



AURORA ENERGY

RETAIL PRICING PROPOSAL FOR THE 2013 DETERMINATION

FROM 1 JULY 2013 – 31 DECEMBER 2013

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1.0 Pricing Proposal for Period 1 (1/7/2013 to 31/12/2013)

1.1 Introduction

The 2013 Retail Price Determination results in a number of significant Challenges for Aurora Energy. In the July 2013 to December 2013 period, retail prices will be influenced by changes in the following key components:

- network charges; and
- renewable energy costs.

The impact of changes in these respective components will be partially offset by the removal of the recoupment of the revenue deferred from 2010-11 as a result of the revenue smoothing mandated in the Declared Electrical Pricing Determination (the Determination) of October 2010.

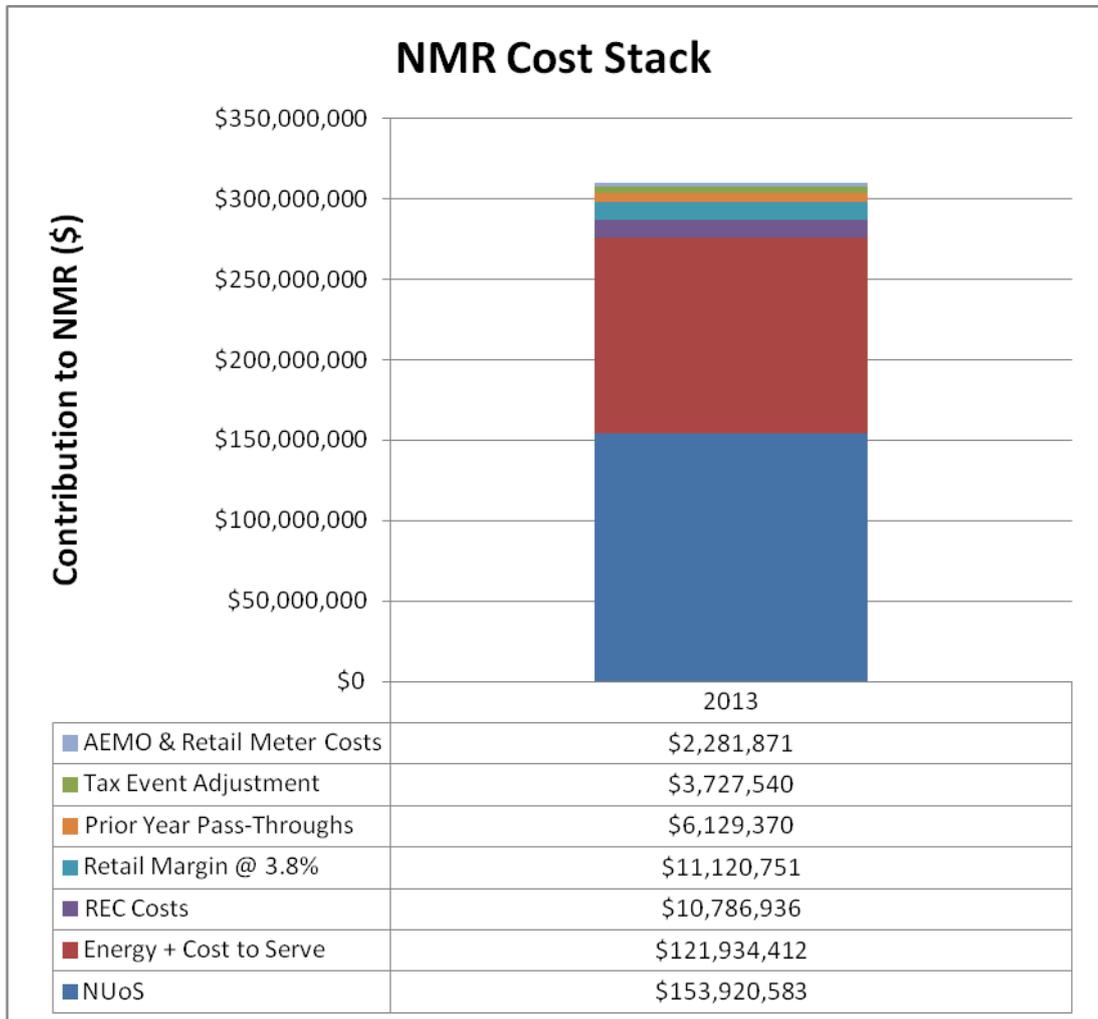
The outcome of the implementation of the Determination for 2013 is an overall average price increase of 1.793%.

The nominal increase is primarily driven by higher than expected Network tariffs (contributing 3.13%) and Renewable Energy Certificate (REC) (contributing 2.31%) being offset by the removal of Retail price smoothing (contributing to a reduction of 4.49%)

As a result of the Tasmanian Governments “Energy for the Future” reforms, the regulations were very prescriptive in nature and required the Regulator to adopt the methodologies approved for the 2010 Determination and to adjust the values used for the 2012-13 electricity price reset to reflect CPI changes. This process did not fully take into account the adequacy of the allowances from the 2010 Determination that have been adopted in the 2013 Determination. There will no longer be a future pricing period by which Aurora can recover variances between the cost allowance established in the Determination and the that Aurora will incur. Subsequently, Aurora’s Pricing Proposal will include an adjustment in customer prices as a result of the change in the costs to Aurora for the purchase of renewable energy certificates for the period from 1 July 2013 to 31 December 2013.

The chart below illustrates the makeup of the Notional Maximum Revenue underlying this Proposal, compared with that assumed for the Final Report.

Chart 1:



The detailed calculations implement the formula given in Part 2 of the Determination.

The prices submitted in Section 1.4 have been developed according to the principles of the Final Retail Tariff Strategy published during April 2011. Aurora notes that for the 2013 Determination no Retail Tariff Strategy was required however Section 1.3 articulates changes to the tariff schedule consistent with the strategy.

The Table below summarises the outcomes in terms of the 2013 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	\$121,934,412	S1.2.1.1
NC	\$153,920,583	S1.2.1.2
AEMO	\$1,368,408	S1.2.1.3
M	\$913,463	S1.2.1.4
REC	\$10,786,936	S1.2.1.5
Tax	\$3,727,540	S1.2.1.6
Margin	3.80%	From Determination
CF	\$6,129,370	S1.2.1.7
NMR	\$309,901,463	S1.2.1.8

The average price change between July 2012 and July 2013 is 1.793%.

1.2 Calculation of NMR.

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

$$\text{NMR}_y = (\text{R}_y + \text{NC}_y + \text{AEMO}_y + \text{M}_y + \text{REC}_y + \text{Tax}_y) \times (1 + \text{Margin}) + \text{CF}_y,$$

where:

- NMR is the permitted maximum revenue to be earned from the data given in Schedule 2 of the Determination
- R represents the sum of the energy costs plus Cost to Serve for non-contestable customers
- NC represents the Network charges for non-contestable customers
- AEMO represents the market participant fees and ancillary services
- My refers to allowable retail meter costs
- REC represents the cost of acquiring Renewable Energy Certificates
- Tax represents the impact of any allowable tax event
- Margin is 3.8%
- CF represents any over or under-recoveries of costs in years covered by the 2010 Determination

1.2.1 Calculation of NMR for the 2013 Determination

1.2.1.1 R

R is calculated as shown in the Table below:

The value of R is given by:

[Forecast load x Transmission Loss Factor x Distribution Loss Factor x Energy Price] + [(Cost to Serve / 2) x Prescribed Inflationary Factor x forecast number of customers].

The majority of these values are given in the Determination as follows:

Table 2:

Parameter	Value	Source
Forecast Load	1,230.13 GWh	Determination – Schedule 2– Notional Tariff Base
Transmission Loss Factor	1.0168	Spreadsheet – Loss Factors 2013-14
Distribution Loss Factor	1.0713	Spreadsheet – Loss Factors 2013-14
Energy Price	8.104 c/kWh	Tasmanian Economic Regulator
Cost to Serve	\$47.00 (\$94/2)	Determination – Part 2 – Point 7
Prescribed Inflationary Factor (Ry (energy), AEMOy, My & RECy)	1.0212	Tasmanian Economic Regulator
Prescribed Inflationary Factor (Ry (CTS) & Special Services)	1.0808	Tasmanian Economic Regulator
Forecast Customer Numbers	262,662	Determination – Schedule 2– Notional Tariff Base

The Transmission Loss Factor and Distribution Loss Factors quoted above are based on the 2013-14 loss factors published by AEMO, and are calculated as a load weighted average for Tranche 5 non-contestable customers. The detailed calculations are contained in the spreadsheet “Loss Factors 2013-14.xls” which accompanies this Proposal.

The calculation of R is therefore:

$$\begin{aligned}
 & [1,230.13 \times 1,000,000 \times 1.0168 \times 1.0713 \times 8.104 / 100] + [262,662 \times \$47 \times 1.0808] \\
 & = \\
 & [\$108,591,813] + [\$13,342,599] = \mathbf{\$121,934,412}
 \end{aligned}$$

1.2.1.2 NC

NC is to be calculated by applying the approved Network tariffs for the 2013-14 regulatory year under the AER to the residential loads set out in Schedule 2 of the 2013 Retail Determination.

The network tariffs used (excluding GST) are shown below:

Table 3:

Retail Tariff	Network Tariff	Fixed Charges	Energy Step 1	Energy Step 2	Energy Peak	Energy Shoulder	Energy Off-Peak	Demand
		c/day	c/kWh	c/kWh	c/kWh	c/kWh	c/kWh	\$/kW or kVa
22	N02	50.274	15.505	15.505				
31	N01	46.504	15.505					
APAYG	N13	52.119	8.020					
34	N02a	50.594	14.993	7.543				
36C	N02b	29.412	15.505					
41	N05	11.562	4.688					
42	N05	11.562	4.688					
43	N05	11.562	4.688					
61	N06	15.634	1.638					
62	N06	15.634	1.638					
73	N08		1.543					
74	N08	203.317	16.016					
75	N08a	203.317			15.287	9.554	1.521	
82	N09	213.640	3.028					190.552
83	N03	229.087	3.936					285.832
85	N10	199.239	1.700					111.367
86	N11	214.918	1.962					159.990

The combined Loads and billing days from Schedule 2 are:

Table 4:

Retail Tariff	Billing Days	Energy Step 1	Energy Step 2	Energy Step 3	Energy Peak	Energy Shoulder	Energy Off-Peak	Demand
	Days	kW/h	kW/h	kW/h	kW/h	kW/h	kW/h	kW or kVa
22	5,813,944	23,272,149	120,778,696					
31	38,872,024	491,812,767						
34	3,864	12,256	9,623	144,888				
36c	1,825,000							
41	13,018,184	114,392,068						
42	23,272,872	411,101,832						
43	321,448	3,017,970						
61	4,592,272	39,106,667						
62	554,392	3,333,340						
73		10,170,921						
74	499,008	9,083,624						
75	86,480				210,223	563,627	951,216	
82	13,984	1,569,738						352
83	18,032	599,555						498
85								
86	552	3,318						147

Note: In order to correctly allow for curtilage discounts, a proportion of the billing days for Tariff 22 have been allocated to a notional Tariff 36c. The values for T22 + T36c = the schedule totals.

Using these values, the value of NC is **\$153,920,583**

The detailed calculations are included in the spreadsheet 'NMR compliance 2013-14.xls' under the tab 'calculation of Res_Bus NC'.

1.2.1.3 AEMO

The value of AEMO for the 2013 Determination is half the final value of AEMO in Period 3 of the 2010 Determination, multiplied by the prescribed inflation factor of 1.0212. By applying this calculation the value of AEMO in 2013-14 dollars is **\$1,368,408**.

1.2.1.4 M

The value of M for the 2013 Determination is half the final value of M in Period 3 of the 2010 Determination, multiplied by the prescribed inflation

factor of 1.0212. By applying this calculation the value of M in 2013-14 dollars is **\$913,463**.

1.2.1.5 RECy

The value of REC for the 2013 Determination is half the final value of REC in Period 3 of the 2010 Determination, multiplied by the prescribed inflation factor of 1.0212. By applying this calculation the value of REC in 2013-14 dollars is **\$10,786,936**.

1.2.1.6 TAXy

There is an adjustment for tax event as a result of the change in the costs to the Aurora from the purchase of renewable energy certificates of **\$3,727,540** from the 2013 Determination to be carried into 2013 prices. The detailed calculations of this amount are given in the attachment to this Proposal 'Adjustment for Tax Event Submission - May 2013'.

1.2.1.7 CFy

There is an under-recovery of **\$6,129,370** from 2012-13 to be carried into 2013 prices. The detailed calculations of this amount are given in the attachment to this Proposal 'Prior Years Adjustments Submission - May 2013'.

1.2.1.8 NMR

NMR for the 2013 Determination is shown below:

Table 5:

Cost Element	Value
Ry	\$121,934,412
NCy	\$153,920,583
AEMOy	\$1,368,408
My	\$913,463
RECy	\$10,786,936
TAXy	\$3,727,540
CFy	\$6,129,370
Subtotal	\$298,780,712
Margin @ 3.8%	\$11,120,751
NMR	\$309,901,463

1.2.2 Average Price Change

Having established the quantum of NMR to be recovered, it is now necessary to determine the average uniform change above the previous 2010 Determinations Period 3 prices (July 2012) which will, when applied to the loads given in Schedule 2 of the Determination, produce revenue which does not exceed \$309,901,463.

That price change is established through MS Excel's goal seek function. It is **1.793%**

These calculations are to be found in the spreadsheet "NMR compliance 2013-14.xls" under the tab "loads and prices".

1.3 Changes to the Tariff Schedule

1.3.1 Curtilage discount

Curtilage is the discount on Fixed Daily charges for the second and subsequent connection points on a single farm house block. The discount is being phased out at the rate of 10% per annum over 10 years. This is the sixth term of the wind-out of this discount and accordingly, Condition (d) under Tariff 22 will be adjusted to reflect the new discount of 40% to the standard daily charge, which will be applied during July-December 2013.

1.3.2 Irrigation Time-of-Use Tariff (TOU)

As a part of the Period 3 2010 Determination Aurora Energy introduced a new tariff, Tariff 75 Irrigation ToU. As stated in the Period 3 pricing proposal under condition (c), Tariff 75 was only to be available to new installations, with this condition to be reviewed during the 2013-14 pricing reset.

From 01 July 2013 Aurora will be removing condition (c) from the tariff schedule making Tariff 75 available to all irrigation customers that meet the remaining conditions under Tariff 75. These remaining conditions are set out below:

Irrigation TOU – Tariff 75
Conditions: <ul style="list-style-type: none">(a) This tariff applies only to irrigation pumping for approved agricultural purposes classified by ANZSIC Class 01(b) Time of Use periods apply;<ul style="list-style-type: none">(i) From 1 April to 30 September Peak rates apply from 7am to 10pm Monday to Friday, Shoulder rates apply from 7am to 10 pm Saturday and Sunday, and Off Peak rates apply at all other times.(ii) From 1 October to 31 March Shoulder rates apply from 7am to 10pm Monday

to Friday and Off Peak rates apply at all other times.

1.4 Proposed July-December 2013 Prices

The Table below shows the proposed 2013 July-December prices, exclusive of GST:

Table 6:

Retail Tariff	Fixed Charges	Energy Step 1	Energy Step 2	Energy Step 3	Energy Peak	Energy Shoulder	Energy Off-Peak	Demand Step 1
	c/day	c/kWh	c/kWh	c/kWh	c/kWh	c/kWh	c/kWh	\$/kW or kVA
22	98.529	35.070	25.745					
31	91.205	25.712						
34	138.154	32.521	25.285	21.274				
36c	59.117							
41	17.665	15.507						
42	17.665	15.507						
43	17.665	15.507						
61	22.384	12.484						
62	22.384	11.758						
73	-	13.469						
74	322.715	30.653						
75	277.705				31.088	24.271	15.166	
82	308.908	15.870						201.733
83	308.908	16.172						292.512
85	302.980	13.971						115.604
86	302.980	14.237						167.176

The following Table shows the percentage change over the July 2012 prices:

Table 7:

Tariff	Fixed Charges	Energy Step 1	Energy Step 2	Energy Step 3	Energy Peak	Energy Shoulder	Energy Off-Peak	Demand Step 1
	c/day	c/kWh	c/kWh	c/kWh	c/kWh	c/kWh	c/kWh	\$/kW or kVA
22	1.793%	1.793%	1.793%					
31	1.793%	1.793%						
34	1.793%	1.793%	1.793%	1.793%				
36c	1.793% ¹							
41	1.793%	1.793%						
42	1.793%	1.793%						
43	1.793%	1.793%						
61	1.793%	1.793%						
62	1.793%	1.793%						
73		1.793%						
74	1.793%	1.793%						
75	1.793%	1.793%			1.793%	1.793%	1.793%	
82	1.793%	1.793%						1.793%
83	1.793%	1.793%						1.793%
85	1.793%	1.793%						1.793%
86	1.793%	1.793%						1.793%

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

Prices including GST, submitted for approval, are:

Table 8:

Tariff	Fixed Charges	Energy Step 1	Energy Step 2	Energy Step 3	Energy Peak	Energy Shoulder	Energy Off-Peak	Demand Step 1
	c/day	c/kWh	c/kWh	c/kWh	c/kWh	c/kWh	c/kWh	\$/kW or kVA
22	108.382	38.577	28.319					
31	100.326	28.283						
34	151.969	35.773	27.814	23.401				
36c	65.029							
41	19.431	17.057						
42	19.431	17.057						
43	19.431	17.057						
61	24.623	13.733						
62	24.623	12.934						
73	-	14.815						
74	354.986	33.718						
75	305.475				34.197	26.698	16.683	
82	339.799	17.457						221.906
83	339.799	17.789						321.763
85	333.278	15.368						127.164
86	333.278	15.660						183.894

1.5 Customer Impacts

All tariff customers will experience price rises of 1.793% over the prices set in July 2012.

The Aurora customer impact model is drawn from a large sample of Tasmanian customers and provides a reliable picture of Tasmanian pensioner customer impacts. The key conclusion is however, whatever structure of variable pricing is used; there will be winners and losers.

Accordingly, the application of price increases in this proposal remain consistent with the current strategy of applying increases equally to fixed and variable components of that tariff. To do otherwise would: (1) penalise those most in need of support, high consumption low income customers, (2) reduce the effectiveness of the Pensioner Discount and (3) could set a precedent that distorts price signals that may exist under AER determinations on Network tariffs in Tasmania.

Pensioner concession customers receive a fixed daily discount from Government. If the variable charge was to be increased at a greater percentage than the average increase, which is the amount used to calculate the discount, low income / high consuming pensioners would be worse off, when these are the very customers that need most assistance.

From 1 July 2012, network tariffs have been set by the AER. Aurora has employed a tariff strategy over several years aimed at aligning, over time, prices so they are reflective of input costs.

Consistent with the Retail Tariff Strategy, the proposed 1.793% price change 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 September 2010.

1.5.1 Residential quarterly cost impacts.

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

Table 9:

Tariff	Low Consumption	Medium Consumption	High Consumption
Tariff 31	\$2.81	\$5.11	\$8.12
Tariff 31 & 41	\$5.69	\$9.20	\$14.07
Tariff 31 & 42	\$9.33	\$12.21	\$15.88
Tariff 31, 41 & 61	\$7.09	\$11.06	\$16.49
Tariff 31, 42 & 61	\$10.60	\$13.67	\$17.70

1.5.2 Small Business quarterly cost impacts

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

Table 10:

Tariff	Low Consumption	Medium Consumption	High Consumption
Tariff 22	\$3.51	\$7.79	\$17.27
Tariff 22 & 61	\$15.18	\$30.99	\$68.51
Tariff 22 & 43	\$9.53	\$22.09	\$54.72
Tariff 22, 43 & 61	\$28.95	\$55.33	\$90.11

1.5.3 Nursing Homes

There are only 21 nursing home installations within the regulated tariff base. Quarterly consumption varies between 456 kWh and 32,210 kWh. The average quarterly bill increase will be \$56.24 with a minimum of \$4.53 and a maximum of \$136.62.

1.5.4 Irrigation

The quarterly bill increases for typical irrigation customers on Tariff 73/74 are shown in the following Table.

Table 11:

Tariff	Low Consumption	Medium Consumption	High Consumption
Tariff 73/74	\$12.39	\$25.73	\$45.94

1.5.5 Irrigation ToU tariff 75 Impacts

There are no “typical” Irrigation ToU installations. It is not therefore possible to speak of “typical” customer impacts. Since all tariff components are increasing at the same rate, 1.793%, the cost increase for each of these sites will be 1.793%.

1.5.6 Demand Tariffs

There are no “typical” demand tariff installations. It is not therefore possible to speak of “typical” customer impacts. Since all tariff components are increasing at the same rate, 1.793%, the cost increase for each of these sites will be 1.793%.

1.6 Special Services Prices

Special services prices will be the value in the 2010 Determination, multiplied by the prescribed inflation factor of 1.0808. A full list of special services prices are published under reference point 2.0 Schedule of Supply Fees.

1.7 Revenue Check

This Section demonstrates that the proposed prices, excluding GST, when applied to the forecast loads set out in Schedule 2 of the 2013 Determination, produce total revenue for each customer segment within the Notional Maximum Revenue calculated in Section 1.2.2 above. The detailed calculations are given in the spreadsheet "NMR Compliance 2013-14.xls" under the tab 'loads & prices'. The following Table summarises the revenue outcomes:

Table 12:

Tariff	Fixed Charges	Energy Step 1	Energy Step 2	Energy Step 3	Energy Peak	Energy Shoulder	Energy OffPeak	Demand Step 1	Total Revenue
22	5,728,403	8,161,439	31,093,949						44,983,791
31	35,453,385	126,454,551							161,907,936
34	5,338	3,986	2,433	30,823					42,580
36c	1,078,889								1,078,889
41	2,299,629	17,738,482							20,038,111
42	4,111,094	63,748,496							67,859,590
43	56,783	467,989							524,772
61	1,027,945	4,882,241							5,910,186
62	124,096	391,934							516,030
73		1,369,880							1,369,880
74	1,610,371	2,784,365							4,394,737
75	240,159				65,355	136,798	144,263		586,576
82	43,198	249,124						71,010	363,332
83	55,702	96,961						145,671	298,334
85									
86	1,672	472						24,575	26,720
Total Revenue:									309,901,463
Notional Maximum Revenue:									309,901,463

1.8 Future Variations to Tariffs

Aurora is not intending to make any additional changes to the structure of existing tariffs during the 2013 Determination.

2.0 Schedule of Supply Fees

The Supply Fees applying from 1st July 2013 are shown below:

Table 13:

Supply Fees	2013 Price
Change of tariff or charging of supply by a different method under a particular tariff	\$83.79
Supply given under an additional tariff	\$83.79
Supply given under an additional tariff where a new or altered circuit is required	\$188.45
New application for supply for an installation which is or has been previously connected to Aurora supply under Aurora's standard connection policy	\$83.79
New application for supply for an installation which is or has been previously connected to Aurora supply where same day reconnection is required	\$183.52
Reconnection, under Aurora's standard connection policy, of all or part of an electrical installation after disconnection requested by the customer whilst in constant occupation	\$83.79
Same day reconnection of all or part of an electrical installation after disconnection requested by the customer whilst in constant occupation	\$183.52
Special meter reading taken at the customer's request	\$83.79
Deposit for test of accuracy of a meter at the customer's request – single or three phase meters	\$106.45
Deposit for test of accuracy of a meter at the customer's request – current transformer meters	\$409.10
Time switch adjustment at the customer's request	\$106.45
Late payment fee 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 Reference

Table 14:

Topic	Submission Section	Source Document Name	Source Document Reference
NMR Calculation	S1.2	NMR Compliance 2013-14.xls	AR20501870 v8
Price Development and Compliance Calculations	S1.2, S1.4 & S1.7	NMR Compliance 2013-14.xls	AR20501870 v8
Customer Impacts	S1.5	Customer Impacts July 2013	AR20503544 v3
Transmission & Distribution Loss Factors	S1.2.1.1	Loss Factors 2013-14 Tab 'Summary'	AR20501862
Adjustment for Tax Event Submission	S1.2.1.6	Adjustment for Tax Event Submission – May 2013	AR20508205 v3
Prior Years Adjustment Submission	S1.2.1.7	Prior Year Unders & Overs Submission – May 2013	AR20503604 v1

4.0 Compliance with Guideline

The Regulator’s Guideline “Approval of Retail Tariffs in accordance with the 2013 Determination” contains a series of requirements with which a Retail Tariff Proposal must comply.

The Table below sets out those requirements and shows where in this document they are addressed:

Table 15:

Guideline Requirement	Proposal Reference
1.) Set out the draft Retail Tariffs	S1.2
2.) Set out the proposed charging parameters and the elements of service to which each parameter relates	S1.2
3.) Detail any amendments, variations or adjustments to the retail tariff proposed	S1.3
4.) Provide detail of the adjustment variables and the methodologies used for calculating those variables including CPI and pass-throughs	S1.2

5.) Set out any variation or adjustment to the retail tariffs during subsequent periods	S1.8
6.) Demonstrate compliance with the 2013 Determination	S1.2 & S1.7
7.) Describe the nature and extent of change from the previous period	S1.2.2 & S1.4
8.) Demonstrate the impact on typical customers	S1.5
9.) Be accompanied by an internal audit certificate and certified as correct by the Chairman and one other Director of Aurora	Certificates Attached