



**Submission to the  
Queensland Competition Authority  
on the Draft Determination on  
Regulated Retail Electricity Prices for 2013-14**

**March 2013**

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## Executive Summary

Origin Energy (Origin) appreciates the opportunity to respond to the Queensland Competition Authority's (QCA) *Draft Determination on Regulated Electricity Prices for the period 2013-14* ('the Draft Decision').

Origin supports many of the findings of this Draft Decision, but seeks to raise a number of issues, in particular in relation to the effectiveness of competition in Queensland, the methodology used to model the cost of wholesale electricity, and the application of the pass-through mechanism.

### Competition

The terms of reference require that the QCA have regard to the effect of regulated retail prices upon competition. Hence, regulated retail tariffs should be set at a level that is sufficient to protect and promote competitive market offers. Origin's previous submission sought to demonstrate that there had been a reduction in competition as a result of the QCA's 2012-13 tariff decision. Competitive activity continues to fall, with a 41 percent drop in spending on above the line marketing activity among the three major retailers between 2011 and 2012,<sup>1</sup> a fall in advertised discounts from the three major retailers, from between 10-13 percent in May 2012 to between 7-9 percent in March 2013, and a fall in average churn from 21 to 18 percent between 2011 and 2012.<sup>2</sup>

Churn in Queensland in January 2013 (excluding Ergon) was 15 percent, compared to 20 percent in NSW, 24 percent in South Australia and 28 percent in Victoria. In situ churn (that is, excluding home movers) appears to have fallen below 10 percent in Queensland (see Figure 1, Confidential Appendix<sup>3</sup>).

### Wholesale energy cost

Origin maintains that the QCA's proposed market-based approach to setting the wholesale energy cost allowance does not adequately capture the costs faced by retailers in providing wholesale energy. Origin accepts that the market-based approach is currently the QCA's preferred methodology and hence this submission does not reiterate our views on the need to reference long-run marginal cost. Instead, we focus on the shortcomings of the market-based approach as adopted. A number of adjustments are required to the market-based methodology before it can accurately reflect the cost to a standard retailer of securing wholesale energy, in particular to ensure contract price data represents retailers' hedging costs and that Pool price modelling reflects the variability of customer demand.

There is a fundamental inconsistency in the way ACIL Tasman has estimated wholesale energy costs in relation to power purchase agreements (PPAs) and owned generation. If PPAs are to be included in the bidding behaviour of generators to determine the modelled cost of Pool prices, then the cost of PPAs must also be included in the costs borne by retailers; otherwise, the approach factors in the benefit provided to customers from PPAs,

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<sup>1</sup> Data provided by AC Nielsen.

<sup>2</sup> Churn figures exclude Ergon.

<sup>3</sup> Based on Origin losses

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but not their cost:

- ACIL's modelling of Pool prices accounts for PPAs and vertically integrated generation. This delivers a lower Pool price outcome than would be the case in the absence of retailer owned and long term contracts, as the model reduces plant bids (and hence Pool prices) to reflect an assumed higher level of generator contract cover and competition among supply side participants.
- The Futures market price similarly reflects the role that PPA's (and other hedge contracts) play in determining generating bidding behaviour and hence Pool prices.
- The QCA's allowance for wholesale energy costs does not recognise the cost to retailers of purchasing electricity under PPAs or the generation plant they own.

The QCA has rejected Origin's previous submission that Futures prices would be higher in the absence of PPAs and own generation. The QCA's view was that:

"If retailers were to purchase all of their load through the Futures market, generators would also be selling all of their load through the Futures market. The one change would most likely be offset by the other."

However, this is not the case. PPAs are required to secure funding for generation, so in the absence of PPAs there would be less generation capacity in the market and so both Pool and Futures prices would be higher. Furthermore, the Futures market in Queensland for 2014 is insufficiently liquid to give a reliable indication of the cost of energy. A more cost reflective and consistent approach would be to include PPAs and own generation in both the calculation of hedge and Pool costs.

ACIL Tasman's load forecast is a critical component in estimating the wholesale energy cost. Origin is concerned that the forecast load profile is not suitably representative of demand conditions in the Queensland wholesale market. The underlying demand data used to project load scenarios is a limited data set taken during a period of mild weather. The methodology used to simulate and project this load data forward is also inadequate, including in the way variability is modelled, the way the data is scaled to fit AEMO's probabilistic demand forecast, and assumptions about the impact of PV generation on the Energex NSLP. Notwithstanding the penetration of PV systems, Origin does not expect that load flex has disappeared from the mass market segment; rather, ACIL Tasman's sampling methodology has not correctly captured the impact of weather on the NSLP. The modelling of Pool prices using this load data gives rise to further concern given the absence in the modelling of intra-regional network constraints and the use of hourly rather than 5 minute trading intervals. When combined with an assumed high level of contract cover (at low contract prices), these deficiencies lead to an inaccurately low cost outcome.

### Pass through

Origin welcomes the QCA's draft decision to allow for a pass through mechanism to address regulatory and tax uncertainty. However, Origin questions the logic of only applying this to FY15 and FY16. The mechanism should also apply to FY14. If the QCA believes a price adjustment in FY14 is not possible under the regulatory framework then the pass through mechanism should ensure that any adjustment in FY15 accounts for under-recovery in FY13 and FY14.

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## Background

On 5 September 2012, the Minister for Energy and Water Supply provided the Authority a Delegation requiring it to determine regulated retail electricity prices (notified prices) for a three-year period from 1 July 2013 to 30 June 2016. While the task is delegated for three years (rather than a one-year period as previously), the Authority is still required to determine prices annually. The first determination is to apply from 1 July 2013 to 30 June 2014.

On 21 September 2012, 2 November 2012 and 12 December 2012, the Authority released three consultation papers on a range of matters relevant to this review that the Authority is required to consider, to which Origin provided responses. The Authority also ran a series of workshops across Queensland during November, December and February, in which Origin participated.

On 22 February 2013, the Authority released its Draft Determination on Regulated Retail Electricity Prices for 2013-14. This submission presents Origin's views on the Draft Determination.

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## 1. Competition in Queensland

Retail price regulation is a second best alternative to a fully competitive deregulated market. To the extent the QCA's price determination reduces competitive activity in south east Queensland, it will impede progress towards deregulation. Retail tariffs should therefore be set at a level that is sufficient to protect and promote competitive market offers.

In its Draft Determination, the QCA has expressly acknowledged that notified prices should not act as a constraint on the development of effective competition. The QCA has also stated that, as competition is still largely price driven, retailers must be able to offer discounts to the notified price in order to attract customers away from notified prices and build market share.

Prior to 2012, when tariff levels were cost reflective, competition was effective and customers were appropriately engaged. Since that time competitive activity has declined, falling relative to levels observed prior to the QCA's FY13 pricing decision and relative to other states in the national market. This declining trend is on-going, as retailers divert resources away from the Queensland market. Those with significant capital invested in the state will persist for longer, but not indefinitely.

To support our contention that competition is falling, we highlight:

- Reduced spending on above the line marketing among the three major retailers, which fell from \$6 million in 2011 to \$3.5 million in 2012, a fall of 41 percent;<sup>4</sup>
- A fall in advertised discounts from the three major retailers, from between 10-13 percent in May 2012 to between 7-9 percent in March 2013;<sup>5</sup>
- Reduced average churn, from 21 percent in 2011 to 18 percent in 2012 (excl. Ergon), and much lower in situ churn;<sup>6</sup>

Churn in the Queensland market (excl. Ergon) was 15 percent in January 2013, compared with 20 percent in NSW, 24 in South Australia and 28 percent in Victoria. In Victoria, where competition is effective:

- the market is mature but high levels of churn have been maintained, contrary to the contention that churn may be falling in Queensland because it is a mature market;
- more retailers have significant market share<sup>7</sup>.

Figure 1 (over) shows churn for Queensland well below the other large NEM jurisdictions.

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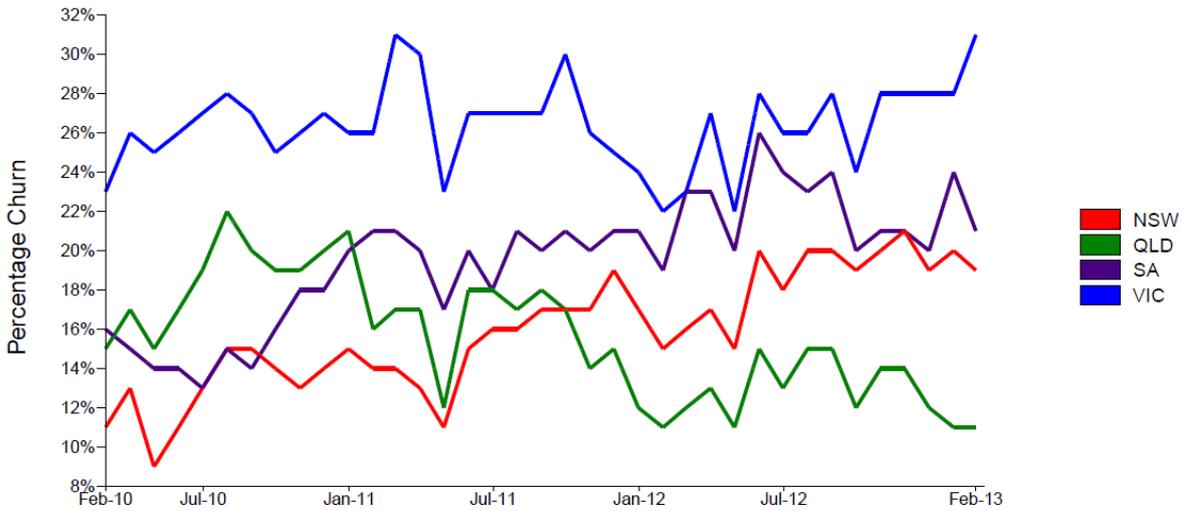
<sup>4</sup> Origin analysis based on survey data

<sup>5</sup> Based on total discount available, based on highest discount advertised above the line

<sup>6</sup> In situ churn figure based on Origin data only; see Figure 1, Confidential Appendix

<sup>7</sup> Based on Origin data only, see Figure 2, Confidential Appendix

**Figure 1. Monthly annualised churn rate, 2010-13\***



Source: AEMO \* Queensland figures include Ergon.

In light of the above, Origin considers that retail tariffs as determined by the QCA’s Draft Determination will not be sufficient to preserve and promote competition in the Queensland retail market, undermining the goal of a fully competitive deregulated market. Origin requests an increase in headroom in order to ensure that retail tariffs preserve and encourage competition between retailers, which will ensure that prices remain as low as efficient and sustainable supply permits. Headroom has played a role in maintaining some level of competition in Queensland since the pricing decision of 2012, however the level of competitive activity continues to decline and so the level of headroom should be increased to ensure a smooth transition to full retail competition.

Origin does not accept the QCA’s view that competition is effective in Queensland. Table 1 examines various factors informing the QCA’s assessment of the effectiveness of retail competition in the Queensland electricity sector.

**Table 1. Factors influencing assessment of competition in south east Queensland retail electricity market**

Issue	QCA position	Origin response
Barriers to entry	<ul style="list-style-type: none"> <li>There are no significant barriers to the development of competition in the retail electricity sector.</li> <li>IPART and ESCOSA have found that the regulated price was not a major barrier to entry.</li> </ul>	<ul style="list-style-type: none"> <li>Agrees there are no barriers to entering the retail electricity market but notes that retail tariff levels can impact the development of competition.</li> <li>The regulated prices that IPART and ESCOSA considered incorporated a different methodology for calculating the wholesale cost component. South Australia has subsequently removed price regulation in recognition that competition is a more effective way to promote customer interests</li> </ul>

.../...

Customer switching	<ul style="list-style-type: none"> <li>While the Queensland switching rate was 11% annualised in January 2013, if Ergon Energy customers were removed from the calculation, the switching rate increases to approximately 15%.</li> <li>Comparative switching rates are 20% in NSW, 24% in South Australia and 28% in Victoria.</li> </ul>	<ul style="list-style-type: none"> <li>At face value, switching rates in Queensland are 5% below those of the regulated market of NSW and 9% and 13% below switching rates within the deregulated markets.</li> <li>If default switching due to customers moving premises is excluded,<sup>8</sup> churn in Queensland is less than a third the level in NSW, South Australia and Victoria (see Figure 1, Confidential Appendix).</li> </ul>
Customer satisfaction	<ul style="list-style-type: none"> <li>A falling switching rate may suggest that retailers have changed marketing strategies as the market has matured or that customers are satisfied with their current retailer.</li> <li>Increased customer satisfaction would suggest that competition is providing an effective constraint on retailer behaviour.</li> </ul>	<ul style="list-style-type: none"> <li>The Victorian retail energy is the most mature in Australia (the first to fully deregulate), yet it shows no signs of reduced competitive activity.</li> </ul>
Market concentration	<ul style="list-style-type: none"> <li>The market has not become more concentrated over the past year.</li> <li>Data indicates that the relative market shares have been roughly the same from September 2011 to September 2012, with second tier retailers supplying approximately 10.5% of customers in Queensland.</li> </ul>	<ul style="list-style-type: none"> <li>Stagnant market shares do not evidence competitive activity.</li> <li>Comparable markets have a broader spread of active second tier retailers, and these have greater aggregate market share than those in Queensland (See Confidential Appendix).</li> </ul>
Level of discounting	<ul style="list-style-type: none"> <li>Of the 63 supply offers available, there were 28 offer prices lower than the Tariff 11 notified price.</li> <li>The maximum available discount currently available in Queensland is 11% (provided by two second tier retailers), as compared to a maximum discount of 10% in 2011-12.</li> </ul>	<ul style="list-style-type: none"> <li>Origin maintains that discounts and marketing activity continue to decline in Queensland, as per the statistics quoted above.</li> </ul>
Non-public offers	<ul style="list-style-type: none"> <li>Origin makes substantially higher discount offers to customers under threat of moving to a new retailer and these discounts are not advertised in the market place.</li> </ul>	<ul style="list-style-type: none"> <li>There has been a <i>relative</i> reduction in competitive activity in Queensland.</li> <li>Retailers' practices may be to offer premium discounts to certain customers without advertising them in the market place, in order to retain customers actively considering leaving. These are tactical discounts that target a small, specific segment of customers.</li> <li>Premium discounts to sub-segments would also have been higher prior to the QCA's 2012-13 price determination.</li> </ul>

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<sup>8</sup> Based on Origin customers

Headroom	<ul style="list-style-type: none"> <li>• The inclusion of headroom will have the effect of moving prices in the Ergon Energy network closer to cost reflective levels.</li> <li>• Including some level of headroom in notified prices is necessary to support competition.</li> <li>• Not convinced that increasing the amount from its current level will necessarily flow through to customers in the form of higher discounts.</li> </ul>	<ul style="list-style-type: none"> <li>• Origin concurs with the QCA. Ergon customers are recipients of a generous cross-subsidy from customers on the Energex network, which renders the headroom allowance insignificant by comparison.</li> <li>• Agrees that inclusion of headroom in notified prices is necessary to support competition.</li> <li>• To the extent that increased headroom facilitates competition from other retailers, customers will necessarily have access to the lowest sustainable prices and best product offerings.</li> </ul>
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The QCA has stated that competition between electricity retailers tends to be price-based and so the extent and level of discounting by retailers can provide an indication of the extent of competition in a market. The QCA has questioned why retailers (such as AGL and Origin) that have advised that they have been reducing marketing activity continue to offer discounts to new customers. Origin continues to offer discounts in Queensland in order to defend the considerable investment it has made in building market share in that market. Origin may at times offer discounts to customers who are considering leaving Origin. These discounts are tactical and targeted to a specific and limited sub-segment. Overall, discounts and marketing activity have reduced.

Among all the three largest competitive retailers, namely Origin, AGL and Energy Australia, discounts have fallen since the QCA's announcement of its changed methodology (May 2012) and the present time. The advertised discounts of these retailers have decreased as follows<sup>9</sup>:

- Origin: advertised headline discount has reduced from 13% to 9% (discount is on the energy component);
- AGL: advertised headline discount has reduced from 10% to 7% (discount is on the energy component); and
- Energy Australia: from 10% to 9% (discount is on the energy and service to property components).

The QCA has stated that competition could be improved if more focus was placed on improving customer engagement, and it has noted possible options to achieve this:

- An advertising campaign to encourage customers to shop around for the best deal.
- Making it easier for customers to access and compare offers between retailers.
- Reviewing customer protection mechanisms to ensure that they are adequate and provide customers with sufficient confidence to venture into the competitive market.
- Removing barriers to customer switching, including termination fees where the contract price increases.
- Adopting an 'opt-in' approach to price regulation under which customers must make an active decision to be supplied under a standard contract at the notified price.

<sup>9</sup> Based on total discount available, based on highest discount advertised above the line

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In relation to these proposals, Origin would highlight that competition was effective in Queensland prior to 2012. When tariff levels were cost-reflective, the retail market functioned effectively. In response to the QCA's specific proposals above:

- An advertising campaign is unlikely to be effective unless there are significant savings available to customers who switch. Research recently carried out by Roy Morgan<sup>10</sup> showed that price was the primary motivation to switch in the retail electricity market. While the research was carried out in NSW, this aspect of the findings seems likely to apply to retail electricity markets across jurisdictions.
- The QCA has already generated a website that helps customers to compare offers.
- A thorough review of customer protection mechanisms in Queensland was carried out as part of preparing the National Energy Customer Framework (NECF). The outcome provides superior protections than the jurisdictional regimes and was agreed by all NEM jurisdictions. Origin has long supported Queensland adopting the framework, as has already happened in the ACT and South Australia, and as is imminent in NSW.
- Origin believes that the regulatory constraints on competition are the most important barrier to enhanced competition, which would in turn drive products that best meet customers' needs.
- Origin supports an 'opt-in model' as is currently contemplated by the Independent Regulatory and Pricing Tribunal in NSW only as a temporary transitional move towards pricing deregulation. Establishing an opt-in should be as part of committed timetable to reach deregulation.

To reiterate, Origin believes that price regulation, and specifically the level of regulated prices, are leading to declining competition in the Queensland market. Competition has declined since the QCA last examined this issue. Addressing this issue through an increased headroom allowance is a priority.

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<sup>10</sup> Roy Morgan Research, 'Retail Competition in the NSW Electricity and Natural Gas Markets: Focus Groups with Residential and Small Business Consumers', report prepared for Australian Energy Market Commission, 28 February 2013, <http://www.aemc.gov.au/Media/docs/Roy-Morgan---Customer-focus-group-report-ebf26359-3656-45a3-b693-11bba694a450-0.pdf>

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## 2. Energy cost

As outlined in previous submissions on the QCA's consultation papers, Origin maintains that the QCA's market-based approach to estimating wholesale energy cost does not adequately reflect retailers' actual costs and will have a detrimental impact on Queensland electricity participants and consumers.

Origin notes the outcome of the Judicial Review concluded in December 2012, in which the Supreme Court dismissed Origin's application with respect to the calculation of wholesale energy. The case did not consider or test the merits of the market based methodology or its impact on competition. This submission does not re-state arguments in relation to the importance of considering long-run marginal cost. However, we note the QCA's finding that the outcome of the Judicial Review does not preclude it from adopting an approach that includes some element of long run marginal cost at some point in the future.

Origin is concerned that the forecast load profile is not suitably representative of demand conditions faced by a retailer in the Queensland wholesale market. The underlying demand data used to project load scenarios is a limited data set taken during a period of mild weather. The methodology used to simulate and project this load data forward is also inadequate, including in the way variability is modelled, the way the data is scaled to fit AEMO's probabilistic demand forecast, and assumptions about the impact of PV generation on the Energex NSLP. Notwithstanding the penetration of PV systems, Origin does not expect that load flex has disappeared from the mass market segment; rather, ACIL Tasman's sampling methodology has not correctly captured the impact of weather on the NSLP. These factors will lead to unrepresentative simulations of future demand.

We continue have concerns about the methodology used to estimate wholesale energy costs, as outlined below. In particular, Origin maintains its view that power purchase agreements (PPAs) should be included in the market-based methodology, as they are a reliable and important indicator of the costs faced by a large retailer in meeting wholesale load. Equally, there continues to be inadequate liquidity in the Futures market to rely on these contracts as the sole representation of the cost of meeting energy demand. The problems of relying on Futures contracts are exacerbated by a hedging strategy that assumes an unrealistic level of coverage and minimal exposure to the wholesale market.

The modelling of Pool prices ignores dynamic activity in the market and intra-regional network constraints and so understates the variability in Pool price events.

Lastly, NEM and ancillary fees also need to be updated and an allowance made for FRC and National Transmission Planner fees.

### 2.1 *The forecast load profile*

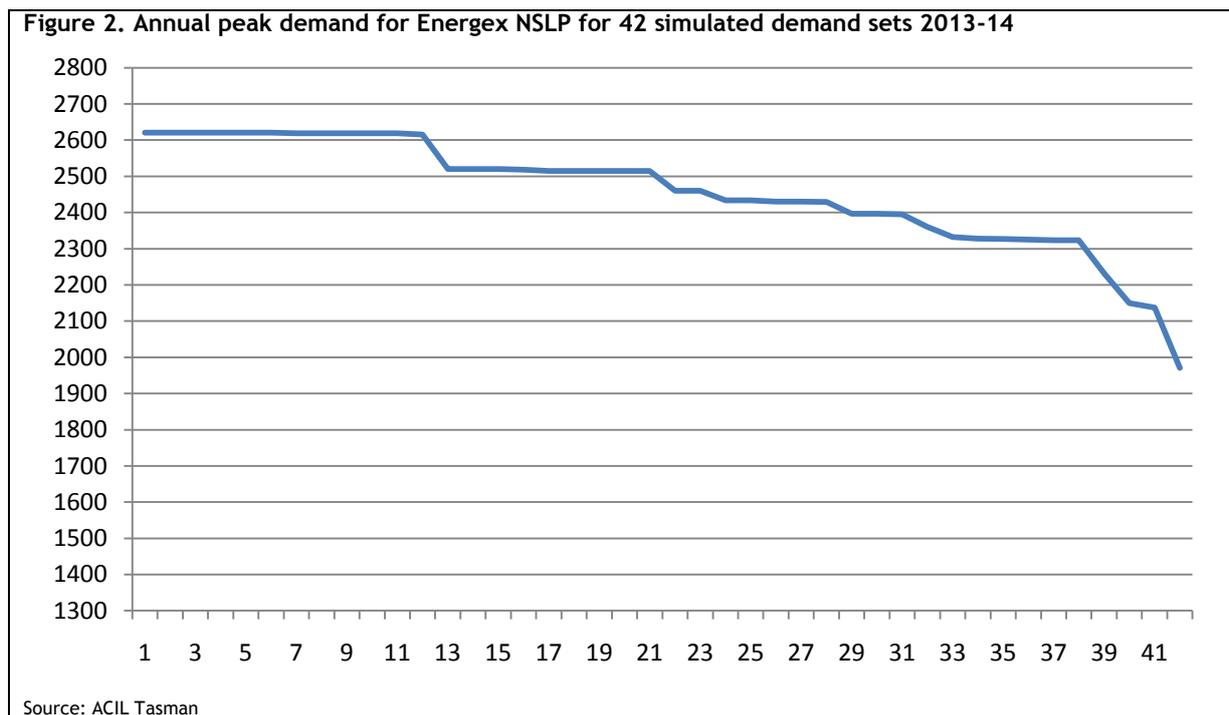
The forecast load profile used by the QCA's consultants is a key input to determine Pool prices and Pool exposure and hence the energy cost allowance. A number of shortcomings in the modelling of the Qld system load and Energex NSLP have the effect of systematically underestimating Pool prices:

- There is little variability between maximum demands across the 42 simulations.
- ACIL Tasman appears to have scaled the maximum of the annual peak demands from the 42 simulated load traces to match AEMO’s 10% POE summer demand forecasts. This effectively reduces a 1 in 42 peak to a 1 in 10 peak.
- ACIL Tasman has developed its simulations based on three recent years of load data. These years were very mild and so do not provide the data to generate high demands under high temperatures.
- ACIL Tasman has explained the lower peak demand in its simulations compared with historic NSLP as being due in part due to higher PV penetration. This is unreasonable as ACIL Tasman’s simulated NSLP peak demand occurs around 7-8pm when there is little PV generation.

Origin proposes that the model must be adjusted if the QCA is to meet its objective of accurately projecting the cost of meeting wholesale load.

*Spread between maximum demands*

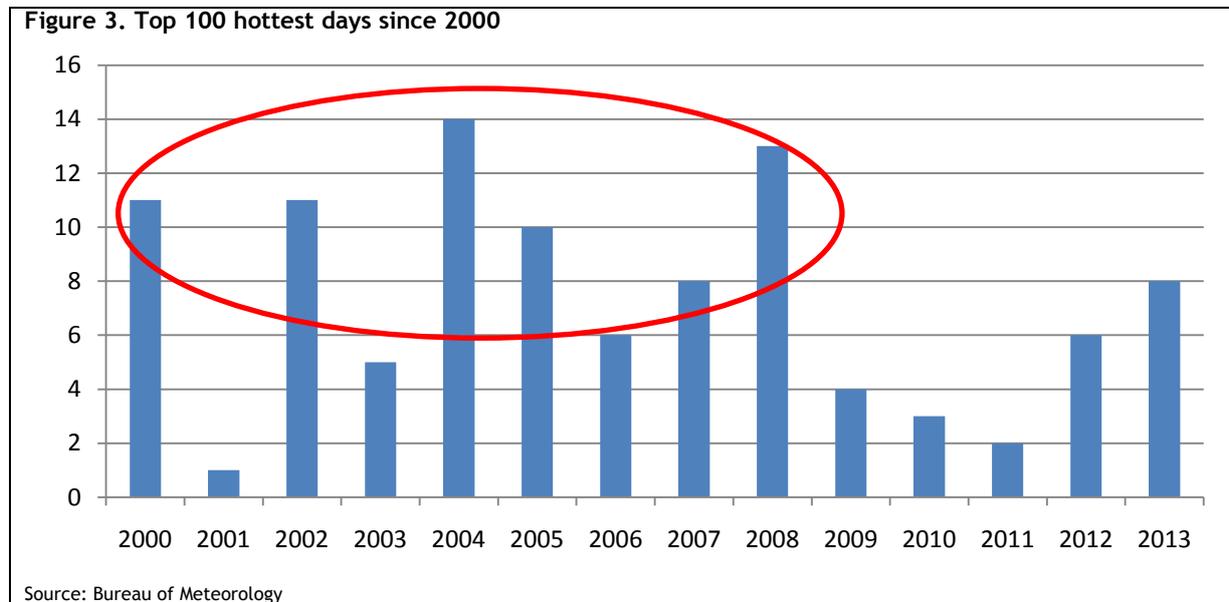
Origin is concerned that the simulations carried out by ACIL Tasman are not a strong representation of the variation in demand likely to be experienced in the NEM. As can be seen in Figure 2,<sup>11</sup> there is little variation across the higher demand simulations. The top 10 simulations all have the same maximum demand, and the top 20 vary by only 105 MW. This does not reflect variability in the years from which the original data has been adapted.



<sup>11</sup> This version was provided by ACIL Tasman as an updated version to their report accompanying QCA’s Draft Determination.

### Impact of weather

In the three years of demand data selected by ACIL Tasman for its analysis south east Queensland experienced more mild weather conditions than in previous years. Figure 3, below, shows the distribution of the 100 hottest days since 2000. The years FY2010 to FY2012 do not rank amongst the top 50 percent of the peak temperatures of the past 13 years.



Applying historical temperature data to these demand sets will not capture the impact of greater variability in weather, even once the data sets are scaled to AEMO's NEFR parameters. Instead, the approach will systematically understate the impact of higher temperatures on demand. Origin acknowledges that the relationship between weather and electricity demand is imperfect, but ignoring variability in years prior to 2009/10 weakens the relationship and thereby the reliability of the model. Effectively the simulated load is capped based on the last three year's conditions. This is evident in Figure 2 above, where the simulated loads are capped for the top twelve simulation runs at 2,2620 MW.

### Scaling of load

Origin understands that ACIL Tasman has scaled the annual peak demand in the QLD regional system load trace as follows:

"The maximum of the annual peak demands from the 42 simulated load traces is scaled to match the 10% POE summer demand forecasts in each region." p. 32

As was discussed at the recent the QCA workshop this approach will understate the maximum demand as the maximum across the 42 load simulations should represent a 1 in 42 peak not a 1 in 10 peak.

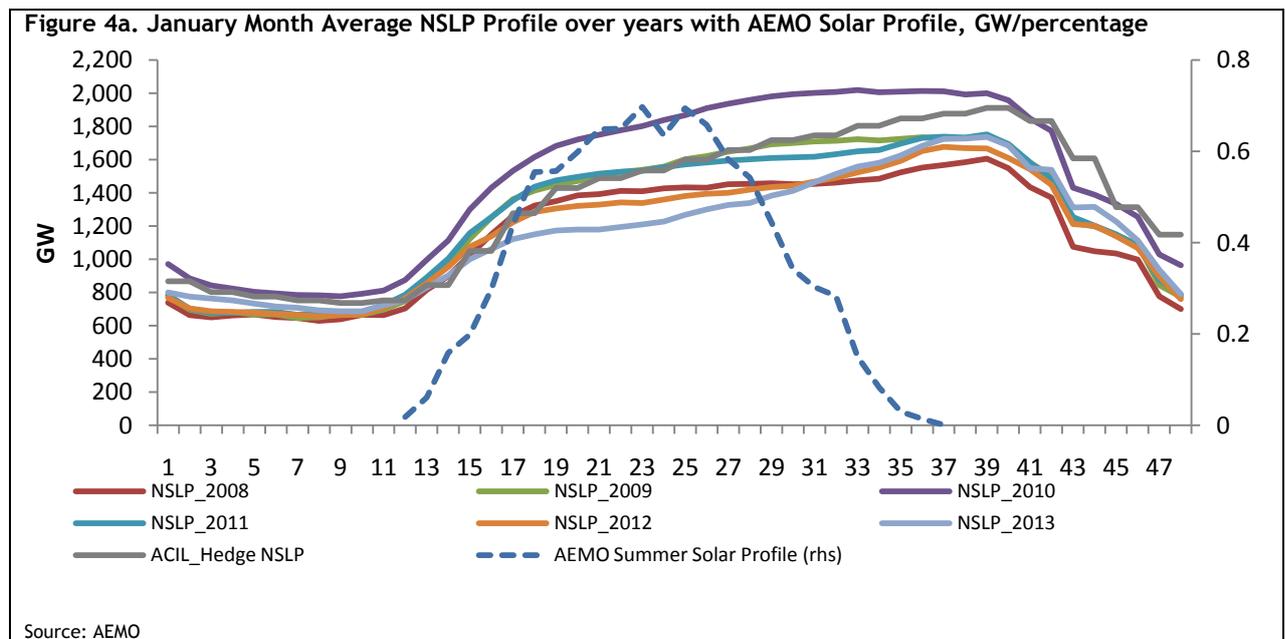
## Impact of PV

Origin notes the comments of ACIL Tasman that solar PV has been a primary factor in flattening system peak demand and will lead to further flattening of the NSLP in the future.

In response to AGL's submission, ACIL notes the role it believes PV installation has played in reducing maximum demand in the NSLP:

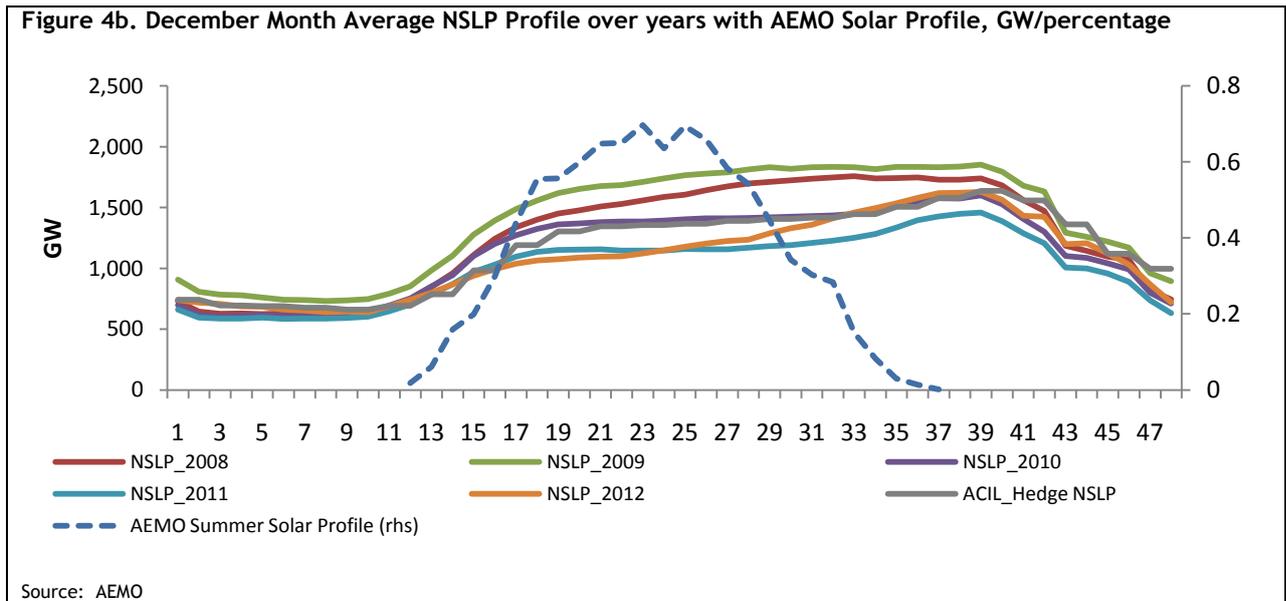
“However, given the remainder (90 per cent) of the load duration curve in 2011-12 is about 200MW or so less than in 2009-10 then it is likely that the peak demand in 2009-10 would have been about 200MW lower had the underlying economy in Queensland and solar PV penetration levels of 2011-12 been present in 2009-10.”

We question this conclusion since, while solar has undoubtedly changed the shape of the NSLP, peak output from PV is reached in the middle of the day, whereas peak NSLP demand on weekdays is in the evening.<sup>12</sup> Further, PV's impact on the winter NSLP peak is nil. As shown in Figures 4a and b there is little PV generation coincident with the NSLP maximum demand. We note the ACIL Tasman's finding that differences in load profile will have minimal impact on costs overall, but we disagree and believe this may be based on an error in the calculation on page 21 of ACIL Tasman's February report.



<sup>12</sup> Note this is demand on NSLP, not total system. The total system peak is reached somewhat earlier in the day as it relates to commercial load.

Figure 4b. December Month Average NSLP Profile over years with AEMO Solar Profile, GW/percentage



## 2.2 Exclusion of Power Purchase Agreements

Origin believes that the QCA should reconsider including references to the prices of long term power purchase agreements (PPAs) in its estimate of wholesale energy prices. PPAs are a reliable indicator of the cost of meeting a given wholesale load in any given year and are integral to investment in generation within the National Electricity Market.

Origin notes the QCA has opposed the use of PPAs largely on the basis that:

- The prices of PPAs represent long term averages and will tend towards similar prices as hedging through via Futures contracts over time, and hence the prices of Futures contracts can be relied on exclusively;
- Data on the prices of PPAs forms part of confidential commercial agreements and so is not publicly available or transparent to third parties, and hence is less suitable as a basis for setting regulated prices.

While the prices of PPAs and Futures contracts may tend towards equivalency over the long term, the QCA's stated objective in estimating the costs of wholesale energy is to assess costs in 2013-14, not over the long term. Retailers can provide the QCA with the PPAs that relate to the provision of energy in the year in question. Prices of PPAs reflect the outcome of commercially negotiated contracts, not aggregates or estimates, and so are reliable as indicators of market outcomes.

The advice from ACIL Tasman finds that PPAs are long term agreements and so will be long run averages, but equally that the prices will reflect prevailing commercial circumstances at the time the contracts were struck. The fact that PPAs were negotiated some time ago does not make them less relevant as metrics of the cost of meeting a given energy load in the year in question.

Origin understands that ACIL Tasman's approach to modelling Pool prices assumes a significant role for PPAs among generators. The impact of the contracts is recognised in Pool price modelling by including these generators in the supply side modelling and adjusting generators' bidding behaviour to reflect a contract position where PPAs and vertically integrated generation play a central role. Having acknowledged the central role

of PPAs in the financing of generation, it is inconsistent not to seek to reference the cost of these contracts when assessing the cost of retailers, since retailers are counterparties to these same contracts.

Recognising the impact of PPA contracts on the generation side but ignoring them in retailers' costs will lead to a systemic underestimate of the overall cost of energy to retailers. This is because contracted generation capacity (which includes both PPAs and vertically integrated assets) typically bid their output in at short-run marginal cost in order to be scheduled, since they are guaranteed a contracted price for their output. Pool prices will appear lower as a result, but only because retailers have already underwritten this output. In this way, the QCA's methodology is measuring the benefit of PPAs to customers, but not the cost.

Origin has estimated the average share of volume and demand in Queensland to come from retailers' own generation and long term power purchase agreements over the period 2007-11, as outlined in Table 2. This is compared with ACIL Tasman's projection for consumption and maximum demand on the Energex Net System Load, on the basis that retailers use own generation and PPAs to hedge mass market load.

	Retailer-owned	PPA	QLD system 2013/14*	<i>Retailer and PPA, %</i>
Energy (GWh)	5,131	1,382	9,635	68%
Demand (MW)	1,549	504	2,620	78%

\* Volume and demand figures based on ACIL Tasman's projection of volume for 2013/14; other figures based on Origin calculations

On the question of transparency, Origin acknowledges that transparent data may be preferable to confidential data, but highlights that in some cases this cannot be achieved without compromising the goal of cost reflective regulated prices. The QCA has acknowledged this in relying upon:

- Confidential information relating to the workings of the model used by ACIL Tasman in the estimation of Pool prices, which is a non-transparent proprietary model based on algorithms and confidential data associated with generator bidding;
- IPART data to calculate the Retail Operating Cost and margin, which in turn relied on confidential data provided to IPART by retailers.

The QCA's consultants are familiar with the operation of PPA contracts in several different contexts and could ably interpret this data, such that third parties can be confident the outcome will be cost-reflective and realistic.

In light of the above, Origin believes that the QCA should reconsider referencing the prices of PPAs in its estimation of wholesale energy cost. The data refers to costs of meeting load in the year for which the QCA is setting prices and reflects the bulk of load rather than the minority. Confidential data must sometimes be used to assess costs accurately and third parties can have confidence in the findings, given the contracts used would be contractual data, not interpretations or estimates.

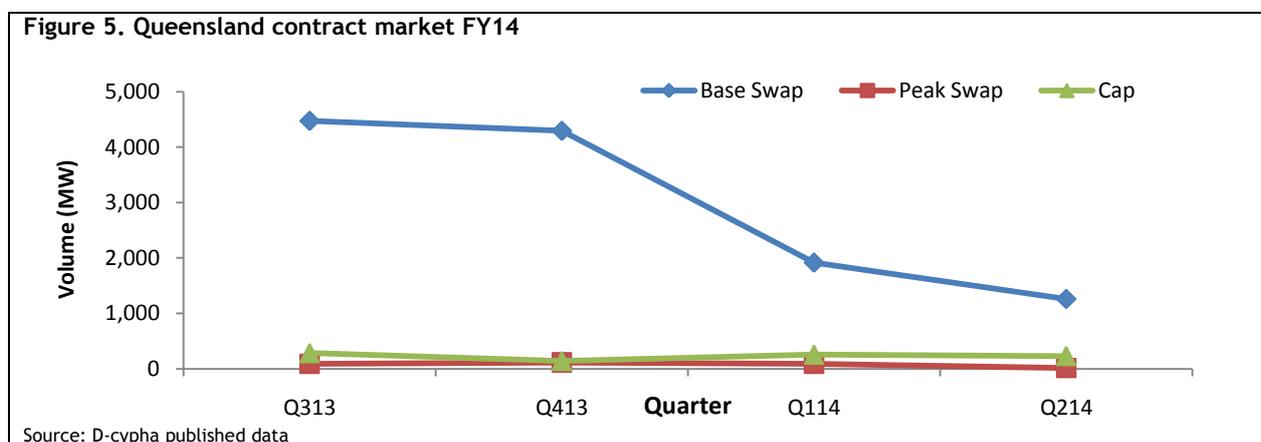
Origin contends that in calculating the wholesale cost of energy, the modelled outcome must be consistent - if PPAs are to be included in the bidding behaviour of generators to

determine the modelled cost of Pool prices, then the cost of PPAs must also be acknowledged as a cost borne by retailers.

### 2.3 Lack of liquidity in Futures markets

As outlined in previous submissions, Origin maintains that there is insufficient liquidity in elements of the Queensland Futures contract market to provide robust and accurate forecasts of wholesale energy costs for 2013-14, reflective of retailer costs.

As the supply side in the generation market responds to lower Pool prices, the inflexion in Pool prices is likely to be rapid and difficult to predict. The limited market for Futures contracts reflects only a portion of available information relating to dynamics in the NEM and so is unlikely to predict this change accurately. QLD contracts on the d-cypha trading platform have traditionally been illiquid for periods beyond the next 6 months and this has remained the case thus far in financial year 2013. In the first and second quarter of 2014 swaps and caps account for 32 and 21 percent of projected QLD energy consumption, respectively.<sup>13</sup>



Origin notes the contention of ACIL Tasman that if retailers had to hedge their entire load exclusively through the Futures market there would be a supply response in relation to the contracts and the price of the contracts would remain basically constant. Origin questions whether additional supply would be built in the absence of long term PPAs in the Australian market context, in light of past experience. Relying solely on short-term contracts would be unsustainable once the supply-demand balance in Queensland had tightened. Thus, as outlined in relation at 2.2 above, ACIL Tasman's approach accounts for the benefit to customers of PPAs (that generation is underwritten, built and bid at close to short-run marginal cost) but not the cost (higher cost of wholesale energy compared to short-run Futures contracts).

In light of the limited liquidity in Futures markets and hence its limited use as a reflection of wholesale costs, Origin believes that the use of Futures contracts should be reinforced with references to prices associated with commercially-negotiated PPAs.

<sup>13</sup> This is based on AEMO projection of total Queensland system demand 2013/14, on the basis that Futures are traded to support both mass market and commercial/industrial customers. We have not taken account of offsetting and financial trades.

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## 2.4 Pool price modelling

Origin has concerns about the methodology adopted by the QCA's consultants to modelling forecast Pool prices in 2013-14.

As outlined at point 2.2, above, the QCA's approach is inconsistent in that it assumes a very high level of contractual coverage for generators, but assumes that retailers rely only on shorter term instruments when assessing hedging costs. Other shortcomings with the approach used to model Pool prices include:

- The model ignores intra-regional network effects, and
- The model is run on an hourly basis, rather than at 5 minute intervals as per the NEM.

### *Intra-regional network effects*

Recent volatility in Pool prices for the Queensland region are to an important extent the result of constraints on intra-regional transmission lines (855 Calvale-Stanwell and 871 Calvale-Wurdong), a situation that is well documented by the Australian Energy Regulator, which was raised by Origin in its FY2013 submission but dismissed by ACIL Tasman. While this constraint will be somewhat reduced by network expansion in the coming year, a variation of the constraint is expected to remain due to limitations and pre-contingent constraints from over-loading the Calvale-Wurdong line. A further constraint will also feature, related to voltage control limitations on transferring generation north across QNI into Queensland from NSW.

The observed price increases are not related to predictable load patterns, nor do they reflect a meaningful change in the supply/demand balance in Queensland, rather they have arisen from a technical opportunity for the supply side to bid in response to intra-regional constraints.

The effects of these dynamics are not captured through ACIL Tasman's model, as it excludes intra-regional constraints, yet these dynamics have been a primary driver of Queensland Pool prices following the change in the structure of Government-owned generation. The result of excluding intra-regional constraints from modelling of the Pool price will be to consistently under-estimate prices.

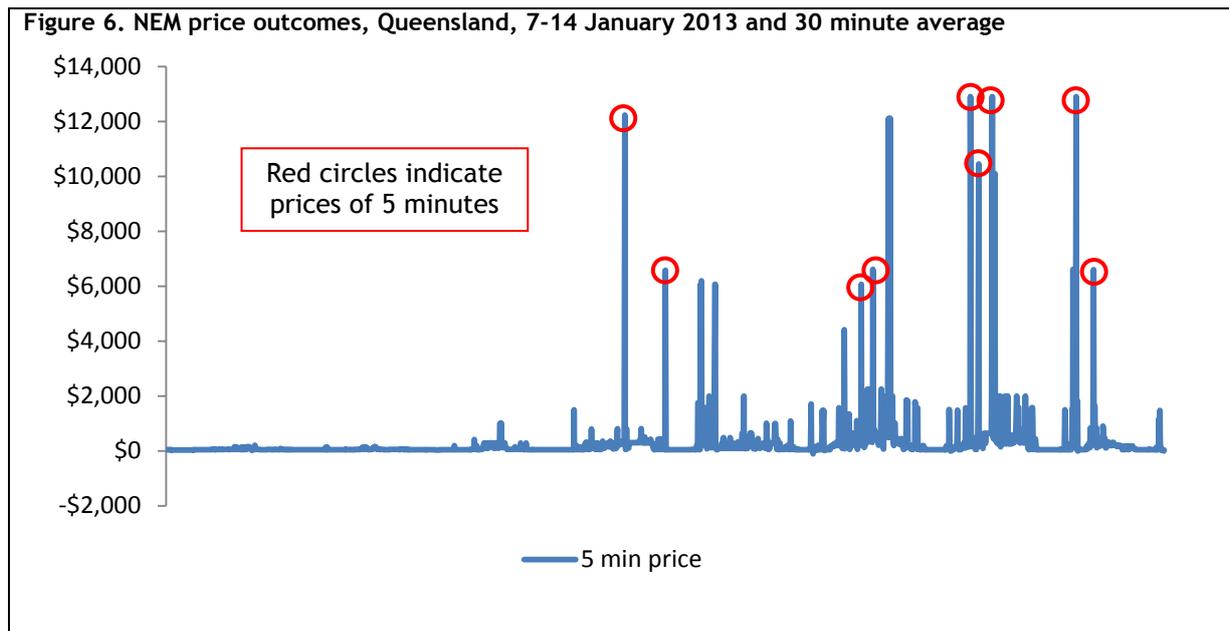
### *Model run on hourly basis*

While the exact details of ACIL Tasman's model are unclear, Origin understands the model is run on an hourly basis, in contrast to the 5 minute intervals which are the basis of NEM bidding. High prices within the NEM are frequently due to generators taking advantage of demand peaks and supply constraints that last for no longer than five minutes. An average based on hourly level data excludes considerable variation around the average at a 5 minute level. Price risk in the NEM is asymmetric around the average, with an upward bias.<sup>14</sup> As a result, the impact of the ignoring 5 minute data will be to reduce Pool prices below the levels most likely to be realised in the next financial year.

Figure 6 (over) shows Queensland NEM data from 7 to 14 January 2013 over 5 minute intervals with a selection of 5 minute events above \$4,000/MWh.

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<sup>14</sup> The largest price risk in the NEM is associated with high prices, with occasional peak Pool prices of \$12,900/MWh against an average level (at a time of day with peak demand) of \$40 to \$50.



Origin proposes that, in the absence of modelling intra-regional constraints and the impact of 5 minute trading intervals, the QCA should review prices against historic levels.

## 2.5 *LRET and SRES*

The binding Renewable Power Percentage and Small-scale Technology Percentage (STP) were published on March 15, at \$10.65 and \$19.70 for calendar 2013, respectively.

Origin also requests that the QCA update the non-binding figures of \$10.39 for the RPP and \$7.69 for the STP for calendar 2014.

## 2.6 *Prudentials*

Origin welcomes the QCA's decision to include an allowance recognising the cost of financial instruments retailers must maintain in order to operate at scale in the NEM.

Origin highlights, however, that this additional allowance does not address our concern that the QCA's reliance on Futures contracts to the exclusion of PPAs and internal generation fails to adequately represent the costs of a large standard retailer meeting the demand of small customers in the Queensland market.

## 2.7 *Ancillary charges, NEM fees*

In its Draft Determination, the QCA has elected to continue its previous approach to estimating ancillary charges and NEM fees for 2013-14 and, on this basis, ACIL Tasman has estimated that ancillary services charges will be \$0.31/MWh in 2013-14 and will use AEMO's 2013-14 fees that will be shortly available.

In Origin’s view, the QCA has made no allowance for the fees levied by AEMO other than basic NEM fees. Additional fees are outlined in Table 3, based on AEMO Draft Budget and Fees for 2013-14, with updates for the Final Decision based on AEMO’s *Final Budget for 2012-13*. This sums to a value of NEM fees (excluding ancillary service charges) of \$0.50/MWh.

**Table 3. AEMO Draft Budget and Fees for 2013-14**

	<i>QCA Draft Decision (\$/MWh)</i>	<i>Proposed update for Final Decision</i>
Market Participant fees	0.40	0.41
FRC fees	N/A	0.05
National Transmission Planner	N/A	0.04
<b>TOTAL</b>	<b>0.40</b>	<b>0.50</b>

Source: AEMO

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### 3. Retail costs, margin and pass through

#### 3.1 Retail margin

Origin notes the QCA's draft decision to maintain a retail margin of 5.7 percent of total cost excluding margin.

Origin supports retail margin being calculated on total costs including network costs, in light of the fact that retailers must meet network payments before they are reimbursed by customers, and so they carry risk associated with these payments, including the risk of non-payment by customers - which is material. (The QCA also highlights that if the margin were a percentage of retail and energy costs only, it would need to be a higher percentage.)

The margin of 5.7 percent is based on the mid-point of three estimation methods adopted by IPART in its bottom-up analysis of retailer costs, and represents the mid-point of the reasonable range recommended by IPART's consultant. Origin maintains that a decision towards the upper end of the range would be more appropriate in the Queensland market, as IPART's estimate was based on the risk profile of a standard NSW retailer under IPART's regulatory approach. While the QCA's decision to permit pass throughs for unforeseen and uncertain events moves the approach somewhat closer to IPART's methodology, the exclusion of LRMC from the wholesale energy calculation presents a fundamental risk not relevant to the NSW context. As a result, Origin recommends adjusting the retailer margin to reflect this.

While acknowledging that risk for a retailer in Queensland may be different from that in NSW, the QCA determines that any adjustment to the margin determined by IPART would be subjective. However, the QCA also notes that "IPART still needed to exercise judgement to select an appropriate retail margin within a relatively wide recommended range". In the same way, Origin proposes that the QCA exercise informed judgement in this respect to select a margin that sits at the top end of the range recommended by IPART's consultant, rather than at the middle of this range. This would be equivalent to 6.5 percent of total cost excluding margin.<sup>15</sup> At the same time, a value towards the top end of the range is concomitant with the risks faced when regulated energy cost allowances change from year to year to reflect short term changes in market dynamics.

#### 3.2 Retail operating costs

Origin has a considerable portion of its Queensland customer base that does not pay its bills on time and this represents a significant cost to the business. Origin notes that the retail operating cost allowance calculated by IPART, and adapted by the QCA, was adjusted downwards, on the basis that NSW standard retailers were permitted to charge a late payment fee on standard contracts.

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<sup>15</sup> The recommend range of IPART's consultant was expressed including margin, as 4.8 to 6.1 percent, with a midpoint of 5.4. This is equivalent to 5.7 of total cost excluding margin, as expressed by the QCA. Origin is proposing a higher margin, at 6.1 percent - the top end of 4.8 to 6.1 percent range (including margin), which expressed as a percentage excluding margin is 6.5 percent.

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The Queensland Electricity Industry Code allows<sup>16</sup> for charging of late fees only where this is stated in the notified prices. As such, Origin believes that the retail operating cost allowance should be adjusted to account for the \$2.30 that was deducted from IPART's ROC to adjust for the charging of late payment fees.

### 3.3 *Pass through and SRES*

Origin welcomes the QCA's decision to allow for pass throughs for unforeseen and uncertain events. The inclusion of this mechanism should reduce customer tariffs over the medium term compared to the base case, since tariffs will only need to increase when relevant events occur, rather than across the board to accommodate generally increased risk.

Origin proposes also that the QCA consider including a pass through mechanism in the first year of the next pricing delegation, in the interests of consistency and in light of the considerable shortfall that has arisen in prior years. Origin notes that IPART is currently considering retailers' applications for such a pass through event that spans regulatory determinations.

#### *Operation of the pass through mechanism*

Origin welcomes the broad scope provided to the regulator to determine events that require a pass through event, as well as recognising two specific events that create significant risk of under-recovery, namely SRES forecasts and discrepancies between forecast and actual network costs. With respect to the latter, Origin supports the rule change proposed by IPART to the AEMC in relation to the more timely release of network prices. For the avoidance of doubt, Origin proposes that the list of events should include (but not be limited to) regulatory events such as:

- Meeting additional obligations related to green energy schemes (existing and future);
- A retailer of last resort event;
- Meeting additional obligations relating to Government-imposed energy hardship policies;
- One-off AEMO charges (such as reserve trader or direction events), and
- New taxation events.

Origin supports the QCA's decision that no specific materiality threshold on the pass through events should be set, as:

- The notion of materiality is subjective and is difficult to define, particularly in isolation of other elements to which retailers and customers are exposed;
- The requirement that the pass through event be of equal incidence on all retailers substantially reduces the scope for pass through events and will tend to limit events to a small number of highly material events only;
- There will be considerable cost associated with processing an application for a pass through event and retailers would not pursue this if the amount in question was only minor. This should operate as an effective incentive to ensure only material differences become the subject of pass through applications.

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<sup>16</sup> Clause 4.9.6

For the reasons stated above, trivial claims are unlikely. The QCA can readily assess the materiality of the event based on the likely impact on retailer revenues and customer bills.

*Allowing for shortfalls in SRES in prior years*

Origin believes the pass through mechanism should operate in all three years of the next price delegation, in order to compensate retailers for SRES shortfalls.

The consideration of SRES costs within the Queensland pricing framework has already resulted in Origin and other retailers not recovering the appropriate SRES costs in the retail electricity tariffs in financial year 2012, a similar shortfall is likely in financial year 2013. These costs amount to tens of millions of dollars. This has occurred because the QCA has determined the SRES allowance based on the non-binding liability estimate for calendar year 2013. In recent years the non-binding liability has materially varied from a liable entity’s actual liability for the relevant calendar year.

Now that the QCA is in a position to recognise the impact of inaccurate SRES forecasts in prior years, Origin proposes that a pass through be permitted in the first year of the next delegation, allowing an additional \$4.70/MWh for SRES to compensate for under-recovery in 2012-13. The calculation to support this value is set out in Table 4, below. This value may need to be adjusted for any difference in volumes between FY13 and FY14.

	2H, CY12	1H, CY13 (F)*
QCA allowance, percent	23.96	7.94
Actual STP, percent	23.96	19.70
Shortfall arising, \$/MWh	0	4.70

\*1H CY13 STP based on binding STP figure released 15 March 2013. Assumes Clearing House certificate price of \$40

To the extent that the QCA is impeded from applying a pass through component in the first year of the next delegation we would propose that it consider requesting an amendment of the terms of reference to accommodate this. Failing this, any adjustment in FY15 must account for under-recoveries in both FY13 and FY14.

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## 4. Transitional measures

### 4.1 *Tariff 11*

The QCA has proposed a three year adjustment period to effect the rebalancing of the fixed and variable components of Tariff 11. Origin acknowledges that the QCA is in a difficult position with respect to these customers and that a shorter transitional period could create significant changes in the bills of smaller customers (of over 20 percent). For this reason Origin does not oppose a three year transition period as proposed.

Origin cautions against delaying the transition for a period of longer than three years, since the current cross-subsidy distorts consumption signals among smaller customers and denies the benefits of cost-reflective tariffs to a significant portion of the Tariff 11 customer base. The cross-subsidy is not necessarily assisting customers least able to pay their bills and is an ineffective means to subsidise customers in any event.