Cost pass-through application for LRET and SRES

A DRAFT REPORT PREPARED FOR IPART

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1	**Background**	**3**
1.1	Frontier's engagement	3
1.2	This report	3
2	**Overview of the schemes**	**5**
2.1	Overview of the LRET	5
2.2	Overview of the SRES	5
3	**Cost pass-through applications**	**7**
3.1	Overview of requirements	7
3.2	What costs are incremental?	8
4	**Incremental costs associated with the LRET**	**10**
4.1	Assessment of incremental LRET costs	10
4.2	Assessment of Standard Retailers' cost pass-through applications	17
5	**Incremental costs associated with the SRES**	**19**
5.1	Assessment of incremental SRES costs	19
5.2	Assessment of Standard Retailers' cost pass-through applications	23
6	**Conclusion**	**25**

Cost pass-through application for LRET and SRES

Tables

Table 1: Renewable power percentages 11
Table 2: LRMC of LRET ($2010/11) 13
Table 3: Cost of complying with LRET ($2010/11) 15
Table 4: Incremental cost of complying with LRET ($2010/11) 16
Table 5: Incremental cost of complying with LRET in 2010/11 ($2010/11) 17
Table 6: Small-scale Technology Percentages 19
Table 7: LGC costs ($2010/11) 20
Table 8: Cost of complying with SRES ($2010/11) 22
Table 9: Cost of complying with SRES in 2010/11 ($2010/11) 23
Table 10: Incremental efficient costs for 2010/11 ($2010/11) 25
Table 11: Incremental efficient costs for 2010/11 ($2010/11) 25

1 Background

The Independent Pricing and Regulatory Tribunal (IPART) has determined regulated electricity tariffs to apply for the period between 1 July 2010 and 30 June 2013 for customers of the Standard Retailers operating in NSW who are supplied on standard contracts (**2010 Determination**). Frontier Economics (Frontier) advised IPART on the total energy cost allowance for 2010/11 to 2012/13 to be incorporated in IPART's 2010 Determination.

IPART's 2010 Determination provided for annual reviews of the total energy cost allowance for 2011/12 and 2012/13 for each Standard Retailer. IPART's 2010 Determination also provided for a cost pass-through mechanism that allows the Standard Retailers to apply to pass through incremental and efficient costs associated with events that amount to regulatory and taxation change events.

1.1 Frontier's engagement

Frontier has been engaged by IPART to provide advice on:

- the assessment of cost pass-through applications for 2010/11 submitted by the Standard Retailers
- the annual review of the total energy cost allowance for 2011/12 and 2012/13.

1.2 This report

This draft report sets out Frontier's advice to IPART on the cost pass-through applications for 2010/11 submitted by the Standard Retailers. These cost pass-through applications relate to incremental costs faced by the Standard Retailers as a result of the replacement of the enhanced Renewable Energy Target (RET) with the Large-scale Renewable Energy Target (LRET) and the Small-scale Renewable Energy Scheme (SRES).

This draft report does not deal with Frontier's advice to IPART on the total energy cost allowance for 2011/12 and 2012/13, for the purposes of IPART's annual review. Frontier's advice to IPART on the annual review is set out in a separate report by Frontier Economics'.[1]

This report is structured as follows:

- Section 2 provides an overview of the new LRET and SRES

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1 Frontier Economics, *Energy purchase costs – annual review for 2011/12 and 2012/13*, A Draft Report prepared for IPART, April 2011.

- Section 3 provides an overview of IPART's approach to cost pass-through applications
- Section 4 provides Frontier's advice to IPART regarding the incremental costs to the Standard Retailers resulting from the LRET
- Section 5 provides Frontier's advice to IPART regarding the incremental costs to the Standard Retailers resulting from the SRES
- Section 6 concludes.

2 Overview of the schemes

As of 1 January 2011 the enhanced Renewable Energy Target (RET) was split into two separate schemes: the Large-scale Renewable Energy Target (LRET) and the Small-scale Renewable Energy Scheme (SRES). This section provides an overview of the new schemes.

2.1 Overview of the LRET

The LRET is essentially a continuation of the RET. The LRET places a legal liability on wholesale purchasers of electricity to proportionately contribute towards the generation of additional renewable electricity from large-scale generators. Liable entities support additional renewable generation through the purchase of Large-scale Generation Certificates (LGCs). The number of LGCs to be purchased by liable entities each year is determined by the Renewable Power Percentage (RPP), which is set each year by the Office of the Renewable Energy Regulator (ORER). LGCs are created by eligible generation from renewable energy power stations.

The key difference between the RET and the LRET is that small-scale installations such as solar water heaters, air sourced heat pumps and small generation units, which were eligible to create certificates under the RET, are not eligible to create LGCs under the LRET. Instead, these small-scale installations are eligible to create certificates under the SRES.

The exclusion of small-scale installations from the LRET has resulted in two key changes to the LRET relative to the REC:

- On the supply-side, the eligible sources for the creation of LGCs have been limited to large-scale generators.
- On the demand-side, ORER has adjusted the LRET target to reflect the fact that there are now two schemes providing a financial incentive to renewable generation – the LRET and the SRES – whereas previously there had only been one scheme – the RET. In effect, ORER have lowered the LRET target to account for expected renewable generation under the SRES.

2.2 Overview of the SRES

The SRES places a legal liability on wholesale purchasers of electricity to proportionately contribute towards the costs of creating small-scale technology certificates (STCs). The number of STCs to be purchased by liable entities each year is determined by the Small-scale Technology Percentage (STP), which is set each year by ORER. STCs are created by eligible small-scale installations based on the amount of renewable electricity produced or non-renewable energy displaced by the installation.

Owners of STCs can sell STCs either through the open market (with a price determined by supply and demand) or through the STC Clearing House (with a fixed price of $40 per STC). The STC Clearing House works on a surplus/deficit system so that sellers of STCs will have their trade cleared (and receive their fixed price of $40 per STC) on a first-come first-served basis. The STC Clearing House effectively provides a floor to the STC price: as long as a seller of STCs can access the fixed price of $40, the seller would only sell on the open market at a price below $40 to the extent that doing so would reduce the expected holding cost of the STC.

3 Cost pass-through applications

This section provides a brief overview of the approach to assessing the Standard Retailers' cost pass-through applications. This includes an overview of the requirements set out in IPART's determination, as well as consideration of incremental costs and efficient costs.

3.1 Overview of requirements

IPART's 2010 Determination sets out the process to be applied to the assessment of cost pass-through applications.

Under the 2010 Determination, if IPART receives a cost pass-through application relating to a regulatory change event, and IPART determines that a regulatory change event has occurred, then IPART is required to determine, among other things, the following:

- the total amount to be passed through to customers in respect of the regulatory change event
- the amount to be passed through to customers each year in respect of the regulatory change event.

In determining the amount to be passed through to customers IPART will take into account, amount other things, the following:

- the implications for efficient costs of the Standard Retailers
- the need to ensure that the Standard Retailers do not recover costs that have already been taken into account
- the need to ensure that the Standard Retailers only recover any actual or likely increment in efficient costs that is solely a consequence of the regulatory change event
- the time cost of money base on the rate of return on capital of the Standard Retailers.

The splitting of the RET scheme into the LRET and SRES has been accepted by IPART as a regulatory change event.

Frontier has been engaged by IPART to advise on the calculation of these amounts to be passed through to customers in respect of the regulatory change event. In providing its advice, Frontier will be guided by the requirements set out above.

3.2 What costs are incremental?

IPART's 2010 Determination requires that, under a cost pass-through, the Standard Retailers only recover any actual or likely incremental costs resulting from the regulatory change event. In order to determine the incremental costs of the change from the RET to the LRET and SRES it is necessary to consider both the incremental costs of the LRET and the incremental costs of the SRES. Since the LRET is essentially a continuation of the RET, whereas the SRES is essentially a new scheme that operates in a different way to the RET and LRET, the approach taken in this draft report is to:

- calculate the incremental cost of the LRET as the efficient cost of the LRET less the efficient cost of the RET
- calculate the incremental cost of the SRES as the total efficient cost of the SRES
- add these incremental costs to determine the incremental cost of the regulatory change from the RET to the LRET and SRES.

3.2.1 LRET

Since the LRET is essentially a continuation of the RET, the incremental costs of the LRET are those costs directly resulting from the change from the RET to the LRET. The incremental costs of the LRET can be estimated by determining the difference between the efficient costs to retailers of meeting the RET and the efficient costs to retailers of meeting the LRET. The efficient costs to retailers of meeting the RET were estimated as part of the 2010 Determination. The efficient costs to retailers of meeting the LRET will be calculated as part of this assessment of the cost pass-through application. The difference between these amounts is the incremental cost.

To ensure that only the incremental costs of the change to the scheme are captured, it is important that the efficient costs to retailers of meeting the LRET are estimated using the same methodology and the same assumptions (other than the assumptions that reflect the regulatory change from the RET to the LRET) as were used to estimate the efficient costs to retailers of meeting the RET. If the efficient costs to retailers of meeting the LRET are estimated using a new methodology or new assumptions then the difference between the cost so estimated and the efficient cost of meeting the RET (as estimated as part of the 2010 Determination) will reflect both the change in the scheme and the change in the methodology or assumptions.

3.2.2 SRES

Since the SRES is essentially a new scheme, the incremental costs of the SRES are all of the efficient costs to retailers of meeting the scheme. In calculating these incremental costs it is important to use, where relevant, assumptions that were available at the time of the 2010 Determination (specifically the regulated load of the Standard Retailers). This is for the same reason that assumptions are held constant when estimating the cost of the LRET: if assumptions are updated the cost so estimated will reflect both the change in the scheme and the change in assumptions.

4 Incremental costs associated with the LRET

IPART has received cost pass-through applications from each of the Standard Retailers regarding the incremental costs they face resulting from the LRET and SRES. This section sets out Frontier's advice in regard to the LRET component of the cost pass-through applications.

4.1 Assessment of incremental LRET costs

In order to calculate the cost to a Standard Retailer of complying with the LRET, it is necessary to determine the RPP for the Standard Retailer (which determines the number of LGCs that must be purchased) and the cost of obtaining each LGC.

4.1.1 Renewable Power Percentage

The RPP establishes the rate of liability under the LRET and is used by liable entities to determine how many LGCs they need to surrender to discharge their liability each year.

The RPP is set to achieve the renewable energy targets specified in the legislation. ORER is responsible for setting the RPP for each year. The RPP for 2011 has been set at 5.62 per cent.

The *Renewable Energy (Electricity) Act 2000* states that where the RPP for a year has not been determined it should be calculated as the RPP for the previous year multiplied by the required GWh's of renewable energy for the previous year divided by the required GWh's for the current year. This calculation increases the RPP in line with increases in the renewable energy target but does not decrease the RPP to account for any growth in demand. As a result, this calculation is likely to overestimate the RPP for a given year.

Frontier has used the published RPP for 2011 and the renewable energy target in 2012 and 2013 to calculate the RPP for 2012 and 2013. These values have then been averaged to arrive at the financial year RPPs set out in Table 1.

Table 1: Renewable Power Percentages

Year	RPP (% of liable acquisitions)
2010/11	5.80%
2011/12	7.22%
2012/13	9.34%

Source: ORER, Frontier Economics.

4.1.2 Cost of obtaining LGCs

The cost to a retailer of obtaining LGCs can be determined either based on the resource costs associated with creating LGCs or the price at which LGCs are traded.

As discussed in Frontier's report for the 2010 Determination, Frontier estimated the cost of RECs on the basis of the LRMC of meeting the expanded RET.[2] As discussed, in order to calculate the incremental cost of the LRET, it is necessary to adopt the same methodology and assumptions for calculating both the costs of complying with the RET and the costs of complying with the LRET, and to change only the relevant target and the eligibility to create RECs. For this reason, and because Frontier considers that a LRMC approach remains appropriate for the LRET, Frontier has, for the purpose of this draft report, estimated the cost of LGCs on the basis of the LRMC of meeting the LRET.

LRET target

The target for the LRET differs from the target for the RET for two reasons:

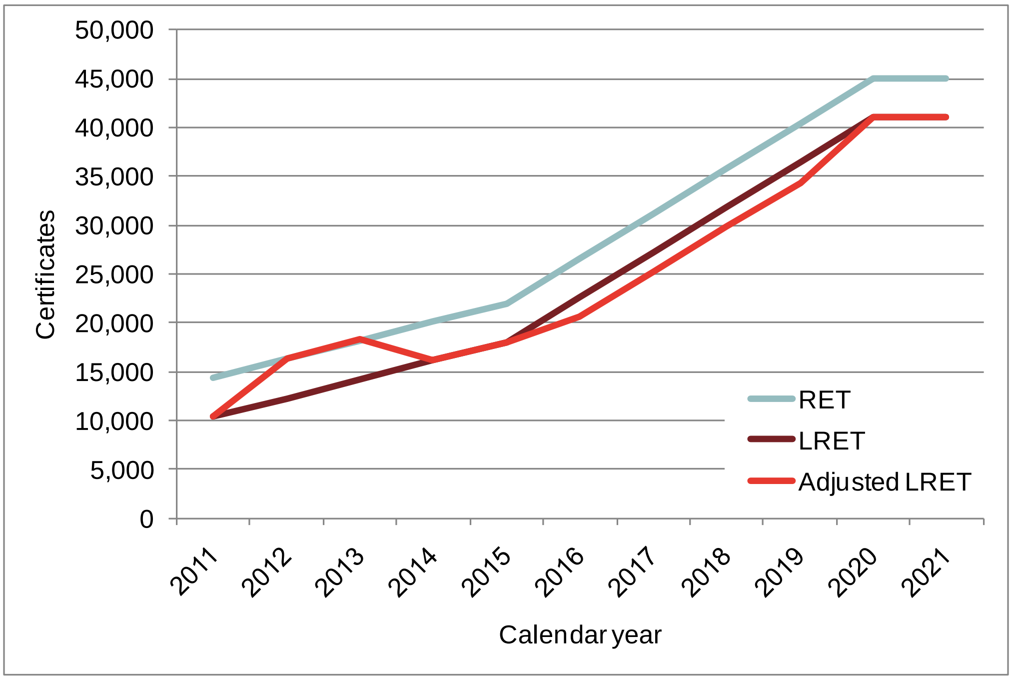
- the LRET target is below the RET target because renewable generation is now supported by both the LRET and the SRES
- the LRET target has been adjusted because the surplus RECs at the end of the 2010 calendar year exceeded 34.5 million. This adjustment has increased the LRET target in 2012 and 2013 and decreased the LRET target from 2016 to 2019.

Figure 1 shows the LRET target, the adjusted LRET target and the RET target. The modelling for the 2010 Determination used the RET target shown in Figure 1. The modelling for this draft report uses the adjusted LRET target shown in Figure 1. The reason is that the relevant regulatory change event incorporates

2 Frontier Economics, *Energy purchase costs*, A Final Report prepared for IPART, March 2010.

both the reduction in the LRET target relative to the RET target and the adjustment to the LRET target to account for the surplus RECs at the end of the 2010 calendar year.

Figure 1: LRET target



Source: ORER, Frontier Economics.

Eligibility to create LGCs

In its modelling for the 2010 Determination, Frontier recognised that part of the REC target would be met by REC creation by small-scale generators. However, because of uncertainty about the costs of small-scale technologies and the basis for decisions on investment in these technologies, Frontier does not typically include them as options in its least cost modelling. Rather, Frontier adopts an exogenous assumption about the number of RECs created each year by small-scale generators, and uses that assumption to reduce the effective REC target to be met by large-scale generators.

At the time of the 2010 Determination, the best information of which Frontier was aware about the creation of RECs by small-scale generators was from a 2005 report by the Australian Business Council for Sustainable Energy (BCSE).[3]

3 Australian Business Council for Sustainable Energy, *2005 REC Report*.

Frontier adopted this information in providing advice for the 2010 Determination.

The modelling for this draft report does not assume that part of the LRET target will be met by small-scale generators. Rather, consistent with the design of the scheme, it is assumed that only large-scale generators are eligible to create RECs.

LRMC of LGCs

Other than the change from the RET target to the adjusted LRET target and the exclusion of small-scale generators from eligibility to create certificates, all other modelling assumptions adopted for the 2010 Determination have been adopted for this draft report.

Based on this set of modelling assumptions, the LRMC of meeting the LRET is set out in Table 2.

Table 2: LRMC of LRET ($2010/11)

Financial Year	LRMC of RET ($/certificate)	LRMC of LRET ($/certificate)
2010/11	$30.48	$26.83
2011/12	$31.70	$27.89
2012/13	$32.97	$29.02

Source: Frontier Economics

As can be seen in Table 2, Frontier's estimate of the LRMC of the LRET for this cost pass-through application is lower than Frontier's estimate of the LRMC of the RET from the 2010 Determination. The reason for this is that the change in the scheme target (which has fallen, from the old RET target to the new LRET target) is larger than the change in the assumed contribution of small-scale generation to that target (which has fallen to zero to reflect the fact that small-scale generation is no longer eligible to create certificates under the LRET).

As discussed, for the 2010 Determination, Frontier adopted input assumptions about the creation of RECs by small-scale generators from the BCSE. Since the BCSE report is not publicly available, Frontier is not able to provide the BCSE's estimate of the number of RECs created by small-scale generators. We can say, however, that the BCSE forecast of the number of RECs created by small-scale generators is substantially lower than the number of RECs that have been created by small-scale generators in 2009 and 2010. Clearly, the BCSE did not forecast the effect that the combined incentives created by the REC and feed-in tariffs would have on the installation of small-scale generators and the deemed creation of RECs.

As a result, the change from the RET to the LRET has resulted in a shift in demand for certificates that is bigger than the shift in supply of certificates. Ultimately this has resulted in a lower LRMC of meeting the LRET target.

4.1.3 Incremental cost of complying with LRET

The cost of complying with the LRET for a Standard Retailer and a financial year is determined by multiplying the cost of LGCs by the RPP and by the forecast regulated load for that Standard Retailer each financial year (as measured at the connection point between the distribution network and the transmission network).[4] Using this approach and these inputs, the estimated efficient cost to each Standard Retailer of complying with the LRET for each financial year covered by the 2010 Determination is set out in Table 3.

[4] Frontier have used the regulated load provided by the Standard Retailers for the 2010 Determination. As with other input assumptions, keeping the regulated load consistent with that used in the 2010 Determination ensures that the estimated incremental cost reflects only the regulatory change not a change in input assumptions. Furthermore, keeping the regulated load consistent with that used in the 2010 Determination is consistent with IPART's approach to the annual reviews, in which regulated load is not subject to review.

Table 3: Cost of complying with LRET ($2010/11)

Financial Year	Cost of complying with LRET
Country Energy	
2010/11 (Q3 and Q4 only)	$3,867,031
2011/12	$10,113,531
2012/13	$13,415,349
EnergyAustralia	
2010/11 (Q3 and Q4 only)	$5,482,338
2011/12	$13,514,281
2012/13	$16,962,450
Integral Energy	
2010/11 (Q3 and Q4 only)	$2,928,061
2011/12	$7,469,481
2012/13	$9,515,534

Source: Frontier Economics

In order to determine the incremental cost of complying with the LRET it is necessary to determine the difference between this estimate of the cost of complying with the LRET with the estimate of the cost of complying with the RET determined for the purpose of IPART's 2010 Determination. Table 4 compares the cost of complying with the LRET with the cost of complying with the RET and sets out the incremental cost of complying with the LRET.

Table 4: Incremental cost of complying with LRET ($2010/11)

Financial Year	Cost of complying with LRET	Cost of complying with RET	Incremental cost of complying with LRET
Country Energy			
2010/11 (Q3 and Q4 only)	$3,867,031	$4,651,031	-$784,000
2011/12	$10,113,531	$11,421,767	-$1,308,236
2012/13	$13,415,349	$13,213,623	$201,726
EnergyAustralia			
2010/11 (Q3 and Q4 only)	$5,482,338	$6,593,824	-$1,111,486
2011/12	$13,514,281	$15,262,422	-$1,748,141
2012/13	$16,962,450	$16,707,387	$255,063
Integral Energy			
2010/11 (Q3 and Q4 only)	$2,928,061	$3,521,695	-$593,633
2011/12	$7,469,481	$8,435,696	-$966,215
2012/13	$9,515,534	$9,372,449	$143,084

Source: Frontier Economics

In the event that IPART determines that these incremental costs pass the required materiality threshold, the incremental cost for Q3 and Q4 of 2010/11 will be recovered through retail tariffs in 2011/12. To determine the amount by which retail tariffs in 2011/12 would need to be adjusted to allow the Standard Retailers' to recover the incremental costs for Q3 and Q4 of 2010/11 that are set out in Table 4, the following steps are required for each Standard Retailer:

- In the 2010 Determination, the retail margin was applied to the Standard Retailers' total costs, including the cost of complying with the RET. Applying this approach on a consistent basis means that the incremental costs for Q3 and Q4 of 2010/11 must be adjusted by the retail margin of 5.4%.
- The incremental costs for Q3 and Q4 of 2010/11 (including the retail margin adjustment) need to be divided by the regulated retail load (measured at the customer premises) for 2011/12. This provides an amount in $/MWh by which the Standard Retailers' regulated tariffs in 2011/12 will need to increase to recover the relevant incremental costs. Since the amount in

$/MWh is measured at the customer premises it accounts for energy losses faced by the retailers.

Based on this approach, the estimate of the incremental efficient cost of the LRET in 2010/11, to be recovered from customers of each Standard Retailer in 2011/12, is as set out in Table 5.

Table 5: Incremental cost of complying with LRET in 2010/11 ($2010/11)

Financial Year	Incremental cost of complying with LRET ($/MWh)
Country Energy	-$0.18
EnergyAustralia	-$0.19
Integral Energy	-$0.18

Source: Frontier Economics

4.2 Assessment of Standard Retailers' cost pass-through applications

The estimate of the incremental efficient cost of the LRET in 2010/11 to be recovered from customers of each Standard Retailer in 2011/12 (as set out in Table 5) varies from the estimates of these amounts set out in the cost pass-through applications submitted by each of the Standard Retailers.

As far as Frontier has been able to determine, these differences occur for a number of reasons:

- The Standard Retailers estimate the incremental cost associated with the LRET by comparing the cost allowance provided for the RET in the 2010 Determination (which adopted a cost-based approach to estimating the cost of RECs) with an allowance for the LRET which is based on market prices for LGCs. As a result, the Standard Retailers' estimates of the incremental cost associated with the LRET reflect a combination of the change in the scheme and a change in the methodology (from LRMC to market-based) used to calculate the cost of complying with the scheme. In contrast, and as discussed above, Frontier have adopted a consistent approach based on estimating the LRMC of compliance with the scheme. In doing so, Frontier have isolated the incremental cost of the regulatory change.
- The Standard Retailers have calculated the RPP in a slightly different way.

- The Standard Retailers have made different assumptions about the regulated load. In contrast, and as discussed above, Frontier have adopted the same assumptions about the regulated load of the Standard Retailers as were used for the 2010 Determination. In doing so, Frontier have isolated the incremental cost of the regulatory change.

5 Incremental costs associated with the SRES

IPART has received cost pass-through applications from each of the Standard Retailers regarding the incremental costs they face resulting from the LRET and SRES. This section sets out Frontier's advice in regard to SRES component of the cost pass-through applications.

5.1 Assessment of incremental SRES costs

In order to calculate the cost to a Standard Retailer of complying with the SRES, it is necessary to determine the STP for the Standard Retailer (which determines the number of STCs that must be purchased) and the cost of obtaining each STC.

5.1.1 Small-scale Technology Percentage

The STP establishes the rate of liability under the SRES and is used by liable entities to determine how many STCs they need to surrender to discharge their liability each year.

The STP is determined by ORER and is calculated as the percentage required in order to remove STCs from the STC Market for the current year liability. The STP is calculated in advance based on:

- the estimated number of STCs that will be created for the year
- the estimated amount of electricity that will be acquired for the year
- the estimated number of all partial exemptions expected to be claimed for the year.

The STP is to be published for each compliance year by March 31 of that year. ORER must also publish a non-binding estimate of the STP for the two subsequent compliance years by March 31. The STPs published by ORER for 2011, 2012 and 2013 are set out in Table 6.

Table 6: Small-scale Technology Percentages

Year	STP (% of liable acquisitions)
2011	14.80%
2012 (estimate)	16.75%
2013 (estimate)	10.62%

Source: ORER.

5.1.2 Cost of STCs

The cost of STCs exchanged through the STC Clearing House is fixed at $40 (in nominal terms). While retailers may be able to purchase STCs on the open market at a discount to this $40, any discount would reflect the benefit to the seller of the STC of receiving payment for the STC at an earlier date. In effect, the retailer would achieve the discount by taking on this holding cost itself (that is, by acquiring the STC at an earlier date). For this reason, in estimating the cost to retailers of the SRES, Frontier has adopted an STC cost of $40.

In real terms, and using IPART's forecast inflation rate of 3.0%, this nominal $40 results in the real LGC costs set out in Table 7.

Table 7: LGC costs ($2010/11)

Calendar Year	LGC cost
2011	$39.41
2012	$38.27
2013	$37.15

Source: Frontier Economics

5.1.3 Incremental cost of complying with SRES

In broad terms, the cost to a Standard Retailer of complying with the SRES is the STP multiplied by the cost of STCs.

However, this is complicated by the fact that liable entities' obligation to surrender STCs under the SRES occurs on a quarterly basis and varies over the course of a calendar year. Determining financial year costs (in order to line up with IPART's 2010 Determination, which is on a financial year basis) therefore requires that the cost of complying with SRES is calculated on a quarterly basis and then aggregated to a financial year basis.

Liable entities' quarterly obligations to surrender STCs in calendar year n are determined as follows:

$$Q1 = 35\% * STP_n * (REA_{n-1} - PEC_{n-1})$$

$$Q2 = 25\% * STP_n * (REA_{n-1} - PEC_{n-1})$$

$$Q3 = 25\% * STP_n * (REA_{n-1} - PEC_{n-1})$$

Incremental costs associated with the SRES

$$Q4 = STP_n * (REA_n - PEC_n) - (Q1 + Q2 + Q3)$$

Where:

STP_n is the STP for year n

REA_n is the retailer's relevant acquisitions of electricity in year n

PEC_n is the retailer's PECs in MWh in year n

Applying this methodology, and using the real STC costs set out in Table 7, the cost each quarter of these quarterly obligations can be determined in real terms. These quarterly costs can then be summed across financial years to provide financial year costs of complying with the SRES.

Frontier has applied this approach for each of the Standard Retailers. The value of REA for each Standard Retailer and each calendar year is based on the forecast regulated load for that Standard Retailer for each calendar year (as measured at the connection point between the distribution network and the transmission network).[5] The value of PEC for each Standard Retailer and each calendar year has been set at zero, on the basis that retail customers are not eligible for PECs.

Using this approach and these inputs, the estimated efficient incremental cost to each Standard Retailer of complying with the SRES for each financial year covered by the 2010 Determination is set out in Table 8.

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5 As for the calculation of the incremental cost of the LRET, Frontier has used the regulated load provided by the Standard Retailers for the 2010 Determination. As with other input assumptions, keeping the regulated load consistent with that used in the 2010 Determination ensures that the estimated incremental cost reflects only the regulatory change not a change in input assumptions. Furthermore, keeping the regulated load consistent with that used in the 2010 Determination is consistent with IPART's approach to the annual reviews, in which regulated load is not subject to review.

Table 8: Cost of complying with SRES ($2010/11)

Financial Year	Cost of complying with SRES
Country Energy	
2010/11(Q3 and Q4 only)	$17,832,606
2011/12	$30,923,260
2012/13	$24,297,256
EnergyAustralia	
2010/11(Q3 and Q4 only)	$26,669,062
2011/12	$40,919,110
2012/13	$29,952,348
Integral Energy	
2010/11(Q3 and Q4 only)	$14,091,558
2011/12	$22,613,196
2012/13	$17,050,237

Source: Frontier Economics

In the event that IPART determines that these incremental costs pass the required materiality threshold, the incremental cost for Q3 and Q4 of 2010/11 will be recovered through retail tariffs in 2011/12. To determine the amount by which retail tariffs in 2011/12 would need to be adjusted to allow the Standard Retailers to recover the incremental costs for Q3 and Q4 of 2010/11 that are set out in Table 4, the following steps are required for each Standard Retailer:

- In the 2010 Determination, the retail margin was applied to the Standard Retailers' total costs, including the cost of complying with the RET. Applying this approach on a consistent basis means that the incremental costs for Q3 and Q4 of 2010/11 must be adjusted by the retail margin of 5.4%.
- The incremental costs for Q3 and Q4 of 2010/11 need to be adjusted to account for the Standard Retailers' holding cost. Unlike with the RET or LRET, retailers are required to acquit their SRES obligations throughout the course of a calendar year. As a result, retailers will incur the incremental costs for Q3 and Q4 of 2010/11 during Q3 and Q4 of 2010/11, but will not recover the costs until 2011/12. The Standard Retailers' holding cost is

calculated using IPART's retail WACC of 9.1% and assuming a holding period of 9 months.

- The incremental costs for Q3 and Q4 of 2010/11 (including the retail margin adjustment and holding cost adjustment) need to be divided by the regulated retail load (measured at the customer premises) for 2011/12. This provides an amount in $/MWh by which the Standard Retailers' regulated tariffs in 2011/12 will need to increase to recover the relevant incremental costs. Since the amount in $/MWh is measured at the customer premises it accounts for energy losses faced by the retailers.

Based on this approach, the estimate of the incremental efficient cost of the SRES in 2010/11, to be recovered from customers of each Standard Retailer in 2011/12, is as set out in Table 9.

Table 9: Cost of complying with SRES in 2010/11 ($2010/11)

Financial Year	Incremental cost of complying with SRES ($/MWh)
Country Energy	$4.43
EnergyAustralia	$4.79
Integral Energy	$4.67

Source: Frontier Economics

5.2 Assessment of Standard Retailers' cost pass-through applications

The estimate of the incremental efficient cost of the SRES in 2010/11 to be recovered from customers of each Standard Retailer in 2011/12 (as set out in Table 9) varies from the estimates of these amounts set out in the cost pass-through applications submitted by each of the Standard Retailers.

As far as Frontier has been able to determine from the Standard Retailers' submissions, these differences occur for the following reasons:

- The Standard Retailers have used different approaches to calculating the STP for 2012 and 2013.
- The Standard Retailers do not calculate SRES costs on a quarterly basis, but assume that 60 per cent of SRES costs are incurred in the first half of a calendar year and 40 per cent of SRES costs are incurred in the second half

of a calendar year. Where the Standard Retailers' load varies between calendar years, this simplifying assumption is not correct.

- The Standard Retailers have made different assumptions about the regulated load. In contrast, and as discussed above, Frontier have adopted the same assumptions about the regulated load of the Standard Retailers as were used for the 2010 Determination. In doing so, Frontier have isolated the incremental cost of the regulatory change.
- The Standard Retailers have used different approaches to converting the nominal STC cost into a real STC cost.

6 Conclusion

Frontier's estimate of the incremental efficient costs associated with the LRET and the SRES, as well as the total incremental efficient costs associated with the regulatory change, is set out in Table 10.

Table 10: Incremental efficient costs for 2010/11 ($2010/11)

	Incremental cost of complying with LRET	Incremental cost of complying with SRES	Total incremental cost of regulatory change
Country Energy	-$784,000	$17,832,606	**$17,048,606**
EnergyAustralia	-$1,111,486	$26,669,062	**$25,557,576**
Integral Energy	-$593,633	$14,091,558	**$13,497,925**

Source: Frontier Economics

Recovering these incremental efficient costs – adjusted for a retail margin of 5.4% and for a SRES holding cost – requires an incremental change to retail tariffs as set out in Table 11.

Table 11: Incremental efficient costs for 2010/11 ($2010/11)

	Incremental cost of complying with LRET ($/MWh)	Incremental cost of complying with SRES ($/MWh)	Total incremental cost of regulatory change ($/MWh)
Country Energy	-$0.18	$4.43	**$4.25**
EnergyAustralia	-$0.19	$4.79	**$4.60**
Integral Energy	-$0.18	$4.67	**$4.49**

Source: Frontier Economics

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