



AURORA ENERGY

**2013 STANDING OFFER DETERMINATION
PRICING PROPOSAL - PERIOD 2**

1 JULY 2014 – 30 JUNE 2015

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1.0 Pricing Proposal for Period 2 (01/07/2014 to 30/06/2015)

1.1 Introduction

The second period of the 2013 Standing Offer Determination (the Determination) will deliver a price decrease to all Tasmanian standing offer customers. While there are increases to the cost of network charges, renewable energy certificates, market and retail charges these have been offset by decrease in energy loss factors and a reduction in the Wholesale Energy Price (WEP).

As part of the Electricity Reform program, amendments were made to the Electricity Supply Industry Act 1995 (ESI Act) providing for regulation of Hydro Tasmania's wholesale market activities in the form of a Wholesale Contract Regulatory Instrument (Wholesale Instrument).

The Wholesale Instrument links Tasmanian and Victorian spot prices and the contract pricing methodology references Victorian prices and adjusts for water levels and Tasmanian supply/demand balance. It is with reference to the methodology specified in the Wholesale Instrument that the Tasmanian Economic Regulator (TER) estimates the wholesale energy price. For Period 2 the primary driver behind the reduction in the WEP from January 2014 to July 2014 is the Victorian contract market pricing in the likelihood of success in the repealing of the Clean Energy Act from 1 July 2014. This reduction in the WEP has contributed (9.40%) of the overall price reduction from 1 July 2014.

Energy loss factors account for the energy lost in transmission and distribution systems due to electrical resistance and the heating of conductors. For period 2 both the transmission and distribution loss factors have significantly decreased which has contributed (2.07%) of the overall price reduction from 1 July 2014.

While the WEP, loss factors and other nominal changes of (1.61%) have contributed to the overall price decrease, this has been offset by increases in network charges 2.70%, retail margin and customer acquisition and retention costs 2.10%, Renewable Energy Certificates (RECs) and market charges 0.48%, to deliver an overall standing offer price decrease of 7.80% on 1 July 2014.

Aurora notes that with the costs of supply within the NMR reducing, the quantum of Aurora's gross margin allowance will reduce.

Chart 1 illustrates the makeup of the Notional Maximum Revenue (NMR) underlying this proposal for Period 2 of the 2013 Standing Offer Determination.

Chart 1:

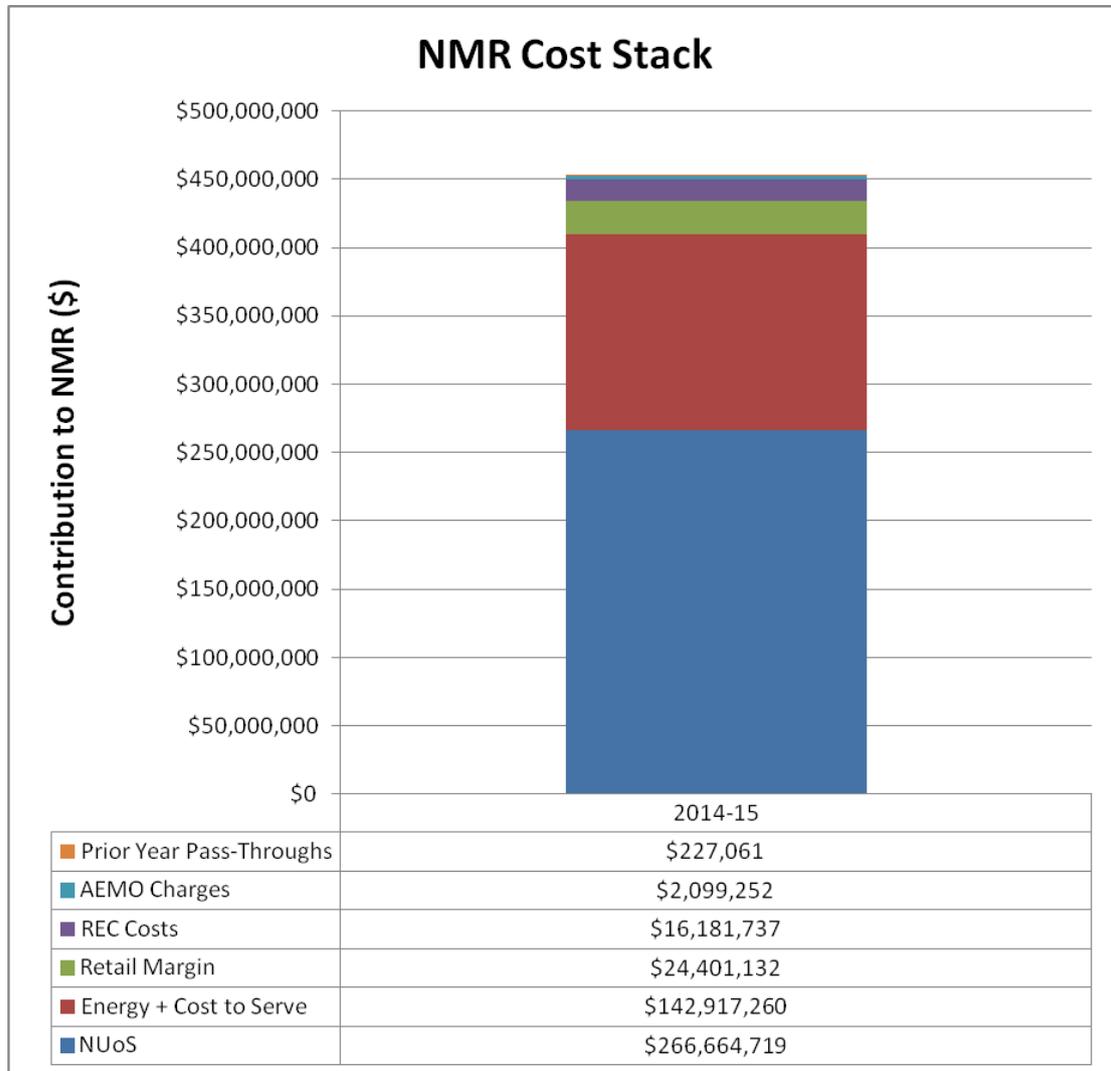


Table 1 summarises the outcomes in terms of the 2013 Standing Offer Determination NMR for each of the variables, and indicates in which section of this Submission the relevant calculations are considered.

Table 1:

| Cost Element | Value | Submission Reference |
|---------------------|----------------------|-----------------------------|
| R _y | \$142,917,260 | S1.2.1.1 |
| NC _y | \$266,664,719 | S1.2.1.2 |
| AEMO _y | \$2,099,252 | S1.2.1.3 |
| RET _y | \$16,181,737 | S1.2.1.4 |
| K _y | \$227,061 | S1.2.1.5 |
| A _y | \$0 | S1.2.1.6 |
| Margin _y | 5.70% | From Determination |
| NMR | \$452,491,161 | S1.2.1.7 |

The average price decrease between January 2014 and July 2014 is 7.80%.

1.2 Calculation of NMR

In calculating the NMR for the 2013 Standing Offer Determination the following formula is to be applied:

$$\text{NMR}_y = (R_y + \text{NC}_y + \text{AEMO}_y + \text{RET}_y + K_y + A_y) \times (\text{Margin}_y)$$

where:

- NMR_y is the allowable notional maximum revenue to be earned from the notional tariff base
- R_y represents the sum of the energy costs plus cost to serve for the notional tariff base
- NC_y represents the network charges for the notional tariff base
- AEMO_y represents the market participant fees and ancillary services for the notional tariff base
- RET_y represents the cost of acquiring Renewable Energy Certificates for the notional tariff base
- K_y represents any under or over recoveries from a previous period covered by the 2013 Standing Offer Determination
- A_y represents adjustments calculated in accordance with a methodology approved by the Regulator
- Margin_y is 5.70% (as per the specification of the 2013 Standing Offer Determination for margin in Period 2 of 1.057)

1.2.1 Calculation of NMR - Period 2 of the 2013 Standing Offer Determination

1.2.1.1 R_y

The below formula is used to calculate R_y

[Forecast load x Distribution Loss Factor x Transmission Loss Factor x Energy Price] + [Cost to Serve x Prescribed Inflationary Factor x forecast number of customers]

Table 2 contains the inputs used to calculate R_y

Table 2:

| Parameter | Value | Source |
|--------------------------------|--------------|------------------------------------|
| Forecast Load | 1,982.76 GWh | NMR July 2014 |
| Distribution Loss Factor | 1.0484 | Spreadsheet – Loss Factors 2014-15 |
| Transmission Loss Factor | 0.9862 | Spreadsheet – Loss Factors 2014-15 |
| Energy Price | 5.2666 c/kWh | Tasmanian Economic Regulator |
| Cost to Serve | \$152.00 | Determination – Table 2 Period 2 |
| Prescribed Inflationary Factor | 1.0256 | Tasmanian Economic Regulator |
| Forecast Customer Numbers | 224,194 | NMR July 2014 |

The Transmission and Distribution Loss Factors quoted above are based on the 2014-15 loss factors published by AEMO, and are calculated as a load weighted average for the notional tariff base. The detailed calculations are contained in the spreadsheet “Loss Factors 2014-15.xls” which accompanies this Proposal.

The calculation of R_y is therefore:

$$\begin{aligned}
 & [1,982.76 \times 1,000,000 \times 0.9862 \times 1.0484 \times 5.2666 / 100] + [224,194 \times \$152.00 \\
 & \times 1.0256] \\
 & = \\
 & [\$107,967,363] + [\$34,949,897] = \mathbf{\$142,917,260}
 \end{aligned}$$

1.2.1.2 NC_y

NC_y is calculated by applying the AER approved network tariffs for the 2014-15 regulatory year, to the forecast notional tariff base loads.

The value of NC_y in Period 2 of the 2013 Standing Offer Determination is **\$266,664,719**.

1.2.1.3 $AEMO_y$

The value of $AEMO_y$ in Period 2 of the 2013 Standing Offer Determination has been forecast by applying the AEMO 2014-15 market charge plus the forecast ancillary charges rate multiplied by the forecast Period 2 load. By applying this calculation the value of $AEMO_y$ for Period 2 is **\$2,099,252**.

1.2.1.4 RET_y

The value of RET_y in Period 2 of the 2013 Standing Offer Determination has been forecast by applying the Clean Energy Regulator's binding 2014 Renewable Power Percentage (RPP) and Small-scale Technology Percentage (STP) and the non-binding RPP and STP percentages for 2015 to the forecast load for Period 2. By applying this calculation the value of RET_y for Period 2 is **\$16,181,737**.

1.2.1.5 K_y

The value of K_y in Period 2 is **\$227,061**, due to an overall under-recovery of $AEMO_y$ and RET_y charges from period 1 of the 2013 Standing Offer Determination. The detailed calculations of this amount are provided in the attachment to this Proposal 'Prior Years Adjustments Submission – May 2014'.

1.2.1.6 A_y

A_y has a **zero** value in Period 2 of the 2013 Standing Offer Determination.

1.2.1.7 NMR

NMR for Period 2 of the 2013 Standing Offer Determination is shown below:

Table 3:

| Cost Element | Value |
|---------------------|----------------------|
| R _y | \$142,917,260 |
| NC _y | \$266,664,719 |
| AEMO _y | \$2,099,252 |
| RET _y | \$16,181,737 |
| K _y | \$227,061 |
| A _y | \$0 |
| Margin _y | \$24,401,132 |
| NMR | \$452,491,161 |

1.2.2 Average Price Change

Microsoft Excel's goal seek function was used to calculate a uniform price change of **(7.80%)** which when applied to the tariffs for Period 1 determines the tariffs for Period 2. These tariffs, when applied to the forecast load for Period 2, will result in an NMR equal to or less than the allowable NMR of \$452,491,161 as per table 3.

These calculations are located in the spreadsheet 'NMR 1 July 2014.xls' under the tab 'Retail Prices'.

1.3 Changes to the Tariff Schedule

1.3.1 Amendment of Tariff 41 Conditions

From 1 July 2014 TasNetworks will introduce a new fee of \$12.30 ex GST for work to switch customers between Tariff 41 – Hot Water Systems and Tariff 42 – Heating Discount. Previously this task has been performed at no cost by Aurora Energy. The fee is now being introduced as the change between tariffs is only performed to meet Aurora's tariff requirements and is of no benefit to TasNetworks, as the same network tariff supports both Tariff 41 and Tariff 42.

Aurora views this additional fee as an unnecessary increase in costs placed on customers when the only difference between Tariff 41 and Tariff 42 is the conditions of the tariffs. Currently under tariff 42 a customer can connect both their hot water and space heating, whereas under Tariff 41 a customer can only

connect their hot water. Due to the increasing popularity of electricity being the household's primary heating source there has been an increasing number of customers changing from Tariff 41 to Tariff 42.

To avoid having these additional costs charged to customers, Aurora proposes to amend the conditions under Tariff 41 so that they include the additional heating conditions of Tariff 42. Therefore this will remove the need for TasNetworks to perform a tariff change.

Aurora proposes the amendment of Tariff 41 conditions through the inclusion of the below conditions so as to be consistent with terms and conditions of Tariff 42. These conditions are:

- (f) Permanently installed wired-in electric heater/s may be eligible with this tariff on condition that the wiring of any electric heater is installed by a registered electrician in accordance with AS 3000 wiring rules and associated regulations and acts, and one of the following conditions are met:
 - (i) If a residence has a permanently installed wired-in electric heater with an output of 3.5kW in a living area, on a single functional switch then this, and any additional permanently wired space heaters throughout the residence, may be installed on this tariff.
 - (ii) A total rating of at least 5kW of the same heating system installed throughout the residence. This heating system must be the priority heating system of the main living area and must have a single functional switch in each heated area throughout the residence. However where a ducted heating system is installed, the control switch must be located near the heating unit in order to qualify for this tariff.
 - (iii) Heating in secondary areas such as bedrooms and hallways if the residence has OffPeak storage heating in the living area(s) as its priority source of heating. The secondary heating system should be a permanently connected single propriety heating system with a total of 5kW or more heating capacity.
- (g) Private domestic indoor swimming pools are allowed under Tariff 41 if an installation: (i) complies with the Tariff 41 heating rules as provided in condition (f); and (ii) has an electrical input power limit of 400 watt/m² of surface area.
- (h) This tariff will be applied following an electrical works request to Aurora Energy from an electrical contractor. Upon receipt of the electrical works request, the tariff will be applied to a customer's account from the date the meter was changed or the day after the last quarterly read, whichever is the later.

1.3.2 Removal of Tariff 86 – Industrial High Voltage Demand (obsolete)

From 1 July 2014 Aurora seeks to have the Industrial High Voltage Demand - Tariff 86 removed from the standing offer price schedule. Tariff 86 has been obsolete since 31 December 2004, since that date no new customers have been connected to this tariff.

Aurora can confirm that there are no longer any customers being supplied under this tariff. As there are no benefits to customers by having Aurora maintain an obsolete tariff, Aurora seeks approval for Tariff 86 to be removed from the standing offer price schedule.

1.4 Proposed Period 2 Prices

The Table below shows the proposed July14 – June15 prices, exclusive of GST:

Table 4:

| Retail Tariff | Fixed Charges | Energy Step 1 | Energy Step 2 | Energy Step 3 | Energy Peak | Energy Shoulder | Energy Off-Peak | Demand |
|---------------|---------------|---------------|---------------|---------------|-------------|-----------------|-----------------|--------------|
| | c/day | c/kWh | c/kWh | c/kWh | c/kWh | c/kWh | c/kWh | \$/kW or kVa |
| 22 | 86.106 | 30.649 | 22.499 | - | - | - | - | - |
| 31 | 79.706 | 22.470 | - | - | - | - | - | - |
| 34 | 120.735 | 28.421 | 22.097 | 18.592 | - | - | - | - |
| 36C | 60.274 | - | - | - | - | - | - | - |
| 41 | 15.437 | 13.551 | - | - | - | - | - | - |
| 42 | 15.437 | 13.551 | - | - | - | - | - | - |
| 43 | 15.437 | 13.551 | - | - | - | - | - | - |
| 61 | 19.562 | 10.910 | - | - | - | - | - | - |
| 62 | 19.562 | 10.276 | - | - | - | - | - | - |
| 73 | - | 11.770 | - | - | - | - | - | - |
| 74 | 282.026 | 26.788 | - | - | - | - | - | - |
| 75 | 242.691 | - | - | - | 27.168 | 21.211 | 13.254 | - |
| 82 | 269.960 | 13.869 | - | - | - | - | - | 176.298 |
| 83 | 269.960 | 14.133 | - | - | - | - | - | 255.632 |
| 85 | 264.780 | 12.209 | - | - | - | - | - | 101.028 |

The following Table shows the percentage change over the January 2014 prices:

Table 5:

| Retail Tariff | Fixed Charges | Energy Step 1 | Energy Step 2 | Energy Step 3 | Energy Peak | Energy Shoulder | Energy Off-Peak | Demand |
|----------------------|----------------------|----------------------|----------------------|----------------------|--------------------|------------------------|------------------------|---------------------|
| | c/day | c/kWh | c/kWh | c/kWh | c/kWh | c/kWh | c/kWh | \$/kW or kVa |
| 22 | -7.80% | -7.80% | -7.80% | - | - | - | - | - |
| 31 | -7.80% | -7.80% | - | - | - | - | - | - |
| 34 | -7.80% | -7.80% | -7.80% | -7.80% | - | - | - | - |
| 36C ¹ | 7.57% | - | - | - | - | - | - | - |
| 41 | -7.80% | -7.80% | - | - | - | - | - | - |
| 42 | -7.80% | -7.80% | - | - | - | - | - | - |
| 43 | -7.80% | -7.80% | - | - | - | - | - | - |
| 61 | -7.80% | -7.80% | - | - | - | - | - | - |
| 62 | -7.80% | -7.80% | - | - | - | - | - | - |
| 73 | - | -7.80% | - | - | - | - | - | - |
| 74 | -7.80% | -7.80% | - | - | - | - | - | - |
| 75 | -7.80% | - | - | - | -7.80% | -7.80% | -7.80% | - |
| 82 | -7.80% | -7.80% | - | - | - | - | - | -7.80% |
| 83 | -7.80% | -7.80% | - | - | - | - | - | -7.80% |
| 85 | -7.80% | -7.80% | - | - | - | - | - | -7.80% |

¹ Excludes increase due to wind down of the curtilage discount at the rate of 10% each year over 10 years.

Final prices including GST, submitted for approval, are:

Table 6:

| Retail Tariff | Fixed Charges | Energy Step 1 | Energy Step 2 | Energy Step 3 | Energy Peak | Energy Shoulder | Energy Off-Peak | Demand |
|---------------|---------------|---------------|---------------|---------------|-------------|-----------------|-----------------|--------------|
| | c/day | c/kWh | c/kWh | c/kWh | c/kWh | c/kWh | c/kWh | \$/kW or kVa |
| 22 | 94.717 | 33.714 | 24.748 | - | - | - | - | - |
| 31 | 87.677 | 24.717 | - | - | - | - | - | - |
| 34 | 132.808 | 31.263 | 24.307 | 20.451 | - | - | - | - |
| 36C | 66.302 | - | - | - | - | - | - | - |
| 41 | 16.981 | 14.907 | - | - | - | - | - | - |
| 42 | 16.981 | 14.907 | - | - | - | - | - | - |
| 43 | 16.981 | 14.907 | - | - | - | - | - | - |
| 61 | 21.519 | 12.001 | - | - | - | - | - | - |
| 62 | 21.519 | 11.303 | - | - | - | - | - | - |
| 73 | - | 12.947 | - | - | - | - | - | - |
| 74 | 310.229 | 29.467 | - | - | - | - | - | - |
| 75 | 266.960 | - | - | - | 29.885 | 23.332 | 14.579 | - |
| 82 | 296.956 | 15.256 | - | - | - | - | - | 193.927 |
| 83 | 296.956 | 15.547 | - | - | - | - | - | 281.195 |
| 85 | 291.258 | 13.430 | - | - | - | - | - | 111.131 |

1.5 Customer Impacts

All tariff customers will experience a price decrease of 7.80% from the prices set in July 2013.

The Aurora customer impact model is drawn from a large sample of Tasmanian customers and provides a reliable picture of Tasmanian customer impacts.

The application of the price decrease in this proposal remains consistent with the principles outlined in Auroras Final Revised Retail Tariff Strategy (April 2011) i.e. any increases/decreases have been applied equally to fixed and variable components of each tariff.

Consistent with this approach, the proposed 7.80% price reduction will be applied evenly across all components of each tariff.

The change in quarterly bills shown below is based on the consumption data given in the Regulator's Information Paper "Typical Electricity Customers" of May 2014.

1.5.1 Residential quarterly cost impacts.

The quarterly bill decreases for typical residential customers are shown in the following Table:

Table 7:

| Tariff | Low Consumption | Medium Consumption | High Consumption |
|--------------------|------------------------|---------------------------|-------------------------|
| Tariff 31 | (\$11.39) | (\$21.88) | (\$37.20) |
| Tariff 31 & 41 | (\$22.91) | (\$35.66) | (\$53.51) |
| Tariff 31 & 42 | (\$27.51) | (\$40.88) | (\$60.18) |
| Tariff 31, 41 & 61 | (\$30.71) | (\$45.49) | (\$69.28) |
| Tariff 31, 42 & 61 | (\$34.86) | (\$50.55) | (\$74.64) |

1.5.2 Small Business quarterly cost impacts

The quarterly bill decreases for typical small business customers are shown in the following Table:

Table 8:

| Tariff | Low Consumption | Medium Consumption | High Consumption |
|--------------------|------------------------|---------------------------|-------------------------|
| Tariff 22 | (\$16.86) | (\$34.08) | (\$70.46) |
| Tariff 22 & 61 | (\$38.81) | (\$111.25) | (\$250.74) |
| Tariff 22 & 43 | (\$28.13) | (\$78.09) | (\$261.69) |
| Tariff 22, 43 & 61 | (\$78.75) | (\$210.61) | (\$388.16) |

1.5.3 Irrigation Tariffs

There are no “typical” Irrigation installations. Therefore it is not possible to speak of “typical” customer impacts. Since all tariff components are decreasing at the same rate 7.80%, the cost decrease for each of these sites will be 7.80%.

1.5.4 Demand Tariffs

There are no “typical” demand tariff installations. Therefore it is not possible to speak of “typical” customer impacts. Since all tariff components are decreasing at the same rate 7.80%, the cost decrease for each of these sites will be 7.80%.

1.6 Revenue Check

The proposed prices, excluding GST, when applied to the Period 2 forecast load and customer numbers, produce total revenue within the Notional Maximum Revenue as calculated in Section 1.2.1.7 above. The detailed calculations are given in the spreadsheet “NMR 1 July 2014.xls” under the tab ‘Retail Prices’. The Table 9 summarises the revenue outcomes:

Table 9:

| Tariff | Fixed Charges | Energy Step 1 | Energy Step 2 | Energy Step 3 | Energy Peak | Energy Shoulder | Energy OffPeak | Demand Step 1 | Total Revenue |
|---------------------------|---------------|---------------|---------------|---------------|-------------|-----------------|----------------|---------------|--------------------|
| 22 | 8,635,807 | 13,295,977 | 66,430,117 | - | - | - | - | - | 88,361,901 |
| 31 | 55,635,932 | 164,763,075 | - | - | - | - | - | - | 220,399,007 |
| 34 | 11,876 | 17,000 | 7,598 | 76,954 | - | - | - | - | 113,427 |
| 36C | 634,406 | - | - | - | - | - | - | - | 634,406 |
| 41 | 3,722,933 | 28,004,307 | - | - | - | - | - | - | 31,727,239 |
| 42 | 6,258,905 | 78,134,014 | - | - | - | - | - | - | 84,392,919 |
| 43 | 82,598 | 1,221,292 | - | - | - | - | - | - | 1,303,890 |
| 61 | 1,488,034 | 4,306,926 | - | - | - | - | - | - | 5,794,959 |
| 62 | 174,355 | 710,368 | - | - | - | - | - | - | 884,723 |
| 73 | - | 3,854,484 | - | - | - | - | - | - | 3,854,484 |
| 74 | 1,249,391 | 6,534,617 | - | - | - | - | - | - | 7,784,008 |
| 75 | 1,220,930 | - | - | - | 258,588 | 520,696 | 472,568 | - | 2,472,781 |
| 82 | 32,246 | 370,648 | - | - | - | - | - | 1,866,228 | 2,269,122 |
| 83 | 65,440 | 699,164 | - | - | - | - | - | 1,733,690 | 2,498,294 |
| 85 | - | - | - | - | - | - | - | - | - |
| Total Revenue: | | | | | | | | | 452,491,161 |
| Notional Maximum Revenue: | | | | | | | | | 452,491,161 |

2.0 Additional Fees

The Additional Fees applying from 1st July 2014 are shown in table 10:

Table 10:

| Additional Fees | 2014-15 Price |
|---|----------------------|
| A late payment fee of \$5.00 applies for accounts not paid in full by the fifth day past the due date (Pensioner, Health Care Card and other exemptions apply). | \$5.00 |

3.0 Document References

Table 11:

| Topic | Proposal Section | Source Document Name | Source Document Reference |
|---|-------------------------|------------------------------------|----------------------------------|
| NMR Calculation | S1.2 | NMR July 2014.xls | AR20567191 |
| Price Development and Compliance Calculations | S1.2 & S1.4 | NMR July 2014.xls | AR20567191 |
| Customer Impacts | S1.5 | Customer Impacts July 2014.xls | AR20599579 |
| Transmission & Distribution Loss Factors | S1.2.1.1 | Loss Factors 2014-15 Tab 'Summary' | AR20564944 |