



11 May 2012

Mr Gary Henry  
Queensland Competition Authority  
Level 19  
12 Creek Street  
BRISBANE Queensland 4000

Dear Mr Henry

**Supplementary Submission on Queensland Competition Authority (QCA) Draft Determination: Regulated Retail Electricity Prices 2012-2013 (Draft Determination)**

I refer to Origin's submission on the Draft Determination dated April 2012, Origin's confidential supplementary submission dated 11 May 2012 and our meeting with you on 10 May 2012 at which we discussed the QCA's assessment of energy costs for the purpose of setting the 2012/2013 mass market retail tariff.

Origin has three key areas of concern:

1. The QCA's approach is inconsistent with the prescribed criteria set out in the *Electricity Act 1994* (Qld) (*Electricity Act*) and the terms of reference in the Delegation from the Minister for Energy and Water Utilities (*Delegation*).
2. To the extent the QCA's market-based approach is to be relied upon, it contains some key deficiencies that must be redressed.
3. Some of the calculations regarding "Other Energy Costs" contain errors or omissions and need to be updated accordingly.

**1. Prescribed criteria**

Section 90(5)(a)(i) of the *Electricity Act* and the *Delegation* require the QCA, in making a price determination, to have regard to "the actual costs of making, producing or supplying" electricity to service retail load.

The QCA has, for this purpose, adopted a "market-based (ie hedging) approach" on the basis of recommendations from ACIL in its "Draft methodology for estimating the energy purchase costs for each retail electricity tariff for Queensland in 2012/13" dated November 2011. However, in doing so, Origin considers that the QCA has not correctly interpreted and applied section 90(5)(a)(i) of the *Electricity Act* and the Terms of Reference in the *Delegation* in failing to have regard to the actual costs of supplying electricity.

The market based approach adopted by the QCA in the Draft Determination ignores a key relevant consideration by failing to take account of all segments of that market, in particular, power purchase agreements (PPAs) and physical generation, which represent the majority of costs incurred by retailers to service their mass market retail load.

Electricity traded through the National Electricity Market (NEM) is for short dated supply and can have periods of low liquidity. Retailers with substantial retail loads seek to manage (ie hedge) this liquidity and price risk through:

- in the case of mass market retail load - longer term PPAs and physical generation assets. These sources better match the longer term duration of the retail mass market and provide retailers that have significant retail demand with price and volume certainty.
- in the case of the commercial and industrial segment - the contract market, given that these contracts are for shorter duration electricity supply.

The QCA's reliance on its narrow definition of "market" is thus inappropriate.

Although the percentage can vary between retailers, Origin meets in excess of 80% of its Queensland mass market load using energy from its own generation assets - such as Darling Downs and Mt Stuart and long-term PPAs - like Braemar 1 and Braemar 2. The actual base and cap contract prices from these supply sources are considerably higher than the market-based calculations determined in the QCA's Draft Determination.

The QCA should expand its market-based definition so that it takes into account retailers' actual costs, which include the costs of longer term PPAs and physical generation assets.

## 2. Deficiencies in the current market based methodology

### *Carbon Intensity*

Origin believes that the modelled carbon intensity of 0.87 tCO<sub>2</sub>-e/MWh understates the actual carbon cost that retailers will incur. The costs of the Clean Energy Act will be incurred by retailers pursuant to pass through provisions contained in hedging contracts, which have been executed with market participants (largely generators).

These contracts predominantly incorporate AFMA based pass-through provisions. These hedging instruments reference the actual carbon intensity published by AEMO reflecting the total permits/tax surrendered under the Clean Energy Act, and not a modelled uplift in the pool price.

Since publication began in July 2011, AEMO's Carbon Dioxide Equivalent Intensity Index (CDEII)<sup>1</sup> reports a NEM-average of approximately 0.92 tCO<sub>2</sub>-e/MWh at the meter, which is approximately 0.95 tCO<sub>2</sub>-e/MWh at the Regional Reference Node. This is well above ACIL's modelled pool uplift intensity of 0.87 tCO<sub>2</sub>-e/MWh, which does not reflect the actual costs that will be incurred by a retailer.

### *Hedge Portfolio*

A retailer typically hedges energy with swap contracts and maximum demand periods with cap products. In practice the cost of these hedge products exceeds the expected

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<sup>1</sup> AEMO: <http://www.aemo.com.au/en/Electricity/Settlements/Carbon-Dioxide-Equivalent-Intensity-Index>.

pool price outcomes in all but occasional extreme years. This is particularly so for cap products where, the premium almost universally exceeds the return. This “contract” premium is commonly understood within in the industry and referenced in work by Frontier Economics.

In practice, one would expect the mean energy cost of the hedged portfolio to be more expensive than the unhedged costs, reflecting the contract premium, and the imperfect match of the hedge portfolio to the pool purchases. This is not the case in ACIL’s modelling, where the mean hedge portfolio cost of \$61.30/MWh, is less than the Price Distribution approach (ie. unhedged) of \$63.97/MWh, using the same pool price simulations. In Origin’s experience, a premium of at least \$5/MWh would be expected yielding the mean hedge portfolio cost in the region of \$69/MWh.

Given the imperfect nature of any hedging profile, this outcome is counter-intuitive in the context of a prudent portfolio and implies the hedge portfolio is substantially long when pool prices are high. While it is difficult to identify the cause of these observations without all of the data, Origin observes that the mean pool price case has 38 hours where the pool price exceeds \$300/MWh, which consistently occurs when the portfolio is long by 400MW on average.

The consequence of this portfolio structure is artificially lowering the modelled hedged costs and must be redressed.

### 3. Errors in calculations for “Other Energy Costs” *Accounting for Energy Losses*

Origin’s April 2011 submission commented that the QCA did not apply an escalation factor to the cost of the Green schemes, NEM fees and ancillary costs. The liabilities of the renewable energy schemes and the NEM-based costs are all accrued and calculated on energy purchases. As such, they need to be escalated by energy losses to reflect the cost through to the customer.

The updated “Other Energy Costs” component would therefore increase by \$1.02/MWh:

$$\begin{aligned} & (\text{Current cost } [\$12.10/\text{MWh}] + \text{Updated NEM fees } [\$0.12/\text{MWh}]) \times (\text{DLF \& TLF}) [7.4\%] \\ & = \$13.12/\text{MWh} \end{aligned}$$

#### *NEM fees*

As stated in previous submissions, Origin supports the methodology the QCA uses to estimate the cost of market fees. It appears, however, that the calculation inadvertently omits three categories which are deemed for recovery from Market Customers.<sup>2</sup> These additional categories include: the National Transmission Planner (NTP), National Smart Metering and the Electricity Consumer Advocacy Panel. As costs allowed to Market Customers, the overall NEM fee calculation should include an additional \$0.06/MWh. Note that the Electricity Consumer Advocacy Panel proportion is unknown at this stage.

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<sup>2</sup> AEMO 2012, *Electricity Draft Budget & Fees 2012-13*, 19 March 2012, p.7. Available: [www.aemo.com.au](http://www.aemo.com.au)

In addition, the NEM participant fee component reported in AEMO's *Electricity Draft Budget and Fees for 2012-13* report is \$0.40/MWh, rather than \$0.34/MWh as reported in the QCA Draft Decision. It is unclear why the fee has been discounted by \$0.06/MWh. The QCA should use the updated figure in its calculation.

The table below sets out a calculation for the NEM fee value that Origin considers the QCA should include in its Final Determination: \$0.52/MWh.

**Table: AEMO Draft Budget and Fees for 2012-13**

	QCA Draft Decision (\$/MWh)	Proposed update for Final Decision (\$/MWh)
Market Participant fees	0.34	0.40
FRC Fees	0.06	0.06
National Transmission Planner (NTP)	N/A	0.04
National Smart Metering	N/A	0.02
<i>Electricity Consumer Advocacy Panel</i>	N/A	TBC
<b>TOTAL</b>	<b>0.40</b>	<b>0.52</b>

Source: AEMO 2012, *Electricity Draft Budget & Fees 2012-13*, 19 March 2012. Available: [www.aemo.com.au](http://www.aemo.com.au)

AEMO's *Electricity Draft Budget and Fees for 2012-13* report is now available on AEMO's website. While the final version is not due to be released until June 2012, the QCA should update its reference to reflect the most up-to-date source.

#### *Small-scale Renewable Energy Scheme*

Due to the timing of the relevant tariff determination and the setting of the Small-scale Technology Percentage (STP) for the SRES, retailers have been exposed to material changes in costs for this scheme. The QCA 2011-2012 tariff determination allowed for an average STP of 11.9%, reflecting 14.8% for July-December 2011 and 9.0% for January-June 2012. However, a retailer's actual costs were much higher as it transpired that the STP for the 2011-12 period was an average of 19.38%, reflecting an STP of 14.8% and 23.96% for calendar years 2011 and 2012 respectively. The actual cost to the retailer therefore was higher across the entire financial year by  $7.48\% \times \$40 = \$2.98/\text{MWh}$  at the regional reference node compared to what was allowed for in the QCA 2011-12 Final Determination.

#### **Further questions**

Please contact me on (02) 9503 5488 or [anthony.lucas@originenergy.com.au](mailto:anthony.lucas@originenergy.com.au) should you have any queries.

Yours sincerely



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