Submission to the Queensland Competition Authority on the Review of Regulated Electricity Retail Prices and Tariffs: Issues Paper

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Contents

Executive Summary

Origin takes the view that the review of regulated electricity retail tariffs in Queensland can have a positive impact on the energy market in Queensland by providing tariffs that:

- are cost reflective;
- signal efficient use of electricity; and
- promote a competitive retail electricity market.

However, Origin believes that in order for the review to successfully achieve these benefits the Queensland Competition Authority's (QCA's) methodology must observe some fundamental principles:

- the estimation of wholesale energy costs must use the higher of a market based methodology and the long run marginal cost (LRMC) for Queensland generation;
- the carbon price must be appropriately incorporated into the calculation of energy costs and greenhouse abatement schemes;
- the allowance for retail operating cost and customer acquisition costs need to escalated from current levels on a fixed annual basis;
- the development of Energex network tariffs must be finalised prior to the QCA determining the R component of the bundled tariffs; and
- there needs to be full cost recovery of the small-scale renewable energy scheme (SRES) compliance costs that were incurred in 2011-12 but were denied due to the limitations of the BRCI method.

In Origin's view, the key determining factor in getting cost-reflective tariffs will be an appropriate estimate of the energy cost allowance given 40 per cent of the electricity tariff is driven by the cost of energy. Failure to make appropriate allowance will ensure that the cost-reflective objective is not achieved.In this submission, Origin highlights that the current method setting for setting retail tariffs has encouraged its investment in Queensland generation due to the certainty of regulated tariff levels, including the link to LRMC. Consequently, continuing to incorporate LRMC, in this case as the floor for the energy purchase cost allowance, is essential so that the tariffs will support both:

- price certainty for retailers from year to year despite still being subject to the limits of a price setting mechanism; and
- the long term interest of consumers and energy security by providing support for investment in generation capacity and ensuring future customer demand is met.

Origin would also highlight that the use of the LRMC as the floor to the energy cost allowance will resolve the biggest issue that the QCA will face in setting tariffs for 2012-13, that is, there is almost no market for electricity in 2012-13 on which the QCA can base its preferred market-based approach for estimating the wholesale energy cost.

Origin would also propose that the preferred approach for determining a representative retailer's costs is utilising the current Queensland retail operating cost benchmark[1] as the starting point. This is preferred for consistency and because recent benchmarking decisions have strongly relied on New South Wales benchmarks which industry has generally identified as not representative of the costs a new entrant would expect to incur now and in the near future.

[1] QCA, Final decision re: BRCI for Notified Prices 2011-12

To give the QCA confidence in its own benchmark, Origin believes the QCA could construct an indicative retail operating cost for a representative retailer based on indicative data provided by retailers. Origin is certainly willing to provide such supporting data.

Finally, Origin notes that the QCA has queried the need for a mechanism to account for unexpected regulatory changes that may materially impact on future costs during the course of a financial year. The QCA specifically refers to the costs of the small-scale renewable energy scheme (SRES) that retailers were incurring from January 2011 but were not recognised in retail tariffs until July 2011. In a similar vein, the costs for SRES that the QCA included in the 2011-12 retail tariffs have now been shown to be significantly underestimated. Retailers would have been reimbursed for this additional cost in 2012-13 through the self-correcting nature of the benchmark retail cost index (BRCI). However, with the change in methodology to an N+R methodology this will no longer occur automatically as expected. As such, Origin believes the new tariff price must include the balance of SRES compliance costs for 2011-12 if the QCA is to be consistent. This balance will be the difference between the 9 per cent estimated by ACIL Tasman for the 2012 STP and the binding 2012 STP published by ORER later this year.

1. Background

On the 26 June 2009, the Queensland Premier and Treasurer directed the Queensland Competition Authority (QCA) to review electricity pricing in Queensland. Origin Energy (Origin) participated in that review and was generally in agreement with the QCA's findings that:

- the benchmark retail cost index (BRCI) methodology had a number of flaws;
- the current retail electricity tariffs were unlikely to reflect the costs of supply;
- an alternative network (N) + retail (R) pricing approach would offer significant improvements to cost reflectivity compared to the existing BRCI methodology; and
- network and retail electricity tariffs should be aligned.

On 11 May 2011, the Minister for Finance and the Arts and Acting Treasurer and Minister for State Development and Trade (the Minister) made a Ministerial Direction requiring the QCA to investigate and report on:

- an alternative retail electricity pricing methodology for the determination of the cost components under an N + R approach; and
- an alternate set of retail electricity tariffs, based on an N+R approach, which could be applied from 1 July 2012.

Origin welcomes further progress towards cost reflective retail electricity tariffs and as a result, more effective competition in the Queensland energy market. Origin therefore notes that some of the policy decisions encapsulated within the directive will have an immediate positive impact on the market from 1 July 2012 including that:

- large non-residential customers in Energex's network area who consume over 100 MW hours per annum will no longer have access to regulated tariffs;
- all obsolete and declining block tariffs will be removed from the tariff schedule; and
- all retail tariffs will be aligned to a relevant network tariff.

In addition, Origin recognises the overarching objective that all tariffs are to be cost-reflective but notes that this may exclude:

- the transitional arrangements for customers who were on obsolete and declining block tariffs;
- the transitional arrangements for customers on farming and irrigation tariffs who may be required to move from one tariff to another;
- the voluntary cost-reflective time-of-use tariff for domestic customers given that any customer who chooses to transfer to this tariff will be permitted to transfer back to the standard regulated tariff for domestic customers at any time; and
- a tariff for any continuously operating traffic signals installed on a road.

Although there are likely to be customer impacts within this tariff reform process which may require some transition, Origin would encourage the minimal use of such arrangements if this large and complex process is to be completed effectively.

Finally, and most importantly, Origin notes that although the Directive specifically requires the QCA to investigate on two specific matters:

- the retail pricing methodology for determining the N and R cost components; and
- the actual alternate set of retail tariffs based on N+R;

it has only requested a Draft Report by March 2012 and the Final Report by 31 May 2012.

Although the QCA's Issues Paper addresses both of these matters, it is clear that an actual set of retail tariffs (even in draft form) cannot be prepared in time for March 2012 until the retail pricing methodology is consulted upon and finalised.

The QCA has indicated that it will be providing as much public consultation as possible given the time constraints but Origin would like a clear indication that a draft report outlining the proposed retail pricing methodology will be provided for comment before a method is selected in any Final Decision. Origin would expect that this consultation be concluded before the end of 2011 in order to provide the QCA sufficient time to implement the methodology and prepare a draft of indicative retail tariffs by March 2012.

2. Network Costs

The use of a cost-reflective N+R pricing model requires the transmission and distribution networks costs to be treated as a straight pass through to customers. Furthermore, in Queensland, the N component of each tariff will be equal to the approved Energex network price.

2.1 Energex's network tariffs

The QCA raises a number of issues that need to be considered regarding the suitability of the Energex network tariff structure including:

- that the network tariff structures reflect the required retail tariffs on a one to one basis;
- that any subsidies (eg. Rural Subsidy Scheme) be enshrined at the network level;
- that Energex network tariffs will have to also adequately cater for particular circumstances in the Ergon Energy distribution area; and
- that the Energex network tariff structure provides appropriate scope for managing network demand.

The QCA seeks stakeholders' views on the issues raised above, in particular the suitability of the Energex tariff structure as a basis for meeting retail pricing objectives. The QCA is also interested in any other matters concerning the setting of network tariffs which stakeholders consider important to be considered in this review.

Origin notes that Energex provided its proposed tariff structure for 2012-13 including a mapping of the network tariffs that will set the basis for constructing a complementary set of retail tariffs for this review.

This mapping includes all network tariffs and gazetted retail tariffs and potential movements but can be further simplified for the purpose of setting cost reflective retail tariffs when it is acknowledged that only customers consuming less than 100 MWh will be able access regulated retail tariffs in the Energex region. Consequently, the relevant retail tariffs in this region will collapse to the following mapping.

2012-13 Tariff Mapping	**Notified Tariffs – Queensland Gazette**						
Network Tariffs	**T11-IBT**	**T11-TOU**	**T20**	**T22**	**T31**	**T33**	**Unmetered**
IBT – Domestic 8400	✓						
TOU Domestic -8450		✓					
Flat Business - 8500/8600			✓				
TOU Business – 8700/8800				✓			
Controlled Load 1 - 9000					✓		
Controlled Load 2 - 9100						✓	
Unmetered – 9600							✓

This mapping assumes that:

- the few Energex customers on tariff 67 move to tariff 20;
- tariff 68 continues to only apply to the Ergon region;
- customers on tariff 62 and tariff 65 move to tariff 22; and
- tariffs 41, 43 and 53 do not apply in the Energex region as all customers consume greater than 100 MWh per annum.

Origin understands that the Energex tariffs are to be the basis for setting notified prices across the State, however:

- they will have to also cater for any particular circumstances in the Ergon Energy distribution area that are not encountered by Energex; and
- large customers in Ergon Energy's distribution area will continue to have access to a regulated retail tariff.

It is important to realise that according to the current direction these retail tariffs will be based on Energex tariffs but the underlying costs will be somewhat different as they will only apply in the Ergon region. Therefore, the Queensland Government will be subsiding to some degree as these tariffs will not be truly cost reflective. As such, the issues surrounding the development of these retail tariffs which will only apply in the Ergon energy are for Ergon Energy to comment upon and should not impinge on the development of the cost reflective tariffs for south east Queensland.

Furthermore, Origin believes the N + R structure does provide Energex the opportunity to pursue more targeted network tariff structures that provide for network demand management however changes in network tariff structure or the introduction of new network tariffs will have to be signalled well in advance of the QCA's process of setting retail tariffs.

2.2 Process for passing through network costs

The Direction requires that Energex's network costs be treated as a pass through to customers.

The QCA seeks stakeholders' views on any issues that should be considered in relation to the pass through of network costs, in particular, should network and retail costs be separately identified on a customer's bill?

Ideally, network costs should be treated as a direct pass-through to customers. Network costs are not controllable by the retailer and hence should not impact on a retailer's costs or return and should simply be added to the retailer's energy and operating costs before including the retail margin.

Pass-through of network costs does not need to be provided directly to the customer as a separate element and can be incorporated into a bundled tariff as is done in South Australia. This ensures customers are exposed to a full pass through of network cost but is more manageable from a practicality, systems and customer management point of view.

As indicated by the QCA, there was significant opposition to the suggestion that the network cost component of a customer's total bill should be separately identified.

Origin cannot support such a proposal and would reiterate that such a change to billing systems is prohibitively expensive and not readily achievable. Origin would highlight that as part of the National Energy Consumer Framework (NECF), there are many changes being

considered regarding the requirements of a customer's bill and such a change is not being considered because of the expense and potential confusion for customers.

Origin believes that the QCA's calculation of retail tariffs using an N + R approach provides sufficient transparency regarding the cost drivers of a customer's bill. Cost reflective tariffs, in their very nature, should provide the appropriate price signals to customers.

Origin also notes the QCA raises the issue of the Community Service Obligation (CSO) payments made by the Queensland Government to the incumbent retailer, Ergon Energy, and whether an alternative approach of applying the CSO payments at the distribution level would allow competition in the Ergon Energy distribution area.

An added benefit of this approach is that the CSO or subsidy being provided to each Ergon based customer is transparent as it would equate to the difference between the Ergon and Energex network charges for that customer class, including transmission charges.

This transparency of subsidy per customer may be useful in the future if the Queensland Government wished to provide the subsidies directly to customers or their retailers through alternative methods and enable retail competition in the Ergon distribution area.

Origin would support such methodology which will contribute to improving competition in the Ergon region and provide all Queensland customers with access to competition. However, Origin would highlight that because of the FRMP model in place in Queensland and the policy that Small customers may revert to notified prices at any time, such a proposal would need legislation to reinforce a retailer's confidence in the market mechanisms before they would compete in these areas.

2.3 Maintaining alignment of retail and network tariffs

Adopting an N+R approach to setting regulated retail tariffs requires a formal process to ensure the ongoing alignment of network and retail tariffs.

The QCA seeks stakeholders' views on how this issue might be best addressed.

As you would be aware, under the current rules, a distributor must submit its pricing proposal for the subsequent years of a regulatory period within two months of the end of the regulatory year[2] and the Regulator must publish the proposal upon receipt[3] and may request the distributor to re-submit the proposal within ten days if it determines the proposal to be deficient.[4]

Origin notes that the current AER price approval process is largely driven by the distribution networks proposals with the AER largely restricted to approval if the proposal meets the Determination pricing or revenue requirements. Therefore, Origin assumes that Energex is in a position to pre-empt any significant or structural change to network tariffs well in advance of this date. It would also appear to be in Energex's best interests to signal such changes to the QCA if it is concerned about the pricing signals in its network tariffs being received by customers.

However, this reliance on Energex's processes could be better formalised by:

- In the long-term, changes to the National Electricity Rules – Origin understands that the AER is considering the network price approval processes as part of its review of

[2] NER, 6.18.2(a)(2)
[3] NER, 6.18.2(c)
[4] NER, 6.18.8

network price regulation and there may be further opportunities for a better process to be formalised in the near future; and

- In the short-term, Queensland specific regulation to enforce this obligation.

Origin believes that it is unreasonable that retailers should have to carry the risk associated with delays in the distribution price setting process and believes that there is opportunities to ensure that the retail tariffs are set based on actual network tariffs within the QCA's time constraints.

3. Energy Component

3.1 Estimating Energy Cost

The purpose of the QCA's initial review of regulated tariffs in 2009 and the continued work in 2011 is to resolve the problems with the structures of the current regulated tariffs. The new tariffs will have a re-established base structure with underlying cost drivers that emulate the costs that drive electricity prices through a representative retailer. One key element of the cost driver is the wholesale energy cost component.

The QCA concluded in its 2009 report that the appropriate means to measure the level of wholesale energy cost is to develop a market-based methodology that a representative retailer would incur in supplying the regulated customer load. As such, the QCA's Issues Paper indicates that its initial position is to move away from the combined LRMC and market-based approach used in its previous BRCI calculations to a market-based approach which it sees as providing the best method for assessing the wholesale energy costs for Queensland.

Origin believes the long run marginal cost (LRMC) of generating plant must at least be the base level for energy costs in any market based methodology. The LRMC provides for certainty of the energy cost allowance, particularly where the market is subject to uncertainties such as a proposed carbon price policy.

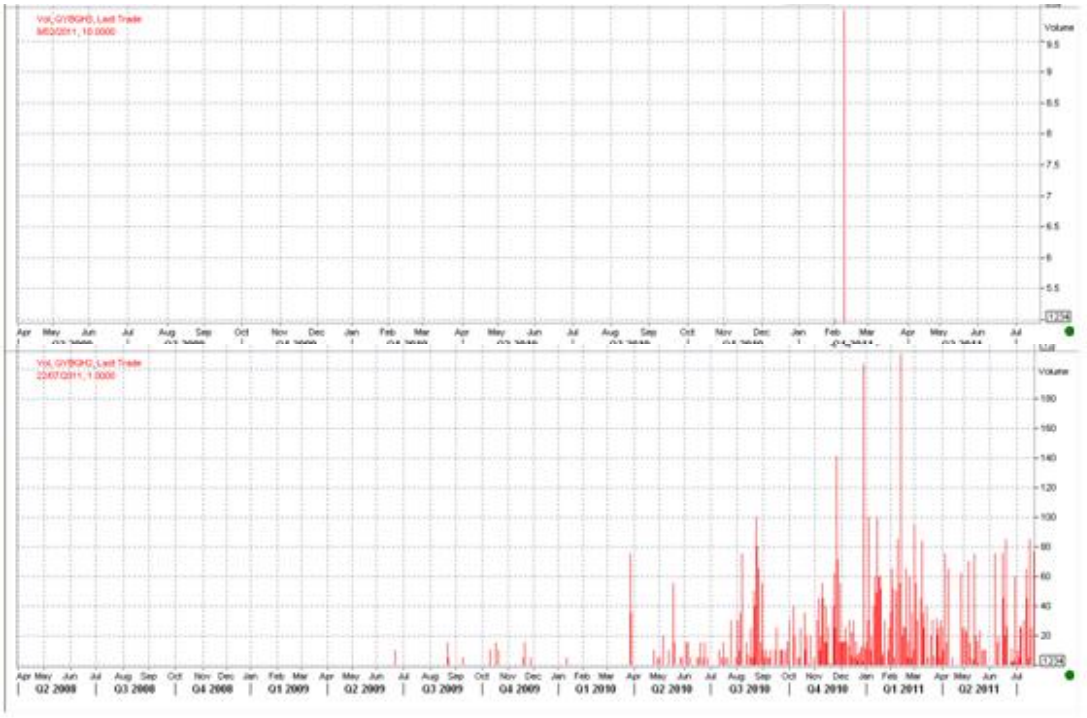
In a price setting environment, the LRMC of generating plant as the floor for the energy purchase cost allowance supports both:

- price certainty for retailers from year to year although still being subject to the limits of the price setting mechanism; and
- the long term interests of consumers by providing support for investment in generation capacity and ensuring future customer demand is met.

The use of LRMC as the floor to the energy cost allowance will have the added benefit of allowing the QCA to formulate a methodology that can consistently apply for 2012-13 and beyond as Origin has significant doubts that the QCA can apply a market-based methodology for 2012-13 that will be cost-reflective.

The QCA needs to be aware that there is and has not been a forward contract market beyond June 2012 due to the absence of any market activity. This has been predominately driven by the uncertainties in the market about the impact of the carbon price announced by the Federal Government to commence 1 July 2012.

Although more details of the carbon price mechanism have been decided and announced, the necessary legislation has not been passed. Consequently, there is a complete lack of confidence in the market mechanisms to sufficiently predict the carbon outcome, and this has been compounded by the past experience of the market through the deferral of the previous Carbon Pollution Reduction Scheme (CPRS). This is clearly shown in the data on actual SFE trades in Queensland which details a complete lack of liquidity for this period. For example, the two diagrams below illustrate there has only been 10 MW traded on the SFE for Queensland base Q1 2013 (top diagram), in contrast to Queensland base Q1 2012 which continues to be actively traded (bottom diagram).



In Origin's view, this raises the question of whether a market based approach is practical at this point in time as any theoretical modelling would not represent what has been occurring in reality due to some clear distortions.

Liquidity in the energy market is not likely to return until closer to 1 July 2012 when the carbon price is a reality or at least once legislation is passed. Given the present market conditions and the likelihood that any market data will be absent until 2012, the market data available will not be representative of a sufficient trading period to emulate the true energy costs of retailers. Consequently, there is a substantial risk that using a market based approach for wholesale energy costs in 2012-13 will not be indicative of actual costs paid by retailers and will lead to a negative impact on retail competition.

Origin has considered the issues raised by the QCA in the context of a carbon price commencing on 1 July 2012 and the uncertainties it has cast upon the energy markets. Origin has concerns that if the QCA were to follow a pure market-based methodology then the overarching purpose of establishing cost reflective retail tariffs in Queensland cannot be achieved. Therefore, Origin supports an approach to calculate the cost of energy, based on the higher of market-based and LRMC costs.

Origin would highlight that in its 2010 Review of Electricity Standing Contract Prices, ESCOSA considered whether or not an LRMC approach was superior to a market-based approach, given the lack of liquidity in the wholesale market. It concluded that a pure market-based approach was unreliable for its 2010 review because of lack of liquidity and considered an LRMC approach that "looks through" the contract market to determine the underlying costs of generation a more robust methodology under the circumstances. Origin concurs with this view.

Origin also notes that AGL proposed an alternative Energy Purchase Cost (EPC) methodology to ESCOSA if liquidity was to improve in the wholesale market. This EPC methodology involved:

- Using a 100% load factor CCGT as a proxy for the cost of a flat swap contract; and

- Developing a "scaling factor" to measure the premium above a flat swap contract cost that is necessary to supply the shape of the relevant load.

Origin sees merit in such an approach in order to avoid the difficulties with using market-based approach at this point in time.

3.2 Market-based Methodology

The market-based methodology involves an attempt to replicate the purchase behaviour of a retailer and establish the level of energy purchase costs that a representative retailer would incur in supplying the regulated customer load. The important matters that must be determined include:

- clearly defining the relevant market and customer load;
- providing an appropriate load trace forecast for that market only including annual load, peak load, load shape and load sensitivity;
- determining the relevant hedging strategy and mix of hedging instruments used by a prudent stand-alone retailer, bearing in mind its appropriate risk parameters; and
- developing a price trace forecast that includes both contract price forecasts and spot market forecasts derived from reliable data sources.

3.2.1 Determining a Suitable Hedging Strategy

Is a hedging-based model the most appropriate way to estimate energy costs given the complexities and risks involved in the Queensland electricity market?

There are 3 fundamental strategies;

- vertical integration with assets;
- contract hedges; and
- pool exposure;

and most industry participants will adopt a blend of these.

Given the volatile nature of the National Electricity Market (NEM), the need to hedge in some manner is self evident. There are two basic ways that energy purchase costs can be derived through considering the pool outcome and hedging. This can be estimated either using a hedging based model or by assuming a simple hedging premium to the pool outcome. Origin believes that attaching an arbitrary premium to the pool does not recognise the different products available with which to hedge and therefore the different hedged outcomes and also the premium extracted from the retailer will vary from year to year given the relative uncertainty in the market at the time.

In normal circumstances, the best way to estimate energy purchase costs is by defining a hedging strategy and then applying it to different pool price scenarios for a given retail load. Origin notes that it previously supported the QCA's hedging model used in the BRCI process, but accepts that it doesn't necessarily optimise the resultant energy cost.

However, Origin would have no objection if the QCA decided to retain its current hedging model method but with the proviso that the market price for contracts needs to be liquid so as to arrive at a sound estimate of purchasing costs. In the past BRCI process, the QCA has relied on a strategy that essentially protects against high prices by over hedging and Origin, as a retailer, agrees with the QCA approach as the risk of under-hedging is far greater; hence, a conservative hedging strategy is preferred.

But as highlighted previously, the potential introduction of a carbon tax has led to market uncertainty and the current forward contract market for 2012 and 2013 does not represent market costs because of the lack of liquidity.

If the forward contract price is illiquid, which is presently the case, then determining which hedging model to use, has no relevance.

What mix of hedging contracts would be appropriate to include in the hedging strategy?

Origin generally agrees with the hedging strategy mix of flat peak and cap products used by the QCA in estimating the energy purchase cost component for the BRCI calculation.

However Origin must emphasise that unless the contract prices are liquid and therefore representative of market costs, the question of an appropriate mix is purely academic.

How (if at all) should the QCA take account of bi-lateral hedging contracts between generators and retailers?

Given the stated deficiencies in forward price, bilateral contracts with carbon premiums could be used as a proxy for the forward price of swaps and caps.

Bilateral contracts between retailers and generators are usually long term contracts. Bilateral contracts are confidential arrangements that effectively underwrite future energy security. Long term Power Purchase Agreements (PPAs) are necessary to finance large upfront capital investments such as new power stations and are best taken into account by setting the LRMC as the floor in the pricing determination process[5].

Origin considers the Queensland Government has indirectly acknowledged the need for the tariff to adequately signal new investment in generation, by using a 50 per cent market and 50 per cent LRMC formula to estimate the energy purchase cost. Origin accepts the 50 per cent split is an arbitrary means of estimating the energy purchase cost but it at least recognises the importance of LRMC of generation in this context.

Are there any other factors the QCA should consider in relation to this issue?

The hedging methodologies used by both IPART and the QCA assume a return for a given modelled pool price. Put simply, if pool prices eventuate as forecast then the energy purchase cost is as estimated using the given hedging strategy adopted. The ICRC even method uses actual pool prices to create a measure of observed volatility. However, none of the methods adequately measure forward price volatility and uncertainty.

IPART attempts to measures unexpected volatility but the calculation doesn't pass on more than average unexpected volatility which results in a low forward price volatility allowance. The QCA needs to consider the influences of unexpected load and price volatility within the methodology.

[5] Origin has addressed this issue within Section 3.3 of this submission.

3.2.2 Wholesale Spot Price Forecasts

What are the advantages and disadvantages of using proprietary electricity market simulation models that are capable of simulating spot prices for every half hour trading interval as would occur in the NEM?

Most of the proprietary market simulation models have been developed over years and have been refined to produce a consistent result. They also model the half hour nature of the market well. However a model is only as good as its assumptions.

Previous submissions to the QCA have questioned the assumptions of demand shape, fuel cost, carbon cost, renewable energy requirements, and bidding strategies used in the pool price modelling. Origin believes that as long as assumptions are correct, the proprietary models will deliver robust results however, Origin has always been concerned about the transparency of such models which makes it difficult for stakeholders to validate the outcomes.

Are there any simpler modelling alternatives, such as the historical spot price approach adopted by the ICRC that the QCA could rely on to forecast future wholesale spot prices in the NEM?

The ICRC approach is to measure the load weight to time weighted historical spot price to determine a load weighted average price ratio.

If the QCA relied on historical pool prices, it is assuming that the load weighted price of the past Queensland tariff price load is reflective of the future load weighted price. This is not a realistic view of the wholesale market.

It would also require the assumption that the carbon inclusive load weighted price will not differ from the past non-carbon load weighted price, even though it is believed that carbon will affect the peak and off-peak prices in different ways.

Origin cannot support the use of the ICRC simple approach as it cannot achieve a realistic outcome; in fact the converse is likely.

Are there any other factors the QCA should consider in relation to this issue?

The QCA must consider the impact of the $23/tonne carbon tax on the spot price and spot price volatility.

Origin believes that for the first few years of the carbon tax, the pool price will suffer from greater volatility due to Queensland's current fuel mix being heavily reliant on black coal plant that must recover the full carbon cost through the pool price. For example, IPART in its 2010-2013 Pricing Determination[6] modelled a pass-through cost in the pool price for carbon equivalent to more than 100 per cent of the carbon cost based on the now deferred CPRS model. This must also be considered by the QCA.

Furthermore, the QCA will need to consider whether the current rationalisation of the Queensland Government owned generators into two companies will lead to market concentration that will deliver different bidding strategies than previously, and may yield higher pool prices for 2012-13 once the carbon tax commences.

[6] IPART, Review of Regulated Retail tariffs and charges for electricity 2010-2013, page 97.

3.2.3 Source of Forward Contract Prices

What sources of data should the QCA use to estimate the cost of forward contract prices?

Origin has previously supported the use of publicly available data such as the d-cypha trade data for estimating the forward contract price. However, the forward contract market for the 2012-13 financial year is currently illiquid due to carbon uncertainty. These market uncertainties are expected to continue until at least 1 July 2012 when the carbon price is due to commence.

Of course, Queensland tariff prices must be settled well before the commencement of the 2012-13 financial year leaving gaps in the available market data.

The QCA has recognised in its Issues Paper, that publicly available data may be unsuitable in times where there are high levels of uncertainty affecting energy markets or when markets lack liquidity. Origin submits that the 2012-13 financial year is one of these times.

It is for this reason that Origin believes a pure market based approach is inadequate and that energy cost be underpinned by the long run marginal cost.

Are there any other factors the QCA should consider in relation to this issue?

Given the uncertainties in the energy market, there are no other factors to be considered.

3.2.4 Timing and Treatment of Forward Contract Purchasing

What assumptions should be made about the timing of contract purchasing for a representative retailer?

In its BRCI decisions, the QCA made the assumption that a prudent and efficient retailer was likely to purchase forward contracts to meet its customers' loads over a 24 month period in advance of the tariff year for which the energy was being hedged.

In the normal course, Origin would support a 24 month average as a prudent retailer contract window despite the unrealistic assumption that a retailer can perfectly forecast its required load. However the lack of liquidity due to carbon price uncertainty makes the 24 month window meaningless in this instance.

Should the QCA decide to attempt to artificially construct a contract price through a simulated pricing model, carbon must be fully priced assuming no compensation flows to Queensland coal-fired generators. Origin is in a position, if required, to provide evidence that OTC trades provide for full carbon cost pass-through from 1 July 2012.

Should the QCA consider using a volume-weighted average in determining contract prices for its market-based energy purchase cost allowance?

Given the 24 month window is meaningless, the use of a volume weighted average for contract prices may be required for the 2012-13 financial year but Origin is concerned about the veracity of an estimate that will be based on a short period of time and potentially high activity.

Are there any other factors the QCA should consider in relation to this issue?

No.

3.2.5 Customer Load Forecasts

In order to calculate a market-based estimate of energy costs, it is necessary to estimate the load of Small customers on retail tariffs in Energex's network area.

Would Energex's NSLP data be suitable for estimating the consumption profile of customers on retail tariffs in Queensland?

The Energex NSLP is the most suitable data as a basis for estimating the consumption profile of regulated tariff customers.

However, it is important to recognise that the historical NSLP is not representative of the load shape that will be evident once the large customers consuming greater than 100MWh per annum move to interval meters and are removed from Energex's NSLP. It is incontrovertible that these loads will generally be flatter than that of small customers.

Origin believes this will need to be addressed by using a modified estimate of the likely Energex NSLP shape.

For example, the NSLP in Victoria experienced significant changes with the further penetration of interval meters over the previous 3 years with the load profile becoming peakier as more customers move to interval metering.

Origin believes the experiences in Victoria will be replicated in Queensland as South East Queensland based customers consuming above 100MWh are moved onto market contracts from 1 July 2012 and therefore the Energex NSLP will become peakier. For this reason, Origin recommends that the QCA make publicly available the proposed load shape for analysis and comment.

Are there any other sources of load demand forecasts, other than AEMO's annual ESOO publication forecasts, that the QCA should consider in forecasting the customer load?

No

Are there any other factors the QCA should consider in relation to this issue?

According to both Energex and AEMO's annual Statement of Opportunities (SoO), summer weather in Queensland for the last few years has been relatively mild with consumption and demand lower than forecasts.

As a consequence the current NSLP shape, even after adjusting for the 100MWh tariff customers, may not be representative of the NSLP shape for 2012-13. For example, even though maximum demand in Queensland of 8,891MW occurred in summer 2010, the SOO currently estimates 10,923MW for the financial year 2012-13 under a medium growth scenario.

Again, Origin believes due to these factors, the NSLP will need to be peakier in the 2012-13 financial year than the existing Energex NSLP data.

3.3 Use of LRMC as a Floor

Should energy costs include a LRMC floor?

Irrespective of the QCA's decision on whether or not it uses a market based approach for estimating the 2012-13 wholesale energy cost, Origin proposes that the QCA use a LRMC to set the floor for the wholesale energy cost. Origin believes there are many reasons to do so.

Firstly, Origin would highlight the new national retail energy objective:

> *The objective of this Law is to promote efficient investment in, and efficient operation and use of, energy services for the long term interests of consumers of energy with respect to price, quality, safety, reliability and security of supply of energy.*[7]

The objective focuses on the long term interests of consumers and Origin believes that an LRMC approach best takes into account long term considerations such as generation capacity and future customer demand. Current market prices do not.

Secondly, Origin does not agree with the QCA's conclusion that there is insufficient evidence that a retailer's entry into the generation market depends on the security of LRMC setting the floor for the cost of energy component within Queensland electricity tariffs.

Origin has firsthand knowledge of this theory working in practice. Origin entered into an arrangement to acquire the Sun Retail business in November 2006 and within 6 months of settlement went to a finance investment decision on Darling Downs Power Station.

In 2009, Origin took a further decision to invest in the Mt Stuart3 Power Station. Origin's investment decision was underpinned by the certainty of the regulated load tracking with the LRMC when the 50 per cent LRMC was embedded in the pricing determinations. Origin was a key counterparty in Braemar 2 Power Station project and entered into a long term contract to hedge Origin's peaky regulated retail load. A key deciding factor for Origin to support the entry of over 1000MW of generation into the Queensland market was that the tariff setting process covered the appropriate cost of investment by maintaining the wholesale energy cost component at levels similar to the LRMC for generation. Origin is a vertically integrated Queensland retailer and hedges much of its retail load with its own generation and long–term PPAs. Its costs are very much related to the LRMC of generation. In an unregulated price environment, this is the cost that would underpin Origin's retail contracts.

Furthermore, the long term stability of the market price is reliant upon properly informed generation investment such as via the integrated energy retailer model. In circumstances where the market price is lower than the LRMC for generation then customers may pay less in the short term, however the long term effect of reduced generation investment will be a higher market price. It is Origin's view that without the integrated energy retailer model, the long term effect upon the market will be higher energy market prices.

If the price setting process was to take a value below the LRMC of electricity generation this would have implications upon new investment in generation capacity as retailers are unlikely to be willing to enter into long term power purchase agreements for the purposes of underwriting generation investment. Instead, investments will be delayed until wholesale market prices reach a high level for a consistent period. This will have wider

[7] National Energy Retail Law (South Australia) Act 2011

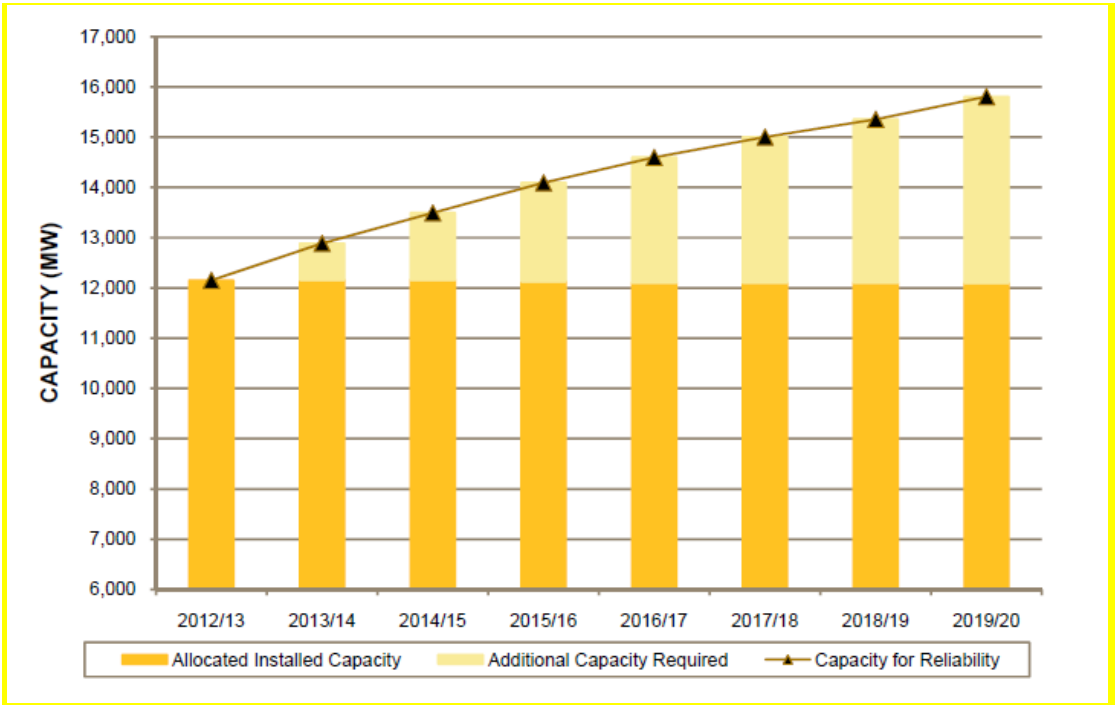
consequences upon the energy market such as stifling retail competition, deferred investment decisions, new entrants may suspend decisions to enter the market or alternatively persuade participants to exit the market.

Origin believes that the investment issue should be closely considered by the QCA as it is especially relevant in the Queensland context. Figure 2 shows the supply-demand outlook as at 2010 and indicates that, with medium economic growth, Queensland reaches Low Reserve Condition point in 2013-14 due to:

- an increase in the Queensland Minimum Reserve Level;
- retirement of Swanbank B by 2012-13; and
- Increased demand in the outlook period (4.1% growth on average).

Strong growth in Queensland will tighten the supply and demand of peak and off-peak energy and reduce the available export which will markedly increase volatility in the State. This volatility and resultant high market energy prices will be then passed through directly to retail tariffs given the QCA's preference for using a market based approach.

Figure 2: Queensland Generation Capacity – SOO



If the QCA decides to move to a fully market based retail tariff, the tariff will move up and down based on lumpy generation capital investment entering the market. This will lead to instability in the tariff setting process and more importantly, when the market does not provide a satisfactory long-term price signal, will result in under-investment in generation assets and reduced energy security. The NSW Government recognised that LRMC should set the floor and as such instructed IPART to base the calculation for the cost of energy component on the higher of market-based and LRMC costs for its 2010-13 Determination for electricity prices.

The fact that IPART sought some flexibility in establishing the regulated electricity prices in NSW for further pricing determinations[8] does not imply a rejection of the concept.

The QCA in its Issues Paper promoted the view of the Independent Competition and Regulatory Commission (ICRC)[9], having rejected the concept of the LRMC setting the floor for wholesale energy costs. It is relevant that the ICRC in Australian Capital Territory (ACT) rejected the LRMC setting the floor because there was no evidence in the ACT that retailer's receiving the LRMC in tariffs allowed this price to flow through to generators. This is not the case in Queensland, where Origin implements an integrated retailer model with significant generation assets.

However, the model produced by the ICRC, in its Final Decision[10] for the Transition Franchise Tariff (TFT) does not represent a tariff level which encourages a well functioning competitive retail market. Origin encourages the QCA to consider conclusions of the ICRC with caution due to the difficulties and lack of competition recognised in the ACT electricity retail market.

The ICRC also disputed the relevance of the LRMC and concluded a model to replicate the LRMC was a complex exercise that had its discrete set of problems. ICRC further concluded that the LRMC was the value by which the market price would follow in the long term and therefore could see no value in accepting the relevance of the LRMC to regulated prices whilst the market price will be tracking the LRMC over time, as eventually market prices would reach LRMC levels. Origin believes the ICRC has erred in this conclusion and the concern is if the LRMC was not the accepted level for a retail load, then an integrated retailer (as opposed to a new entrant) would not be prepared to enter into PPA arrangements for new investment.

Instead of driving the market price towards LRMC it will drive the market price above the LRMC to higher levels and for a longer period of time than would otherwise have occurred under an LRMC approach.

Origin argues an integrated retailer is more closely aligned to a representative retailer for which the QCA is seeking to establish efficient costs. Furthermore, Origin has confidence in the QCA's abilities to establish a robust LRMC calculation despite the difficulties of estimating the impacts of the carbon policy and other modelling given it has done so through many BRCI calculations.

It is Important to note that the recent competition review of the ACT conducted by the AEMC recognised the low level of the TFT was a contributing factor in the limited retail competition in that market. The AEMC also concluded for retail competition to be reinvigorated a complete removal of the TFT would likely stimulate retail competition and return the tariff levels to a more cost reflective level.

Finally, the Queensland retail electricity market can be distinguished from ACT as there is an active presence of multiple retailers in Queensland with a significantly larger regulated load while the ACT market is a mere sub-set of the NSW generation mix. Furthermore, Origin has demonstrated that the level of the retail tariffs encouraged its investment in Queensland generation due to the certainty in respect of tariff levels, including its link to the LRMC.

[8] IPART, Changes in regulated electricity retail prices from 1 July 2011, Final Report, June 2011
[9] Final Decision, Retail Prices for non-contestable electricity customers 2010-2012, June 2010
[10] Final Technical Report, The Energy Purchase Cost component of the TFT 2010-12

If so, how would retailers and customers share the risks as well as the benefits from any short term fluctuations in wholesale energy costs?

If the energy cost component of the tariff prices is estimated with the LRMC setting the floor level, the vertically integrated retailer underpins energy security. Without consideration of this market reliance in the short term, customers will in the long term be subject to higher pool prices. The normal competitive pressures in the market mean that customers will take the benefit from lower market prices and are able to churn to more competitive contracts.

In circumstances where the contract markets are reliable, Origin proposes a floor and ceiling scenario to be developed in the estimation of wholesale energy costs which will allow customers to take the benefit of smoother price movements between regulatory periods and work to protect customers from consistently high pool prices. If the LRMC for generation costs remains as the floor for the wholesale energy costs, then retailer's will take the risk and adjust its investment decisions for periods where the pool price is consistently high.

Are there any other factors the QCA should consider in relation to this issue?

As noted previously in this submission, the full cost of carbon will need to be incorporated into any LRMC estimate.

3.4 Other Energy Costs

3.4.1 Energy Losses

Energy losses refer to the energy that is lost due to electrical resistance as energy flows through the transmission and distribution networks. As retailers record energy consumption at the customer's meter but are billed for the energy sent out from the generator, energy losses vary for each retailer and are calculated by combining transmission and distribution losses. The energy cost used in setting retail prices needs to account for these losses (the difference between total energy purchases and total sales).

The QCA seeks stakeholder's views on any issues associated with the incorporation of energy losses in its energy cost estimate.

AEMO calculates marginal loss factors for each NEM region and these are publicly available on its website. Distribution losses are also approved and published by the AER.

In calculating energy costs for the BRCI, the QCA indirectly accounted for transmission losses, but did not account for distribution losses, on the basis that its energy cost estimate was based on the NEM load which included distribution losses but excluded transmission losses.

To account for transmission losses, the QCA increased energy cost estimates by the average loss factor published by Powerlink each year in its Annual Planning Report.

For the cost build-up methodology, the QCA will need to derive an estimate of average transmission and distribution losses for Small customers in the Energex area. The wholesale energy cost will need to be escalated by these losses.

3.4.2 Queensland Gas Scheme

Origin agrees the costs incurred by retailers in meeting their obligations under State and Commonwealth Government greenhouse gas reduction schemes need to be accounted for within the energy purchase costs. The current schemes are:

- Queensland Gas Scheme; and
- Commonwealth Enhanced Renewable Energy Target Scheme.

Following from the discussions relating to the wholesale energy cost, the uncertainties relating to the carbon price and its impact upon businesses has affected the energy market and left participants hesitant to make assumptions about the future energy prices. In addition to this, the uncertainties have reached the individual schemes that are targeted at greenhouse gas abatement which are not directly impacted by the carbon price but will have indirect but unknown flow on effects. Consequently, energy market participants have ceased purchasing scheme certificates for 2012 onwards.

How should a retailer's cost of complying with the Queensland Gas Scheme best be estimated?

The QCA has identified the market based method to estimate the compliance costs of Queensland Gas Scheme in preference to a LRMC of gas-fired generation plant mix.

In the 2011-12 BRCI decision, the QCA relied upon the market price to estimate the annual price change movement. Origin was opposed to using the GEC market price as it disputes the relevance of the current market price to the actual price paid by retailer's long term purchase arrangements and the GEC market is considered to be illiquid.

GECs are predominantly long term power purchase agreement type deals that are entered into to support the build project generally at much higher price than prevailing market costs. Retailer's with large loads to ensure compliance with the scheme manage the liability through these types of arrangements. In general, GECs trade infrequently and the small amounts that trade are not indicative of underlying costs. To further complicate the current status, the uncertainty in the carbon policy is causing some concerns in the market about the future of the scheme and its continuance to the intended expiry. Based on these concerns, trading in the market for GECs for 2012 and beyond has ceased.

The QCA also notes that IPART utilised a LRMC method for its recent pricing determination to calculate the cost of the Greenhouse Gas Abatement scheme (GGAS). Origin did not support the conclusions of the consultants when estimating the LRMC for NGACs, but agrees with the underlying concept of applying the LRMC when the market data available is flawed or non-existent. Origin believes that in the context of the ongoing uncertainty with the carbon price which is unlikely to resolve itself until closer to its reality, the QCA will need to rely on the most reliable data available and in this case the LRMC is the most valid option.

As many established retailers' cover their long term liability for GECs, the need to trade regularly is removed. Retailers take up long term purchase agreements for GECs that provide for a fixed cost thereby avoiding short term price fluctuations. Accordingly, Origin reiterates that the LRMC more closely resembles the price paid by integrated retailer's for greenhouse based certificates.

Origin supports a method to estimate the costs of GECs by using the long run marginal cost of gas-fired generation plant mix.

What data source(s) should the QCA use in modelling the Queensland Gas Scheme?

It is recognised there is no valid GEC market. Current trading purchases for GECs are usually for low volume purchases, for example, retailers or large customers with minimal exposure to the Queensland loads and not in significant volumes. The reported trades for GECs are irregular and the volumes purchased are not recorded. It is not unusual for a period of one month to pass with no reported trades and therefore it is considered a very illiquid. Both AFMA and ICAP release a forward price curve that can be used as a market benchmark however this is not reflective of true cost and there are no volumes reported for calculating a weighted average.

Accordingly, the curves are merely a benchmark that has no solid basis or linkages to actual trading data.

Are there are any other issues that should be considered in estimating this cost component?

Carbon is causing uncertainty for State based schemes such as the GEC and NGAC markets. Retailers are cautious about forward contracting GECs in particular because there has been no guidance on the future of the scheme now that carbon should be in from 1 July 2012. To further justify the cautiousness, IPART based its recent pricing decision on a zero compliance cost for the NGACs which remains at the retailer's risk until there is greater certainty around carbon pricing policies.

3.4.3 Renewable Energy Target Scheme

For the 2011-12 BRCI, the QCA based its estimate of 2011 LRET costs on weekly market prices for Renewable Energy Certificates (RECs), as published by AFMA, as well as the latest Renewable Power Percentage (RPP) and the latest annual LRET targets set by the Office of the Renewable Energy Regulator (ORER). In addition to this actual data, ACIL forecast its own estimate of total liable energy for 2012 and utilised the latest published LRET target to arrive at a forecast RPP.

To estimate SRES costs for the 2011-12 BRCI, the QCA relied on ORER's final Small-scale Technology Percentage (STP) published for 2011 and an estimate by its consultants for the STP in 2012.

How should the QCA estimate retailers' costs of complying with the ERET scheme?

The most appropriate method for estimating the medium term costs of retailer compliance for the large scale renewable target (LRET) will be to establish a long run marginal cost (LRMC) methodology to reflect the cost of building wind projects. Given the most likely form of renewable project to respond to the expanded scheme will be wind projects.

The change in the RET scheme in 2011 was intended to remove the solar REC influence on the price of RECs and improve investment in renewable energies. The separation of SRES from the scheme was to reduce the uncertainty for large-scale renewable energy projects. The high demand for small-scale renewable technologies resulted in a flood of RECs in the market depressing the REC price as well as the pursuit of large-scale renewable energy projects.

Market prices have been increasing since the split of the schemes and over time should approach a large scale renewable LRMC so as to encourage wind and large scale projects. However like other elements in the energy market, the carbon policy continues to cast uncertainty upon the future large-scale generation certificates (LGC) prices. In this regard,

the LRMC is the only plausible method to establish the cost of the LRET scheme to take account of the LGC market and adequately reflect the opportunity cost of investing in renewable energy as intended by the policymakers.

The small-scale renewable energy target has very different drivers to LRET and is determined mostly by government incentives for households to take up solar installations. In estimating the SRES cost, the QCA should follow the basic ORER formula for calculating the SRES cost for each tariff year:

- The STP aligns with that published by ORER, both binding and non-binding estimates,
- STC Clearing House price of $40/MWh remains constant, and
- A basic average used to produce the combined 2012-13 year.

With regard to the previous estimates of SRES costs in Queensland through the 2011-12 BRCI decision, Origin did not support the underlying assumptions used by ACIL Tasman. The estimate of 9 percent STP for 2012 was grossly inadequate as the market was estimating and pricing in a 20 million excess of certificates from 2011. The market predicted these excess STCs would rollover to 2012 which translates to approximately 10 percent even before taking account of any expected STC creation in 2012. As expected, on 29 July 2011 ORER published a further non-binding estimate for 2012 STP at 20.87 per cent.

Furthermore, demand for solar panels has not cooled even though the solar credit multiplier has decreased to three as this has been offset by the high Australian dollar and the oversupply of solar panels (specifically from China) causing the price of panels to fall.

What factors should be considered in forecasting the REC costs likely to be incurred by retailers in the SRES and LRET markets?

LRET forward contracts are very illiquid due to the carbon uncertainties in the market.

ORER is best placed to estimate the STP for future years. Origin does not support estimates that are below the estimates published by ORER.

Are there are any other issues that should be considered in estimating this cost component?

Given the large under-estimate of the 2012 STP in the 2011-12 BRCI calculation and the absence of the compliance costs for the first 6 months of 2011, the QCA should enable retailers to recoup the costs previously incurred to comply with SRES but denied in the BRCI years. As a minimum, the new tariff price must include the balance of compliance costs for 2011-12, that is, the difference between the 9 per cent estimated by ACIL Tasman for the 2012 STP and the binding 2012 STP to be published by ORER at the end of 2011.

Once the carbon scheme is implemented the Federal Government is considering implementing a National Energy Efficiency scheme that will increase the regulatory obligations of retailer's and accordingly the cost to serve tariff customers.

In this instance, Origin considers a mechanism to allow for a cost-pass through during the tariff year to enable retailer's to recoup costs for anticipated and unanticipated regulatory change events. Given the myriad of possibilities for regulatory change, Origin does not consider a pass-through event should be restricted to certain situations. An open process to allow retailer's to claim legitimate anticipated or unanticipated costs ought to suffice. Although the tariff price will be set for one year, the market uncertainties are too great to deny an opportunity for retailer's to reopen at least for the 2012-13 tariff year.

Another possible regulatory change event that may impact on SRES is potential subsidies to support solar technology from the Clean Energy Fund as part of the Carbon Policy. Concerns in the market relate to further subsidies to the solar industry which may increase the volumes of STC's in the SRET market, resulting in further inflation of compliance costs.

3.4.4 Carbon Pricing

Is it reasonable to expect the market to effectively price in the carbon tax? If not, how should the QCA estimate retailers' costs of complying with a carbon price?

On 24 February 2011, the Commonwealth Government announced that an interim carbon price mechanism would apply as early as 1 July 2012. A carbon price is to be fixed at a pre-determined rate that increases each year for between three and five years, to be followed by the introduction of a carbon trading market.

As highlighted by Origin previously, there is currently no forward contract market for 2012-13 and there is no suggestion that carbon will be fully priced into the market until legislation is passed and a carbon price is certain. At present, any energy purchasing arrangements that are made simply incorporate a direct pass-through for the cost of the carbon price.

Consequently, it is uncertain how the QCA's market based approach can incorporate carbon effectively and it is most important that modelling of the LRMC floor for the energy cost allowance will need to include the price of carbon.

This may need to be done by modelling LRMC without carbon then adding a carbon pass through at market intensity.

3.4.5 NEM participation fees and ancillary services charges

How should the QCA estimate both the NEM participation fees and ancillary services charges incurred by retailers?

Are there are any other issues that should be considered in estimating this cost component?

As indentified by the QCA, the NEM participation fees and ancillary services charges that retailers are required to pay to AEMO are relatively stable. These fees and charges are forecast and published on AEMO's website prior to each financial year and as such, Origin agrees with the QCA that these costs should be readily forecast from historical information as well as the expected future movements of these cost as identified by AEMO.

4. Retail Costs

Retail operating costs relate to the costs of the services provided by an electricity retailer to its customers. In order to establish a retail operating cost allowance, the QCA needs to determine appropriate retail operating cost categories and an approach to estimating costs in each of those categories.

As noted by the QCA, an appropriate allowance for retail costs needs to be included within the R component of each retail tariff. Retail costs and margin need to be set to encourage business efficiencies, new entrants and thus competition in the electricity market. If the retail cost component of each tariff is set below a representative retailers cost to serve, competition will stall and customers will not be offered price benefits or discounts. This is to the detriment of consumers.

Origin's preferred approach to determine a representative retailer's costs is to use the current Queensland retail operating cost benchmark, to escalate this allowance on a fixed annual basis. To give the QCA confidence in its own benchmark, Origin believes the QCA could construct an indicative retail operating cost for a representative retailer based on indicative data provided by retailers. This is because Origin believes recent benchmarking decisions, based on the New South Wales benchmark, are not representative of the costs that a new entrant would expect to incur now and in the near future.

For the purpose of determining the R component under the proposed new pricing methodology, Origin believes the QCA should base it on:

- A representative, new entrant retailer. This retailer should be of a moderate size with between 200,000 – 500,000 customers. This reflecting that competition is evident in the Queensland market and retailers are slowly growing in size. However, the size also needs to recognise that there are a number of smaller scale retailers entering the mass market segment; and
- Retail costs should include both retail operating costs (ROC) and customer acquisition costs (CARC) with CARC costs being considered as another retailer operating cost. These are the costs that are incurred by retailers in obtaining, retaining and providing services to its customer base.

Origin notes that competition in the Queensland electricity industry has significantly increased since the market opened to full retail competition in 2007. Whilst customer churn to market contracts has steadily increased, recent churn rates appear to be at a flatter rate. The churn rates suggest that prices should be deregulated in the near future however Origin understands that this issue will not be considered until the Australian Energy Market Commission (AEMC) conducts its review of competition in Queensland in 2013. Until this time, Origin believes that it is imperative that retail tariffs reflect the costs that retailers incur in supplying regulated customers in Queensland and ensure that there is sufficient flexibility in the determination to account for increasing future retail costs (ie. carbon tax, NECF).

Origin believes that determining retail costs based on a representative, new entrant retailer will encourage a greater level of competition in the Queensland electricity market and is in the long-term best interest of customers.

Each of the above retail cost issues are discussed further below.

4.1 Retailer Characteristics

The QCA seeks stakeholders' views on the following:

Should the build up of retail costs be modelled on a representative retailer or an actual retailer in the Queensland market?

Where a representative retailer is preferred:

Should it be a new entrant or incumbent in the market

Should it be a stand-alone business providing only electricity retail services in Queensland or an integrated business involved in other activities including retailing in other jurisdictions

How many customers should it be assumed to have?

Where an actual retailer is preferred, which retailer(s) should be included?

Obtaining actual cost data from Queensland retailers would be data intensive and Origin's experiences in other jurisdictions have shown that it is a contentious issue given the different structures and activities of the various retailers. In addition, there are no standard retailers in Queensland to obtain actual cost data. Origin thus believes that it is appropriate for the QCA to base the build up of retail operating costs and margin on a representative retailer. This is the approach that has generally been adopted nationally.

Further, Origin believes that the representative retailer should be defined based on a new entrant retailer with a moderate sized customer base of between 200,000 – 500,000 customers. A new entrant approach will ensure the market remains attractive to retailers to further encourage competition and the offering of price discounts to consumers. The R component needs to be set so that an array of retailers can compete in the market and not just the incumbent retailers. If new entrants are deterred from entering the market, competition will fall which will be detrimental to consumers.

Origin recognises that the new entrant retailer needs to be of a moderate size given competition has steadily increased in Queensland and retailers are growing in size. However, there are still a number of retailers trying to enter the Queensland market, for example, Qenergy and Click Energy. The costs need to reflect that there are small scale retailers and if the allowed costs are not adequate to cover costs, retailers will exit the market. The larger the number of retailers in the market, the greater the level of competition and price offerings – this is clearly visible in Victoria.

Given the varying market and regulatory frameworks that exist across the country for electricity retailers, Origin believes the representative retailer's costs should be based on a stand-alone Queensland electricity retailer. Although Origin agrees that there are economies of scope in retailing across electricity and gas and across state borders, these economies of scope are limited in the current market framework. The rules and regulations around the electricity market are different from state to state and from fuel to fuel. Although there is a move to a national framework, this will not occur before July 2012 (this timetable may be further delayed) and the exact economies of scope have not been fully determined as each jurisdiction has their own derogations from the national framework. Furthermore, jurisdictional specific concession schemes will continue to be administered by retailers. An electricity retailer operating across state boundaries is unlikely to have a lower cost to serve than a stand-alone retailer given the unique systems and processes that need to be developed for each state.

Origin notes in the QCA's has commented that regulators have set regulated prices based on retail costs of actual retailers, and includes South Australian electricity[11] as an example. Origin's understanding of ESCOSA's approach is that a benchmark approach was used and actual data was only obtained to determine the sensibility of the benchmark. In terms of the approach, ESCOSA's recent electricity price determination states:

> *"ROC allowance is set by having reference to the entire retail market, rather being based on the costs incurred specifically by AGL South Australia…the ROC allowance represents the costs that a new entrant would be expected to incur in meeting the responsibilities of standing contract supply to small customers in South Australia"*[12]

ESCOSA further states:

> *"The Commission observes that, in comparing an actual cost approach to a benchmarking approach, benchmarking is more likely to be consistent with the Commission's statutory objectives of promoting efficiency and providing incentives to reduce costs. The Commission therefore intends to place significant weight on its benchmarking approach."*[13]

ESCOSA's final decision states that they accepted AGL's proposed ROC *"having regard to other regulatory decisions"*[14]. Thus, actual AGL data was collated to determine the sensibility of the benchmarks however, ESCOSA largely relied on benchmarks for a new entrant retailer and not an incumbent retailer.

4.2 Retail Operating Cost Categories

The QCA seeks stakeholders' views on which costs should be included in the retail operating cost allowance and how they would best be categorised?

Although there is no universal set of cost categories used by energy regulators, the underlying cost categories appear very similar. Thus, Origin believes the following cost categories are appropriate moving forward:

- Billing;
- Customer call centres;
- Credit management (including bad and doubtful debts);
- Energy Trading activities;
- Corporate overheads;
- IT systems; and
- Other costs (eg Ombudsman costs).

In terms of other costs, Origin believes the QCA regulatory fees should be treated as a separate retail cost item. Licence fees are significantly higher in Queensland than any of the other jurisdiction. Origin understands the benchmarks do not fully take these into account. It is noted that clause 13 of the QCA's regulatory fees framework provides a specific provision for the pass through of Queensland regulatory fees[15].

[11] P22 – Issues Paper
[12] ESCOSA, *2010 review of Retail Electricity Standing Contract Price Path, Draft Inquiry Report and Draft Price Determination*, pA-88
[13] lbid, pA-93
[14] ESCOSA, *2010 review of Retail Electricity Standing Contract Price Path, Final Inquiry Report and Final Price Determination*, pA-86.
[15] QCA:Fee Framework, p3.

On the issue of depreciation, it appears appropriate that this cost item be accounted for through the retail margin and not retail costs. Retailers are publicly reporting cost to serve data on this basis and it would appear appropriate that regulated pricing aligns with this methodology. It is noted that all Regulators have now taken the approach to include depreciation as part of retail margin.

4.3 Calculating Retail Operating Costs

The QCA seeks stakeholders' views on the following:

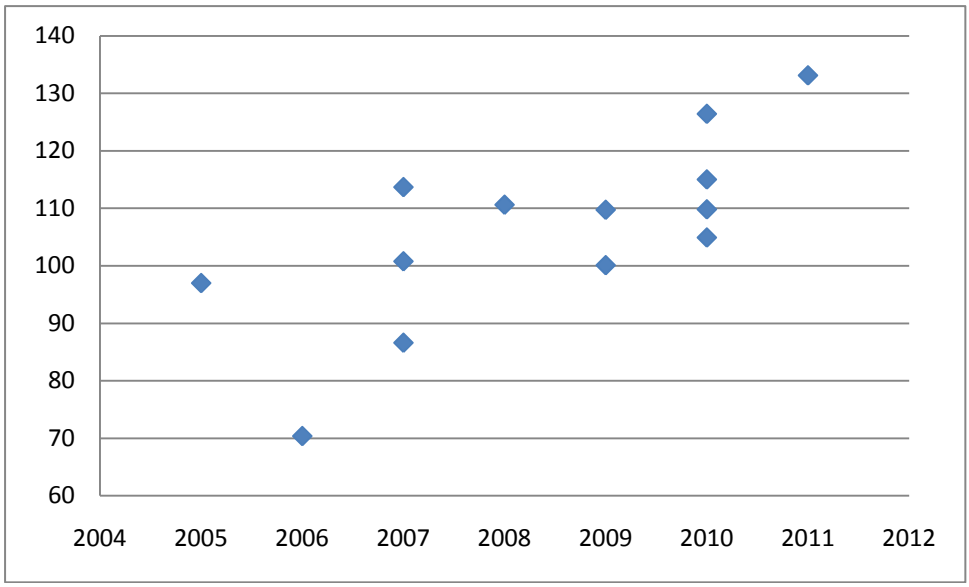
How should retail operating costs be calculated?

What information should be obtained from retailers?

What other sources of information would assist The QCA in its task?

Origin's preferred approach for determining a representative retailer's costs is through carrying out a benchmarking exercise of relevant regulatory decisions. It is however noted that it can be difficult to compare jurisdictional pricing decisions due to the different methodologies and parameters used by Regulators in approving retail costs. This is particularly true in the retail sector where retailers operate under separate regulatory and market frameworks as well as CARC being treated and calculated on various bases. While there are these differences, there is still an upward trend in retail costs as can be seen below.

Chart 4.1 Regulator Electricity Decisions over time, $ROC/customer



Of all the benchmarks of retail costs (including CARC), Origin believes the current escalated Queensland retail operating cost benchmark should be used as the starting point for determining the R component for each retail tariff. The original Queensland benchmark set in 2006 does not take into account the current regulatory and market complexities nor contemplate the existence of smaller scaled retailers. The original benchmark is thus too low. Origin believes the escalated allowance more accurately reflects a retailer's actual costs of operating in the Queensland electricity market than recent benchmark studies.

Origin has significant concerns with the approach that Regulators, such as ESCOSA, have recently taken by adopting the New South Wales benchmark. The retail operating cost decision by IPART in the 2010 Determination was at the lower end of the range of outcomes

that might be expected for a retailer in the New South Wales electricity market. Although IPART conducted a bottom-up analysis, concerns were raised over the methodology used to determine the cost estimate including:

- The Standard Retailers that existed in New South Wales were integrated distribution network and retail businesses. The analysis was therefore subject to the variability and ring-fencing methodologies of the Standard Retailer's accounting systems and some cost sharing from an operational sense of the integrated businesses. The QCA would be aware of such variations from its previous regulation of integrated retail and network businesses;
- the benchmark reflects the historical costs and processes of a Standard Retailer in New South Wales rather than a forecast of ongoing retail operating costs. Origin believes the costs allowed in this determination are understated and do not take into account current costs nor future regulatory obligations that are relevant to the market; and
- while the IPART bottom up analysis provided a range of cost estimates for both the retail operating costs and customer acquisition costs, it selected the mid-point in each range as the point estimate for the price calculations. This methodology was of significant concern to Origin and the business does not believe that this method was appropriate. IPART took a conservative range of costs so to then take the midpoint of the derived ranges introduced a clear statistical bias and was inappropriate for an assessment of retail costs. This was particularly concerning for Origin as the distribution or average of the cost data was not made available to stakeholders due to confidentiality concerns; and

Frontier, in their 2007 review of New South Wales electricity retailer's costs, noted that there were "uncertainties" with relying on Standard Retailer data in New South Wales as:

- economies of scope arise from spreading fixed costs over a wide range of functions and can be evident in functions related to customer information systems, billing and revenue collection in an integrated retail and distribution business[16]; and
- costs can be recovered over a wide range of activities leading to a lower average cost for an activity, such as retailing.

Frontier further noted in its review that the reported costs of a Standard Retailer in New South Wales were lower than those available to a standalone retailer.[17] They found that ROC may include savings from scope economies and therefore may understate the costs of a standalone retailer.

Given the myriad of inherent issues with the New South Wales benchmark which has since been adopted in South Australia, Origin believes that the current benchmarks are too low and are not representative of a new entrants cost. If the QCA decides not to rely on the current escalated Queensland ROC benchmark as the starting point, Origin believes that the QCA should construct an indicative total cost stack of a representative retailer based on indicative data from retailers. Adopting the current NSW benchmark will lead to an under-recovery of retail costs by a representative new entrant retailer which could have a negative impact on competition and investment.

With regards to the annual change in ROC, Origin suggests that a simple methodology should be developed. For example, the QCA's current approach of escalating ROC based on a percentage split of wage growth and the consumer price index. However, if an annual escalation method is used, then there would need to be a provision to take into account

[16] Frontier Economics Pty Ltd, *Mass market new entrant retail costs and retail margin - Public Report*, March 2007, p10.
[17] Ibid page 10.

one-off changes to retail costs because of new regulatory or compliance obligations in the Queensland market. Origin envisages that the ROC escalates based on a fixed method unless it is demonstrated that there has been a change in ROC because of the introduction of a new scheme or an event (including new benchmark studies). It would then be up to the QCA to assess whether any increase was warranted. Instilling a fixed principle will provide an element of transparency and certainty to the market.

4.4 Customer Acquisition and Retention Costs

The QCA seeks stakeholders' views on the following:

Should CARC be treated the same as other retail operating costs?

If not, how should CARC be calculated?

Are there any other issues related to CARC the QCA should consider?

As noted by the QCA, CARC are costs related to acquiring new customers, retaining existing customers and transferring existing non-market customers onto market contracts. These costs include marketing, advertising, sales overheads, door to door agent costs and telesales. The inclusion of a CARC is necessary in order to ensure the competitive functioning of the Queensland electricity market.

Similar to base ROC calculations, CARC should be based on a new entrant retailer. By their nature, new entrant retailers have to acquire their customer base through market initiated activity. This includes new entrants needing to replace lost costs with new customers and instilling strategies to retain its customer base in order to recover its costs. It should be noted that there are definite costs to a retailer with the internal transfer of customers from market contract to standing contract (or vice versa) including various notification requirements. Queensland has a unique market in the sense that mass market customers have the ability to request a standing contract at any time. In order to continue to encourage new entrant activities, CARC must cover all costs a retailer incurs in acquiring, retaining and transferring a customer.

Once CARC has been initially calculated, Origin supports the QCA's proposal that CARC and ROC should be treated on the same basis. This means that the total retail cost allowed each year includes both CARC and the ROC and they will change in the same manner rather than CARC being dependent on churn. This approach appears appropriate given the way the market has matured and the manner this issue is dealt with by other Regulators.

4.5 Retail Margin

The QCA seeks stakeholders' views on:

What factors should be considered when calculating an adequate retail margin?

What level should the retail margin be set at?

The retail margin represents a normal retail cost which reflects the reward to investors for committing capital to a business and for accepting risks associated with providing retail electricity services. A retail margin which is not sufficient to compensate investors for their investment and the risks they incur leads to under-investment by existing retailers, deters entry into the market by new retailers and stalls the development of efficient competition.

A retail margin needs to cover a retailer for its risk-weighted investment. A low retail margin is a significant impediment to the further development of competition and to the future investment in the energy sector. A margin of at least 5.4 per cent appears appropriate.

When determining a retail margin for future price determinations, Origin believes that the QCA needs to set an appropriate retail margin taking into account that:

- all business risks are being suitably covered;
- satisfactory returns are provided to shareholders; and
- any forecast error resulting in reduced retail margins.

As noted by the QCA, there are a number of different ways an appropriate retail margin can be determined. Origin strongly supports a retail margin based on a percentage of total sales. This approach is commercially accepted across a range of industries and is generally consistent with that adopted by other jurisdictions. The level of margin must be sufficient to attract new entrant retailers and to encourage retailers to support future investment in the electricity industry.

In assessing an appropriate retail margin, Origin believes that the QCA should review the work undertaken by SFG for IPART's 2010 Electricity Price Determination. IPART engaged SFG to assist them in determining the appropriate retail margin for an electricity market in New South Wales. SFG used three different methodologies for estimating ranges of retail margin[18]. These including:

- Expected returns approach – 3.4 per cent – 4.8 per cent of sales revenue;
- Benchmarking approach – 6.4 per cent – 6.9 per cent of sales revenue; and
- Bottom-up approach – 4.5 per cent – 6.3 per cent of sales revenue.

IPART concluded that a weighting of one-third of each of the mid-points of the approaches was appropriate and thus derived a retail margin of 5.4 per cent. This value was consistent with the mid-point of the reasonable range recommended by SFG.

Based on the above detailed recent analysis, Origin believes a margin of at least 5.4 per cent is justifiable in Queensland. Origin proposes that the retail margin be higher than previously allowed because of:

- Recent benchmark margins that have been adopted in New South Wales and Australian Capital Territory. In particular, Origin believes that historically there have been less retailer risks operating in the New South Wales electricity market than the Queensland market given the existence of the ETEF arrangements and the fact that IPART adopted a cost based approach to determining energy costs by using the LRMC as the floor. If the QCA decides to take a market based approach to estimating energy costs, the margin should be higher than that determined in New South Wales to account for the greater risks faced by retailers in Queensland;
- Increased risks associated with future policy and market developments. This includes the introduction of initiatives such as a carbon tax, NECF and bill benchmarking for Queensland customers;
- The heightened credit risk, including counter-party credit risk and increasing exposure to consumer bad debt. This is particularly the case with energy bills increasing and a larger proportion of customers in financial hardship; and
- Although churn rates are at a high steady rate, Queensland has not attracted the same level of interest from independent small retailers as has been seen in other jurisdictions. The retail margin needs to cover a retailer's risk-weighted investment in order to entice them into the market.

[18] SFG Consulting, *Estimation of the regulated profit margin for electricity retailers in New South Wales*, 16 March 2010, p2.

Given the new risks, policy uncertainty and the potential for regulatory error in setting the retail pricing components, Origin believes the historical 5 per cent retail margin is inadequate and does not provide a return on investment to commensurate with the risks of a retail business.

Further, it should be noted that there is an asymmetrical regulatory risk in setting the retail margin. Lower margins will have a direct impact on market competiveness however a margin above the commercial requirements will have little impact with competition removing the opportunity for additional returns.

In a national electricity market, electricity retailers will seek markets where they can find the best value and if the risks are high and returns are low, their willingness to supply electricity customers in the Queensland market will decline. While Origin would continue to supply non-market customers, the effect will more quickly be felt on new entrants' willingness to offer electricity contracts (the standard contract price acting as the upper benchmark, or price to beat, for competing retailers) and thus customer's ability to receive price benefits.

5. Setting the R Component

As the Direction requires the retail tariffs to be aligned with distribution network tariffs, the setting of an appropriate R cost component to apply to each network tariff requires a calculation of how total energy and retailer costs are to be recovered from each customer groups to which the approved network tariffs apply. In order to ensure that retailers recover their efficient costs of providing retail electricity services, the R component for individual retail tariffs must also be cost reflective. This can be done by:

- allocating aggregate R costs to each customer group and then recovering those this cost in a manner that reflects how they are incurred; or
- allocating the average retail costs directly to each network tariff.

5.1 Allocating R costs to customer groups

The QCA seeks stakeholders' views on the following:

How should the QCA allocate R costs to each customer group?

What information will the QCA require?

What other issues should the QCA be aware of?

A necessary condition for cost-reflective pricing is that costs are recovered from each customer group on the basis of the driver or cause of the cost. For this process, Origin believes that attempting to allocate a specific total retail cost to each customer group is either unnecessary or of little benefit in most instances.

Given the QCA is predominantly setting regulated retail tariffs to apply to small customers then there is either little discernible variation in customer size, retail cost to serve or wholesale energy cost. Where such variations may exist there is often imperfect cost information so that any perceived benefits in enhanced cost reflectivity through estimating this variation will be outweighed by data errors.

For example, the cost of supplying energy to a particular group of customers will depend on the load profile of that customer group so the costs to retailers of supplying customers with a peakier load profile will be different from the costs of supplying customers who have a flatter load profile. However, in order to allocate energy costs to reflect these cost drivers, individual load profiles would need to be constructed for various tariff groups. This is untenable in most instances as Origin believes that estimating a suitable NSLP for the aggregate Small customer load will be difficult enough. As such, Origin proposes that the QCA focus on estimating a general and relevant retail component that can be applied to the calculation of the majority of retail tariffs.

In some instances, there is an obvious and easily identifiable variation in retail cost or wholesale energy cost for a group of customers. In these cases, Origin supports separately estimating and applying this retail component.

Origin believes these instances should be limited to the controlled load customer groups which may vary from the general retail component due to:

- retail operating cost being shared across the controlled load tariff and the domestic tariff; and
- the load profile for controlled load customers being significantly different from the NSLP and clearly identifiable.

5.2 Determining the Fixed and Variable R Components

The QCA seeks stakeholders' views on the following:

How should the proportions of fixed and variable energy costs be determined?

How should the proportions of fixed and variable retail costs (operating costs and margin) be determined?

How should the QCA establish a time-of-use R component for residential customers with appropriate metering?

How should the QCA set the R component for customers with accumulation meters?

What information will the QCA require to set the R component of each tariff?

What other issues should the QCA be aware of?

Origin believes the following tariff principles need to be considered in relation to retailer tariffs:

- Each retailer tariff should recover Origin's controllable costs in relation to the sale and supply of electricity to a particular segment — this should ensure that there are no cross-subsidies between customer segments;
- Costs driven by customer numbers should be recovered by supply charges — this ensures that, in relation to the recovery of these costs, when average demand is lower than expected Origin is not disadvantaged and when average demand is higher than expected customers are not disadvantaged. It is also an important foundation for ensuring that the percentage margin is similar between customers on the same tariff but with differing levels of consumption;
- Costs driven by volume should be recovered using variable ($/MWh) charges — this is a straightforward user-pays approach; and
- the retail margin should be recovered by applying the similar percentage to the costs allocated to each tariff component — this should ensure that the retail margin received from high consumption customers is similar in percentage terms as that from low margin customers.

As such, Origin proposes that the QCA mimic the methodology used by IPART to a large degree and allocate:

- energy costs on a variable basis;
- retail operating costs as both fixed and variable costs using a benchmark overall split such as 75 per cent fixed and 25 per cent variable;
- customer acquisition costs as a total fixed cost; and
- retail margin on a fully variable basis.

Given all these cost elements will be based on benchmarks or forecasts then there appears to be little benefit in attempting to allocate on a more precise basis across individual tariffs.

Origin also supports the premise put forward by the QCA that by keeping the cost allocations rather broad for the regulated tariffs, it will provide the opportunity for retailers to identify any customers or tariffs that it may be able to offer more adventurous or precise market offers.

Origin does not believe the approach to establishing a time-of-use R component for residential customers needs to be any different to the other retail tariffs or customer

segments. However, when determining the appropriate time-of-use R component, the QCA will need to consider which party will pay the installation costs for a time-of-use compliant meter and for retro-fitting the meter if the customer wishes to return to a standard tariff with an accumulation meter. Additional costs may need to be built into the R component to cover these specific costs.

5.3 Transitional issues

The QCA seeks stakeholders' views on the following:

Given that prices will only be determined for one year at a time, how could the QCA mitigate the impact on customers of moving to new tariffs?

Is there any justification for determining prices for any customers on a less than cost-reflective basis in the first year?

With any reform to regulated retail tariffs, there are always going to be customers that will experience either positive or negative impacts on their annual electricity bill. Tariffs will always represent the average cost to serve for a group of customers (with similar load profiles) and can never perfectly represent the cost to serve for all customers. Customers that see an increase in their annual bill have potentially been paying below the cost reflective rate while those that will see a decrease in their annual bill have been paying above the average cost of supply.

At this time, Origin has no specific comment on the likely impacts of higher electricity prices on different types of customers, but agrees that it is important to work to alleviate the impacts of higher electricity prices on specific types or segments (ie. pensioners). Origin does not believe that this issue should deflect from the objective of establishing efficient and cost reflective retail prices in 2012. If it is found that there are smaller residential customers that will see significant increases in their annual bill, Origin suggests that the Government may need to provide some sort of additional financial support to these low energy users to assist them transition to the cost reflective rate. This could be through enhancements to the Home Energy Assistance Scheme already operating in Queensland.

With the direct pass through of network charges, the transition should not be on the retail tariff component – retailers should be entitled to recover the full cost of supplying customers on the regulated tariff and any transition may deny those customers that have been paying an above average rate to see the benefits of the tariff reform.

The movement of customers from an obsolete tariff to an appropriate regulated tariff also needs to be considered. It is Origin's view that no transition should be required for these customers either as there are potentially a number of other appropriate tariffs that these customers could be supplied on. By their very nature, the tariffs became obsolete because it was deemed that there were other appropriate tariff categories that could suit the customer.

It is Origin's belief that customers need to see the full, cost reflective charge for their electricity consumption and this is even more important with the potential introduction of the carbon tax. If such a scheme is to have the desired impact on customer behaviour, actual prices need to be transparent.

Origin believes the key to managing customer expectations and impacts is providing sufficient notice to all parties that changes are occurring. If retailers are provided sufficient notice of decisions, they can identify and provide targeted communication to customers to notify them of the change. They could also provide consumers with measures that can be put into place to minimise any pricing impacts.

6. Uncertainty

Retailers face inherent risks with regulated tariffs being set for a fixed period of time as the regulatory framework requires assumptions to be made regarding future energy costs, changes to retail costs and appropriate returns. These risks are the greatest for retailers supplying small standard customers on a regulated tariff as revenue is constrained by the level of the tariff.

The risks most relevant to a cost pass through provision are the non-systematic risks that can arise due to uncertainties around the introduction of unforeseen market events or policy developments such as a carbon tax, implementation of national energy consumer framework or Queensland specific green initiatives (ie. mandatory offering of a green product and greenhouse benchmarks on bills). Retailers incur real costs at the time the scheme or new regulatory requirement is introduced. This was evident in 2010-11 when substantial changes were made to the RET scheme during the year. There was a requirement for retailers to absorb these higher costs for a period of time which had the potential to significantly impact on a retailer's ability to financially survive in the electricity market.

Is a mechanism required to account for the impact of unforeseen events on the R component of retail tariffs?

If so, should the mechanism apply to both the retail operating cost and energy cost components or just the more volatile energy cost component?

What specific events should be included or excluded?

Should a materiality threshold apply? If so, how should it be determined?

What other issues should the QCA be aware of?

Given tariffs will be set on a yearly basis, Origin believes that a pass through mechanism in its true sense is not required as long as the QCA includes an allowance for:

- future events or changes to regulatory frameworks within an upcoming determination. That is, if there is a likelihood that a future event will occur, then forecast costs based on available data or benchmarks should be included within the next determination. If the costs allowed are found to be too high or low, then an appropriate adjustment can be made in the following year; and
- events that have occurred within the past 12 months. For example, if there has been an introduction of a new regulatory requirement, the costs should be included and adjusted upwards to take account of this event.

If the QCA does not adopt the above approach to account for both past and future events within an upcoming determination, then a cost pass through provision should be included within the pricing framework. Retailers should not be financially penalised for events that are out of their control and the risks should be shared between both retailers and consumers.

If a formal cost pass through mechanism is included, it should not be defined into specific pass through event categories. Categories such as regulatory reset event and change in taxes events are too narrow and do not encapsulate all the potential events that could occur. This is especially true with the myriad of market reforms that are currently occurring at a national level. For example, there are discussions regarding a national energy efficiency scheme, the introduction of a carbon tax and the move to a national consumer protection framework.

To cover these potential events, Origin proposes that the determination would have a pass through provision without a specified definition of events. The onus would lie with a retailer to assess the impact of any unforeseen event and then apply for a cost pass through event if deemed significant. Of course, the QCA would then assess whether any application was warranted and would make its decision on the actual pass-through required.

Furthermore, Origin does not believe that a materiality threshold would be necessary as the time and cost to the retailer of submitting and gaining approval from the QCA for a mid determination pass-through event provides its own materiality threshold. A threshold is also difficult to define in terms of ongoing and cumulative cost of potential pass-through events rather than a single year's costs.

Origin would highlight that IPART has taken this approach to cost pass through events in relation to gas. It has an open approach whereby the gas retailers' *Voluntary Transitional Pricing Arrangements* sets out a process to make an application (ie. must provide justification statement, cost justifications and time periods for application) but does not impose any limit on the actual events that may give rise to a cost pass through event[19]. Origin believes a similar approach should be adopted by the QCA.

[19] Clause 4.9 of Origin's Voluntary Transitional Pricing Arrangements sets out a list of examples of events that may give rise to a pass through event, but the list is not exhaustive.