



Information Paper

Review of Electricity Pricing and Tariff Structures

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1. INTRODUCTION

The Premier and Treasurer have directed the Authority to review electricity pricing and tariff structures in Queensland with a view to having a new retail electricity pricing framework in place for 2010-11. A copy of the Ministers' Direction Notice and a letter from the Minister for Mines and Energy regarding this review are available on the Authority's website at www.qca.org.au.

The review is to be conducted in two stages, as follows:

Stage 1 (to be completed by 31 August 2009)

- Part A: Review the BRCI methodology and alternative pricing methodologies that could be considered to effectively reflect the cost of supplying electricity including network costs and accounting for all State and Commonwealth Government environmental obligations.
- Part B: Review existing electricity tariff structures and assess whether current tariffs are fully cost reflective (for south east Queensland consumers), provide appropriate price signals to enable customers to understand and manage their consumption, and facilitate effective retail competition, and whether any tariffs are obsolete.

Stage 2 (to be completed by 30 November 2009)

- Review alternative retail tariff structures which may assist in the long term management of peak electricity demand.

In order to commence stakeholder consultation on Stage 1 of the review, the Authority released a Request for Comments Paper on 26 June 2009.

1.1 Purpose of this Information Paper

The purpose of this Information Paper is to provide additional background information regarding electricity price setting and tariff structures in other Australian jurisdictions in order to assist stakeholders in preparing their submissions to Authority's Stage 1 Request for Comments Paper.

1.2 Review Timetable

The timetable for Stage 1 is set out below.

Timetable: Stage 1 Review of BRCI methodology and existing tariff structures

Task	Timetable
Ministers' Direction Notice received	25 June 2009
Request for Comments Paper released	25 June 2009
Information Paper released	7 July
Submissions in response to Request for Comments Paper due	16 July 2009
Release of Draft Report	Late July/Early August 2009
Submissions in response to Draft Report due	Mid August 2009
Final Report to Government	By Monday 31 August 2009

2. OVERVIEW OF EXISTING REGULATORY FRAMEWORK IN QUEENSLAND

In Queensland, regulated electricity prices are determined by applying a single indexation factor annually to all regulated tariffs using the Benchmark Retail Cost Index (BRCI) methodology. The BRCI approach does not set prices based on an assessment of the efficient cost of supplying electricity, rather, it calculates the annual change in the cost of supplying electricity using a prescribed broad methodology and applies this to the previously existing regulated prices.

Customers who do not accept a market contract for the supply of electricity from a retailer are able to remain on regulated tariffs. Small customers also retain the right to return to a regulated tariff with their current retailer should they wish to do so in the future.

2.1 State of the retail market

Full retail competition commenced in Queensland energy markets on 1 July 2007. As at 30 June 2009, there were 27 licensed retailers, of which 11 were active in the small customer market. There were approximately 1,930,000 small customers in Queensland as at 31 March 2009, of which around 44% were on market contracts.

In the competitive market, electricity retailers are able to offer to supply electricity to all consumers, including those on regulated prices. Consumers taking up such an offer transfer from the regulated price to the market contract price they have accepted from the retailer. However, regulated electricity prices remain an important feature of the Queensland electricity market. In particular, customers who are not offered a market contract, or who choose not to accept an offer, remain on a regulated price. In addition, small consumers who accept a market contract may revert to a non-market contract at the regulated price in the future, subject to any contractual conditions that may apply to their market contract.

In effect, the regulated price sets a ceiling on the basic price that consumers are required to pay. As such, it is important that regulated prices adequately reflect the costs and risks assumed by electricity retailers. For small consumers in the majority of the State (those outside the south-east corner, where there is little or no active competition) the regulated prices are the prices they will be required to pay.

There are currently 20 scheduled tariffs for which regulated prices are set.

2.2 How regulated tariff prices are set

At present, regulated prices are set annually by the Authority under a delegation from the Minister for Mines and Energy and in accordance with the BRCI process outlined in the *Electricity Act 1994* (the Electricity Act) and the *Electricity Regulation 2006* (the Electricity Regulation).

The BRCI process does not involve an assessment by the Authority of the efficient cost of supplying electricity. Rather, it requires the Authority to escalate the regulated tariffs in existence at the commencement of retail competition by the change in the cost of supplying electricity to Queensland customers as defined under the Electricity Act and the Electricity Regulations.

In determining the change in the cost of supplying electricity, the Authority is required to use the methodology prescribed in the legislation to calculate what is termed the Benchmark Retail Cost of supplying electricity by reference to the following cost components:

- (a) the cost of energy;

- (b) network costs;
- (c) retailers' costs (including an appropriate retail margin); and
- (d) other relevant costs.

A more detailed description of the legislative requirements under the BRCI process and how it has been applied by the Authority is contained in the Authority's recent 2009-10 BRCI Final Decision (available at www.qca.org.au).

Cost of Energy

To assess the cost of purchasing energy faced by retailers, the Authority applies a weighted average of:

- (a) an estimate of the long run marginal cost (LRMC) of electricity generation; and
- (b) an estimate of the cost of purchasing electricity in the market to meet the required load for the relevant (future) tariff year.

The LRMC of energy is estimated based on a 'greenfields approach' which assumes that the entire generation system is built anew using the most efficient combination of new plant to meet the nominated load. The approach recognises the interconnection of the Queensland electricity network with the rest of the National Electricity Market (NEM) and includes projected changes in the LRMC of energy over time. In arriving at its estimate of the change in LRMC, the Authority bases input costs on a regression analysis of costs over time.

The purchase cost of energy is estimated based on a combination of contract and spot market energy prices that an efficient retailer could be expected to purchase over a two-year period in order to meet the nominated load.

In establishing the cost of energy component of the BRCI, the Electricity Act also requires the Authority to consider the impact of the 13% gas scheme and the Mandatory Renewable Energy Target (MRET) scheme (under the Renewable Energy (Electricity) Act 2000). These costs have been estimated using publicly available prices for Renewable Electricity Certificates (RECs) and the penalty cost to retailers for not surrendering sufficient Gas Electricity Certificates.

The Authority also includes the cost of NEM participant fees and ancillary services charges paid by retailers in its estimate of the cost of energy.

Network Costs

Retailers recover the charges levied on them by transmission and distribution network service providers by incorporating these charges in the retail tariffs charged to customers.

Transmission costs are the amount that Queensland's transmission entity (Powerlink) charges Queensland's two electricity distributors (Energex and Ergon Energy) for using its transmission network. While Powerlink's Transmission Use of System (TUOS) charges are by far the largest component of transmission costs, there are a number of other transmission-related costs incurred by distributors, including avoided TUOS payments made to embedded generators and payments to other distribution network service providers for (transmission like) network services.

Distribution costs are based on the aggregate annual revenue requirements for both Energex and Ergon Energy set by the economic regulator (currently the Authority but from 1 July 2010 the Australian Energy Regulator (AER)). While the charges levied by Energex and Ergon (and the

rate of change in these) will differ, the BRCI approach applies an average of these in determining annual price increases.

Retail Costs

Retail costs include the cost to retailers of providing a range of services to their customers and include retail operating costs, customer acquisition costs and a retail margin.

The Authority has estimated retail operating costs by escalating a benchmark cost established in 2006-07 (including costs relating to the introduction of retail competition accounted for in 2007-08) to account for inflation and wages growth in the intervening period.

In calculating customer acquisition costs, the Authority has estimated the cost incurred by a retailer to achieve customer transfers and switches, recognising that it costs a retailer more to acquire a new customer than it does to convince an existing customer to transfer to a market contract.

The retail margin has been set at 5% and is the increment above a retailer's total costs that is needed to provide an appropriate return to the retailer given the commercial risks that it faces. The gross retail margin can be defined as the retailer's revenue minus the cost of energy and network costs while the (smaller) net margin is what remains after the retailer's operating costs are subtracted from the gross margin. References in the Queensland legislation to the retail margin refer to the net margin.

The Authority has also been required to ensure that retail headroom in the tariffs remains relatively stable over time. Headroom is not defined in either the Electricity Act or the Electricity Regulations. To date, the Authority has taken the view that, as it is not calculating efficient tariffs but rather indexing existing tariffs, whatever headroom was in the previously existing tariffs must have been maintained if all other sources of cost increase have been accounted for.

2.3 How regulated tariff prices are escalated

As noted earlier, the BRCI process applies a single indexation figure to all notified prices on an annual basis.

3. NEW SOUTH WALES

In New South Wales (NSW), regulated electricity prices are set by the Independent Pricing and Regulatory Tribunal of New South Wales (IPART) for a three year period based on a build-up of network and retail cost components for the three “Standard Retailers” operating in the three distribution areas of the State. In its most recent decision, IPART adopted a weighted average price cap approach to setting regulated prices that allows the Standard Retailers to set their own regulated tariffs but limits the average change in regulated tariffs rather than individual tariffs. Under this approach, actual network costs are passed through while retail cost components (such as energy purchase costs, retail operating costs and retail margin) are based on IPART’s estimate of efficient costs of supplying small retail customers on regulated prices.

Once prices are set for the three year period, IPART also conducts an annual assessment of how its estimate of energy purchase costs have tracked compared to its original forecasts. If the energy purchase cost estimates are found to have deviated from the forecast by more than 10%, the regulated prices for the remaining years are adjusted to reflect the most recent forecast.

3.1 State of the retail market

Full retail competition commenced in NSW on 1 January 2002. Small retail customers consuming less than 160 MWh per annum of electricity have the choice of being supplied under a regulated tariff or can enter into a negotiated contract with their retailer of choice.

There are three distribution areas in NSW and each area has a nominated Standard Retailer – Energy Australia, Country Energy and Integral Energy. The *Electricity Supply Act 1995* (NSW) requires each Standard Retailer to make electricity available on the regulated tariffs and charges set by IPART. As at 31 December 2008, around 66% of small customers remained on a regulated tariff with their Standard Retailer.

To mitigate any financial burden on Standard Retailers from supplying customers on regulated tariffs, the NSW Government introduced the Electricity Tariff Equalisation Fund (ETEF) in 2001. The ETEF is an arrangement that assists Standard Retailers in managing risks associated with purchasing electricity for regulated non-market customers. The participants of the Fund include the NSW State-owned generators and the three Standard Retailers, with NSW Treasury acting in the role of the fund administrator. The arrangement requires the Standard Retailers to pay a sum into the ETEF when the NSW electricity pool price is lower than a specified strike price and Standard Retailers are paid compensation from the ETEF when the pool price exceeds the strike price. This essentially removes some risk incurred by Standard Retailers in purchasing wholesale energy for their regulated customer demand.

3.2 How regulated retail tariffs are set

The *Electricity Supply Act 1995* governs the regulation of retail electricity prices in NSW. The Act does not prescribe how regulated tariffs are to be calculated, but rather allows the relevant Minister under the Act to set the terms of reference for the calculation of regulated tariffs in a direction to IPART.

IPART sets regulated electricity prices for a three-year period. The retail pricing determination currently in force in NSW was made by IPART in June 2007 and set regulated tariffs for the three Standard Retailers from 2007 to 2010. For this determination, the Minister’s terms of reference required IPART to:

- assess the costs of a hypothetical retailer, including the electricity purchase costs for the regulated load in each Standard Retailer's supply district and the retail costs and retail margin for a mass market new entrant; and
- recognise retailers' hedging, risk management and transaction costs, particularly given that the ETEF will be phased out during the determination period.

The terms of reference also required IPART to focus on ensuring that regulated tariffs were cost reflective (from the perspective of the hypothetical retail business) by the end of the regulatory period, and that they facilitated retail competition.

In determining the three-year price path for its 2007-2010 determination, IPART undertook an "N + R" cost build-up approach to setting regulated tariffs. The "N" value of the regulated tariffs refers to the network cost component (DUOS and TUOS network charges) and the "R" value represents the retailer specific costs such as energy purchase costs, costs associated with environmental obligations, NEM fees, costs relating to network energy losses, retail operating costs, customer acquisition costs and retail margin.

Energy Purchase Cost

In estimating energy purchase costs for its 2007-10 determination, IPART considered a range of possible approaches, including:

- adopting an LRMC estimate;
- a modelling approach based on portfolio theory, whereby a retailer's costs are estimated by attempting to determine the efficient mix of energy purchasing instruments (spot market purchases and other energy purchase contracts); and
- basing its estimates on market data such as d-cypha Trade or data produced by the Australian Financial Markets Association.

IPART adopted an approach based on portfolio theory because it considered that this would provide a more cost-reflective estimate of energy purchase cost than LRMC. IPART was of the view that such an approach best captured the increasing uncertainties confronting retailers when purchasing wholesale energy in the NEM and balanced the trade-offs between costs and risks. IPART was also concerned that the use of market data was more problematic the further into the future prices were being set.

IPART's decision was also based, in part, on the increased risk that retailers obligated to offer regulated tariffs would face as a result of the New South Wales Government's decision to rollback the ETEF within the regulatory period.

Due to uncertainty about future spot and contract electricity prices, IPART also included an annual review mechanism which was restricted to examining electricity purchase costs in each year of the three-year price path. If an annual review found that electricity purchase costs had altered by +/-10% compared with those forecast at the time the price path was determined, the prices for the remaining years of the regulatory period would be adjusted to take that change into account.

The first annual review, undertaken by IPART in early 2008, concluded that electricity purchase costs had not exceeded the +/-10% trigger amount and, therefore, the price path remained unchanged.

In its second annual review (completed in May 2009), IPART concluded that electricity purchase costs had increased by more than 10% for each of the Standard Retailers (14% Energy Australia, 15% Integral Energy and 16% Country Energy). As a result, IPART increased the regulated tariffs for the 2009-10 tariff year of the price path to reflect the revised estimate of energy purchase cost for each Standard Retailer. Given that energy purchase costs comprise up to 45% of total retail electricity costs, the effect of the revision to energy purchase costs was to increase regulated retail tariffs by 6% for Energy Australia and Integral Energy and by 5% for Country Energy.

Network Costs

Under IPART's weighted average price cap methodology, actual network costs, as determined by the AER for distribution and transmission, are adjusted each year and passed directly through to customers via the regulated retail tariffs (regulated tariffs are not uniform across the State).

Retail Costs

IPART's terms of reference required it to consider the retail costs incurred by a 'mass market new entrant' rather than those of the Standard Retailers. IPART accepted that retail costs for a 'mass market new entrant' would include both retail operating costs and costs to acquire new customers. IPART also included a retail margin of 5% in retail costs which, in dollar terms, is not changed through the pricing period regardless of energy purchase cost changes which might result from the annual reviews.

No explicit allowance is made for retail headroom.

3.3 How regulated retail tariffs are escalated

The regulatory framework in NSW provides IPART with the flexibility to determine the form of regulation it can apply to the regulated tariffs. In its 2007-10 determination, Standard Retailers were able to set their own regulated retail electricity tariffs subject to a weighted average price cap which constrains the average level of change in regulated tariffs. Thus, the price cap limits the maximum increase in average regulated tariffs but provides the Standard Retailers with some flexibility to restructure and rebalance tariffs.

A number of other additional regulatory instruments are used by IPART in its determination, including:

- a "threshold price increase test" for the regional Standard Retailer serving the regional distribution network (Country Energy) which requires the retailer to seek IPART approval if it proposes to increase individual tariffs above a threshold level (the annual change in the weighted average price cap allowed by IPART plus an additional 5%). This mechanism was introduced to ensure that increases in individual tariffs significantly above the average increase allowed by the price cap were justified (constraining the retailers' ability to segment the market for reasons other than differences in underlying costs); and
- a cost pass-through mechanism that allows retailers to pass-through material increases or decreases in costs associated with unanticipated regulatory or taxation change events.

4. AUSTRALIAN CAPITAL TERRITORY

In the Australian Capital Territory (ACT), retail electricity prices are set annually by the Independent Competition and Regulatory Commission (ICRC) for customers who remain on a regulated tariff with the incumbent retailer (ActewAGL Retail). The ICRC initially set prices for three years based on a build-up of network and retail cost components for an efficient electricity retailer providing services to regulated customers in the ACT. The ICRC has subsequently moved to an annual price setting approach where retail prices are allowed to move in accordance with changes in an established retail cost index (which includes energy purchase costs, retail operating costs and retail margin) and with actual network costs passed through directly into retail prices.

The ICRC uses the change in costs to establish a weighted average price cap which allows the incumbent retailer to set prices annually for those customers remaining on regulated tariffs within the limits of the change in the price cap.

The ICRC does not include customer acquisition costs or headroom in establishing retail costs nor does it allow for the pass-through of unanticipated costs during the year. As prices are set annually, there is no provision for any within period review of prices.

4.1 State of the retail market

Full retail competition commenced in the ACT on 1 July 2003. However, certain transitional arrangements were put in place to ensure small retail customers consuming less than 100MWh per year were able to remain on a regulated tariff with the one incumbent retailer in the ACT (ActewAGL Retail).

In the ACT, customers on a regulated tariff are referred to as being on a 'transitional franchise tariff' (TFT). The TFT for the incumbent retailer is determined by the ICRC on an annual basis. There are approximately 150,000 small customers in the ACT and, while there are 17 licensed retailers in the ACT, as at 30 June 2008, around 80% of customers remained on a regulated tariffs.

4.2 How regulated retail tariffs are set

The primary legislative instrument for setting the TFT in the ACT is contained in the *Independent Competition and Regulatory Commission Act 1997* (ICRC Act). The ACT regulatory pricing framework does not prescribe how the TFT is to be calculated but imposes a number of considerations or objectives on the ICRC in determining changes in the TFT (effectively a weighted average price cap). In particular, the provisions of section 20 of the ICRC Act provide that a price direction needs to balance a number of conflicting objectives, including the need for:

- reliable supply services of a defined quality;
- efficient delivery of services with incentives to reduce costs;
- participation in the retail electricity sector by allowing financially viable service provision; and
- regard to the social impacts of the tariff levels and general price inflation.

In order to initiate a TFT price direction, the relevant Minister is required to provide a terms of reference to the ICRC. The most recent TFT price direction was given to the ICRC in December 2008 for determining the 2009-10 TFT prices. The ICRC released its final decision on this in June 2009.

Initially, regulated tariffs ACT were set for a three year period from 1 July 2003 to 30 June 2006. The ICRC estimated the economically efficient cost for the incumbent electricity retailer, ActewAGL Retail, to provide retail electricity services to the regulated customer segment.

Subsequently, the ICRC has moved to setting regulated tariffs on an annual basis using a cost index that it has developed which tracks over time the individual cost components incurred by ActewAGL Retail in servicing its TFT customers. Regulated prices are then adjusted to reflect movements in the index. The ICRC's Final Decision for 2009-10 was to allow for an increase in the TFT of 6.42%. Although framed as an escalation of electricity tariffs, because the original tariffs at the start of retail competition were set based on cost reflectivity, current tariffs can be assumed to be cost reflective so long as the calculation methodology was well executed.

Energy Purchase Cost

The ICRC adopts a market-based approach to determine the cost to the incumbent retailer of purchasing energy from the NEM to supply its TFT customers. The ICRC estimates the purchase cost of electricity by using publicly available market data on historical and future electricity prices combined and a range of assumptions aimed at mimicking the purchasing activities of an efficient electricity retailer.

In determining the energy purchase cost, the ICRC also makes a number of assumptions about the load profile of the incumbent retailer's regulated customers and determines a forward purchasing strategy for the incumbent retailer by assessing data from d-cypha Trade on future swap prices and using that information to forecast average peak, shoulder and off-peak electricity prices in the following 12 months. In addition, the ICRC also incorporates an explicit allowance for energy trading and management contracts.

Network Costs

The ICRC determines the network cost component of the TFT by determining the total network revenue for the preceding year (calculated by multiplying the total consumption by network prices) and then dividing it by the total consumption for the preceding year. This results in a dollars per MWh amount which is then passed directly through into retail prices.

Retail Costs

To estimate retail operating costs, the ICRC escalates benchmark costs determined in 2003-04 according to annual movements in CPI, thereby keeping the incumbent retailer's operating cost estimate constant in real terms. The ICRC does not make any allowance for customer acquisition costs in determining retail costs. The ICRC is of the view that the ACT retail market has reached a sufficiently competitive level and that making an explicit allowance for customer acquisition costs would not result in a material increase in the number of active competitors or the level of competition from existing market participants. Rather, the ICRC considered that an allowance for customer acquisition cost would simply increase the TFT prices and only represent a transfer from customers to retailers without compensatory benefits in terms of lower overall prices or the development of alternative services.

The ICRC included a retail margin of 5% in retail costs based on benchmark retail margins adopted in other jurisdictions.

No explicit allowance for retail headroom has been made by the ICRC in its retail pricing determinations to date.

4.3 How regulated retail tariffs are escalated

The TFT applies to a range of regulated tariffs offered by the incumbent retailer. To allow regulated tariffs to be rebalanced towards the efficient cost of providing services, the ICRC adopted a weighted average price cap approach which allows the incumbent retailer to set prices for those customers who remain on regulated tariffs within the approved movement in weighted average prices.

The ICRC also retains the power to review the movement in the individual tariffs proposed by the incumbent retailer.

In its final decision on 2009-10 TFT electricity prices, the ICRC considered a number of cost pass-through events which the incumbent retailer suggested should be recognised up front in the pricing decisions. These included events such as a government directive to trial smart metering, potential network tariff changes and the possibility of increased environmental obligations under the Commonwealth Government's climate change policies (such as the Carbon Pollution Reduction Scheme). However, the ICRC decided not to include any of the proposed events as the TFT pricing period was only for 12 months and the likelihood of any event materialising during the next 12 months was considered very low.

5. VICTORIA

The retail electricity market in Victoria was deregulated from 1 January 2009, leaving retailers free to set electricity prices for all customers.

In the years leading up to deregulation, ‘safety net’ prices were established via an informal agreement between Victoria’s host retailers – AGL, Origin Energy and TRUenergy – and the Victorian Government. These safety net prices were not necessarily set at efficient or cost reflective levels but instead were set at levels which ensured that small consumers retained access to electricity at reasonable prices while also encouraging developments in the competitive market.

The last safety net agreement resulted in the establishment of a four year price path, (from 1 January 2004 to 31 December 2007), which allowed retailers to increase prices within pre-established constraints of approximately 5% each year. A further agreement between the Government and retailers, allowed for a similar increase in prices in 2008.

5.1 State of the retail market

Full retail competition for Victorian electricity customers commenced on 13 January 2002. On 1 January 2009, retail price regulation was removed as competition was considered to be effective in all market segments. The Victorian Essential Service Commission (ESC) continues to regulate certain non-price aspects of the retail electricity sector, such as compliance by licensees with conditions in Codes and guidelines relating to service standards, appropriate market arrangements and conduct. The Victorian Government has also retained a reserve power to re-regulate electricity prices should the market exhibit anti-competitive outcomes in the future.

The new regulatory framework requires electricity retailers to publish widely the prices that they offer. In addition, prices are not allowed to be changed more than once every six months. Deregulation of the Victorian market was made in response to a finding by the Australian Energy Market Commission (AEMC) that the market was effectively competitive and a consequent recommendation that the retail market barriers to competition be removed.

5.2 How regulated retail tariffs were set prior to deregulation

Until 31 December 2000, the ESC had been responsible for regulating prices to all Victorian retail electricity customers in accordance with the provisions of the Victorian Electricity Supply Industry Tariff Order.

Upon expiry of the Tariff Order provisions, the Government introduced transitional customer ‘safety net’ arrangements for the oversight of retail prices until such time as it considered that competition for small customers was effective. The Government established the safety net through the *Electricity Industry Act 2000*.

The safety net was designed to ensure that customers retained access to electricity at reasonable prices and to maintain standards of service in the transition to a competitive market, but did not include any provisions for the establishment of regulated prices. Instead, retailers would propose the prices they intended to charge for each year and the ESC would develop benchmarks against which those proposed prices were assessed.

This year-to-year pricing process continued for a number of years until longer term price paths were agreed via an informal arrangement between Victoria’s host retailers – AGL, Origin

Energy and TRUenergy – and the Victorian Government. The original price path agreement was for the period 1 January 2004 until 31 December 2007 and allowed retailers to vary individual tariffs for standing contracts provided they were within the following constraints:

- customer electricity tariffs were not to increase by more than 5% above the average rise allowed for the relevant retailer in 2004.
- from 2005 to 2007, the average rise allowed was 5 per cent.

The tariffs for 2008 were determined by a subsequent agreement between the Government and retailers.

The rationale for adopting a multi-year price path approach was to provide ongoing certainty in the market for investors, local retailers, new entrants and customers. However, unlike the price-setting of monopoly service providers, the aim was not to provide customers with service at least cost but rather continue the safety net mechanism which protected customers that did not move to a market contract, while also encouraging developments in the competitive market.

Retail price regulation was removed entirely on 1 January 2009.

6. SOUTH AUSTRALIA

In South Australia, full retail competition commenced on 1 January 2003. Regulated electricity prices were retained for small customers who consume less than 160 MWh per year and who choose not to enter into a market contract. Regulated prices are set by the Essential Services Commission of South Australia (ESCOSA) using an overall revenue cap for the declared retailer, AGL SA, for supplying consumers on the regulated tariff rather than setting individual tariffs. The revenue cap allows AGL SA scope to rebalance prices between schedule tariffs within prescribed limits. The cap is set for a minimum of three years. The resulting price path also allows for pass through of costs resulting from changes in taxation, regulation and reserve trader events or NEMMCO directions. The price path also allows for reopening the decision under special circumstances.

ESCOSA limits its regulatory examination to the three categories of retail costs that a retailer is able to influence through its business practices – wholesale electricity costs, retail operating costs and retail margin. All other costs are passed through. Wholesale electricity costs are calculated according to a portfolio model, incorporating swaps, price caps and future contracts, to estimate energy purchase costs over the three year period of the price path. Retail operating costs and margin are calculated by benchmarking.

6.1 State of the retail market

Retail competition commenced in South Australia on 1 January 2003. Regulated prices were retained for small retail customers consuming less than 160 MWh per year and who chose not to enter into a market contract. The South Australian Regulator, the Essential Services Commission of South Australia (ESCOSA), sets an overall revenue cap for the declared retailer, AGL SA, for supplying consumers on the regulated tariff.

South Australia currently has 14 licensed retailers with over half the small residential customers on market contracts.

6.2 How regulated retail tariffs are set

Under the *Electricity Act 1996 (SA)* and *Essential Services Commission Act 2002 (SA)*, ESCOSA determines regulated prices for small customers on AGL SA's standing contract. ESCOSA is required by the Electricity Act to determine regulated prices for a minimum period of three years.

As the prescribed retailer under the *Electricity Act 1996 (SA)*, AGL SA is required to sell electricity to small customers at a standing contract price (the regulated price), subject to standing contract terms and conditions.

ESCOSA's stated objective in setting the regulated retail electricity price is to establish the lowest possible price consistent with:

- the costs that an efficient retailer would be expected to incur in meeting the responsibilities of standing contract supply to small customers in South Australia over the period;
- encouraging the development of competition among retailers for the benefit of consumers;
- encouraging ongoing, efficient investment to meet consumers' long-term requirements; and

- providing an appropriate return for an efficient declared retailer.

In its 2008-10 price determination, ESCOSA used a building block approach to determine a total revenue requirement, including a retail margin, that reflected the efficient costs incurred in supplying electricity. ESCOSA examined the various costs that an efficient retailer would face, as opposed to examining actual costs incurred by AGL SA. ESCOSA examined in detail the three cost components that a retailer is able to influence through its own business skills and practices, namely:

- (a) wholesale electricity costs - determined based on a short term energy purchase cost portfolio approach of swaps, price caps and future contracts,;
- (b) retail operating costs - based on an estimate of the costs that an efficient retailer would be expected to incur in supplying small customers under a standing contract. These were determined by benchmarking with retail operating and customer acquisition costs allowed in other jurisdictions and with reference to the actual operating costs incurred by AGL SA in retailing electricity to standing contract customers; and
- (c) retail margin - based on a combination of benchmarking against margins allowed in other jurisdictions and by conducting a bottom up "return on investment" analysis of retail margins for the standing contract business. ESCOSA provides for a retail margin of 5%.

Under the revenue cap approach, individual tariffs can be set provided overall revenue remains within the cap and subject to a side constraint on individual tariff increases of CPI + 4%.

ESCOSA's 2008-10 determination proposed an initial increase of 12.34% followed by CPI based increments for the remainder of the three year period.

The price path set by ESCOSA applies to those costs that are able to be influenced by a retailer and also allows for the pass-through of network costs in the regulated price. For other costs, ESCOSA provided for cost pass-through provisions to cover events beyond the control of the retailer. Four types of events that were identified, namely:

- (a) a change in taxes affecting only the electricity industry;
- (b) a regulatory reset event, imposing different obligations on AGL SA as a standing contract retailer (including the introduction of a Carbon Pollution Reduction Scheme);
- (c) a retailer of last resort event; and
- (d) a NEMMCO directions event.

ESCOSA also provided that, in special circumstances involving an event of such magnitude as to disturb the fundamental basis of an existing price determination, the regulatory prices could be revisited and a new determination made.

In May each year, AGL SA is required to provide a reconciliation demonstrating that total revenue divided by total consumption was no more than the allowed average retail price cap per megawatt hour and that the charge at any level of consumption for each tariff is no more than CPI plus 4% above the previously existing charge.

6.3 How regulated retail tariffs are escalated

Each year during the regulatory period, regulated tariffs are increased in line with the established price path. Every three years, ESCOSA undertakes another bottom up examination of costs to reset prices and the price path.

7. TASMANIA

The Office of the Tasmanian Economic Regulator (OTTER) sets a revenue cap for a notional customer base of non-market customers in Tasmania, referred to as the Notional Maximum Revenue (NMR). OTTER then approves (annually) a set of tariffs proposed by the sole incumbent distributor/retailer Aurora Energy, where the tariffs must together deliver a total amount of revenue that will not exceed the NMR. There is no fixed review of how actual costs changed compared to the forecasts underpinning the NMR. However, there are a range of options for passing through additional costs that arise. Furthermore, OTTER can reopen its NMR determination if a fundamental basis of the determination has been undermined.

7.1 State of the retail market

Aurora Energy is the sole distributor and incumbent retailer of electricity in Tasmania.

OTTER's latest NMR determination was released in September 2007, and applies from 1 January 2008 to 30 June 2010. At the time OTTER released its determination, full retail competition had not commenced in Tasmania. Only the 60 largest customers in the State had gained limited ability to choose their electricity retailer and retail competition had not been extended to residential customers or business customers consuming less than 4 GWh per annum.

At the same time, OTTER's determination included provisions for the staged introduction of retail competition with a final transition planned for residential customers and other small customers on 1 July 2010, subject to a final decision by the Government.

If and when full retail contestability commences, all Tasmanian customers will have 12 months before they must move to a market contract. After that 12 month period, customers will be unable to remain on a notified tariff.

7.2 How regulated retail tariffs are set

OTTER's revenue cap determination and the approval of regulated electricity tariffs are made in accordance with the *Electricity Supply Industry Act 1995* (Tas) and the *Electricity Supply Industry (Price Control) Regulations 2003* (Tas) ("the Tasmanian legislation"). The legislation allows OTTER to reopen its determination part-way through the regulatory period in limited circumstances where a fundamental basis of the determination has been undermined.

OTTER follows a two stage process to set regulated retail tariffs. First, it makes a periodic (not annual) determination of the maximum amount of allowable revenue for the non-market customer base in Tasmania, known as the NMR. Secondly, on an annual basis it approves a set of tariffs proposed by Aurora Energy, where the tariffs must together deliver a total amount of revenue that will not exceed the NMR.

Since the NMR is calculated to meet the costs of supplying the non-market customer base in Tasmania, OTTER excludes from its consideration the demand and costs associated with supplying any market customers. As further tranches of customers are progressively transitioned to retail contestability, the impact of OTTER's determinations will decrease.

In determining the NMR, OTTER follows a 'building block' approach by taking into account the contributions of various cost components including energy wholesale costs, transmission costs, distribution costs, retail costs and retail margin.

OTTER's determination focuses on calculating the distribution and retail costs. Transmission costs are calculated by the AER and are effectively passed through to consumers, while the energy wholesale costs are fixed by the Tasmanian Government.

The energy wholesale cost component of the NMR is set under Price Control Regulations, which specify a price that OTTER must assume is the price that the retailer will pay for its purchases of energy to supply its non-market customers. The Government is able to set prices in this way because the incumbent retailer/distributor Aurora is government-owned. Prices set under the Price Control Regulations are not necessarily cost-reflective, allowing the government to fix a major component of the NMR and absorb any cost differences to satisfy policy objectives.

In setting the NMR, OTTER calculates the costs of supplying non-market customers as if they existed in isolation in order to ensure that there are no cross subsidies between market and non-market customer groups. The incumbent retailer/distributor Aurora is required to provide OTTER with a detailed mapping of the costs attributable to contestable customers in order to enable an appropriate allocation of the costs.

After determining the NMR, OTTER approves (annually) a set of notified tariffs proposed by Aurora that must deliver an amount of revenue that will not exceed the maximum revenue allowed under the NMR (side constraints are imposed on tariff baskets to limit the impact of changes on residential customers).

The Tasmanian legislation states that, once retail contestability is introduced for a class of customers, then regulated tariffs will only apply to those customers in that class for a maximum of 12 months or until the customer enters into a market contract (whichever is sooner for that customer). Customers in Tasmania will have no ability to revert to regulated tariffs once they choose to enter into a market contract

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APPENDIX A

	<i>Queensland</i>	<i>New South Wales</i>	<i>ACT</i>	<i>Victoria</i>	<i>South Australia</i>	<i>Tasmania</i>
Introduction of FRC	2007	2002	2003	2002	2003	Not yet-
Type of Regulation	Standard tariff price	Standard retail suppliers	Standard retail supplier	Free Market (from 1-Jan-2009)	Standard retail supplier	Direct control of incumbent
Retail regulatory framework	All retailers have to offer supply on the regulated tariff rate set by the QCA (under delegation from the Minister).	Three retailers providing regulated tariff rates: Energy Australia supplies Sydney, Central Coast and Hunter Regions; Integral Energy supplies Western Sydney, Blue Mountains, Southern Highlands, Illawarra and Shoal Haven regions; and Country Energy supplies the remainder of NSW.	ActewAGL: must provide the regulated tariff rate to small users not on market contracts.	Prior to deregulation, safety net prices were set by agreement between the Government and the host retailers.	AGL SA must provide the regulated tariff to small users not on market contracts.	Aurora (the State owned retailer and distributor) supplies non-market customers. The small retail customer market is still regulated so most customers have no choice of supplier or alternative terms of supply.
Regulator's price setting power	BRCI: regulated tariff ceiling. Single escalation factor.	Weighted average price cap: retailers set their own tariffs subject to the weighted average price cap.	Weighted average price cap: ActewAGL set their own tariffs subject to the weighted average price cap.	Government retained discretion to reinstate regulatory control.	Average revenue cap against which tariffs are assessed on a yearly basis.	Maximum revenue cap with incumbent retailer submitting tariffs for approval on an annual basis.
Pricing Period	1 year	3 years	1 year	Variable prior to deregulation.	3 year	Most recent determination for 2.5 years

	<i>Queensland</i>	<i>New South Wales</i>	<i>ACT</i>	<i>Victoria</i>	<i>South Australia</i>	<i>Tasmania</i>
Re-opening Decision and Cost Pass Throughs	No specific pass through arrangement (however prices set annually).	Regulatory or taxation events with costs equating to 0.25% of total revenue for the last period EPC allowance threshold breach by 10%.	No specific pass through arrangement (however prices set annually)	NA	Cost pass through events: taxation, regulatory reset or reserve trader events, or a AEMO direction. Legislative discretion to re-open: where “special circumstances exist”.	A discretion when a “fundamental basis” of the determination has been undermined.
Pricing Components						
Cost of Energy	50/50 LPMC and EPC	Frontier Economics proprietary 100% EPC model	EPC model using market data	NA	A combination of Allen Consulting Group EPC model and AGL SA hybrid LPMC/EPC model	Determined by Government under Price Control Regulations which the regulator must apply to its price build up
Network Costs	Passed on to retailers	Direct pass through to customers	Direct pass through to customers	NA	Direct pass through to customers	Transmission network costs passed through Less transparent with DUOS costs given there is currently one Government owned vertically integrated distributor/retailer
Retail Costs						
Retail Operating Costs (ROC)	Benchmark cost inflated annually by an average of wage growth and inflation.	Set after considering bottom up calculation and retailers’ actual costs.	Adjusted for CPI	NA	Based largely on ROC allowances granted in other jurisdictions and actual costs of AGL SA. To be reduced at 4.1% per annum	Based on upper end of benchmarks in SA, Vic, NSW with FRC costs stripped out.
Customer acquisition	Yes	Yes	Included within ROC	NA	Included within ROC	NA

	<i>Queensland</i>	<i>New South Wales</i>	<i>ACT</i>	<i>Victoria</i>	<i>South Australia</i>	<i>Tasmania</i>
Costs						
Retail Margin a (including headroom)	5%	5%	5%	NA	5%	3%
Margin Rationale	<p>Mid point of margins accepted in other jurisdictions.</p> <p>Appears high enough to be attracting retailers and churn to market contracts</p>	<p>Based on a mass market new entrant requiring a higher margin than Standard Retailers. The margin should recognise the energy purchase risk and declining periods of customer retention</p>	<p>Margin consistent with other jurisdictions</p>	<p>NA</p>	<p>Is set to recover the full economic cost of operating the efficient standing contract business. Calculated using AGL SA EBITDA.</p>	<p>Lower than other jurisdictions as Aurora is not exposed to the same risks.</p>