21 December 2013

Lord Dalgety
Electricity Commission
Tu’atakilangi
Nuku’alofa

Dear Lord Dalgety

Re: Monthly Compliance Report - December 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 November, 2013.


The above report items are described in detail below.

1. System Loss Report, September 2013

The following graphs illustrate the 12 months Moving Average (smoothed) Systems Losses for all four islands for the years 2012/13 and 2013/14. The 12 months moving average losses are used because of the variability of monthly Real Time Systems Losses due to the impact of the number of days and fall of the weekends in respect to meter reading cycle.

System loss report is always one month late as last month consumption data (i.e. meter readings) will only be read this month and available to report next month.

The graph below shows that Tongatapu systems losses have decreased from August to September, 2013. The graph also shows that the year 2013/14 losses have decreased significantly from the previous year data.
Vava’u and Haapai losses however have increased slightly from August to September, 2013.
Eua systems losses have been always steady, but well above 13% target.

Overall all islands systems losses have decreased significantly below the target 13% in September, 2013 due to the network improvements implemented through the Village Upgrade Project.
2. Fuel Efficiency Report, September 2013

Tongatapu fuel efficiency ratios have been erratic, but most of the time above the target.

Vava’u fuel efficiency ratios have been well above the target due to the two new 600KW generators commissioned in May, 2010.
Mostly, fuel efficiency ratios have been under achieved in Haapai and Eua.
Overall, all island fuel efficiency ratios have been above weighted average target of 4.17 KWh/L.
3. Reliability Measures

<table>
<thead>
<tr>
<th>Report Date</th>
<th>Fault Description</th>
<th>Repair Comment</th>
<th>No of Customers</th>
</tr>
</thead>
<tbody>
<tr>
<td>08/11/2013</td>
<td>Shut down</td>
<td>Shut down from 'UPOLU to HA'ATAFU to upgrade HV line.</td>
<td>1599</td>
</tr>
<tr>
<td>03/11/2013</td>
<td>HV line short &amp; burnt</td>
<td>The power was shut down from Fua'amotu air port to Haveluliku because to replace DDO barrels fuse tail was connected with aluminum and then it causes loose, short and burnt. So we use 1 m coper to replace it and two 16-95 IPC connector.</td>
<td>1220</td>
</tr>
<tr>
<td>25/11/2013</td>
<td>Broken conductor</td>
<td>1381-1383 pole # broken conductor H.V. caused by tree branches on H.V. lines. [ coconut leaves drop on lines ]</td>
<td>933</td>
</tr>
<tr>
<td>15/11/2013</td>
<td>Power off</td>
<td>Part of the power off from the breaker at Vaini</td>
<td>456</td>
</tr>
<tr>
<td>06/11/2013</td>
<td>Conductor broken</td>
<td>HV line broken due to coconut leaves fell on line so they shut down the power and fully check it than connect power line and all the customer from Kandokupolu to Ha'atafu were out of power so they fix it with 1 x 8A, DDO link , 1 x IPC 16 -- 95. Power shut down from Ahau Inline fuse, 'Ahau to Ha'atafu was off.</td>
<td>400</td>
</tr>
<tr>
<td>08/11/2013</td>
<td>Broken pole</td>
<td>Broken pole due to accident so the repair went there and shut down the power line from KOLOVAI TO HA'ATAFU and wait for the line's men to replace the pole ** Vehicle License Number =L14111 **BROKEN POLE #H02110</td>
<td>400</td>
</tr>
<tr>
<td>08/11/2013</td>
<td>Turn on power from Ha'avakatolo to Ha'atafu</td>
<td>Power turn on from HA'AVAKATOLO TO HA'ATAFU.</td>
<td>400</td>
</tr>
<tr>
<td>25/11/2013</td>
<td>Power off</td>
<td>8 amps fuse was blown and replaced with 15 amps fuse [ one phase off from Tokomololo Inline fuse to Vaoitu'u</td>
<td>400</td>
</tr>
<tr>
<td>26/11/2013</td>
<td>Broken pole</td>
<td>Broken pole due to accident in lomaiviti and the half of the pole were hanging on the top of our cable so the crew went there and check it Vehicle plate # T5 0 6 3 SHUTDOWN FROM TOKOMOLOLO TO MAKAPAO - 19: 05</td>
<td>85</td>
</tr>
<tr>
<td>15/11/2013</td>
<td>PARTLY OFF</td>
<td>Partly off due to LV fuse blown so they fully check it than replace pole fuse and also the LV fuse link with 1 pole fuse , 1 x 100A</td>
<td>77</td>
</tr>
<tr>
<td>04/11/2013</td>
<td>Fuse blown</td>
<td>Pole 369 1 inline fuse blown due to tree branch fell on the HV line.</td>
<td>59</td>
</tr>
</tbody>
</table>

SAIDI minutes (measuring average total duration of interruption per connected customer) for the month of November, 2013 have significantly decreased from 318.4 (October, 2013) to 38.51 (November, 2013) minutes (see the table above). The major HV faults contributed to the SAIDI minutes for the October are described below.

Cumulative SAIDI YTD is shown below:
CAIDI minutes (measuring average total duration of interruption per interrupted customer) for the month of November 2013 have also decreased significantly from 102.03 minutes (October, 2013) to 91.75 minutes in November.

SAIFI (measuring average number of interruptions per customer) has decreased from 3.15 (October, 2013) to 0.42 (November, 2013).
4. Monthly Outage Events

There were total of 520 planned/unplanned fault events for the month of November, 2013 affecting 7,152 customers. As per the table above, the number of fault events has decreased from 567 events in October, 2013 to 520 events in November, 2013. The service line faults have decreased; so does customer premises faults in October, 2013. Most of the customer services faults included fuses at the service line tap off point for a premise. Street lights faults have decreased significantly. There is no correlation between the 2012 and 2013 figures.

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