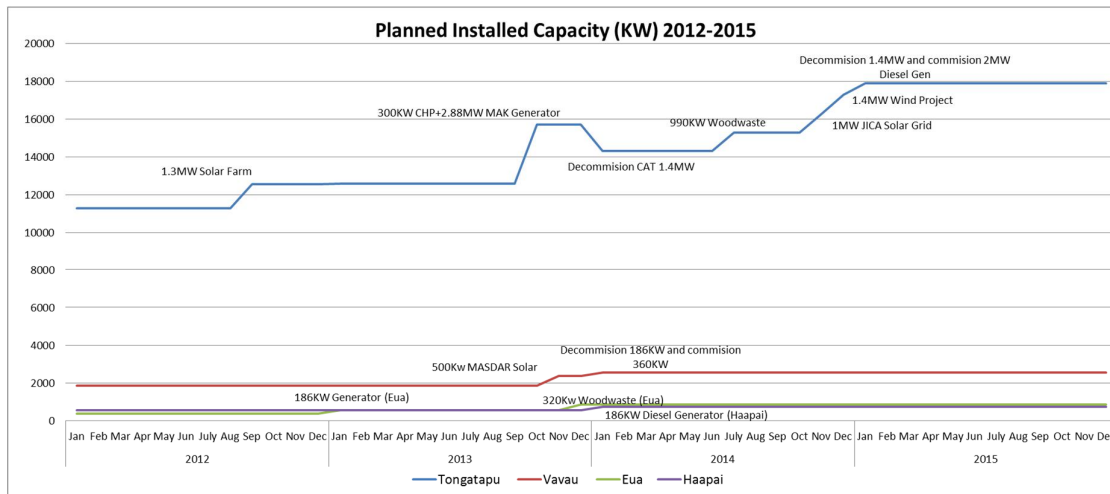
7. Tariff Review Proposal

TPL conducted a Fuel Tariff Review recently and the Castalia Model output shows that the fuel component of tariff is under pressure due to sharply increased oil prices, despite the ongoing benefits from the Maama Mai solar facility. TPL expects to make an application to the Electricity Commission in the near future.

Meanwhile a World Bank sponsored tariff review has been carried out, at this stage TPL is uncertain as to the outcome, and a work shop is anticipated involving Government representatives, in the next month or so. This may lead to further development work by TPL into tariff structure re-design.

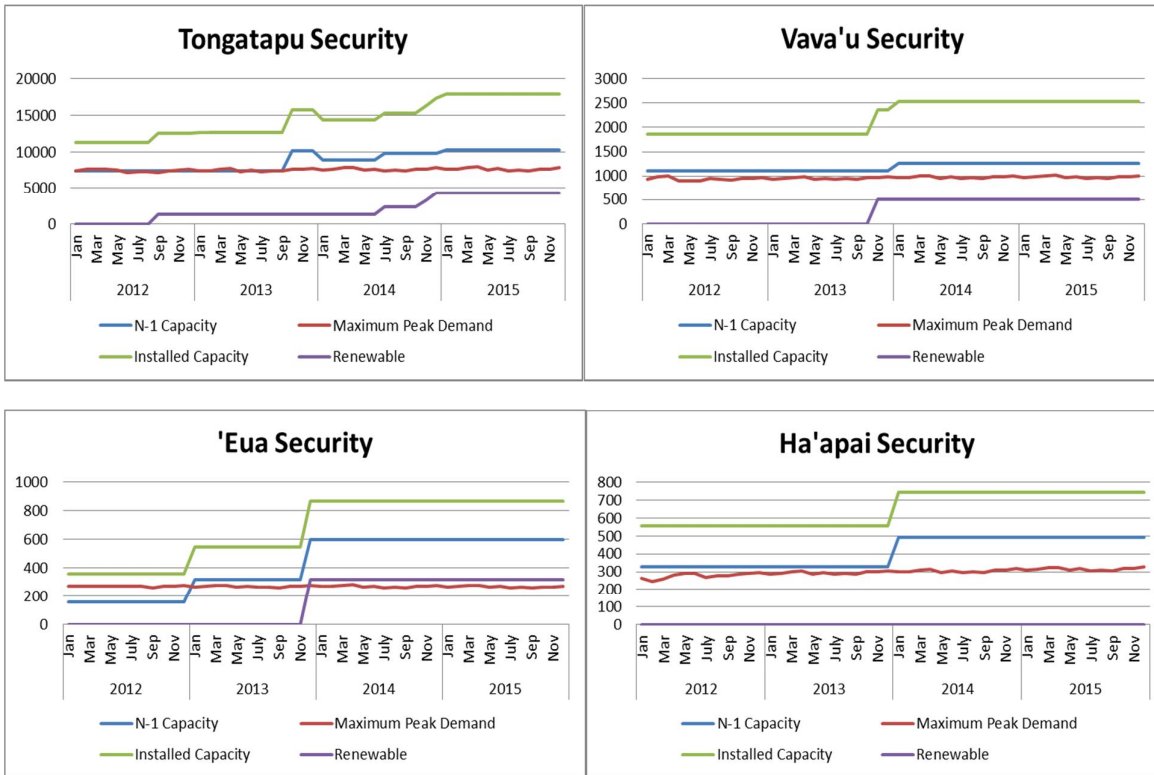
Additional Reporting Items:

8. Generation Security Profile



The above graph shows proposed changes to TPL's generation profile, as new large scale renewables come on line, and diesel generation sets are replaced. The current thinking is that demand growth will not drive new investment. Rather the cost of diesel fuel and the end of life of diesel generators will set the timetable for new investments. TPL plans to decommission some diesel generators as the renewable energy generation increases, however the mix of generation types will be dictated by need to provide back up security in the event of failure of a generator in addition to coping with intermittency of the renewables. The following table sets out likely installed capacity, firm capacity (without renewable) and renewable energy capacity will increase now and in Dec. 2015 for all four islands.

Installed Capacity (KW)							
	Tongatapu	Vavau	Eua	Haapai	Total	Increase (%)	
2012 Oct	12580	1860	360	558	15358		
2015 Dec	17901	2534	866	744	22045	44%	
Firm Capacity (KW)							
	Tongatapu	Vavau	Eua	Haapai	Total	Increase (%)	
2012 Oct	11280	1860	360	558	14058		
2015 Dec	14570	2034	866	744	18214	30%	
Renewable Energy (KW)							
	Tongatapu	Vavau	Eua	Haapai	Total	Increase (%)	
2012 Oct	1300	0	0	0	1300		
2015 Dec	4321	500	320	0	5141	295%	



The above four graphs show that Tongatapu and 'Eua will have some difficulty in providing N-1 security of supply (that is being able to meet the highest demand should one generator fail) in the near term .

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:

- Service Standards Report Oct 2012
- Capex Summary for Regulatory Period 2008-2015
- Capex Reconciliation Jul-Sep 2012
- Faults Report Graphs Sep 2012
- Monthly Faults Events Sep 2012
- Generation Capacities and Security Oct 2012