

**South Australia**

**2004 Electricity Standing Contract Price**

**Review of ESCOSA Methodology**

**Report to the Premier of South Australia**

**INDEPENDENT PRICING AND REGULATORY TRIBUNAL  
OF NEW SOUTH WALES**



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**March 2004**



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## 1 KEY FINDINGS AND RECOMMENDATIONS

| KEY PROCESS AND METHODOLOGY ISSUES/OPTIONS                 | ESCOSA ACTION  | RECOMMENDATIONS  |
|--|--|--|
| Clarity of processes                                       | Conducted an information review under section 5 and part 5 of the ESC Act 2002 in absence of price change proposal from AGL                            | Legislative amendments or administrative guidance to clarify approach irrespective of whether prices and costs are rising, static or falling   |
| Length and frequency of reviews                            | Undertook three-month 'review' in absence of medium-term price path  | A medium-term price path should be set which may provide for annual adjustments subject to compliance checks   |
| Role of the regulator                                      | Initiated standing contract price review   | Legislative change or administrative guidance should: <ul style="list-style-type: none"> <li>• require medium-term price review to be commenced by submission from utility</li> <li>• ensure ESCOSA can conduct annual compliance checks on price changes within medium-term price path</li> </ul> |
| Stakeholder input  | Sought input, but three-month timetable gave limited time for submissions  | At least six months should be allowed for a medium-term price review, allowing full stakeholder input  |
| Resources and quality control                              | Obtained qualified expert advice. Constrained internal resources limited peer review and quality control   | ESCOSA should: <ul style="list-style-type: none"> <li>• take on additional resources</li> <li>• draw further on ideas and resources of other stakeholders before committing to a position</li> </ul>   |
| Clarity of objectives for regulation of standing contracts | 2003 review addressed issues and objectives. Initial papers in current review assumed objectives without drawing out implications for methodology used | Greater clarity should be brought to the objectives for regulation of standing contracts in future reviews. The use of data/estimates under alternative approaches should also be employed   |
| Building block approach                                    | Adopted, according to common regulatory practice   | Use of building block approach is endorsed as primary approach, supported by benchmarking against competitive prices and margins in SA and elsewhere where possible  |
| Options for assessing wholesale energy costs               | Used notional prudent costs of incumbent, an appropriate methodology   | Despite the difficulties and uncertainties involved, future reviews should estimate actual contract costs attributable to standing contract customers. This provides an alternative estimate of wholesale electricity costs  |
| IES methodology for assessing benchmark incumbent costs    | Used methodology consistent with other applications  | The notional prudent price should be estimated using a similar methodology at the next review but with earlier data verification against actual contract data  |

| KEY PROCESS AND METHODOLOGY ISSUES/OPTIONS | ESCOSA ACTION  | RECOMMENDATIONS  |
|--|--|--|
| Assessing retail costs                     | Used benchmarking approach in line with standard regulatory practice                                   | Actual costs could be used as a cross-check against benchmarks, although the uncertainties and limitations involved should be recognised   |
| Assessing retail margins                   | Used benchmarking approach in line with standard regulatory practice                                   | Benchmarking should provide the reference point but the method of specifying these margins (% vs. \$ amount) should be examined further. Market-specific risks not reflected in the wholesale cost should be identified or excluded from the retail margin |
| Allowance for headroom                     | No specific allowance made but existence of headroom relative to current prices argued to be desirable | Proposed medium-term review should adopt a clear and consistent position on the issue. This is a policy issue on which government may wish to provide direction  |

## 2 SCOPE OF THE REVIEW

### 2.1 Terms of reference

ESCOSA's report on the 2004 Electricity Standing Contract Price was released on 31 December 2003. The Premier of South Australia has asked the Independent Regulatory Tribunal of New South Wales ('IPART') "to undertake a review of the methodology used by the Essential Services Commissioner of SA to consider a determination of 2004 electricity prices."

In commissioning the review, the Premier highlighted that "there remains the need for much greater clarity to ensure the methodology being used to determine final prices provides the fairest outcome available in the circumstances..." The Premier has explicitly not asked the Tribunal to review the level of prices.

The 'electricity standing contract price' is the tariff available from the incumbent to all SA customers with an annual consumption less than 160 MWh pa. Only AGL SA (the default retailer) is obliged to offer supply at this standing contract price (including to those customers who wish to return from a market contract with a retailer). Consumers with an annual consumption less than 160 MWh pa have been able to choose their electricity suppliers since 1 January 2003.

### 2.2 Definition of methodology

'Methodology' as referred to in the terms of reference above, has been defined to include:

- The methodology used for assessing the contract costs for energy sold under standing contracts.
- The methodology for assessing each of the 'building blocks' of the costs of supplying energy for standing contracts, ie wholesale costs + network costs + retail costs + retail margin. This approach has the advantage of covering all aspects of the cost of supplying energy for standing contracts.



- The specification of regulatory objectives and the consideration of alternative approaches to assessing the reasonableness of prices. This includes the matching of the objectives of regulation to the methodology adopted, the options for use of alternatives (eg market reference points) and issues of methodological principle including whether there should be an allowance for 'headroom'.
- The process of the review. This includes consideration of the extent to which ESCOSA reviewed and assessed information provided by its consultants and the utilities.

'Methodology' in the scope of this report does not include

- a review of the merits of the actual decision
- a review of the discretion exercised by ESCOSA in making the decision, or
- the individual values determined in the review.

### 2.3 Review process

IPART has been requested to carry out this review under section 9 of the *Independent Pricing and Regulatory Tribunal Act 1992*. Under this section of the Act, IPART is not required to undertake a formal consultation process. Given the short time frame for this review, a formal submission process has not been undertaken.

Instead, the following process has been undertaken:

- The Tribunal contacted key stakeholders informing them of the scope and process for the review.
- The IPART secretariat undertook a review of ESCOSA's methodology for considering a determination of 2004 electricity standing contract prices based on ESCOSA's published papers on the issue.
- The Chairman of IPART and/or the Project Manager for the review met most key stakeholders in Adelaide on 29-30 January. Submissions were not requested from stakeholders, but they were given the opportunity to provide documentation supporting their views at the meetings.
- The Project Manager and staff subsequently met the other stakeholders and the consultants for ESCOSA and the Energy Consumers' Council (ECC).
- The Tribunal's report was provided to the Premier of SA.

## **3 SUMMARY OF ESCOSA REVIEW AND METHODOLOGY**

### **3.1 Legal and institutional background**

#### **3.1.1 Structure of the market**

South Australia forms part of the National Electricity Market (NEM), an interconnected grid that runs through Queensland, New South Wales, the ACT, Victoria and South Australia. Tasmania will join the NEM on completion of the Basslink electricity transmission cable across Bass Strait.

The National Electricity Market Management Company (NEMMCO) operates a wholesale market for trading electricity between generators and retailers in the NEM. All electricity is pooled and then dispatched to meet demand.

The major generators in SA include NRG Flinders, TXU, Pelican Point Power Limited and the peaking plants of Synergen, AGL and Origin. In addition to local generation, demand in SA is also met by importing electricity from Victoria. This is via the Heywood and Murraylink interconnectors. However, currently capacity constraints exist on these interconnectors, especially in periods of high demand such as during hot weather.

Transmission of electricity in SA is a monopoly of ElectraNet SA which is regulated by the ACCC. Electricity distribution in SA is also a monopoly, owned by ETSA Utilities with prices regulated by ESCOSA.

Up until 1 January 2003, electricity retailing to residential and small business customers was a monopoly of AGL. Following the introduction of full retail contestability on that date, the retail electricity market became subject to competition. Retailers such as TXU, Origin, Power Direct and EnergyAustralia have now entered the market, offering contracts to customers.

#### **3.1.2 Declared electricity retailer**

Section 36AA of the *Electricity Act 1996* provides that a declared electricity retailer is, on request, legally bound to sell electricity to small customers at a standing contract price and under standing contract terms and conditions which are set out in the Electricity Retail Code. AGL SA is the only retailer so declared in SA, and is therefore responsible for supplying every small customer who seeks supply (including those who wish to return from a market contract with a retailer).

Retailers (including the declared retailer) are able to offer market contracts to small customers, where the terms and conditions (apart from a few basic provisions) are able to be set by the retailer. There is no restriction on price for these market contracts, and ESCOSA has no role in setting or monitoring prices for these contracts.

However, section 36AA(6) of the Act specifies that the price for standing contract supply is either the price fixed by the declared electricity retailer by a notice published in the gazette together with a justification for that price (which price can only take effect three months after the date of publication), or a price fixed by ESCOSA by a price determination under section 35A(1)(a) of the Act and under Part 3 of the *Essential Services Commission Act 2002* – which replaces the entity's price.

The electricity retailer's price justification statement can be the subject of an inquiry under Part 7 of the *Essential Services Commission Act 2002*.

### 3.1.3 Full retail contestability (FRC)

In SA, electricity contestability proceeded according to the following table:

| Electricity usage | Contestability date |
|-------------------|---------------------|
| > 4 GWh pa        | 15 November 1998    |
| > 750 MWh pa      | 15 May 1999         |
| > 160 MWh pa      | 1 January 2000      |
| All               | 1 January 2003      |

Thus, from 1 January 2003, all consumers in the South Australian electricity market have been free to choose their retailer. Before this date, contestability was restricted to consumers using more than 160 MWh of electricity per annum.

Prior to the FRC date of 1 January 2003, there had been considerable uncertainty as to the timing of full contestability in the state and even as to whether it would proceed at all. It was against this background of uncertainty that the declared electricity retailer AGL had to contract for its future electricity supply. ESCOSA assumed that AGL contracted its forecast 2004 load in the calendar years 2001 to 2003 (see figure 2 in section 5.4.1). Because of the uncertainty over the timing of FRC, AGL would have experienced an associated uncertainty in its demand forecasts and this would have affected its contracting strategy.

### 3.1.4 Legal powers and responsibilities

ESCOSA is a statutory body, with its powers and functions limited to those granted it by Parliament through the *Essential Services Commission Act 2002*.

The *Essential Services Commission Act 2002* sets out (in section 5) the functions of ESCOSA. Section 5(1)(a) specifies that one such function of ESCOSA is "to regulate prices and perform licensing and other functions under relevant industry regulation acts" - the *Electricity Act 1996* has been declared for this purpose.

When ESCOSA is undertaking a function within its overall responsibility, it must have regard to specific objectives as set out in legislation. Section 6(1) of the *Essential Services Commission Act 2002* sets out the core set of objectives to which ESCOSA must have regard:

- 6(1) In performing the Commission's functions, the Commission must:
  - (a) Have as its primary objective protection of the long-term interests of South Australian consumers with respect to the price, quality and reliability of essential services; and
  - (b) At the same time, have regard to the need to:
    - (i) Promote competitive and fair market conduct; and
    - (ii) Prevent misuse of monopoly or market power; and
    - (iii) Facilitate entry into relevant markets; and

- (iv) Promote economic efficiency; and
- (v) Ensure consumers benefit from competition and efficiency; and
- (vi) Facilitate maintenance of the financial viability of regulated industries and the incentive for long-term investment; and
- (vii) Promote consistency in regulation with other jurisdictions.

ESCOSA is not, however, required only to have regard to these objectives; relevantly, if ESCOSA is making a price determination under Part 3 of the *Essential Services Commission Act 2002*, it must also, under Section 25(4), have regard to:

- (a) The particular circumstances of the regulated industry and the goods and services for which the determination is being made;
- (b) The costs of making, producing or supplying the goods or services;
- (c) The costs of complying with laws or regulatory requirements;
- (d) The return on assets in the regulated industry;
- (e) Any relevant interstate and international benchmarks for prices, costs and return on assets in comparable industries;
- (f) The financial implications of the determination;
- (g) Any factors specified by a relevant industry regulation Act or by regulation under the ESC Act;
- (h) Any other factors that the Commission considers relevant.

ESCOSA must also ensure that the costs of regulation do not exceed the benefits, and that regulatory decisions articulate the trade-off between costs and service standards.

If ESCOSA is conducting an inquiry into the declared retailer's standing contract price justification statement on the referral of the Minister, it must also incorporate in its consideration process any matters specified by the Minister and any specific directions in respect of the conduct of the inquiry set out in terms of reference.

## 3.2 ESCOSA review

### 3.2.1 2003 electricity standing price review process

In September 2002, the South Australian parliament amended the *Electricity Act 1996* to require prescribed retailers to publish standing contract prices and a justification for those prices, at least 90 days prior to their commencement.

Similarly, in establishing the Essential Services Commission, provisions were made for the relevant minister to refer matters for inquiry to the Commission.

Accordingly, on 30 September 2002, AGL SA published in the Advertiser its proposed standing contract price and terms and conditions in accordance with the Commission's Retail Code.

On the same day, the Minister for Energy referred to the Commission for inquiry under part 7 of the *Essential Services Commission Act 2002* the standing contract prices and AGL's justification.

Given the necessity for AGL's standing tariffs to be fixed at the earliest possible opportunity to assist other retailers to prepare for entering the market on 1 January 2003, (the date of introduction of FRC) the Commission had previously released three papers relating to the inquiry.

This process was commenced with an 'Initial Thoughts' paper issued in April 2002. This was followed by Electricity Retail Justification - Discussion Paper published in August 2002. Electricity Retail Price Justification: Final Report was released in September 2002.

In its Final Report and Determination of October 2002, the Commission addressed the submissions it had received in those earlier reports and made a determination of electricity standing prices to take effect from 1 January 2003. The Commission concluded that the prices published by AGL SA were likely to effect a small over-recovery of the prudent costs for retailing electricity to standing contract customers.

Accordingly, the Commission made a price determination under Part 3 of the ESC Act, and the prices fixed by that determination replaced the prices previously published by AGL SA. Overall, this review, which set the initial standing contract prices through a zero-based cost review, lasted eight months.

ESCOSA's 2003 review (for prices in 2003) established a base for the subsequent 2004 review (for prices in 2004). Hence, the current 2004 review is the second such review and cannot be considered in isolation from the 2003 review.

### **3.2.2 Methodology of ESCOSA's current review for setting electricity standing contract prices for 2004**

There have been changes in the National Electricity Market throughout 2003 which have generally seen a fall in the contract prices and spot prices from levels that applied in 2001 and 2002.

Given this, there has been an expectation, for example as stated by the Energy Consumers' Council in its annual report and its submission to the current review process, that there would be a fall in retail prices that would reflect this fall in 2003 wholesale contract prices.

In the absence of a price proposal from AGL on the electricity standing contract for 2004, ESCOSA initiated an 'information review' process.

The approach taken by ESCOSA for setting electricity standing contract prices for 2004 has been based on the experiences of regulators in other jurisdictions, but particularly those in the UK, Victoria and NSW. ESCOSA determined that there were four cost components it would need to consider in determining if the standing contract price was justified (or whether a cost component reflected the costs of a 'prudent' retailer). The four components were:

1. Wholesale electricity cost (including other costs associated with purchasing from the NEM, as well as network losses).

2. Network charges for transmission and distribution.
3. Retailer operating costs.
4. Retailer margin or profit.

This approach followed the approach used by ESCOSA in its 2003 review. ESCOSA commenced the review by focusing on changes in circumstances or cost data since the previous review.

Hence, ESCOSA initially focussed on wholesale costs, where it perceived that the greatest changes since 2002 have occurred. ESCOSA's methodology in this area is discussed in more detail in section 5 - assessment of ESCOSA methodology.

However, it should be noted that while ESCOSA did not initially propose to undertake a full, 'ground-up' review, the scope of the ECC submission reflected expectations for a more extensive review.

### 3.2.3 Timetable for the 2004 review

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|                          |  |
|--------------------------|--|
| August 1 2003            | ESCOSA sends request for proposal to consultants Intelligent Energy Systems (IES)          |
| August 6 2003            | IES submits proposal   |
| August 12 2003           | Consultancy contract signed, initial meeting   |
| August/September 2003    | IES and ESCOSA staff discuss project and modelling   |
| September 9 - October 12 | ESCOSA Chairman absent   |
| September 9              | First draft of IES report given to ESCOSA staff  |
| September 30             | Meeting between IES, AGL and ESCOSA staff  |
| October 1-21             | Continuous discussions with AGL resulting in second draft                                  |
| October 24 2003          | IES final report received  |
| October 28 2003          | ESCOSA releases discussion paper   |
| November 14 2003         | Submissions close on discussion paper  |
| November 2003            | KPMG issue report comparing 2003 retail prices in SA and VIC                               |
| November 27 2003         | ESCOSA ask KPMG to respond to Bardak Ventures submission on price comparison in SA and VIC |
| November 30 2003         | Critique of KPMG report by Bardak Ventures   |
| December 3 2003          | ESCOSA releases issues paper   |
| Mid December 2003        | IES and AGL discussions re AGL contracts and modelling                                     |
| December 15 2003         | Submissions close on issues paper  |
| December 31 2003         | IES submits report   |
| December 31 2003         | ESCOSA releases final report   |

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### 3.2.4 Issues raised by stakeholders

The ECC in its 2002-3 annual report commented that “although the residential retail price has been increasing, the wholesale pool price of electricity has been decreasing. In principle, in a competitive market, the movement of retail prices should mirror the movement in wholesale prices. The Council believes that these trends need to be addressed so that the benefits of lower wholesale costs of electricity are passed on to consumers.”

In their submissions to the 2004 electricity standing contract price review, the electricity retailers submitted that retail margins should increase from the current 5 per cent to as much as 10 per cent.

Business SA was generally supportive of the ESCOSA proposals. They submitted that setting the lowest retail price was not the aim of the regulator and a reasonable headroom should be allowed to encourage competition.

NRG Flinders supported ESCOSA’s general approach and methodology, based on the assumed cost structure of an efficient retailer.

The ECC in its submission to the review process, strongly reiterated its position that as South Australian wholesale contract prices had fallen considerably from the peak levels seen in 2001, this should be reflected in a fall in the standing contract price for 2004.

### 3.2.5 Findings

ESCOSA’s overall finding was that a change in standing contract prices for 2004 was not justified. A net reduction in revenue to AGL as a result of ESCOSA’s decision to approve a pass-through of costs to ETSA Utilities had been offset by a reduced allowance for wholesale energy costs.

## 4 ASSESSMENT OF REGULATORY FRAMEWORK AND ESCOSA PROCESSES

### 4.1 Clarity of processes

Section 36AA(6) of the *Electricity Act 1996* specifies that the price for standing contract supply is the price fixed by the declared electricity retailer by a notice published in the gazette together with a justification for that price (which price can only take effect three months after the date of publication).

Such a legislative framework assumes the process will be initiated by the retailer. In an environment of falling wholesale contract prices for electricity, there is no incentive or obligation on the retailer to reduce its standing contract prices. In the absence of an initiative by the retailer, the framework for the process is unclear. It seems that ESCOSA had four options:

1. Conduct a price determination under section 35A(1)(a) of the Act and under Part 3 of the *Essential Services Commission Act 2002* (ESC Act) – which replaces the entity’s price.
2. Make a formal Inquiry in the meaning of Section 34 of the ESC Act 2002.

3. Use its powers under Section 5 and Part 5 of the ESC Act to conduct an information review to inform itself whether it should hold a formal inquiry and/or a price determination.
4. Take no action and let previous prices stand.

Each of these options has its advantages and disadvantages. ESCOSA chose the information review option (3, above) perceiving that it had the advantage of informing itself on the cost components of the retail price as they might apply for 2004, relative to the levels set out for 2003 supply, without having to conduct a formal determination or review.

ESCOSA's decision not to use its determination or inquiry powers was subject to some criticism. IPART considers that the key issue is the legislative and administrative uncertainty as to the processes to be followed if the utility does not submit a proposal to change prices. ESCOSA has pointed out that the approach adopted did not diminish its information gathering powers and provided a more informal means of proceeding.

However, this approach was not is not without its risks. Based on the information review undertaken, ESCOSA decided that there was no justification for a change in the standing contract price. If it had found the evidence suggested a reduction in prices was warranted, it is not clear what the next steps would have been. On one view, ESCOSA may have been able to move directly to a determination. Against this, it could be argued that this could be challenged and a separate process would be required for a determination.

### **Finding:**

*The process set out in legislation for determining justifiable standing contract prices is not well suited to a position of static or falling costs.*

### **Recommendation:**

*Legislation amendments or administrative guidance should be provided to clarify appropriate process irrespective of whether prices and costs are rising, static or falling.*

## **4.2 Length and frequency of reviews**

The current legislative framework envisages that the review and determination processes should last no longer than three months and such reviews may occur annually or more frequently. There is no specific contemplation of a medium-term price path.

IPART considers that the legislative provision for three months is insufficient for a 'ground-up' review of price with adequate stakeholder consultation. It also considers that annual reviews are excessively costly and burdensome.

While the intention may be to limit the review to factual changes since the previous review, as appears to be the case with ESCOSA's recent review, it is hard to restrict the review to this limited scope if current prices are contentious. This is especially so if there is no medium-term price constraint. ESCOSA's experience with this recent review bears out this problem.



The Tribunal's preferred approach would be for a medium-term price path with the provision for annual adjustments within limits subject to a compliance review by the regulator. The compliance review by the regulator would be a straight-forward process under which the proposed prices would be assessed against the medium-term price path. It would not be costly or require stakeholder input.

In the context of the SA market, a medium-term price path may require a mechanism for handling wholesale market risk. If through the medium-term review, it is decided such a mechanism is required, it should be specified in advance with the objective of ensuring its application is clear.

**Finding:**

*A medium-term price path would increase certainty for customers, AGL and competing retailers and reduce regulatory costs.*

**Recommendation:**

*A medium-term price path should be set which may provide for annual adjustments subject to compliance checks. A period of at least six months should be allowed for the review and determination of the medium-term price path in order to ensure adequate stakeholder input and sufficient time for analysis and deliberation.*

### **4.3 Role of the regulator**

In the absence of a proposal from AGL SA, ESCOSA took a de facto lead in the process for setting electricity standing contract prices for 2004. It did this by estimating a wholesale price that a prudent retailer would incur if it purchased to meet its obligations to supply small customers as it had done in the 2003 review.

The Commission put out its position via a report it had commissioned from consultants IES. IES had been previously engaged by the Commission for the 2003 pricing inquiry. Their remit was to review the input data and determine a wholesale electricity price for supply to small customers during calendar year 2004.

The assumptions and conclusions from IES came under considerable criticism from the ECC, with the result that the process became to be seen to be a conflict between ESCOSA and the ECC.

In the absence of a proposal from AGL, ESCOSA's discussion paper provided information and a position for stakeholders to respond to. The problem with this, is that it takes the regulator out of the role of analysing and weighing up the views of all stakeholders. Instead, it makes the regulator an adversary for some from the commencement of the process.

**Finding:**

*The medium-term price review process should be initiated by a proposal from the utility (possibly preceded by an 'open' issues paper from the regulator). ESCOSA could then take submissions on the utility's proposals from other stakeholders and act as an independent arbiter, rather than being perceived to defend an initial position. Annual price changes would be subject to a compliance review by ESCOSA.*

**Recommendation:**

*Legislative change or administrative guidance should require a medium-term price review to be initiated by a submission from the utility and annual compliance reviews.*

## **4.4 Stakeholder input**

ESCOSA's chosen information review process provided opportunities for stakeholder input. As noted above, the fact that the Commission led the process by publishing a position based on the IES report provided substantive positions to which stakeholders could respond and multiple opportunities were provided as the analysis process developed.

However, the three-month timeframe provided for this review did not allow sufficient time for stakeholders to consider properly the issues and provide these multiple responses. The last round of submissions was too compressed both for proper preparation of submissions and due consideration of these submissions prior to finalisation of the report.

**Finding:**

*While ESCOSA sought to ensure opportunities for stakeholder input, the compressed timetable did not allow for adequate notice of these opportunities and time for stakeholders to prepare submissions.*

**Recommendation:**

*At least six months should be allowed for a medium-term price review to permit a 'ground-up' review of prices to ensure adequate time for stakeholder input.*

## **4.5 Resources and quality control**

ESCOSA obtained well-qualified expert external resources (IES). It also devoted senior internal staff to the project, within the constraints of the limited resources available to the Commission. The review received a high priority within ESCOSA's work program.

However, ESCOSA's small size and limited resources constrained its ability to ensure full internal peer review and quality control of the project. This limited the scope for internal review of the approach that may have identified alternative approaches or views of the problem – a problem amplified by the process which saw ESCOSA take the lead role rather than responding to and balancing the proposals of others.

**Finding:**

*ESCOSA obtained the qualified expert advice necessary for the task and devoted substantial resources to the review. However, its resources did not provide for strong peer review and quality control.*

**Recommendation:**

*ESCOSA should:*

- *examine the processes of its reviews to draw better on the ideas and resources of other stakeholders before taking a position on the approach to be adopted or the estimate of parameters within an approach; and*
- *increase its resources to strengthen its capacity for internal review and quality control.*

## **5 ASSESSMENT OF ESCOSA METHODOLOGY**

### **5.1 Clarity of objectives for regulation of standing contracts**

The ESC Act 2002 requires the consideration of a range of objectives but its primary objective is the long-term interests of the consumer. Efficiency, promotion of competition and prevention of misuse of market power are subsidiary. A separate section also requires it to have regard to the particular circumstances of the industry, its costs and financial impacts (see section 3.1.4. of this report - legal powers and responsibilities).

This range of objectives is similar to those specified in legislation or codes for other regulators eg IPART, the ESC of Victoria and the Gas Code. While IPART's legislation does not give guidance to weighting, Ofgem's legislation in the UK gives primacy to consumer interests ("to protect and advance the interests of consumers by promoting competition where possible, and through regulation only where necessary").

While the ESC Act gives primacy to the long-term interests of the consumer, the question remains as to how this should be interpreted. 'Long term' suggests more than short-term static efficiency concepts, such as the new-entrant cost in this period. But is the long-term interest of the consumer best served by:

- Promoting the development of the competitive market? In this case, an approach which ensures headroom by design (eg long-term or short-term costs plus a margin) would be desirable.
- Ensuring stable provision of default retail services at reasonable prices? In this case, the starting point may be the reasonable actual costs incurred by the supplier.
- Ensuring efficient prices in the default service over the medium-to-long term and avoidance of shocks for consumers? In this case, prudent long-term costs built up from a theoretical contracting position may be the appropriate starting point.
- Ensuring efficient prices in the short term? In this case consideration of a shorter contracting period becomes relevant.

Once a view is taken of what the 'long-term interests of consumers' means, the question of how this is to be balanced against the other objectives can be considered.

In balancing these objectives, it would not be feasible to rely on one methodology alone for assessing the costs. This is precisely because the different perspectives offered by different methodologies are necessary to evaluate properly price outcomes against the different objectives.

For example, as noted above, the benchmark for achieving financial sustainability would be the benchmark of reasonable actual costs incurred, while the benchmark for promotion of competition would be prices in the competitive market and/or long or short-term costs plus a margin.

Hence, a practical approach may be to start from prudent long-to-medium-term costs for the incumbent, as ESCOSA has done, and cross-check this against an evaluation of price outcomes from this analysis in terms of short-term market headroom. Ideally, the framework for evaluating these outcomes should be clarified through the discussion of the regulatory objectives at the outset of the review. ESCOSA's 2003 review arguably provided such a framework but this was assumed at the start of the 2004 review.

Headroom is a difficult and controversial issue. Different regulators have adopted different approaches. IPART has not allowed headroom. Ofgem in the UK, according to AGL's submission to the current price review process, allowed an average headroom of 8 per cent to encourage development of a competitive market.

Judgements on the objectives of the review can be critical for the methodology adopted by the regulator. In the case of ESCOSA's retail review, implicit differences in these judgements appear to underlie some of the differences of view on the appropriate methodology and price outcomes. As the discussion of these objectives has not been clear, especially in the initial stages of the 2004 review, the difference in the views on objectives is more implicit than explicit.

### **Finding:**

*The objectives of retail price regulation and the implications for the methodology should be clearly specified at the outset of a review and greater regard had to alternative approaches to estimating the cost components.*

### **Recommendation:**

*Greater clarity should be brought to the objectives for regulation of standing contracts in future reviews and greater use made of data/estimates under alternative approaches as a cross-check of the primary analysis.*

## 5.2 Building block approach

The building block approach used by ESCOSA is widely used and endorsed by other regulators. The key points of difference between regulators in adopting the building block approach are the methodologies for estimating the components and the extent to which there is an allowance for headroom.

In spite of the widespread acceptance of the building block approach, there is also merit in examining, where possible, competitive offerings in the market in question or in similar markets. It is, however, important to recognise the limited number of new entrants in the SA market. As at mid 2003, only two companies, Origin and TXU, were offering to supply small customers.

This may have been in itself an indicator of the limited headroom at that time between competitive costs and the standing contract prices. While the small numbers of competitors limited any reliance on the data, such comparisons may still be of use as a cross-check.

In the later stages of the 2004 review ESCOSA engaged consultants KPMG to benchmark the net receipts allowed AGL SA in its standing contract supply prices against Victorian retailer net receipts under the regulated retail tariffs. KPMG compared net payments to AGL SA to net payments to Victorian retailers by deducting network charges from the regulated prices. KPMG concluded that net payments were similar. Hence, ESCOSA found no evidence in these comparisons to support any change in the 2003 tariffs it set in 2002. However, due to the lack of development of competition at present in the SA market, no comparable exercise could be done for AGL against unregulated tariffs offered by other retailers operating within the state.

### **Finding:**

*ESCOSA's adoption of the building block approach is endorsed.*

### **Recommendation:**

*The building block methodology should continue to be the primary approach but supported by benchmarking against competitive prices and margins in South Australia and elsewhere where possible.*

## 5.3 Options for assessing wholesale energy costs

In its 2004 electricity standing contract price final report, ESCOSA uses an estimate of wholesale electricity cost based on a medium-term contracted load model. Wholesale electricity prices are inherently volatile and a forecast involves a considerable amount of judgement on the part of the regulator.

There are, however, a number of different methodologies which can be used by a regulator to estimate the future cost of wholesale electricity. These are listed in the sections below. While ESCOSA placed primary reliance on the estimation of medium-term contract costs for the incumbent, it also engaged KPMG to benchmark these costs against an estimate of the residual component of the Victorian regulated retail tariffs (see earlier discussion).

### 5.3.1 Actual cost

This involves the calculation of AGL's actual wholesale energy costs based on the part of its hedge book relating to tariff customers. This would remove any uncertainties surrounding the cost of wholesale electricity. Due to the use of commercially sensitive contract data, ESCOSA would however not be able to publish this data obtained from AGL and may not be able to publish a point estimate of these costs.

There are also a number of difficulties involved in using AGL's actual contract data to estimate the wholesale electricity cost attributable to customers on standing contracts. It is difficult to assign individual contracts to a certain customer class and ESCOSA has to rely on AGL to provide the relevant contracts.

Other regulators such as IPART (gas), have used auditors to sign off on the allocation of contracts. However, the more complex nature of electricity contracts and differing views of stakeholders on the robustness and feasibility of this approach make it difficult to use it as the sole methodology to estimate wholesale electricity costs.

During the course of the review, ESCOSA questioned the feasibility of undertaking a review of actual costs. However, in finalising their review of wholesale costs, IES received data on a sample of actual contracts provided by AGL which AGL attributed to the wholesale market. From this, IES generated one scenario for 2004 standing contract supply using AGL's actual contract data<sup>1</sup> that indicated the wholesale electricity cost generated under this scenario is higher than its own estimate. However, IES acknowledged problems in allocating contract data to customers on standing contracts. The Tribunal is of the view that while the review of actual costs is difficult it is a valid cross-check. But because of the difficulties and uncertainties it requires a more extensive analysis of the underlying data and assumptions by the expert consultant or an independent auditor.

Greater reliance on estimates of actual costs would reduce the incentives for the utility to purchase energy efficiently. While this is an especially important concern in the ongoing regulation of core monopoly services it may be of lesser importance in the case of the regulation of the standing contract tariffs. The primary driver for efficiency in energy purchase should be the developing competition in the retail market and so there is less weight on regulation as a means of achieving efficiency gains. Furthermore, the Tribunal proposes that actual costs should be used as a cross-check rather than a primary determinative factor.

### 5.3.2 Implicit market benchmarks

This could be done by deducting an estimate of retailer-specific costs such as retail margins and costs from competitive offer prices. This would be possible in future reviews as there are other retailers operating in the South Australian market. ESCOSA would still have to estimate retailer-specific costs such as the retail margin. It is unlikely that ESCOSA or other regulators could obtain retail costs. Instead, the regulator would have to estimate these costs from benchmark data. While this introduces a level of uncertainty, retail costs are small relative to wholesale costs. However, this option would provide ESCOSA with a methodology to test its estimate of wholesale electricity cost.

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<sup>1</sup> ESCOSA, 2004 *Electricity Standing Contract Prices - Final Report*, December 2004.

ESCOSA engaged KPMG to undertake a calculation of net retailer receipts for 2004 for AGL SA and five Victorian retailers.<sup>2</sup> This required the calculation of the total retail bill and the equivalent network charge at different levels of consumption for each retailer. The difference between those two numbers represents the total payment to the retailer to cover all their costs, namely:

- wholesale electricity purchases
- operating costs, and
- profits.

Data from South Australian competitors was only available from mid 2003 and it was therefore not possible to undertake a similar study with South Australian data for the 2004 review. In future reviews, ESCOSA could use South Australian competitive offer prices to conduct an implicit benchmark study.

### **5.3.3 Notional prudent contract cost**

#### *Medium-term contract costs for incumbent*

This is the methodology adopted by ESCOSA. It consists of estimating the wholesale electricity cost paid by a retailer over the calendar year 2004 based on contracts purchased during a specified period. This is a reasonable methodology to model wholesale electricity costs. As with all models, however, judgments have to be made in regards to a number of inputs into the model. Furthermore, there are a number of technical issues in regard to the reliability of the available data especially in a market with a single dominant buyer such as in South Australia.

South Australia is in a unique position with AGL as the main retailer contracting a substantial part of the market. Consequently, AGL's purchasing strategy will have an influence on contract prices in the market. By using AFMA prices, ESCOSA does not take into account the effect of AGL's purchasing strategy on contract prices. This highlights the difficulties ESCOSA is facing when determining the contracting strategy of an efficient retailer. This issue is further discussed in section 5.4.

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<sup>2</sup> ESCOSA, 2004 *Electricity Standing Contract Prices - Final Report*, December 2004.

### *Short-term contract costs*

The short-term view of a new entrant would be based on the contracting price that exists in the market at the time when the new entrant enters the market. In this respect, the cost would not take into account contract costs that have been incurred in the past to hedge a future load.

The use of the short-term new entrant cost raises a number of questions. Firstly, a retailer would not choose to start contracting a load in a new market the day it started operating in it. This kind of behaviour would drive up contract prices and it is uncertain if enough contracts would be available to cover the load of the new entrant. Consequently, even a new entrant would contract over a certain period before it entered the market.

Secondly, as mentioned before, AGL's purchasing strategy has an effect on contract prices in the South Australian market. This leads back to the question as to whether one should use AGL's actual costs due to the unique nature of AGL in the South Australian market. If contract prices are now lower due to AGL's past purchasing behaviour, the use of the short-term new entrant cost would penalise the incumbent who has contracted earlier in time, when spot prices and consequently strike prices were higher.

### *Long-term view*

Retailers seek to contract for part of their load for longer periods. This strategy is the result of a combination of:

- the desire by retailers to spread risk
- the desire to reduce exposure to short-term volatility, and
- the obligation on the incumbent to supply a large part of the market for indefinite periods.

It is difficult to observe the price of these contracts in the market as they are generally not traded. The only way to get an insight into these contracts would be to analyse the retailer's actual books. The alternative is to assume that published data and medium-term contract prices are a reasonable proxy for long-term contract costs.

### **5.3.4 Long-run marginal cost**

Long-run marginal cost is based on the assumption that the long-run generation cost of additional electricity is the opportunity cost of the additional infrastructure needed to generate that additional electricity. As such, it does not take into account the actual purchase cost of the retailer, but looks at the costs a generator is likely to incur in the long run.

Over the long run, market prices for electricity will have at least to average these long-run marginal generation costs or there will be insufficient new investment. Hence, it can be seen as a proxy for long-run costs. However, there will be sustained periods when market prices are below or above long-run generation costs.



### 5.3.5 Pros and cons of the different approaches

|                                       | PROS   | CONS  |
|---------------------------------------|--|---|
| Actual cost                           | AGL SA is the only retailer in SA. It has to purchase most of its energy on the market. Not likely to be in a position to negotiate more efficient contracts. Actual cost would reflect that position.   | <p>Difficulty of assigning individual contracts to different customer classes.</p> <p>Commercial sensitivity of data restricts disclosure of the basis of the calculations or the specific estimate.</p> <p>Dilution of efficiency incentives if excessive reliance is placed on actual costs in the absence of competitive pressures.</p>  |
| Implicit market benchmarks            | Provides ESCOSA with a relatively easy-to-implement approach to test its wholesale electricity cost estimate.  | Relies on the accuracy of the estimates of the retail operating costs and retail margin.  |
| Notional – medium term for incumbent  | In principle, reflects most efficient cost of wholesale electricity. Based on market data and efficient contracting period.  | <p>Does not explicitly encourage competition. Difficulty in defining an efficient retailer.</p> <p>There is also the possibility of inaccurate data due to the dominant position of AGL in the South Australian market.</p>   |
| Notional – short term for new entrant | <p>In principle, reflects more accurately current market wholesale electricity cost. This may depress prices if spot prices are falling.</p> <p>On the other hand, retailers would use short-term contracting to cover any marginal load that may arise. There is a high probability that contract prices for these loads are higher as retailers clearly are price takers in these circumstances.</p> | <p>Using short-term costs would penalise the incumbent on contracts taken out in earlier periods. Short-term contract prices would be considerably lower than medium or long-term prices. Consequently, they would not provide a price signal to new entrants.</p> <p>Short-term contracting may lead to inflated prices in periods of peaky demand and tighter capacity constraints.</p> |
| Long-run marginal cost of generation  | Provides an incentive to the retailer to manage its cost below that estimate. Cost savings achieved under this option will be kept by the retailer.  | There might be sustained periods where market prices are below or above the long-run marginal cost of generation.   |

ESCOSA has chosen to use the medium-term notional prudent contract cost of the incumbent to estimate the wholesale electricity cost. This is a reasonable methodology to forecast the wholesale cost of electricity incurred by the incumbent during the calendar year 2004.

However, the model is quite sensitive to the underlying assumptions. The model assumes that the incumbent has contracted its 2004 load during the three-year period proceeding the calendar year 2004. Wholesale electricity prices in South Australia and consequently contract prices have substantially fallen during this period. Due to the assumed contracting pattern, this fall in wholesale prices will feed through to retail prices in subsequent years. Hence, there is currently a wide gap between assumed contract costs and current contract costs.

In order to provide retailers with certainty on regulatory behaviour in subsequent reviews, the regulator should be cautious in changing the assumption as a change in these assumptions can lead to systematic biases in the modelling results. This issue will be further discussed in section 5.4.1.

### **Finding:**

*Notional prudent cost of the incumbent is an appropriate methodology to which a regulator should have regard but the regulator should also have regard to alternatives such as those discussed above. Where a notional prudent cost approach is used, there should be a presumption that the approach will be applied consistently over time.*

### **Recommendation:**

*Despite the difficulties and uncertainties involved, future reviews should estimate actual contract costs attributable to standing contract customers. This provides an alternative estimate of wholesale electricity costs.*

## **5.4 IES methodology for assessing benchmark incumbent costs**

ESCOSA engaged IES to undertake an estimation of the purchase cost of wholesale electricity in the South Australian market. IES is a well respected consultancy specialising in energy modelling and electricity markets. It has undertaken consultancy work for a number of other regulators such as IPART and the ACCC.

IES used a model based on an efficient contracting strategy for a retailer using swaps and caps to estimate the 2004 electricity wholesale cost in SA. The model has to make a number of assumptions which include:

- AGL's 2004 load profile
- the cost of swaps
- the contracting period for the swap purchases
- the cost of a \$300 cap
- the amount of cap contracts purchased
- a hedge mismatch allowance
- add-on amounts for various pass-through costs, such as purchase of green energy, NEMMCO fees and bank guarantee costs.

These estimates require considerable judgement, especially in regards to the contracting period, the validity of AFMA swap prices in the South Australian market, the price of a \$300 cap and the load profile. There is a wide range of feasible estimates and no single estimate seems to be better than the others. A further difficulty is the allocation of risk between the wholesale electricity price and the retail margin.

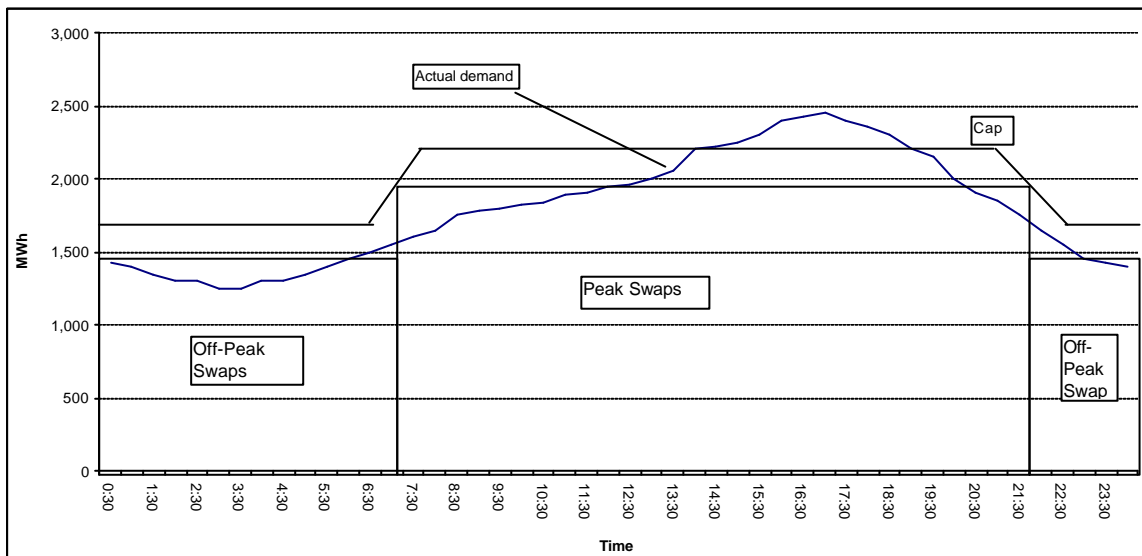
### 5.4.1 Modelling assumptions

The amount of judgement involved in the estimation of the various inputs to the model highlights the difficulties in modelling wholesale electricity costs. A number of the issues involved in the estimation of the various inputs for the methodology used by ESCOSA are outlined below.

#### Contracting assumptions

The IES model assumes a 100 per cent fully hedged average load for the calendar year 2004. It uses peak and off-peak swaps to cover the average load and a cap contract for 75 per cent of the difference between peak demand (10 per cent probability of exceedence) and the average load in the first quarter which is then applied to all of calendar year 2004. This results in a risk profile similar to that depicted in Figure 1:

Figure 1 IES model risk profile



The areas under or over the average load profile curve that are not covered by the swap contracts are either covered by the cap contracts (in case the spot price exceeds \$300) or are included in the hedge mismatch allowance. It should be noted that the hedging strategy used by IES does not include instruments such as options or swaptions.

More complex or sophisticated options may be better matched to specific risks and may be able to mitigate risks and lower costs for extreme events. However, these are likely to result in higher apparent costs per unit of energy as an additional cost is incurred to provide the load matching flexibility.

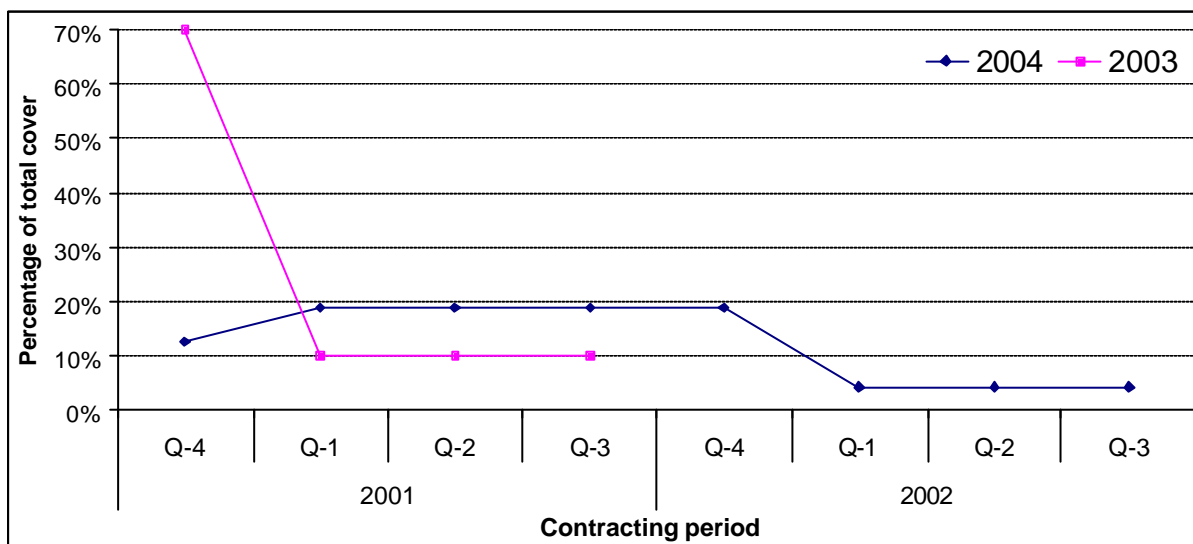
Discussions with market participants have indicated that the market for these products in South Australia is illiquid and that the hedging assumed in the IES model is a reasonable proxy to use in the model, providing sufficient allowance for modelling inaccuracies are taken into account.

The IES model assumes the load is fully hedged for the calendar year 2004 by combining swaps with caps and adding a hedge mismatch allowance of 5 per cent. This effectively removes volume risk for the calendar year 2004 apart from extreme load scenarios.

*Contracting period*

In its final report, ESCOSA uses a contracting period from Q4 2001 to Q3 2003. The Commission also uses a theoretical portfolio of a prudent retailer. Assumptions made on inputs such as the contracting period have a considerable effect on the wholesale electricity cost generated by the model. The timing of the purchase of contracts for the calendar year 2004 is structured as shown in Figure 2:

**Figure 2 Contracting assumptions**



The period and structure of contracting has a considerable influence on the contract price used in the model. ESCOSA has changed the contract purchasing pattern between its 2003 and 2004 price review. Changes in these assumptions can lead to biases in the modelling outputs. Care needs to be exercised in changing these assumptions but arguably the contracting assumptions used in 2003 could not be automatically applied to future reviews.

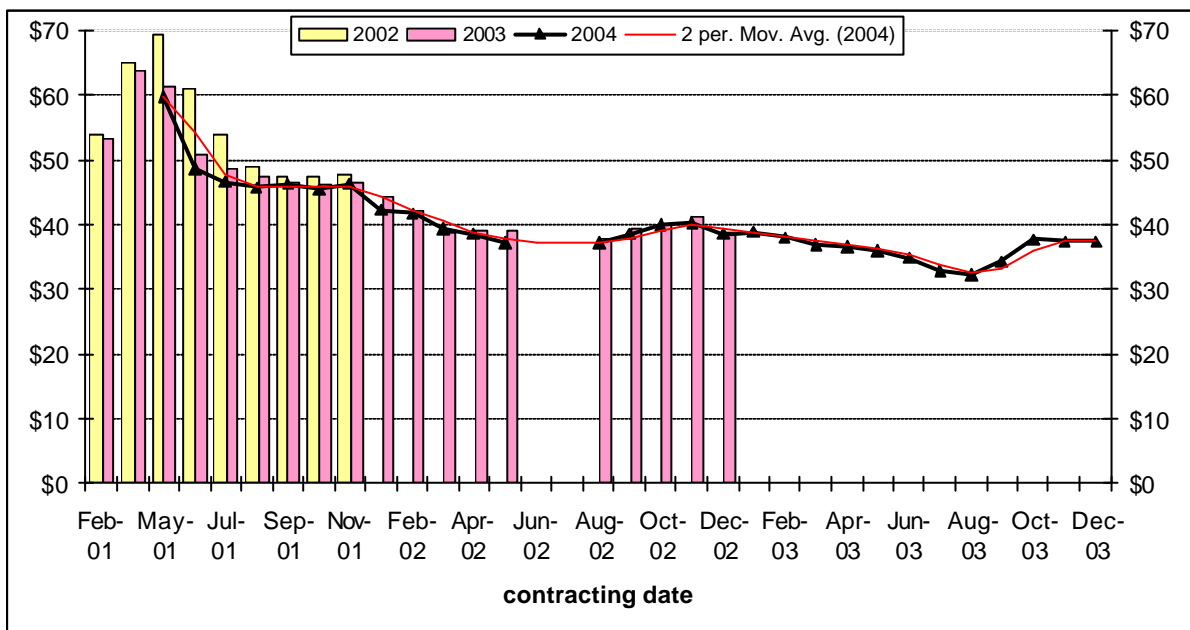
AGL was in a unique position in 2001 as it was required to hedge 2003 and beyond due to the vesting contracts ending on 31 Dec 2002. The purchasing assumptions in ESCOSA’s 2003 review resulted in most of the assumed contracts being purchased in Q4 2001 (see diagram above). While this reflected the vesting contract cliff faced by AGL, it created a dilemma for ESCOSA in its 2003 review.

Keeping the same profile but rolling forward twelve months would have resulted in the bulk of purchases being assumed to be in Q4 2002 and none in 2001. This is markedly different from the strategy widely assumed to be pursued by AGL given the particular obligations it faced. Another option would have been to peg the starting point (ie high level of contracting in 2001) and stretch out the contracting profile. This would assume a large proportion of long-term contracts whose prices are not observable from AFMA data. It would also substantially dilute the effect of the subsequent reduction in contract prices.

In the end, ESCOSA has taken quite a different approach in its 2004 price review from its 2003 review. This is due to the fact that the 2003 review reflects the particular situation AGL was facing in regards to the vesting contracts. ESCOSA indicated that it will continue using the 2004 contracting pattern in future reviews.

Figure 3 gives an indication of flat swap contract<sup>3</sup> prices for calendar years 2002, 2003 and 2004 in South Australia over the 2001 to 2003 period. The data is sourced from the electricity supply newsletter and uses a number of different sources. It is therefore not directly comparable to the AFMA swap curve. It gives, however, a good indication of the direction of swap contract prices:

**Figure 3 South Australian contract prices**



A contracting period of two years as used by ESCOSA is, in normal circumstances, a reasonable assumption given the limited data available. However, there is no one single correct contracting period that can be applied consistently to any yearly load. There are arguments that the contracting period should be shorter, with retailers delaying purchasing when contract prices are expected to fall. However, such judgements need to be based on information in the market place at the time and allow for the possible effect of AGL's contracting behaviour on observed prices.

<sup>3</sup> Flat swaps are the weighted average of the peak and off-peak swaps.

In mid 2001, contract prices were very high with a significant difference between 2002 and 2003 pricing. This could have been seen as a sign of an anticipated fall in spot prices. Whether the anticipated fall in prices during mid 2001 was the result of market expectations that AGL would have to buy heavily in 2001 to replace its vesting contracts or expected market trends independent of AGL's purchase decisions cannot be determined. If it were the former it would not have been possible for AGL to 'capture' the benefit of the expected price reduction through a changed purchase pattern because that change would have affected price expectations in the market.

However, by Q4 2001 prices had fallen significantly from the mid-year prices, there was a flattening of the price curve and there was negligible difference between pricing for 2002, 2003 and 2004. It appears that at this stage, the subsequent price fall was not anticipated in the market. Furthermore, it is difficult to determine the extent to which that fall may have reflected the mild 2002 summer and AGL's contracting strategy. Generators may have contracted large volumes, and were now contracting for discretionary volumes (ie not base load).

Retailers might also have entered into much longer contracts ranging from five to eight years ahead, which in turn would increase the cost of wholesale electricity based on the information in figure 2. If, however, AGL has been able to secure more efficient bilateral contracts, these would not be reflected in the information provided by AFMA. This can only be revealed by analysing AGL SA's actual contract data.

An important factor for the regulator to bear in mind is that the assumptions on contracting may well affect actual contracting by the incumbent<sup>4</sup>. In principle, a risk-adverse incumbent retailer would mirror the regulator's assumed profile in their actual contracting decisions.

This effect will be reduced in practice because trading is generally undertaken on a total book basis rather than a market segment basis (hence the difficulties noted above in estimating actual costs). Furthermore, emerging competitive pressures will reduce the influence of the regulatory assumptions. However, use of short-term contract prices may encourage, to a degree, short-term contracting behaviour with adverse effects on market volatility and new generation investment.

### *Margin over AFMA swap prices*

Industry participants have argued that the AFMA swap price curve is a poor predictor of a reference price. The AFMA curve is provided on a voluntary basis and reflects future expectations rather than actual purchases. Rather than using it as a benchmark price for the pricing of over-the-counter products, many participants regarded it as questionable.<sup>5</sup> This is especially true for the South Australian market with AGL as the dominant purchaser.

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<sup>4</sup> This is an issue for the regulator to bear in mind in future decisions. In 2001 no regulatory methodology was in place to influence the contracting behaviour of AGL.

<sup>5</sup> Bach Consulting, *Management of financial risk in the wholesale electricity market*, June 2002.

ESCOSA acknowledged this and added a \$5 premium in the 2003 pricing to the mid-point AFMA reference rate to reflect AGL SA's unique position in South Australia-based contracting in 2001 and the available market information. This was reduced to \$3 for the 2004 pricing decision based on modelling a contracting strategy where contracts were predominantly purchased in 2002 and analysis of AGL's contracts by IES.

In principle, there may well be periods where actual contract prices are above those quoted by AFMA, but there equally may be periods where the opposite is the case. It is a matter of judgement as to whether to include any allowances above the AFMA price or if allowing for these differences, how much should be allowed.

ESCOSA is in the difficult position where it cannot make public the actual AFMA data or AGL's actual contract data. IES has examined a sample of actual contract data but noted the difficulties in assigning individual contracts to standing contract customers. It has understood that such contracts were not 'standard' contracts and valuing the additional features of the contracts can be difficult. Furthermore, the apparent gap may be specific to the period in which the actual contracts were entered into. Hence the results cannot be automatically applied to a different set of contracting assumptions.

#### *Cap contract price*

ESCOSA has used a price of \$9.50 for a \$300/MWh cap in its final report. There are a number of methodologies that can be used to estimate a cap price. This price varies depending on the methodology used. ESCOSA has opted to use actual contract prices struck in the market.

One of the problems with using actual market data is that the market for caps seems to be illiquid in South Australia. A further issue is whether cap contracts are the most efficient strategy for the retailer to cope with peak load volatility and high prices in the National Electricity Market.

#### *Hedge mismatch premium*

ESCOSA has used a hedge mismatch allowance of 5 per cent in its final report. This hedge mismatch allowance is designed to reflect the volume risk likely to be experienced during the calendar year 2004. There is no doubt that one cannot accurately forecast the 2004 load profile and that there consequently will be a certain amount of hedge mismatch involved in the model.

Volume risk can be both downside and upside. However, experience would indicate that there is a strong correlation with contracting and that if a retailer is over contracted then the spot prices are more likely to be low, leaving the retailer to pay and if they are under contracted then the spot price is more likely to be high, leaving the retailer to incur extra costs.

The regulator has to make a judgement on how much downside risk is arising from a particular hedging strategy offset by any potential for upside gains.

### *Other risks*

Retailers experience other wholesale risks such as the recent Moomba experience (which added significant risk to the market), counterparty credit default (such as the Enron collapse), force majeure events, periods of VoLL and the impacts of customer churn which are not modelled in the swap, cap and mismatch costs. Such risks can be properly taken into account through the retail margin allowed by the regulator. But many of these risks are common to other similar markets (eg Victoria and NSW). A number of issues specific to SA, such as the peakier load profile for residential customers, are already taken into account in the analysis of wholesale energy costs.

### **Finding:**

*In principle, the methodology applied by IES is consistent with other applications. However, the uncertainties on each parameter suggest a wide range for the feasible estimates. Cross-checking against actual contract data could be undertaken earlier in the next review.*

### **Recommendation:**

*The notional prudent price should be estimated using a similar methodology at the next review but with earlier data verification against actual contract data.*

## **5.5 Methodology for assessing retail costs**

ESCOSA estimated retail costs using benchmarks from regulatory decisions in other jurisdictions. Such benchmarks are widely used by other regulators and so can be regarded as standard industry practice.

However, where possible, these benchmarks could be cross-checked against an examination of actual retail costs for a medium-term price review. Such an exercise would be complicated for AGL because its retail costs will be allocated to different market components. Energy retailing is now a multi-state, multi-fuel activity for AGL. Any estimate of actual retail costs for electricity retail in SA by AGL will reflect the cost allocation rules used by AGL. Such cost allocations would need to be considered carefully and supported by adequate data.

The use of actual costs can reduce the incentives to pursue efficiency gains. However, a number of factors suggest that this may be of less concern in the regulation of default contract tariffs than the regulation of ongoing monopoly services. (See earlier discussion of the use of actual costs to estimate wholesale energy costs.)



**Finding:**

*The retail cost benchmarking methodology adopted by ESCOSA is also used by other regulators and can be regarded as common regulatory practice. It could have been supported by an analysis of actual costs, although this must recognise the difficulties of allocating a realistic component of AGL's overall retailing costs to retailing of electricity in the SA market.*

**Recommendation:**

*In a medium-term price review actual costs could be used as a cross-check against benchmarks with the important caveat that their use should be tempered by a recognition of the uncertainties and limitations of the estimates involved.*

## **5.6 Methodology for assessing retail margins**

ESCOSA estimated retail margins using benchmarks from decisions in other regulatory jurisdictions. Such use of benchmarks is widely practiced by regulators and can be regarded as consistent with common regulatory practice. Benchmarked margins are commonly expressed as a percentage of costs, so again this is consistent with normal regulatory practice.

The ECC submitted that the margin should be expressed as a fixed dollar amount, rather than as a percentage. The ECC's argument was that due to the relatively higher effective wholesale and network prices in South Australia, the application of a fixed retail margin leads to a much higher retail margin in dollar terms than the application of a percentage figure intends.

In a competitive market, while retailers will seek to achieve a target percentage margin, the actual margin realised will depend on market circumstances. The Tribunal believes that the methodology by which margins are specified is worthy of closer examination.

A further issue is the extent to which risks specific to the SA market have already been allowed for in the wholesale cost build-up and therefore should not be double-counted in the retail margin.

**Finding:**

*Benchmarking is an appropriate way of assessing retail margins and the approach used by ESCOSA is consistent with normal regulatory practice. However, the option of setting a dollar margin rather than a percentage margin (or some mix of the two) deserves further examination.*

*In principle, market-specific risks that are not reflected in the estimate of wholesale costs should be incorporated in the retail margin. However, the nature and magnitude of these risks is not clear in ESCOSA's review.*

**Recommendation:**

*Benchmarking should provide the reference point for assessing retail margins but the method of specifying these margins should be examined further. Future reviews could clarify the extent to which there are market-specific risks not reflected in the wholesale cost which should be incorporated in the retail margin.*

## **5.7 Allowance for headroom**

'Headroom' can be thought of as an additional margin over the prudent cost level which allows other retailers room to undercut the incumbent retail supplier on price with the aim of encouraging the development of a competitive market.

Different regulators have taken different approaches on whether to allow for headroom. For example, AGL submitted that in the UK, a headroom of 8 per cent on average in the electricity market encouraged the development of a competitive market. Business SA contended that a reasonable level of headroom increases the opportunity for new retailers to enter the market.

There is no 'correct' answer to the issue; it reflects the priorities and the judgements of legislators and regulators in balancing objectives.

ESCOSA in its process for setting electricity standing contract prices for 2004 has made no specific allowance for headroom. This is also reflected in its terms of reference to IES, where it indicated that the objective was to mimic competitive prices and not to provide headroom in addition.

Instead of a specific allowance for headroom, ESCOSA has assumed that in a market where wholesale energy prices have been falling, new entrant retailers have an opportunity to purchase energy contracts at a lower price than AGL, giving them an implicit level of headroom. In other words, ESCOSA sees merit in the existence of an apparent headroom between the price based on the sum of the prudent efficient components and the apparent cost of new entrants. Thus, ESCOSA can be considered to have sought a 'middle ground' on the headroom issue.

**Finding:**

*There is no correct answer on the question of inclusion of headroom but the regulator should make a clear statement as to their approach which should follow from its objectives in price regulation and review. Given that this is an important matter of policy and the approach to the introduction of competition, guidance from the government would be appropriate.*

**Recommendation:**

*The government should consider whether it wishes to provide guidance on the issue of headroom as part of its overall policy objectives. Irrespective of this, the regulators should adopt a clear, consistent position on this at the next review.*