



20 November 2013

Malcolm Gray
Senior Commissioner
Independent Competition and Regulatory Commission
PO Box 161
Civic Square ACT 2608

Dear Senior Commissioner

RE: RETAIL PRICES FOR FRANCHISE ELECTRICITY CUSTOMERS FROM 1 JULY 2014, ISSUES PAPER

Origin appreciates the opportunity to respond to the Independent Competition and Regulatory Commission's (ICRC) Issues paper on setting retail electricity prices in the Australia Capital Territory (ACT) for the year beginning 1 July 2014.

Origin has concerns that although effective competition is a key objective of the ICRC¹ and the removal of price regulation has been agreed by the Council of Australian Governments,² electricity price determinations in the ACT have in the past materially understated the cost to retailers of meeting small customer load in the ACT, with negative impacts on competition in that state and to the detriment of its electricity customers. If the ICRC is to maintain its same approach to setting prices in 2014/2015 then the outcome will be similarly inadequate. Origin urges the ICRC to address this situation, through recognising the higher wholesale costs of any retailer that has own generation or the power purchase agreements (PPA) will have higher actual costs than are reflected through market modelling, as well as through recognising retail operating cost allowances that include the cost of serving and marketing to customers.

1. *Recent developments in retail electricity markets*

Origin notes the ICRC's observation that electricity consumption in the ACT has been falling for some four years and that there has been less volatility in average electricity spot prices in the New South Wales wholesale market. We would highlight that while this has had some positive impact on the cost to retailers of meeting demand in the ACT, this is limited to the extent to which retailers are buying energy on a short term basis. Furthermore, considerable uncertainty remains in the wholesale market and this continues to create additional risk and cost for retailers in generating and procuring electricity across the National Electricity Market (NEM). Uncertainty stems both from the impact of policy, including with respect to the carbon price and the future of various green schemes, as well as from changes in consumption and load shape that have arisen from embedded generation, which mean retailers are recovering their costs over declining volumes.

Origin has considerable doubts about the theoretical and empirical basis for the conclusions drawn by the consultants advising the Essential Services Commission of Victoria (ESC) in its investigation into retailers' margins. The analysis for the report was undertaken and subsequently published without any industry engagement. Following this, the Energy Retailers

¹ Independent Competition and Regulatory Commission Act (1997), s.7(a)

² COAG Energy Reform Implementation Plan, 7 December 2012

Association of Australia (ERAA) commissioned Deloitte³ to review the report and the approach adopted by Sinclair Knight Merz MMA (SKM-MMA) to reach its determinations. Deloitte concluded that the SKM-MMA report:

- Utilised a methodology that was not transparent, nor used by any regulator in Australia;
- Did not reflect recent determinations by other state regulators, which have concluded that retailers operational costs have not been accurately reflected in the past;
- Understated retail discounts and therefore overstated retail margins;
- Conveyed an inaccurate picture of retail operations and the market, and
- Did not look at the full impact of smart meter or green cost.

Origin encourages the ICRC to review the Deloitte report (which is provided as an attachment to this submission) and to consider the conclusions of the SKM-MMA report in this light. We highlight that Victoria has among the highest switching levels in the world and that the market offers a wider variety of products than any other retail electricity market in Australia. Consumer advocates found⁴ that customers in Victoria can make savings in excess of advertised discounts merely by identifying based on their consumption whether they are better on a higher or lower fixed rate relative to the variable rate. Competition has driven these benefits for Victorian customers.

2. ICRC's regulatory approach and pricing model

Weighted average price cap

Origin supports the adoption of a weighted average price cap (WAPC) ahead of setting actual tariffs or capping revenues. A WAPC approach encourages more efficient formulation of cost-reflective prices. It also more closely approximates a fully competitive outcome and so is preferable since an underlying objective of all energy price regulation should be to move the market towards effective competition.

Term of determination

Origin supports a term of determination of two to three years with annual reviews of wholesale costs.

Cost pass-through arrangements

Origin strongly supports a mechanism that allows retailers to pass-through unforeseen and uncertain cost imposts that cannot be determined at the time of setting retail prices. Failing to include robust cost pass-through mechanisms is likely to discourage retailers from market entry and competitive activity in the ACT, since it heightens the risk that retailers could be left unable to recover efficient costs.

In particular it is important that allowance be made for current uncertainty surrounding the cost of carbon and the timing of any repeal of the carbon tax, discussed further below.

Use of an incumbent retailer benchmark and inclusion of customer acquisition and retention allowance

Origin notes the ICRC's preference for the use of an incumbent retailer ahead of a new entrant retailer as its cost benchmark. We question the finding that in trying to assess the costs of an incumbent retailer the ICRC should make no provision for customer acquisition and retention costs. In all jurisdictions where Origin is an incumbent electricity retailer it must use campaigns and discounts in order to win new customers and maintain existing customers - to defend its

³ Energy Retailers Association of Australia/Deloitte, Retail margins in the Victorian retail electricity market, June 2013

⁴ G. Dufty and M. Johnston "The National Energy Market - in a bit of a state? Observations from the Vinnies' Tariff-Tracking Project", September 2012, p.12

customer base against the campaigns of second tier retailers. Origin anticipates that the same applies to the incumbent in the ACT.

Maintaining an allowance for customer acquisition and retention is important not only because this reflects actual costs all retailers incur, but also because this helps to encourage further competition in the jurisdiction. In choosing not to include an allowance for the cost of customer acquisition and retention the ICRC departs from the practice of the two other regulators that continue to regulate prices in the NEM,⁵ as well as from the AEMC's stated objectives for price regulation.⁶ The importance of facilitating further competition is discussed under Retail costs, below.

Long-run marginal cost versus market-based purchase cost

Origin supports the wholesale cost component of regulated retail electricity prices making some reference to the long-run marginal cost (LRMC) of electricity. Most retailers do not serve their mass market customers by buying all their electricity through exchange-traded energy futures - this approach would create too much risk and exposure. Instead, they establish and acquire generation or enter into long-term power purchase agreements (PPAs).

The prevailing contract market conditions will only be one factor impacting on the wholesale energy cost structure built into retailers pricing positions, and the market based methodology adopted is therefore not the appropriate method by which to capture retailer's wholesale energy costs. Furthermore, the method selected for estimating the cost of energy is likely to result in significant adverse long-term impacts such as:

- consumers being exposed to more volatility in prices over time;
- a disincentive to invest in new generation facilities from the point at which fresh investment is required, threatening long term security of supply; and ultimately
- higher electricity prices over time.

By contrast, Origin maintains that an LRMC based methodology is a more appropriate and accurate means of estimating the wholesale energy cost component because:

- it is a forward looking approach that better approximates the actual costs of retailers' purchases through PPAs and of internal generation;
- it is linked to the NEM (as generation investment, along with other factors, influences the prices in the spot and contract market), but it is not wholly dependent on market conditions at a point in time;
- it is an estimate for average wholesale energy costs that has theoretical merit as well as being readily modelled and identifiable; and
- it is far less volatile over time than any market based reference.

An LRMC approach also meets the objectives ICRC has identified for its approach to estimating wholesale energy, namely that the approach be simple, transparent and the results replicable.⁷

The cost of PPAs does not vary with changes in the spot price or the prices of futures contracts. For this reason relying exclusively on the cost of futures as a way to set the wholesale energy allowance is inadequate and does not reflect actual costs incurred. While spot market prices reflect the current supply/demand balance in the NEM payments under long-term PPA arrangements underwrite investments in generating capacity over time. Origin strongly encourages the ICRC to consider including a reference to the LRMC in its assessment of wholesale cost.

As a comparison it is valuable to compare the elements of regulated wholesale energy allowance in NSW and in the ACT for 2013/14. In all cases save for the SRES the ICRC's figures are lower than those calculated by IPART's consultants, even though these figures relate to the same NEM

⁵ Queensland Competition Authority, Final Determination, Regulated Retail Electricity Prices 2013-14, May 2013, p.47; Independent Regulatory and Pricing Tribunal, Review of regulated retail prices and charges for electricity from 1 July 2013 to 30 June 2016, Electricity – Final Report, June 2013, p.110

⁶ AEMC, Advice on best practice retail price methodology - Final Report, 27 September 2013, box 2.2, p.19

⁷ ICRC, Issues paper, Retail prices for franchise electricity customers from 1 July 2014, p.18

jurisdiction (NSW). This discrepancy suggests not only that the ICRC’s approach to energy purchase cost understates the cost of wholesale cost but that the estimate may be understating a number of the subsidiary elements in the wholesale energy cost, by considerable margins in some instances.

While the ICRC includes an allowance for the cost of energy contracting, this does not match the volatility allowance included by IPART of \$1.03/MWh.⁸

Item	NSW*	ACT
Energy purchase cost	79.37	68.99
LRET	5.19	4.35
SRES	4.72	7.16
NEM fees	1.07	0.82
Energy contracting cost	-	0.82

* NSW figure is based on a blend of the three retail franchise areas broadly aligned with size of customer base and is expressed in \$2013/14 based on CPI in 2012/13 of 2.5%

In addition, the Queensland Competition Authority in its determination for 2013/14 recognised that retailers face additional costs associated with prudential requirements flowing from their operations in the wholesale market. Specifically, these costs are required to cover the additional bank guarantees that a retailer has to purchase if it hedged using futures that it would not otherwise require if it hedged through other means such as PPAs or investing in generation. The QCA included an allowance of \$0.585/MWh for prudential capital costs, made up of \$0.278/MWh for AEMO prudentials and \$0.307/MWh for hedge prudentials and Origin recommends that the ICRC adopt a similar allowance.

Cost of carbon

Origin highlights that considerable uncertainty continues to attend the repeal of the carbon tax in 2014 and this uncertainty may persist until after July 1 2014 and the commencement of the ICRC’s next pricing determination. As outlined above Origin thinks it very important that the ICRC’s approach allow retailers to recover any remaining carbon cost impost.

Origin broadly supports the approach to carbon cost proposed by the ICRC, being to adopt forward prices for over-the-counter carbon-exclusive contracts and then, if required, to calculate the carbon impost based on the carbon tax legislation in place and the carbon intensity factor of generation in the relevant jurisdictions. Compared to an approach that relies on the heavily discounted carbon component implicit in futures prices, the ICRC’s approach has several advantages: firstly it allows for carbon to be fully recognised in the event the tax remains in place, and secondly it allows for carbon to be fully excluded in the event repeal is effective. This second advantage is particularly important in light of fresh powers to be accorded the Australia Competition and Consumer Commission to ensure that retailers pass on all savings that arise as a result of carbon repeal. Origin strongly opposes a retrospective application of the carbon tax repeal as this will further complicate the process of passing on savings from the repeal to customers.

Cost of other green schemes

Origin notes the ICRC’s preference for using market-based prices to estimate the cost of meeting the Large-scale renewable energy target (LRET) and the Small-scale renewable energy scheme (SRES). This approach has two important shortcomings, namely:

- A market-based approach is only reliable if the market for the relevant traded instrument is sufficiently liquid in order to reflect actual cost, which is not the case

⁸ A NSW blend of the sub100 MWh volatility allowances for each retail franchise area broadly based on relative market size.

with respect to Large-scale Certificates (LGCs), as recognised by IPART in its determination for prices to apply in financial year 2014⁹;

- It ignores the significant funding for new investment in renewable energy that occurs via longterm power purchase agreements and direct investment, the cost of which not necessarily correlated with the current price of LGCs.

For these two reasons Origin proposes including a LRMC component in the calculation of the cost of meeting the LRET target. A further complication arises due to the impact of carbon uncertainty, being that if carbon repeal becomes effective then the cost of LGCs will rise, but this will not have an impact until after the commencement of the relevant regulatory year. This complexity could best be resolved through using an LRMC model to estimate the cost of meeting the LRET.

Energy contracting costs

Origin strongly supports an allowance for energy contracting costs as proposed by the ICRC, recognising the highly volatile nature of the National Electricity Market and additional uncertainty that has arisen in the last four years about the direction of energy demand and changes in load shape - changes that were not foreseen by the market's own forecasters. However, we note that the current allowance is less than the volatility allowance for by IPART by around 27 percent.

Retail operating costs

Both IPART and the QCA reset their allowance for retailer operational expenditure for the year 2012/13, increasing these by around 33 percent in real terms, as outlined in Table 2 below. The increases adopted by IPART and the QCA reflected the view of their respective consultants that costs for retailers had increased. By contrast, the retail operating cost allowance approved by the ICRC has been kept constant in real terms (or fallen slightly¹⁰) over the same period. This understatement of retailer costs is consistent with the lack of competition in the ACT.

Table 2. Retail operational allowance, \$/MWh; 2012/13 - 2013/14; NSW, QLD & ACT (\$2013/14)

	NSW ¹	QLD ²	ACT ³
2012/13	13.09	18.93	11.51
2013/14	17.35	24.97	11.43

1. Based on \$/customer figures of \$85 and \$112 and average mass market consumption of 6.5 MWh/pa; figures expressed in \$2013/14 terms based on inflation of 2.5% in 2012/13

2. Based on \$/customer figures of \$88.5 and \$116 and average mass market consumption of 4.67 MWh/pa; 2012/13 figure expressed in \$2013/14 terms based on inflation of 2.5% in 2012/13; QLD figure includes an allowance for late fees;

3. 2012/13 figures are reflected in \$2013/14 terms based on inflation of 2.5% in 2012/13 (note ICRC increased the allowance for 2013/14 based on inflation of only 1.76% in its 2013/14 decision, which against CPI increase of 2.5% implies a small reduction in real terms).

Customer acquisition and retention costs

As outlined earlier in this submission Origin does not support the ICRC's decision not to include an allowance for customer acquisition and retention in its build-up of retailer costs. These costs apply to all retailers, including incumbents, and play an important role in moving the ACT towards greater competition. As competition increases so will the costs to the incumbent of its own marketing activities. This in turn will encourage the incumbent to offer discounts and better service offerings in order to maintain its customer base.

The ICRC writes:

⁹ Independent Regulatory and Pricing Tribunal, Review of regulated retail prices and charges for electricity from 1 July 2013 to 30 June 2016, Electricity – Final Report, June 2013, p.77

¹⁰ This depends on how CPI is defined - IPART used 2.8% in 2012/13 and QCA 2.5%, whereas ICRC used 1.76%. We have adopted 2.5% in Table 2 in the interests of consistency.

The first issue relates to the fundamental objective of regulation and whether a headroom allowance is required over and above efficient retail operating costs to promote competition in a regulated market.¹¹

Origin believes all necessary conditions are in place for the ICRC to include a retail allowance that encourages competition in the ACT and that this should be an immediate priority.

The benefits of competition have been established by numerous jurisdictional Australian regulators, as well as by the AEMC, the AER, and are backed up considerable overseas experience. In 2011 the International Energy Agency (IEA) reviewed progress towards deregulation of prices across all its 28 member countries, and found that:

In all cases, removal of price regulation resulted in greater product differentiation and innovation, reflecting new entry and resulting in more choices for consumers. Increased transparency, diversity and innovation in tariffs also can be expected to mitigate the risk of price coordination or tacit collusion in the market.

Regulated prices can significantly delay the timely development of dynamic and innovative retail markets, with significant economic costs for consumers and the potential to substantially reduce effective customer choice and demand response.¹²

A key finding of the IEA research was that the existence of a regulated price *itself* impedes the move to effective competition. In Origin's view this finding supports a retail cost allowance that supports greater competition.

There is also considerable momentum at a national level towards price deregulation. Following deregulation in Victoria and South Australia, Queensland has now announced in principle support for price deregulation by July 2015. The AEMC recently determined that competition is effective in NSW and that pricing regulation should be removed in that state.

In 2011 the AEMC reviewed the effectiveness of competition in the ACT and found that a package of measures was required to encourage further the acceleration of competition. Key among these measures was the removal of the transitional retail price cap on residential customers from 1 July 2012.¹³

Origin also further notes that the AEMC concluded in its review of competition in NSW¹⁴ that in future a NEM-wide review of the effectiveness of competition should be carried out annually. The AEMC noted that "jurisdictions would also be able to request a more in-depth review of their own jurisdiction if the NEM-wide annual review raised issues that warranted further investigation."¹⁵ This will create an opportunity to identify any remaining issues with respect to the ACT's circumstances that need to be addressed to facilitate the move to full price deregulation.

Lastly, the ACT recently adopted the National Energy Customer Framework (NECF), a set of regulatory arrangements specifically designed to protect customers in the context of deregulated prices. Origin notes that regulated prices are an ineffective means to protect vulnerable customers and the NECF has an array of mechanisms that address this need.

In light of all the above factors Origin urges the ICRC to consider creating an allowance to encourage further development of competition in the ACT market.

¹¹ ICRC, *Retail prices for franchise electricity customers from 1 July 2014, Issues paper*, p.24

¹² D.Cooke, *Empowering Customer Choice in Electricity Markets*, International Energy Agency Insights Series, p.29

¹³ AEMC, *Review of the effectiveness of competition in the electricity retail market in the ACT, Stage 2 Report*, March 2011, p.i

¹⁴ AEMC, *Review of Competition in the Retail Electricity and Natural Gas Markets in New South Wales*, 3 October 2013, p.68

¹⁵ Ibid

Retail margin

Origin supports the finding of IPART in relation to customer margin of 5.7 percent applied to all retail and network costs and would recommend the ICRC updating its estimate based on this more recent analysis. Origin notes that this margin should be in addition to an allowance for added competitive activity.

If you have any questions with respect to this submission please contact me on (02) 9503 5674 in the first instance.

Yours sincerely

[SIGNED]

Keith Robertson
Manager Retail Regulatory Policy
Origin

5 July 2013

Mr Neil Howes
Australian Energy Market Commission
PO GPO Box A2449
Sydney South NSW 1235

Dear Mr Howes,

RE: Review of Competition in the Retail Electricity and Natural Gas Markets in New South Wales Draft Report

The Energy Retailers Association of Australia (ERAA) welcomes the opportunity to provide comments on the *Review of Competition in the Retail Electricity and Natural Gas Markets in New South Wales Draft Report* (the Draft Report).

The ERAA represents the organisations providing electricity and gas to almost 10 million Australian households and businesses. Our member organisations are mostly privately owned, vary in size and operate in all areas within the national electricity market (NEM) and are the first point of contact for end use customers of both electricity and gas. Of particular relevance to this review is the ERAA's unique insight into what drives a new entrant (sometimes referred to as a 'second tier') retailer to enter a market and compete for customers. A number of our members do not currently have a significant customer base in NSW but are likely to be attracted to the market if clear direction is set by the Australian Energy Market Commission (AEMC) and NSW Government on phasing out retail price controls.

This submission follows on from our participation in previous stages of this consultation process. The ERAA submitted to the *Review of Competition in the Retail Electricity and Natural Gas Markets in New South Wales Issues Paper*, provided verbal and written evidence to Sapere research group, and attended the public forum on 20 March 2013.

Under the Competition and Consumer Act 2010 (Cth), the ERAA is not permitted to share or discuss information within the Association in relation to prices and the mechanisms for setting prices. The ERAA will focus its input on broader policy issues, referring to the individual submissions of our members for more specific comments, and we recommend that the AEMC has due regard to these submissions.

Assessment of competition

The ERAA supports the findings contained in the Draft Report. We agree with the AEMC's assessment that competition in the NSW retail markets for electricity and gas is effective. The ERAA also supports the draft recommendation by the AEMC to remove price caps for retail electricity and gas in NSW. The strong case for deregulation outlined in the Draft Report should provide the NSW Government with confidence that the removal of price caps is in the long term interest of customers.

Benefits of deregulation

The ERAA has consistently advocated for deregulation of the retail energy market to drive the best outcomes for consumers. Open, competitive energy markets free from distortions



such as retail price regulation naturally encourage prices to be efficient through the development of market offers. Competition in retail energy markets, as in other sectors of the Australian economy, incentivises businesses to improve service, develop products that meet consumer needs and find ways to lower their costs and to pass these savings onto consumers. Price regulation is an oddity in the Australian economy as it does not apply to almost any other contestable good or service such as food, fuel, telecommunications, insurance and housing.

Much of the increase in energy prices over recent years has been due to higher cost factors outside retailers' control. As noted in the Draft Report, price regulation does not operate to protect hardship customers because of the hardship they are facing.¹ Similarly, price regulation cannot protect hardship customers from being disconnected.² Using retail price regulation to artificially suppress retail prices only delays an inevitable price increase in the future and can make increases worse than they otherwise might have been.

In previous submissions, the ERAA has communicated the benefits of deregulated retail energy markets including Victoria. Since price caps were removed in Victoria on 1 January 2009 competition has developed strongly; offering customers more diverse and innovative energy products, and enabling consumers to save on their power bills by shopping around. Since this date there has been a growth in the number of smaller retailers. The Victorian market is the least concentrated in the country with the three incumbent retailers having about 70-75 per cent of the market while a range of new entrant retailers have secured about 25-30 per cent of overall customers.

In 2012 Deloitte undertook research into retail price regulation and competition. This research was supplied by the ERAA to the AEMC, and has been utilised by the AEMC in the Draft Report. In June 2013, the ERAA commissioned Deloitte to undertake a report into deregulated retail energy markets, *Retailer Margins in Victorian Electricity Market*. This was prepared in response to a report commissioned by the Essential Services Commission of Victoria (ESCV) and prepared by Sinclair Knight Merz (SKM) MMA, *Causes of Residential Electricity Bill Increases in Victoria, 2001 to 2012*. *Retailer Margins in Victorian Electricity Market* provides commentary and clarification in response to the approach taken by SKM MMA in their calculation of retailer margins, and is included as **Attachment A** to this submission

A path to removing retail price caps

The ERAA supports the draft recommendation to remove price regulation for all retail energy customers at the same time. As noted in the Draft Report, this approach would remove the potential for distortion between different sections of the market.³

Should price regulation be removed, the ERAA would support the use of market monitoring to inform the government whether there is a need to further investigate the effectiveness of competition. Should the market continue to be sufficiently effective, the benefits of this monitoring may not exceed its cost. To avoid a situation whereby market monitoring is placing an unnecessary cost burden on consumers, the ERAA recommends monitoring is phased out unless it is proven to be of net benefit.

The ERAA does not agree with the proposal for a trigger for re-regulation. Instead, the decision to re-regulate should be informed by the same process and methodology used for this review. The NSW Government will always have an ability to re-regulate the retail energy market should they desire. However if this is based on changes to a specific metric and not a robust and thorough consultation process, this may lead to a decision which is not in the long-term interests of consumers. Such an approach would introduce a risk that may reduce

¹ AEMC (2013), *Review of Competition in the Retail Electricity and Natural Gas Markets in New South Wales Draft Report*, p.98.

² *Ibid*, p. 99.

³ *Ibid*, p. 204

competitive pressures, create uncertainty and discourage new retailers from entering the market.

The ERAA does not believe that monitoring of revenues or margins will be necessary post deregulation, given that other proxies for competition exist and are more reliably measured. Margins are complex to assess and shift frequently due to factors unrelated to retail competition such as changes in wholesale cost. The complexity in estimating retail margins and determining an acceptable range is akin to the work currently required to set regulated prices. This would be an unnecessary cost and given the subjectivity involved add little value to the monitoring of competition.

Customer engagement and protection

The National Energy Customer Framework (NECF) was introduced in NSW on 1 July 2013. The NECF was designed as a customer protection framework in a market with deregulated retail prices and provides additional protections to NSW customers that they did not previously have. As such, the ERAA does not see the need to implement additional consumer protections.

Under the NECF retailers must publish notice of their standing offer prices 10 business days in advance and provide customers with detailed information on prices, terms and conditions at the point of sale. Under the NECF, a retailer is only able to change its standing offer price the price of its standing offer contract once every six months. Retailers also provide information to customers to aid comparison including via their website and energy offer price fact sheets.

In NSW customers have access to a range of price comparison websites including the Australian Energy Regulator's *Energy Made Easy*, and websites run by third party brokers and aggregators. Included as part of the NECF, *Energy Made Easy* allows customers to compare offers between retailers.

Further measures to increase customer engagement

As part of a transition to price deregulation, the ERAA supports the provision of information and engagement programs to enhance customer understanding of the benefits of increased choice of energy products. This is an important step to ensure that customers are aware of the range of offers available, and the ways in which they are protected. However we would be concerned if the development of these programs slows the timely removal of price caps. Any such measures should be announced at the same time as a date for deregulation. These products can be developed and implemented both pre and post the removal of price caps, remembering that already there is significant incentive on retailers to ensure that customers are informed and have easy to understand information on product offerings to ensure customers engage in the market. This approach will provide certainty for customers and improve the effectiveness of information and engagement programs.

The Draft Report states that the AEMC will work with stakeholders to develop an effective set of programs and measures. The ERAA supports this approach, and looks forward to working with the AEMC in this area. Retailers are able to provide valuable input as part of this process as they are the first, sometimes only, point of contact between the energy industry and consumers. The ERAA was an active advocate for the removal of price caps in the Victorian and South Australian markets. The experiences of ERAA members will be important in ensuring a smooth transition to price deregulation in NSW.

Those customers who are currently on market offers are unlikely to be impacted by the removal of retail price regulation. For this customer class, the ERAA does not see the need for a costly information program, as they would already be aware of the benefits of market offers. The ERAA would support the provision of general information targeted at this customer class by government. It is important to not over-complicate messages, or else customers may not engage at the level most appropriate to them.

For customers who are on a regulated offer, there may be a need for more direct communication by retailers. Retailers are best placed to assist these customers to ensure they are able to understand what deregulation means for them, and how they can ensure they are able to select the offer that best suits them.

There may be some customers or customer groups which will require additional assistance. The ERAA supports targeted government information programs for these groups. Tailoring messages to target audiences is an efficient approach to increasing customer engagement.

Should you wish to discuss the details of this submission, please contact me on (02) 8241 1800 and I will be happy to facilitate such discussions with my member companies.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Cameron O'Reilly', written in a cursive style.

Cameron O'Reilly
CEO
Energy Retailers Association of Australia



The collective voice of
electricity and gas retailers



Retail margins in the Victorian retail electricity market

In May 2013, the Essential Services Commission of Victoria (ESCV) released an Analysis of Electricity Prices and Retail Margins which was undertaken by Sinclair Knight Merz (SKM) MMA.

The SKM MMA report focused on electricity prices and retail margin in the Victorian retail electricity market from 2006 until 2012. The report claimed that retailer margins in Victoria had increased significantly over this period.

The analysis for the report was undertaken and subsequently published without any industry engagement. As a result, the Energy Retailers Association of Australia (ERAA) commissioned Deloitte to review the report and the approach adopted by SKM MMA to reach its determinations.

Deloitte has concluded that the SKM MMA report

- Utilised a methodology which was not transparent and is not used by any regulator in Australia
- Does not reflect recent determinations by other state regulators which have concluded that retailers operational costs have not been accurately reflected in the past
- Understates retail discounts and therefore overstates retail margins
- Conveys an inaccurate picture of retail operations and the market
- Does not look at the full impact of smart meter or green costs

In any debate on Australian energy markets, it must be noted that energy reform commenced in the early 1990s, with Victoria leading the way in this competitive process.

From 1 January, 2009 the Victorian Government ceased retail energy price regulation in the State in favour of a regime of price monitoring. Since this time, Victorian prices have not moved out of line with regulated states - in fact Victoria's prices remain competitive against NSW, Qld and SA.

Since that date, international studies show that customer switching rates have never fallen below 25% as a dozen or more retailer's battle for market share. There has also been a growth in the number of smaller retailers. The Victorian market is the least concentrated in the country with the three incumbent retailers having about 20-25 per cent of the market while a range of new entrant retailers have secured about 25-30 per cent of overall customers.

Enclosed are the findings of the report by Deloitte. Should you wish to discuss any aspect of the report, please contact me on 02 8241 1800.

Cameron O'Reilly
CEO
Energy Retailers Association of Australia



Energy Retailers Association of Australia

Retailer Margins in Victorian Electricity Market

FINAL REPORT – 24 June 2013

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Executive summary

Deloitte was engaged by the Energy Retailers Association of Australia (ERAA) to review analysis conducted by SKM MMA¹ and the Essential Services Commission (ESC) on retailer margins in the Victorian electricity market.² This report presents the findings of our review of their published reports.

1. Retail price and revenue assumptions

Deloitte believes that the methodology and data used by SKM MMA to calculate retailer revenues cannot be relied upon to estimate retailer margins, as we consider they overstate the effective retailer revenues. This is because SKM MMA has:

- relied upon an incomplete set of retail tariff offers, which is likely to exclude the more discounted offers which have been increasing with competition, therefore is likely to be overstating revenues;
- failed to account for discounting and other innovation, therefore overstating effective revenues; and
- made an assumption that each retailer recovers an 'average' revenue across all tariff types, therefore failing to account for the fact that more customers would be attracted to the most competitive offers, hence overstating total revenues.

2. Black energy costs

Neither the ESC nor SKM MMA consulted with retailers on the new methodology it developed to calculate black energy costs for this report, which make up approximately half³ of total wholesale supply costs.⁴ In addition, SKM MMA's model and assumptions have not been well explained in its report, failing to achieve the transparency necessary for such a discussion.

As a result, Deloitte has concluded that the model cannot be relied upon to accurately estimate the black energy costs incurred by retailers to supply domestic customers.

In Deloitte's view, the main shortcomings of the SKM MMA model and report are:

- Methodology not well explained
- Cost of self-generation ignored
- Limited detail on risk costs
- Missing wholesale contract data
- Inconsistent with other regulators' approaches to calculating black energy costs
- Simplistic and not well explained approach adopted in developing load shapes.

¹ SKM MMA, *Analysis of Electricity Retail Prices and Retail Margins 2006 – 2012*, 10 May 2013.

² Essential Services Commission, *Retailer Margins in Victoria's Electricity Market - Discussion Paper*, May 2013.

³ SKM MMA defined wholesale supply costs to include all costs incurred by a retailer with the exception of retail operating costs (see SKM MMA, *Analysis of Electricity Retail Prices and Retail Margins 2006 – 2012*, 10 May 2013, p iv). We note that, conventionally, wholesale supply costs have only included the costs of energy procurement from the wholesale electricity market and excluded costs of complying with green schemes, network costs and market charges including ancillary services.

⁴ For example, see the calculations presented in SKM MMA, *Analysis of Electricity Retail Prices and Retail Margins 2006 – 2012*, 10 May 2013 Table E-1 in Appendix E.

3. Network use of system charges

SKM MMA has used the regulated, published network charges in their calculation which is appropriate. However, it is unclear how SKM MMA has treated metering charges stemming from the Victorian Advanced Metering Infrastructure (AMI) rollout.

4. Green certificates, White certificates and Market and Ancillary Charges

By not using the clearing house price of Short Term Contracts (STCs), we believe that SKM MMA has understated the cost to retailers of complying with green schemes in Victoria for FY 2012, by approximately 0.4 c/kWh and consequently overestimating retail margin estimates by approximately 2%.

5. Retail operating costs

SKM MMA has relied on the operating costs determined by the Independent Pricing and Regulatory Tribunal (IPART) for the NSW Standing Offer tariff determinations since 2007. Deloitte considers that this is a reasonable approach. However, we note that in recent years, Victorian retailers have been preparing for the transition to AMI and have incurred significant costs in doing so. These costs are not reflected in IPART's retail cost estimates. Therefore, SKM MMA's retail operating costs for Victorian retailers could be understated.

6. ESC Discussion Paper

The ESC continues to play an important role in the Victorian energy market despite the shift to national regulation of energy and a move to retail price monitoring.

Notwithstanding the shortcomings of the analysis presented in the report, based on the data presented in its Discussion Paper, we believe that the ESC has no proper basis for concluding that there is a trend of increasing retailer margins in Victoria. The table below shows that the average margin across all retailers before and after price deregulation has fallen from 7.27% to 5.35%, while for first tier retailers, the average margin has fallen from 11.3% to 7.6%.

Table 1 Net margins – discounted market offers for customers on single rate tariff

	Net Margin Pre deregulation (%)			Net Margin Post deregulation (%)			
	2006	2007	2008	2009	2010	2011	2012
1st tier retailer	15.20	10.30	8.50	5.30	4.60	7.70	12.80
2nd tier retailer	6.50	6.60	6.80	-1.10	3.80	6.70	11.30
3rd tier retailer	7.30	-0.60	4.80	5.10	0.60	-2.50	9.90
Average	7.27	7.27	7.27	5.35	5.35	5.35	5.35
1st tier average	11.33	11.33	11.33	7.60	7.60	7.60	7.60

Source: Essential Services Commission, *Retailer Margins in Victoria's Electricity Market - Discussion Paper*, May 2013, p. 13.

This analysis demonstrates that interpreting net margin data by drawing a trend based on one or two years is misleading. This is particularly the case due to the key role that retailers play in the National Electricity Market (NEM) of managing wholesale risk and stabilising end customer prices.

7. Conclusion

Given the challenging task of calculating retail margins, it must be highlighted that the ESC did not engage with industry to ensure that the models, data and assumptions used by SKM MMA were reviewed and discussed by key stakeholders.

Deloitte's review of the SKM MMA report has highlighted several shortcomings which indicate the results as reported are unreliable. An informed discussion about the competitiveness of the Australian electricity retail market should be carefully conducted through robust debate and analysis in the wider context of policy reform, particularly deregulation.

1 Introduction

Following a review of the Victorian energy retail markets by the Australian Energy Market Commission (AEMC) in December 2007 which concluded that competition was effective, the Victorian Government ceased regulating retail electricity prices from 1 January 2009.

The AEMC's conclusions were supported by evidence of active participation in the competitive market by Victorian consumers and strong rivalry between retailers. The AEMC relied upon its consultants' and its own analysis of key competition indicators and submissions from stakeholders, as well as independent surveys of customers and retailers.

Since January 2009, the Essential Services Commission of Victoria (ESC) has operated a price monitoring framework, providing general information on standing offers and market offers as published in its annual pricing reports.

In May 2013, ESC released a discussion paper that presented estimates of gross and net retail margins of 1st tier, 2nd tier and 3rd tier retailers supplying electricity to customers in Victoria, for the period FY 2006 to FY 2012. The ESC relied on modelling and analysis conducted by consultants SKM MMA⁵, which it commissioned to calculate trends in Victorian retail margins and compare them to margins in other states of New South Wales and South Australia.

Based on the modelling produced by SKM MMA, the ESC has concluded that overall retailer margins have increased in Victoria since retail price deregulation in 2009. The ESC noted that SKM MMA's analysis presented broad trends and that the results need to be interpreted with caution, stating page 15 of its Discussion Paper:

*“Without more observations over several years, caution must be exercised in interpreting these findings and before making inferences about the degree of competitive pressure in the Victorian retail electricity market”.*⁶

1.1 Report structure

The remainder of the report is structured as follows:

- Chapter 2 presents our assessment of the SKM MMA report, in particular the methodology and data used to calculate gross and net retail margins
- Chapter 3 presents our assessment of the ESC discussion paper and its key findings
- Chapter 4 summarises our key findings.

⁵ SKM MMA, *Analysis of Electricity Retail Prices and Retail Margins 2006 – 2012*, 10 May 2013.

⁶ Essential Services Commission, *Retailer Margins in Victoria's Electricity Market - Discussion Paper*, May 2013.

2 An assessment of the SKM MMA Report

2.1 Summary of SKM MMA's approach

The objective of SKM MMA's analysis is to calculate and present the margins earned by electricity retailers in Victoria, New South Wales and South Australia for the period FY 2006 to FY 2012. In its report retail margins were calculated on both gross and net bases, and segmented retailers into three broad categories:

- 1st tier retailers - Origin Energy, EnergyAustralia and AGL
- 2nd tier retailers – Australian Power and Gas, Lumo Energy, Simply Energy, and Red Energy
- 3rd tier retailers – all other retailers and includes Neighbourhood Energy, Momentum and Dodo.

Gross retail margins were estimated as the difference between Retail Revenue and Wholesale Costs, expressed as a percentage of Wholesale Costs, as presented below:

$$\text{Gross retail margin} = \frac{(\text{Retail Revenue} - \text{Wholesale Costs})}{\text{Wholesale Costs}}$$

Net retail margins were calculated as follows:

$$\text{Net retail margin} = \frac{(\text{Retail Revenue} - \text{Wholesale Costs} - \text{Retail Operating costs})}{(\text{Wholesale Costs} + \text{Retail Operating Costs})}$$

As network costs incurred by retailers vary according to the underlying network tariffs, SKM MMA calculated margins for nine distribution network zones, representing five distribution zones in Victoria, three in New South Wales and one in South Australia.

To cater for the choice of tariff options, SKM MMA calculated retailer revenues and consequently retailer margins for the following three tariff types:

- Single rate – the most common residential tariff, where retail and network tariffs do not vary according to time of day, however do vary by consumption blocks, for example the first 1200kWh/quarter and the remainder of consumption
- Dual rate – where customers have a dedicated hot water/heating supply and pay a lower (or discounted) rate for that dedicated supply
- Time of use – where retail and network tariffs vary with time, with customers paying a higher rate for peak period consumption and a lower rate for off peak consumption.

SKM MMA used this structure to calculate retail revenues based on retail tariffs which were provided to it by the ESC. It generated revenue estimates for each of the nine distribution zones, by tariff types and retail segments. Retail tariffs were based on Standing and Market Offers and, where possible, discounted Market Offers.

2.2 Retail price and revenue assumptions

In order to estimate typical retailer profit margins, establishing the effective prices paid by their customers and therefore estimating the total revenue received is an important first step. However, while the products offered by each retailer may be published, what is actually received under each tariff is significantly more difficult to understand due to the range and increasing complexity of retail products on the market. Deloitte has identified some shortcomings in the approach described in the SKM MMA report, which are discussed in this section.

Our observations on retail product diversity

Products offered by electricity retailers typically fall into two categories:

1. Standing Offers can be seen as a type of benchmark price with regulated terms and conditions, historically offered by Tier 1 providers in each National Electricity Market (NEM) jurisdiction for the provision of energy. With the exception of Victoria and South Australia, Standing Offer prices are set by state government regulators.
2. Market Offers are deregulated, competitive pricing agreements. They are typically characterised as discounted Standing Offer prices, sometimes including non-price incentives to encourage customers to switch retailer.

In Victoria, approximately 25% of residential electricity customers are on Standing Offers, while in other states the proportion is much higher, for example, 80% of customers in the ACT were on Standing Offers in 2010.⁷

Product differentiation and retailer innovation are excellent signs of a competitive market, and accordingly product differentiation is one of the key criteria used by the AEMC to identify whether effective competition is evident in retail electricity markets.⁸ Electricity is a highly homogenous product, and retailers are limited in the extent to which they can change their end products to differentiate themselves from competitors. Instead, retailers tend to focus on differentiating the way in which they serve their customers, such as differentiated product offering, promotions, and incentives on prompt payments or other value propositions. Some examples of different product options offered by electricity retailers include:

- Varying payment options and contract terms - Energy retailers now commonly offer a range of payment options including credit card and direct debit facilities, allowing customers to select the billing alternative that best suits them. Retailers also increasingly offer flexible contract terms, in which electricity tariffs and contract length are varied.
- Non-price benefits – Some retailers are offering non-price incentives to supplement the energy rates they offer to customers. These incentives include magazine subscriptions, football club memberships and credit card loyalty program incentives.
- ‘Green’ energy billing – Many retailers offer contracts with environmentally friendly or renewable energy guarantees for some or all of their supply (for example, GreenPower).

In analysing the impacts of competition on electricity retail markets in 2012, we have previously collected some data on retail products offered in Victoria, NSW and Queensland.⁹

The level and type of discounting varies among retailers, with some including cash back offers, some pay on time discounts, and others simply discounting the tariff rates themselves from the Standing Offer rates. Our study highlighted the variety of retail products on offer across the NEM, which

⁷ AEMC, *Stage 1 Final Report – Review of the effectiveness of competition in the electricity retail market in the ACT*, 24 November 2010.

⁸ AEMC, *Review of the effectiveness of competition in the ACT electricity retail market – Revised Statement of Approach*, December 2009, pp. 1-2.

⁹ Deloitte, *Energy Retailers Association of Australia - Study on electricity retail price regulation and competition in retail markets*, October 2012.

extend beyond what is Gazetted (i.e. provided to and then published by the Victorian Government) or even published by retailers on their websites. This is because in competitive markets, retailers respond to competition and create options and value propositions to existing and new customers. These outcomes, combined with the effect of different network region base prices, means that the customers have a number of products and services (in terms of the c/kWh, Standing Charge and discount, packaged together) and are increasing over time. This makes determining the revenue recovered on each tariff and therefore overall gross revenue extremely difficult.

Missing retail product data

SKM MMA's report states that it was provided with data on Victorian retail tariffs by the ESC, but it noted that:

*"Information was not available for every retailer, every rate type and every year. Where data was missing, retail margins were not calculated for that retailer in that year."*¹⁰

This suggests that SKM MMA has taken a sample of the products on offer in Victoria and other states (probably based on the Gazetted market offers) and made some assumptions about the volume of customers on each of these offers, based on the total number of customers in each state and some high level estimates. In our view the tariff data that was relied on by SKM MMA does not accurately represent the products for which consumers are actually contracted, which impacts on the analysis of retail margins. In particular, it is likely not to pick up the most deeply discounted tariffs, thereby biasing revenues upwards and increasing implied margins.

SKM MMA acknowledged that discounting occurs in retail electricity markets, and stated that its model was set up to calculate both the 'discounted and undiscounted' retail revenue from market offers, and that 'retail margins are reported with and without discount.'¹¹ It is not clear to us why it would be useful to report the 'undiscounted' retail revenue, as the revenue that is recovered by retailers is always net of any discounts owed by customers. 'Undiscounted' revenue overstates the revenue earned by the retailers.

Innovative offers

SKM MMA also acknowledged that retailers offer other incentives beyond percentage discounts to the energy component of bills, such as variations to the contract period or discounts that only apply in the first month. However, SKM MMA did not capture these discounts in its modelling.¹² For our 2012 analysis, we collected data on the incidence and impact of bill discounting and new innovative products offered by retailers. Our analysis highlighted the following range of discounts and effective discounts (i.e. non-price rewards) beyond the standard percentage discount off energy usage charges:

- Prompt payment discounts of between 5% and 15%
- First month free energy
- First six months or year discounted energy
- \$25, \$75, \$100, \$150, \$175 or \$250 credit on accounts or bill rebates
- Magazine subscriptions
- Airline and credit card loyalty program points
- Discounted other products, such as supermarkets, restaurants, hotels
- Monthly cash prize draws
- Tariff freeze promises
- Gift cards.

¹⁰ SKM MMA, *Analysis of Electricity Retail Prices and Retail Margins 2006 – 2012*, 10 May 2013, p. 6.

¹¹ Ibid.

¹² Ibid.

SKM MMA's analysis appears not to have incorporated the impact of any of these effective discounts on retailer revenues. As a result, the analysis of retail margins is likely to be overstated, particularly in competitive markets where offers such as these are most prevalent. For example, a prompt payment discount of 5% on all offers reduces retail net margins (as calculated by SKM MMA) by approximately 6%.¹³

SKM MMA also did not incorporate 'green' retail offers, which are another example of product differentiation in competitive markets. It stated that 'green' products were excluded to ensure that comparisons were made between similar sorts of retail offerings, however noted that such offers would have a higher proportion of green certificates and therefore a higher supply cost, and consequently higher retail prices.¹⁴

In order to exclude 'green' retail offers from the analysis, SKM MMA appears to have made an assumption about how many customers are on 'green' contracts, however this is not clear. By pointing out that 'green' energy contracts are associated with higher retail prices (due to higher underlying costs), SKM MMA is implying that the profit margins on these contracts are in the same proportion to costs as other offers or higher, however, SKM MMA does not highlight this assumption nor justify it.

In practice, different retail offers have different levels of profitability which changes over time with the underlying costs of supply. By excluding 'green' contracts, SKM MMA is failing to paint a complete picture of the profitability of retailers and therefore its conclusions about overall retailer revenues could be misleading.

Assumed revenue per retail product

SKM MMA did note that 'for some retailers, more than one retail package of a particular rate type was on offer in a given financial year. In these instances, the retail revenue calculated represented the average revenue from these packages.'¹⁵ It is unclear how this is done but our interpretation is that SKM MMA assumed that each retailer recovered an 'average' revenue of its tariff products on offer, and did not assume that more customers would have opted for competitive offers, rather that all customers have opted for all tariff offers in equal proportions. This is, in our view, an unlikely scenario, as customers who are seeking a better deal are likely to be informed about the most competitive market offers (which are typically advertised by retailers) and would seek out the best deal possible. Accordingly, assuming an 'average' revenue is likely to overstate total retailer revenue and therefore overstate net margins.

Conclusions on retail revenue calculations

In summary, SKM MMA's analysis of typical retailer revenue has the following shortcomings:

- Incomplete data set on retail tariff offers, which is likely to exclude the more discounted competitive offers which have been increasing in recent years
- Failure to account for discounting and other innovation, therefore overstating effective revenues
- Assumption that each retailer recovers an 'average' revenue across all tariff types, therefore failing to account for the fact that more customers would be attracted to the most competitive offers, which is therefore likely to overstate total revenues.

2.3 Wholesale energy costs

SKM MMA incorporated the following key components into its estimate of wholesale energy costs:

¹³ Deloitte calculation.

¹⁴ SKM MMA, *Analysis of Electricity Retail Prices and Retail Margins 2006 – 2012*, 10 May 2013, p. 6.

¹⁵ *Ibid.*

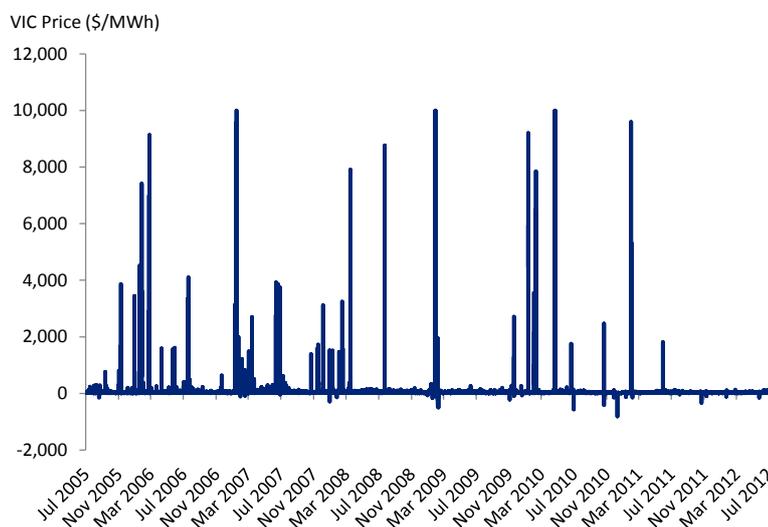
- Black energy – the cost incurred by retailers to procure electricity from the wholesale electricity market, to meet their customers’ demand
- Network use of system charges – the cost incurred by retailers for the transmission and distribution of electricity to their customers
- Green certificates – the costs incurred by retailers in order for them to comply with various State and Commonwealth environmental schemes which create a liability for retailers to purchase and surrender ‘green’ products
- White certificates – the costs incurred by retailers in order for them to comply with various State energy efficiency schemes
- Market and ancillary services – cost incurred by retailers to meet market charges and to pay for ancillary services.

In the remainder of this section, Deloitte presents its analysis of SKM MMA’s methodology for calculating the main cost components of wholesale energy costs, being black energy costs, network use of system charges and green certificates.

2.3.1 Black energy costs

Black energy costs typically represent about 50% of wholesale energy costs.¹⁶ Retailers buy electricity from the wholesale spot market, where prices are set every half hour and can range from -1,000/MWh to \$12,500/MWh (with the market floor and ceiling prices set by the regulator). Price volatility is driven by complex market dynamics of generation supply, customer demand, temperature, hydrology and a range of other factors. The figure below represents the wholesale price in Victoria for the period FY 2006 to FY 2012, highlighting the volatility of the spot market.

Figure 1 Victorian wholesale pool prices



Source: AEMO data

As is evident from the figure above, wholesale pool prices are volatile. Unanticipated price spikes can be caused by several factors, including drought, plant outages or demand spikes. To manage this extreme volatility, retailers enter into forward hedging contracts. In recent years, retailers have also invested in significant generation capacity in an attempt to minimise risk and lock in their financial positions.

¹⁶ For example, see the calculations presented in SKM MMA, *Analysis of Electricity Retail Prices and Retail Margins 2006 – 2012*, 10 May 2013, Table E-1 in Appendix E.

In the NEM, forward hedging contracts are traded on the Sydney Futures Exchange (d-cyphaTrade) and over the counter through brokers (such as NextGen). Over the last few years, the forward market has been impacted by uncertainty on the timing of the introduction and form of carbon pricing. Over the period 2008 to 2011, this uncertainty has resulted in the forward hedging market becoming less liquid and more volatile. Uncertainty is continuing with the prospect of a repeal of the current form of carbon pricing following the September 2013 Federal election, which is impacting liquidity and market dynamics.

Over the last few years, retailers and generators have been trading in this inherently volatile wholesale electricity market, while facing increasingly intense retail competition, demonstrated through high customer churn rates.

Therefore, it is extremely challenging to retrospectively determine the black energy costs faced by retailers in Victoria (and other NEM states) in supplying domestic customers. Any real attempt to identify average black energy costs would require extensive consultation, and should be followed by the development of a transparent model with detailed explanation of methodology and assumptions. It is important that estimates of black energy costs incorporate sufficient allowances for risk and recognition of the costs associated with not only short term, but longer term investments, as without incorporating such costs the resulting analysis could be misleading.

In Deloitte's view, the SKM MMA model (and subsequent analysis) has failed to achieve these objectives and therefore cannot be relied upon to form a view on the black energy costs incurred by retailers to supply domestic customers. The following sections set out our reasons for this view and provide more detail on our review of SKM MMA's black energy cost estimate.

Methodology not well explained

SKM MMA has not clearly explained the methodology underpinning its wholesale electricity cost model. Several assumptions are discussed, but not supported by detailed calculations or worked examples, for example:

- Developing a hedging strategy resulting in an 80% probability of providing a net settlement in the retailer's favour - This hedging strategy is at the core of SKM MMA's model which then translates into retailers' hedging peak volumes at 120% of average peak period load. This concept is not further explained and it is not clear how the 80% probability was determined, for example, whether it was based on historical analysis and if so what pool price forecasts were used.
- The adoption of 95% hedging for off peak periods is based on generator hedging requirements. SKM MMA has not explained why this assumption is relevant given the analysis is being conducted purely from a retailer's perspective.
- The costs incurred by retailers when the pool price is between \$300/MWh and the hedge contract price is not adequately explained, rather SKM MMA simply asserts that this cost is included in calculating the 80% probability, as per the first point.

In summary, SKM MMA has made several assertions but has not clearly articulated and explained the underlying basis of their model. Furthermore, based on the limited explanations provided in SKM MMA's report, we believe that its model does not capture all the complexities and the risk of procuring electricity from the wholesale pool and contract markets as it does not explicitly model the interaction and the risk of operating in a wholesale pool with peak and off peak hedging contracts.

Deloitte understands the complexities of retrospectively forecasting pool prices and applying them in a wholesale model to calculate historical black energy costs, however it is unclear how SKM MMA has adequately addressed these issues.

Cost of self-generation ignored

SKM MMA's analysis has not included the cost of retailer self-generation, simply stating that the cost of self-generation is reflected in the market value of traded contracts.

Retailers have over time invested significantly in generation, following strategies to avoid recontracting risks, lower credit risk, improve protection from extreme events (such as plant outages and demand spikes) and gain portfolio flexibility. It is for these reasons that we see a trend towards vertical integration in energy-only markets as this provides for a better long term sustainable risk management and investment model. The more retailers invest in self generation, the less relevant the contract market becomes as a predictor of actual black energy costs. Instead, the contract market acts as a medium for trading and settling of imbalances or providing price signals for new investment.

While there are several and contrary views on self-generation costs and their relationship (both in the short and long term) to forward contract and spot prices, we believe that not including the costs of self-generation in the black energy cost estimate means that SKM MMA has not accurately estimated retailer costs, particularly given the extent of vertical integration in Victoria.

Examples of vertical integration in the Victorian electricity market include:

- Loy Yang B and Hazelwood are owned by GDF Suez Australia (Simply Energy being the retailer wholly owned by GDF Suez)
- Loy Yang A is wholly owned by AGL (AGL increased its stake in Loy Yang A to 100% on 29 June 2012)
- Yallourn Power Station is owned by EnergyAustralia
- Mortlake Power Station (completed in August 2012) is owned by Origin Energy.

In NSW, with the exception of Macquarie Generation and Delta Central, most generation capacity is either owned or contracted to large retailers (Origin Energy and EnergyAustralia have long term contracts with Eraring and Delta respectively; EnergyAustralia owns Tallawarra Power Station).

In South Australia, with the exception of Flinders and Northern Power Stations which are owned by Alinta Energy, the rest of the generation assets are owned by major retailers (Torrens Island Power Station owned by AGL, Hallett Power Station owned by EnergyAustralia).

In conclusion, excluding the costs of self-generation and relying solely on the contract market to estimate the costs of black energy is a flaw in SKM MMA's model as it does not reflect how retailers support their load and the consolidation of generation and retail businesses in the NEM.

Inconsistent with other regulatory approaches

Retail prices continue to be regulated in NSW and Queensland. In setting retail prices for small customers, jurisdictional regulators have made estimates of black energy costs. The SKM MMA model is inconsistent with the model adopted by jurisdictional regulators in establishing black energy costs, for example:

- IPART in its Draft Decision for 2013-16 has adopted a price floor which is based on 75% of Long Run Marginal Cost (LRMC)¹⁷ estimates and 25% of market-based energy purchase cost estimates. In calculating the market-based cost of black energy, its consultant Frontier Economics has based its estimates on both contract and pool price forecasts. The interplay of hedging and pool price exposure to minimise energy purchase costs for a given load profile required careful analysis and the development of several pool price forecasts to adequately capture and quantify the cost of risk and exposure in the wholesale market. In addition, the use of LRMC reflects the underlying cost of generation and is therefore given a weight of 75%.
- In the Queensland Competition Authority's (QCA's) Final Determination in May 2012, it adopted a market based approach, based on an ACIL Tasman model which calculated black energy costs using contract market information and pool price forecasts. The model

¹⁷ LRMC in this context represents the cost of building generation capacity to supply a particular load shape that is being priced.

went to great lengths to try and capture the risk and relationship between potential pool price outcomes and load curves.

- In 2010, the Essential Services Commission of South Australia (ESCOSA) adopted an LRMC model to forecast black energy costs, given the lack of liquidity in the contract market. The LRMC model was based on gas based generation for the SA market only.

In calculating black energy costs, the QCA and IPART models were based on market models which used both contract and pool price forecasts. It was through the development of pool price forecasts and the application of forward hedges that the cost of the load curve could be accurately estimated. None of these market models are similar to the one SKM MMA has described.

It is important to note that we consider it may be appropriate for SKM MMA to adopt a different methodology from that applied by regulators, however because it is unique, the approach requires significant explanation and clarification. Further, in our view SKM MMA's approach of not overlaying pool price forecast on contracts means that it may not have appropriately captured wholesale risk and could therefore understate the true black energy costs.

In addition, several jurisdictional regulators have included an estimate of LRMC in calculating black energy costs. LRMC estimates are a proxy for the cost of self-generation and the inclusion of these estimates better reflects the underlying cost structure of the retailers, given significant vertical consolidation.

No detail on risk costs

SKM MMA has not outlined how it has calculated wholesale risk costs – identified as a separate cost item to black energy cost - and how these risk costs relate to the model developed to calculate black energy costs. We assume that the cost of purchasing caps as described in the report relates to risk costs.

Wholesale contract prices

The SKM MMA market model has incorporated contract prices for peak and off peak swaps sourced from NextGen. The hedging model assumes that retailers pre-hedge their position by pre-contracting for future expected sales volume - with 20% of expected sales volume hedged three years in advance, 30% hedged two years in advance and 50% hedged one year in advance. Following this pre hedging strategy, retailers are expected to be fully contracted at the start of the spot year.

It is important to note that retailers (and generators) resort to pre-hedging primarily as a risk management strategy. However we note that there were no futures contracts traded in FY 2008 for FY 2011 and no futures contracts traded in FY 2009 for FY 2012. This implies that retailers were exposed to additional risk, due to the lack of liquidity in the futures market in 2008 and 2009. It is unclear how SKM MMA has incorporated this additional risk in their calculation of black energy costs for FY 2011 and FY 2012.

Assumed load shapes

The load shape used in SKM MMA's analysis has a significant impact on wholesale costs and risk and therefore on forecasting black energy costs. The methodology adopted by SKM MMA to determine the load shape for Victoria and other states is not well explained. For example:

- The determination of the load shape applicable for residential customers in Victoria from the Net System Load Profile (NSLP) is not clearly explained. While we understand that some regression analysis was conducted to remove the peak commercial energy from the NSLP to obtain a better reflection of peak residential usage – the description on the regression model has not been outlined in any detail to enable us to comment on its robustness. In addition the impact of commercial off peak load was discarded, but not enough details were provided in support of this decision.
- It appears that SKM MMA has used the annual actual NSLPs for Victoria for FY 2006 to FY 2012 and applied adjustments on an annual basis as per their regression model. This approach of using actual annual adjusted NSLP data will understate black energy costs as

it does not capture uncertainty surrounding the demand forecasting process. This approach will also understate the demand for those years where residential demand was less peaky due to a mild summer – for example FY 2012. This is because, when retailers are pre hedging their forecast load requirements the load shape incorporates some risk for unanticipated peak events – because the risk of being exposed to the pool without hedges in a high load high price event can result in significant loss. It is unclear if SKM MMA has taken these factors into account in its modelling. In contrast, IPART¹⁸ in setting retail price caps for the period FY 2013 to FY 2016 has relied on its consultant Frontier Economics that developed 5,000 load shapes from historical load shape data and selected a load shape with a 10% probability of exceedence (POE), 50 POE and a 90 POE.

In the absence of reliable load traces for residential customers based on actual interval metered data, an estimation of residential load shapes based on NSLP would contain a significant margin of error, given the historical volatility of residential demand over the period FY 2006 to FY 2012. It is unclear how the SKM MMA's regression model has catered for this risk. In addition, the use of the actual NSLPs for Victoria is inconsistent with practice and will understate black energy costs, particularly in years where peak demand was soft due to a mild summer.

2.3.2 Green costs

Green costs consist of complying with a range of jurisdictional and Commonwealth Government green schemes. For Victoria, SKM MMA has included costs to retailers of complying with the MRET and the LRET, VRET and SRES. We have not checked their calculations for complying with all the green schemes for all the years; rather, we have focused our analysis on complying with the LRET and the SRES green schemes for FY 2012.

LRET and SRES green scheme

In calculating the cost of complying with the Large Scale Renewable Energy Target Scheme (LRET), SKM MMA has assumed that 95% of Large-scale Generation Certificates (LGCs) are sourced from self-generation assets, where costs are based on long run marginal costs (LRMC, or costs of new entry) with only 5% LGCs sourced from the contract market.

In our view, this is a sound approach as it reflects the significant investment made by retailers in developing their own wind farms, coupled with long term contracts between retailers and developers. However, we note that SKM MMA has not adopted the same approach to investment in self-generation assets when calculating black energy costs, which we consider to be a limitation of its overall analysis.

Based on our knowledge of the market, the cost of complying with the LRET scheme in FY 2012 was approximately 0.45 c/kWh. This is based on the price of LGCs of \$50/MWh (based on the LRMC of \$100/MWh and average pool prices of \$50/MWh – noting that the average pool prices have been lower in FY 2012) and the Renewable Power Percentage of 9.15.¹⁹

We note that SKM MMA has assumed a price of \$28.88 for STCs for FY 2012. We note that IPART in its 2011 determination²⁰ assumed a price of \$40, reflecting the clearing house price and the short term mismatch between supply and demand. ESCOSA in its final determination also assumed an STC price of \$40,²¹ given the uncertainty in supply and demand and the set clearing house price.

From the report provided by SKM MMA, it is not clear why it has adopted a much lower price for STCs given the uncertainty in 2011 upon the introduction of the SRES green scheme. Using a \$40

¹⁸ Independent Pricing and Regulatory Tribunal, *Review of regulated retail prices and charges for electricity, From 1 July 2013 to 30 June 2016, Electricity – Final Report*, 17 June 2013, p. 59.

¹⁹ The Renewable Power Percentage is published by the Clean Energy Regulator, annual rates are available here: <http://ret.cleanenergyregulator.gov.au/For-Industry/Liable-Entities/Renewable-Power-Percentage/rpp>

²⁰ Independent Pricing and Regulatory Tribunal, *Changes in regulated electricity retail prices from 1 July 2011 - Final Report*, June 2011.

²¹ Essential Services Commission of South Australia, *Review Of Retail Electricity Standing Contract Price Path Final Inquiry Report & Final Price Determination*, December 2010.

price of STCs, the estimated cost of complying with the SRES green scheme is estimated to be 0.96 c/kWh.

Accordingly, we believe that SKM MMA may have understated the cost to retailers of complying with green schemes in Victoria for FY 2012 by approximately 0.4 c/kWh and consequently overestimating retail margins by 2%.

2.4 Network costs

SKM MMA has used the regulated, published network charges in their calculations. The report is unclear as to the treatment of metering charges stemming from the Victorian AMI rollout. We presume that this is incorporated into the analysis of total retail margins.

2.5 Retail operating costs

To incorporate operating costs into its analysis of retailer margins, SKM MMA has relied on the operating costs determined by IPART for the NSW Standing Offer tariff determinations since 2007. We consider that this is a reasonable approach and note that these determinations were based in part on various cost data provided by national retailers, who also operate in Victoria. We also note that IPART's recent final decision on the 2013 to 2016 retail tariffs has adopted a significantly higher allowance for retail operating costs, but a lower allowance for customer acquisition and retention costs.²² Overall, IPART's final decision on retail operating costs and customer acquisition and retention costs are broadly consistent with its decision for 2010 to 2013.

However, we note that in recent years, Victorian retailers have been preparing for the transition to AMI, which impacts the volume of data transferred into their systems. Significant IT costs have been incurred with the transition to AMI in Victoria, which are not reflected in IPART's retail cost estimates. This trend of increasing underlying costs is likely to continue until Victoria has fully transitioned to AMI.

Retailers incur significant costs in order to manage the time difference between purchasing wholesale energy and receiving payments from customers, as the wholesale market settles on a weekly basis while customer bills are typically paid quarterly. However, in using IPART's operating cost estimates, SKM MMA has not incorporated a working capital allowance.

IPART incorporated a working capital allowance in its determination of profit margins, along with retailer depreciation and amortisation costs. This means that SKM MMA's comparison of net margins across jurisdictions is actually a comparison of margins plus other costs. In its presentation of net margins, SKM MMA does not indicate this fact and is therefore likely to be misleading as to the profit component of retail revenues.

²² Independent Pricing and Regulatory Tribunal, *Review of regulated retail prices and charges for electricity, From 1 July 2013 to 30 June 2016, Electricity – Final Report*, June 2013.

3 An assessment of the ESC Discussion Paper

The ESC released a Discussion Paper which draws on SKM MMA's analysis and makes some additional conclusions. This section summarises our views on the ESC's Discussion Paper.

It is important to highlight that the ESC has caveated its statements in the Discussion Paper by urging readers 'not to attribute a false degree of precision to the results as reported.'²³ However, the ESC also indicated that it believed the results were indicative, interesting and relevant. It is for this reason that we highlight the following concerns with the Discussion Paper.

3.1 Establishing a trend

The ESC's Discussion Paper provides an interpretation of SKM MMA's analysis which is driven by the final two years' of net margin calculations. Indeed, the data presented by the ESC in Table 2.6 shows that the net margins for 1st tier retailers (for customers on single rate tariff) has increased from 4.6% to 12.8%, based on SKM MMA's calculations, which we have discussed in the previous chapters.

However, what the data presented by the ESC actually demonstrates is that the average margins of all retailers (and 1st tier retailers, independently) over the period FY 2009 to FY 2012 are in fact lower than the period preceding deregulation, being FY 2006 to FY 2008. The table below shows that the average margin across all retailers have fallen from 7.27% to 5.35%, while for first tier retailers, the average margin has fallen from 11.33% to 7.6%.

Table 1 Net margins – discounted market offers for customers on single rate tariff

	Net Margin Pre deregulation (%)			Net Margin Post deregulation (%)			
	2006	2007	2008	2009	2010	2011	2012
1st tier retailer	15.20	10.30	8.50	5.30	4.60	7.70	12.80
2nd tier retailer	6.50	6.60	6.80	-1.10	3.80	6.70	11.30
3rd tier retailer	7.30	-0.60	4.80	5.10	0.60	-2.50	9.90
Average	7.27	7.27	7.27	5.35	5.35	5.35	5.35
1st tier average	11.33	11.33	11.33	7.60	7.60	7.60	7.60

Source: Essential Services Commission, *Retailer Margins in Victoria's Electricity Market - Discussion Paper*, May 2013, p. 13.

This analysis demonstrates that interpreting net margin data by drawing a trend based on one or two years is misleading. This is particularly the case due to the key role that retailers play in the NEM of managing wholesale risk and stabilising end customer prices. For this reason, retailers contract with suppliers one or two years in advance and manage the risk of spikes in wholesale prices, liquidity in contract markets and the operational risks associated with significant investments in self-generation. In our view, it is important to conduct a longer term analysis based on reliable modelling data before making any observations.

²³ Essential Services Commission, *Retailer Margins in Victoria's Electricity Market - Discussion Paper*, May 2013, p. 1.

3.2 Transparency and consultation

The ESC has an important, ongoing role to monitor the electricity market in the interests of Victorian consumers.

Given this important role and the general credibility that is associated with the ESC's analysis and views, it must be noted that the ESC did not consult with the industry to seek data to support SKM MMA's analysis in this case. This is particularly so given the challenging nature of the task undertaken by SKM MMA to retrospectively assess net margins in a dynamic and volatile environment.

3.3 Robustness of the analysis

Deloitte's review of the SKM MMA report has highlighted several shortcomings, as we have discussed in the previous chapters. Based on these shortcomings and the comments in the ESC's Discussion Paper, it would appear that there has been limited critical review of the analysis and methodologies adopted by SKM MMA.

While we appreciate the need for informed discussion about the competitiveness of the Victorian and the wider Australian electricity retail market, this should be carefully conducted through robust debate and analysis, in the wider context of policy reform, particularly deregulation.

4 Conclusion

Deloitte has conducted a high level, independent review of SKM MMA's report on retail margins in support of the ERAA's response.

Deloitte acknowledges the inherent difficulties in estimating retail margins due to the considerable difficulties in firstly, estimating retailer revenues given the significant number of retail products, and secondly, retrospectively estimating the costs of supply, given known market outcomes.

SKM MMA has developed a methodology which it has described at a high level in the public report, which has enabled us to identify quite a few shortcomings in their approach. We note again that neither SKM MMA nor the ESC have mentioned any consultation processes which were undertaken to verify their approach, models and data inputs.

Deloitte has identified the following key shortcomings in SKM MMA's approach to estimating retail margins:

1. In calculating effective retailer revenues, it is highly likely that SKM MMA has relied on an incomplete set of retailer offers. In particular, offers which are made to customers seeking a better deal are likely to be missing, due to the way that retailers operate and offer products to Victorian customers. The retailer revenue estimate forms the top line of the margin calculation and therefore any overestimation of revenue directly inflates the calculated margins.
2. The report which explains SKM MMA's analysis and modelling does not adequately reveal the major assumptions and methodology used to estimate retailer costs, in particular black energy costs which constitute 50% of end customer prices. We believe that SKM MMA has implemented a new approach to estimating black energy costs in order to simplify their analysis, which represents a departure from approaches that jurisdictional regulators have applied in regulating retail prices. Given SKM MMA has adopted a new approach, we would have expected detailed discussion and analysis of the methodology, supported by extensive data and modelling outputs.

In any debate about the operation of the retail market, it is important to acknowledge the path to competitive Australian energy markets which commenced in the 1990s. Victoria has led the deregulation of retail electricity markets, with other states now starting to follow through with their commitment made in the Australian Energy Market Agreement in 2004.

The benefits of competitive markets stem from economic efficiency driven by appropriate, informed allocation of resources. The reasons for ensuring retail energy competition is effective are increasing, in particular given the technology and product developments that are on our doorstep. The installation and trialling of smart metering and energy management services around the country is escalating the drive and need for an effective, risk taking, energy retail market.

5 Limitation of our work

This report is prepared solely for the use of The Energy Retailers Association of Australia (ERAA). This report is not intended to and should not be used or relied upon by anyone else and we accept no duty of care to any other person or entity. The report has been prepared for the purpose set out in our engagement letter. You should not refer to or use our name or the advice for any other purpose.