

INQUIRY INTO RETAIL ELECTRICITY PRICE PATH DISCUSSION PAPER

September 2004

ELECTRICITY

REQUEST FOR SUBMISSIONS

The Essential Services Commission of SA (the Commission) invites written submissions from interested parties in relation to the issues raised in this paper. Written comments should be provided by **15 October 2004**. It is highly desirable for an electronic copy of the submission to accompany any written submission.

It is Commission policy to make all submissions publicly available via its website (www.escosa.sa.gov.au), except where a submission either wholly or partly contains confidential or commercially sensitive information provided on a confidential basis and appropriate prior notice has been given.

The Commission may also exercise its discretion not to exhibit any submission based on their length or content (for example containing material that is defamatory, offensive or in breach of any law).

Responses to this paper should be directed to:

Inquiry Into Retail Electricity Price Path: Discussion Paper

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Public Hearing

The Commission will hold a public hearing on **Wednesday 20 October 2004 (9am – 12.30pm)** to allow parties who make written submissions to present to the Commission and to elaborate further on their submission. Stakeholders are asked to complete and return the registration form indicating their intention to attend the Public Hearing.

Public Information about the Essential Services Commission of SA's (ESCOSA) activities

Information about the role and activities of the Commission, including copies of latest reports and submissions, can be found on the ESCOSA website at www.escosa.sa.gov.au.



Registration to attend Electricity Retail Price Path Inquiry Public Hearing

Wednesday 20 October 2004, 9.00am – 12.30pm

Hilton Adelaide, 233 Victoria Square

Please complete and return this form by **close of business Tuesday 12 October 2004** if you wish to attend the Public Hearing.

To: Tami Norman, Manager Commission Secretariat

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Name:

Organisation:

Address:

Telephone:

E-mail:

Please indicate in what capacity you will be attending the Public Hearing:

I wish to attend the Public Hearing as an observer.

I wish to make a presentation to the Commission and further elaborate on my submission at the Public Hearing

Confirmation of your registration will be provided, along with final details of the Public Hearing.

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GLOSSARY OF TERMS

ACG	Allen Consulting Group
ACT	Australian Capital Territory
AFMA	Australian Financial Managers Association
AGL SA	AGL South Australia Pty Ltd
CCSA	Conservation Council of South Australia
CPI	Consumer Price Index
CRA	Charles River and Associates
DUOS	Distribution Use of System (charges)
ECC	Energy Consumers Council
ERAA	Energy Retailers Association of Australia
ESCV	Essential Services Commission, Victoria
ESC Act	Essential Services Commission Act 2002
ESCOSA	Essential Services Commission of South Australia
ESIPC	Electricity Supply Industry Planning Council
ETEF	Electricity Trading Equalisation Fund (NSW)
ETSA	ETSA Utilities
FRC	Full Retail Competition
GST	Goods and Services Tax
IES	Intelligent Energy Systems Pty Ltd
IPART	Independent Pricing and Regulatory Tribunal (NSW)
IPA	International Power Australia
IT	Information Technology
kWh	Kilo watt hour
LRMC	Long Run Marginal Cost
MRET	Mandatory Renewable Energy Target
MW	Mega watt
MWh	Mega watt hours
NEM	National Electricity Market
NEMMCO	National Electricity Market Management Company
NRG FLINDERS	NRG Flinders Operating Services
NSW	New South Wales
OFFER	Office of Electricity Regulation, UK
ORIGIN	Origin Energy Pty Ltd



POE	Probability of Excedence
ROC	Retail Operating Costs
SA	South Australia
SAIIR	South Australian Independent Industry Regulator
SRT	Socially Responsible Tariff
TOR	Terms of Reference
TUOS	Transmission Use of System (charges)
UK	United Kingdom
WACC	Weighted Average Cost of Capital
WEC	Wholesale Electricity Costs

1. INTRODUCTION

1.1. *The Inquiry and the Role of the Discussion Paper*

On 26 May 2004 the Commission received a Notice of Inquiry from the Minister for Energy, under Part 7 of the *Essential Services Commission Act 2002* (ESC Act), requiring the Commission to investigate proposed retail electricity prices for small consumers on standing contracts for the period to July 2008. The Notice obliged the Commission to proceed with the necessary studies and consultation to allow a medium term price path to be implemented from 2005, as had been recommended in the Independent Pricing and Regulatory Tribunal's (IPART) review of the methodology¹ used by the Commission in examining standing contract electricity prices to apply in 2004.

The Notice required the Commission to release an Issues Paper within one month of the receipt of the Notice, outlining the information that the Commission required AGL South Australia Pty Ltd (AGL SA) to provide and advising stakeholders of the key issues it was intending to address. The Commission released a report entitled *Inquiry into Retail Electricity Price Path: Issues Paper* on 25 June 2004.

In response to the *Issues Paper*, the Commission received 9 submissions, from AGL SA, Origin Energy (Origin), TXU, International Power Australia Pty Ltd (IPA), ETSA Utilities (ETSA), NRG Flinders Operating Services Pty Ltd (NRG Flinders), the Conservation Council of South Australia Inc (CCSA), the Energy Retailers Association of Australia (ERAA), and Business SA. The submissions are available on the Commission's website².

On 20 August 2004, AGL SA submitted a price path proposal for the period to 30 June 2008, as requested in the *Issues Paper*. A public version of AGL SA's price path proposal has been placed on the Commission's website³.

The Notice from the Minister also required the Commission to release a Discussion Paper following the release of AGL SA's price path proposal. This Discussion Paper has been prepared to comply with this requirement and is intended to further the discussion regarding the details of establishing and implementing an appropriate medium-term price path. This paper provides an overview of AGL SA's proposal, the matters raised in submissions to the *Issues Paper*, and the results to date of various studies the Commission has undertaken or engaged independent consultants to undertake. The Paper provides an opportunity to stakeholders to comment on the proposal, key issues

¹ Earlier this year, the SA Government commissioned IPART to undertake a review of ESCOSA's methodology for setting the standing contract prices for 2004. The report by IPART was released in March 2004. A copy of the report can be found on the Commission's web site <http://www.escosa.sa.gov.au/resources/documents/040330-R-IPARTReportSAGovt.pdf>.

² Submissions to *Inquiry into Retail Electricity Price Path: Issues Paper*: select the "Retail Electricity Pricing 2004" icon from the ESCOSA Home page

³ AGL SA's Price Path Proposal: <http://www.escosa.sa.gov.au/resources/documents/040823-R-AGLStandingContractPriceProposal.pdf>



and the reports prior to the Commission finalizing its views for release in the draft report in November 2004.

1.2. Background to the Inquiry

On 1 January 2003, the South Australian retail electricity market became fully contestable, in line with commitments under the *National Electricity Code*. There are no longer any direct legal or regulatory impediments to prevent a licenced electricity retailer seeking to sell electricity to a South Australian customer.

However, effective competition takes time to evolve, and transitional regulation of retail tariffs has been required to protect vulnerable customers and ensure small consumers have access to a basic standard of service at a reasonable price. In virtually every electricity market where competition has been developed in the retail sector, regulatory or government control of prices has applied for a period of time until the competitive market is functioning properly.

The South Australian *Electricity Act 1996* was amended in late 2002 to insert special provisions relating to the retail prices charged to small electricity customers (those who consume less than 160 Megawatt-hours (MWhs) per year). In particular, section 36AA of the *Electricity Act 1996* required AGL SA to publish its *standing contract price* for small customers by notice published in the Gazette and a newspaper circulating generally in the State, where:

- ▲ the standing contract price was fixed by the notice with effect from the end of the period of 3 months from the date of publication of the notice; and
- ▲ the notice contained a statement of justification for the price; and
- ▲ the Commission did not, within the period of 3 months, make a price determination under the *Electricity Act 1996* that had the effect of fixing AGL SA's price.

The Commission undertook an Inquiry in the second half of 2002, and issued a determination setting standing contract prices to apply from 1 January 2003. In late 2003, it reviewed the justification for these prices and in its *Final Report 2004 Electricity Standing Contract Prices*, which was released on 31 December 2003, allowed the prices to remain at their existing level for 2004.

Following the release of the Commission's report, the South Australian Premier asked IPART "to undertake a review of the methodology used by the Essential Services Commission of SA to consider a determination of 2004 prices". IPART was not asked to review the level of prices, simply the methodology.

In late March 2004, the South Australian Government released IPART's report *South Australian 2004 Electricity Standing Contract Price: Review of ESCOSA Methodology*⁴.

⁴ <http://www.escosa.sa.gov.au/resources/documents/040330-R-IPARTReportSAGovt.pdf>

This report made a number of recommendations, which the South Australian Government indicated it would adopt. The present Inquiry is in response to the recommendations contained in IPART's report and to subsequent legislative change.

IPART's recommendations are briefly summarised as follows:

- ▲ **clarity of process** – legislative amendments or administrative guidance should be introduced to clarify the appropriate process irrespective of whether prices and costs are rising, static or falling;
- ▲ **length and frequency of reviews** – a medium-term price path should be set which may provide for annual adjustments subject to compliance checks;
- ▲ **role of the regulator** – legislative change or administrative guidance should be introduced to (1) require the medium-term price review to be commenced by a submission from the utility; and (2) ensure that ESCOSA can conduct annual compliance checks on price changes within the medium-term price path;
- ▲ **stakeholder input** – at least six months should be allowed for a medium-term price review, allowing full stakeholder input;
- ▲ **resources and quality control** – ESCOSA should (1) take on additional resources; and (2) draw further on the ideas and resources of other stakeholders before committing to a position;
- ▲ **clarity of objectives for regulation of standing contracts** – 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** – the use of a building block approach is endorsed as the primary approach, supported by benchmarking against competitive prices and margins in South Australia and elsewhere where possible;
- ▲ **options for assessing wholesale energy costs** – 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** – the notional prudent price should be estimated using a similar methodology at the next review but with earlier data verification against actual contract data;
- ▲ **assessing retail costs** – actual costs could be used as a cross-check against benchmarks, although the uncertainties and limitations involved should be recognised;
- ▲ **assessing retail margins** – benchmarking should provide the reference point but the method of specifying these margins (as a percentage or dollar amount) should be examined further. Market-specific risks reflected in the wholesale cost should be identified or excluded from the retail margin;

- ▲ **allowance for headroom** – 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.

One of the most significant recommendations made by IPART was that the Commission should set a medium-term price path for standing offer tariffs, with provision for annual adjustments within limits subject to a compliance review, rather than reviewing these tariffs on an annual basis. The primary reasons for reaching this conclusion were that:

- ▲ the legislative provision for a three month review of proposed tariffs was insufficient for a ground-up review of prices with adequate stakeholder consultation;
- ▲ annual reviews are excessively costly and burdensome: a medium-term price path would reduce regulatory costs; and
- ▲ a medium-term price path would increase certainty for customers, AGL and competing retailers.

In July 2004, the South Australian Parliament passed the *Statutes Amendment (Electricity and Gas) Act 2004* which, inter alia, amended the provisions of Section 36 AA of the *Electricity Act 1996* to incorporate the proposed standing contract price path.

The new provisions of Section 36 AA are as follows:

- 4a) *The following provisions apply in relation to the fixing by the Commission of a standing contract price for an entity for the purposes of this section:*
 - (a) *the Commission may fix the price by a determination of a kind referred to in section 35A(1)(a);*
 - (b) *a determination must provide for the expiry of the determination at the end of a period of not less than 3 years specified in the determination;*
 - (c) *a determination may provide for prices that vary at specified times according to a formula specified in the determination;*
 - (d) *unless the Commission determines that special circumstances exist*
 - (i) *a determination may not be made to take effect before the expiry date of the last preceding determination made by the Commission in accordance with this subsection;*
 - (ii) *a determination may only be made if the entity has made a submission to the Commission stating the price that the entity proposes be fixed by the Commission as the entity's standing contract price, and the entity's justification for the price, not less than 6 months and not more than 9 months before the making of the determination;*
 - (iii) *the Commission must, before making a determination, have conducted an inquiry under Part 7 of the Essential Services Commission Act 2002 into the question of the appropriate price to be fixed as the standing contract price;*

- (e) *a submission under paragraph (d) must comply with any requirements as to the form and content of such submissions imposed by the Commission by written notice served on the entity.*

Clauses 36AA(4a) (a) to (c) were proclaimed to operate from 19 August 2004, while clauses (d) and (e) have been proclaimed to operate from 1 July 2005: accordingly, clauses (d) and (e) are not relevant to the current Inquiry.

The Commission, in its June 2004 Issues Paper, outlined to AGL SA the information it required in AGL SA's submission in accordance with its power to seek information under Part 5 of the ESC Act.

AGL SA submitted its price path proposal to the Commission on 20 August 2004. There were two submissions: a public version which was placed on the Commission's website on 23 August⁵, and a Commercial-in-Confidence version, submitted under Part 5 of the ESC Act as it included commercially sensitive material.

1.3. Details of the Inquiry and Price Determination Process

The Terms of Reference (TOR) of the Inquiry, as specified by the Minister for Energy in the notice of referral dated 26 May 2004, require the Commission to undertake a number of tasks (the Terms of Reference are provided in full in Attachment 1).

Specifically, the Commission is required to:

... investigate the standing contract price proposal ("the Proposal") that will apply to small customers from 1 July 2005 for a period of no less than three years.

In assessing the proposal, the Commission's evaluation will be limited to reviewing the electricity entity's prudent controllable costs, which, together with the relevant network tariffs, comprise the final standing contract prices charged to small customers. There should be no provision for specific headroom allowed in the prudent controllable costs determined by the Commission.

In determining whether the electricity entity's controllable costs are justified as the prudent costs incurred in supplying small customers, in addition to the requirements of Parts 2 and 3 of the Act, the Commission is to have regard to:

- The electricity entity's justification for its proposed charges, presented as part of the proposal;*
- The wholesale electricity contracts and hedging strategies that would be utilised by a prudent electricity entity in providing the standing contracts to each of the residential and business customer classes in South Australia;*
- The electricity entity's actual underlying wholesale electricity contracts, hedging strategies and other arrangements for securing electricity supply for South Australia, as well as the method for allocating these costs between large and small customers and within the small customer class;*
- The retail operating costs that would be incurred by a prudent electricity entity in delivering the range and standard of services that are required of the electricity entity in providing standing contract services to South Australian small customers;*

⁵ <http://www.escosa.sa.gov.au/resources/documents/040823-R-AGLStandingContractPriceProposal.pdf>

- *the electricity entity's actual operating costs in providing standing contract services to South Australian small customers, and the method of allocating its costs between the different customer classes;*
- *the electricity entity's proposed margin on standing contract sales, and its actual margin achieved in recent years, and whether these are reasonable having regard to the entity's investment in the business, the risks of standing contract retailing in South Australia, and the equivalence with standing contract retailer margins interstate without Government risk management schemes;*
- *any cross-subsidies between, and within, business and residential small customer classes, and whether these cross-subsidies are justified to prevent a disproportionate price impact on any small customer group;*
- *the prices charged and costs incurred in providing comparable services in other States and Territories of Australia, and whether the reasons for any differences can be justified; and*
- *any other factors the Commission considers relevant.*

The process for holding the Inquiry is set out in the notice of referral, and is also governed by the provisions of Part 7 of the ESC Act.

The notice provisions required the Commission to release a Discussion Paper after receipt of AGL SA's proposal: this paper complies with that requirement.

At the end of the Inquiry, the Commission is required to provide a draft and a final report to the Minister: the final report is to be tabled in Parliament within twelve sitting days of receipt by the Minister (or made publicly available within 28 days if Parliament is not sitting).

Term of Reference 3.3 states that the Commission may make a price determination under the relevant sections of the *Electricity Act 1996* and the ESC Act. The Inquiry does not require the Commission to make a price determination, nor does it give the Commission the power to do so.

Separate to the Inquiry, the Commission needs to initiate its own process of making a price determination to set the price path for the standing contract prices. This process is separate (and distinct) from the Inquiry, although the Commission can rely on information gained in the Inquiry in making its determination.

The criteria to be considered by the Commission in undertaking a price determination are set out in Part 3 of the ESC Act. Specifically, they are as follows:

- 25(4) *In making a price determination, the Commission must (in addition to having regard to the general factors specified in Part 2) 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 this Act;*
- (h) *any other factors the Commission considers relevant.*

The general factors specified in Part 2 of the ESC Act are as follows:

- 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.*

1.4. The Discussion Paper

This Paper is intended to assist stakeholders understand the issues that the Commission is required to address in undertaking the Inquiry (and subsequently in making a price determination). The Commission is not presenting its views or conclusions in this Paper: its purpose is to make available to all stakeholders the information currently available to the Commission, and to seek comments on this information and the issues identified, so as to assist the Commission form its conclusions over the next two months.

TOR 3.1 requires the Commission to investigate AGL SA's standing contract price proposal, and TOR 3.2 limits the Commission to reviewing AGL SA's "prudent controllable costs" (ie excluding network charges). Section 2 of this Discussion Paper summarises AGL SA's proposal for a price path, which was received by the Commission on 20 August 2004.

Section 3 of this Discussion Paper explores possible approaches to setting a price path, and in particular considers whether the controls over standing contract prices can be applied as a total revenue control, an average price control, an individual tariff control or a tariff basket control.

TOR 3.4 sets out a number of cost elements that the Commission is required to consider, including "prudent retailer" costs for purchasing electricity and operating as a standing



contract retailer, and AGL SA's actual costs for these activities. Section 4 of this Discussion Paper sets out the key issues the Commission needs to consider in undertaking these tasks and in determining the "prudent controllable costs" on which standing contract prices should be based.

Section 5 of the Discussion Paper outlines the next steps in the Inquiry, and the proposed timelines to completion.

Released separately from the Discussion Paper (but at the same time) are two key consultant reports prepared for the Commission on the subject of wholesale electricity costs. The reports by the Electricity Supply Industry Planning Council (ESIPC) and Allens Consulting Group (ACG) will be available on the Commission's website, and are of critical importance to this Inquiry. The Commission is keen to receive comments on these reports, and stakeholders responding to this Discussion Paper are urged to read them.

2. AGL SA'S PRICE PATH PROPOSAL

A public version of AGL SA's price path proposal has been placed on the Commission's website. This section provides a summary of the proposal.

A confidential version of the proposal has been provided to the Commission but cannot be released because it contains commercially sensitive material. The Commission is limited under Part 5 of the ESC Act from releasing such information.

2.1. Overview

AGL SA has proposed that retail electricity prices for residential and small business consumers on standing contracts be varied as follows:

PERIOD	JANUARY TO JUNE 2005	JULY 2005 TO JUNE 2006	JULY 2006 TO JUNE 2007	JULY 2007 TO JUNE 2008
Retail price change (%)	CPI	1.3	CPI	CPI

AGL SA has advised that this proposed price path for the total retail price (that is, retailer controllable costs and network charges) is based on current network charges and that any change in these charges would be passed on to consumers. Given that network charges represent almost half of total retail price for standing contract consumers, AGL SA's proposal is seeking almost double CPI increases to its own controllable costs over the period.

AGL SA's proposal has been based on a building block approach. The rationale for the price path is discussed in the following sections.

2.2. Form of Regulation

AGL SA has proposed a form of regulation with the following characteristics:

- ▲ prices would be set for a period of three years, excluding the half year of transition from January to June 2005;
- ▲ prices would be set according to a constraint on AGL SA's average revenue; thus the retail price change figures in the table above refer to changes in AGL SA's average revenue per MWh of sales on standing contracts;
- ▲ individual tariffs would be permitted to increase by a greater extent, CPI+5%, to allow for the unwinding of existing cross subsidies between business and residential consumers and cross subsidies within tariffs;
- ▲ should AGL SA wish to increase prices above the price path, it would be required to justify such an increase to the Commission;

- ▲ changes in taxes, market related changes (such as an industry levy for the national regulator) or new charges introduced (such as reserve trader charges) would be treated as passthrough items.

2.3. Wholesale Energy Costs

AGL SA has not provided its estimate of wholesale energy costs in the public version of its submission, though it has provided this estimate to the Commission on a confidential basis. This estimate has been based on:

- ▲ AGL SA's view that energy supply in South Australia is characterised by the following:
 - relatively high fuel costs for power generation due to the high proportion of gas-fired generation plant and gas being more expensive than coal;
 - a large proportion of peaking plant that is more costly to run and operate;
 - generation and network assets with a relatively lower utilisation factor than elsewhere in the National Electricity Market (NEM); and
 - relatively high interregional and regional loss factors.
- ▲ AGL SA's view that the current wholesale electricity costs it incurs for the small customer market are at a level consistent with the fuel costs, the costs of imports, the market risks and characteristics of the SA load shape and that these costs are above what has been allowed by the Commission in prior price determinations;
- ▲ AGL SA's view that there is an inverse relationship between the level of contracts undertaken by retailers and pool prices;
- ▲ AGL SA's hedging approach;
- ▲ risk allowances for weather, pool prices, market events (such as supply side events) and National Electricity Market Management Company (NEMMCO) directions;
- ▲ an allowance for NEMMCO participant fees, ancillary charges, renewable energy levy and bank guarantee fees; and
- ▲ 2004/05 line losses of 8.12%, based on NEMMCO published loss factors for transmission and distribution.

AGL SA also provided comment on what, in its view, were a number of 'common misconceptions' regarding its wholesale costs, including:

- ▲ that pool prices reflect the cost of energy to retailers – AGL SA's view is that pool prices largely reflect the level of hedge contracting AGL SA has undertaken;
- ▲ that the Australian Financial Managers Association (AFMA) prices reflect AGL SA's hedge contract prices – in AGL SA's view these prices reflect only a perception from a few market participants as to what the price should be and are not available for

retailers to contract at. In AGL SA's view, there is no publicly available information which can provide a reliable guide to AGL SA's wholesale contract prices;

- ▲ that retailers incur limited risk when contracted – AGL SA is of the view that retailers incur hedge mismatch costs and the risk of supply side events, such as the failure of the Moomba gas field to supply in the early months of 2004, counterparty defaults, etc; and
- ▲ that cap contracts should only reflect the value they return from the pool prices – AGL SA is of the view that if this were the case, insufficient peaking capacity would have been constructed in recent years to meet forecast peak demand growth. AGL SA believes that the increasing number of wind farms is likely to result in a higher unit cost for caps as fixed costs must be recovered over a reduced volume of output.

2.4. Retail Operating Costs

AGL SA has not provided its estimate of retail operating costs in the public version of its submission, though it has provided this estimate to the Commission on a confidential basis. AGL SA has outlined its regulatory obligations and other services⁶ that it currently provides to its customer base. It has asserted that in the future, both the number of services provided and the level of service will increase.

AGL SA has provided confidential information on actual operating costs relating to standing contract customers for the calendar year 2003 and projected operating costs for the period 2005 to 2008. AGL SA's cost per customer has been derived from the projected net operating costs divided by the total small customer numbers. The estimate has been based on AGL SA assurances that:

- ▲ only the costs associated with customers consuming less than 160MWh are taken into account – costs relating to providing services to commercial and industrial customers and customers in other jurisdictions have been excluded;
- ▲ costs incurred in other AGL entities that relate to SA small customers are taken into account;
- ▲ marketing costs not related to standing contract customers have been excluded.

2.5. Retail Operating Margin

AGL SA has stated that it considers the appropriate margin based on the level of risk in the South Australian market and reflecting its continuing obligation to supply would require a retail margin at the upper end of the 5-10 per cent range. Although AGL SA has not stated its proposed retail margin in the public version of its proposal, it has stated that it has based its proposal on a margin consistent with previous determinations by the Commission (ie 5 percent).

⁶ Such as administering the Government rebate, which is not a regulatory obligation.



3. FORM OF REGULATION

3.1. Background on Commission's Pricing Powers

The ESC Act sets out the functions and powers of the Commission, one of which is to perform price regulation functions in respect of regulated industries.⁷ By reason of section 14D of the *Electricity Act 1996*, the electricity supply industry (which includes the retail sector) is a regulated industry and the Commission therefore has a price regulation role in relation to the electricity retail sector.

Part 3 of the ESC Act sets out in detail the scope of the Commission's price regulation function. As a threshold test, the ESC Act provides that the function may only be exercised (ie, the Commission can only make a price determination) if it is authorised to do so by a relevant industry regulation Act or a regulation under the ESC Act itself.⁸

The *Electricity Act 1996* is a relevant industry regulation Act and authorises the Commission to make price determinations in respect of a number of sectors within the electricity supply industry. Relevantly, section 36AA of the *Electricity Act* authorises the Commission to make a price determination in respect of the price that AGL SA can charge for standing contracts⁹.

Section 36AA provides generally that a declared electricity retailer (AGL SA has been declared as the relevant retailer¹⁰) must, as a mandatory condition of its retail licence, agree to sell electricity to a small customer on request at the retailer's standing contract price and subject to the retailer's standing contract terms and conditions.¹¹

By the combined operation of AGL SA's electricity retail licence and the Energy Retail Code, the standing contract obligation to sell electricity subject to the retailer's standing contract terms and conditions is regulated by the Commission through the requirement that the standing contract terms and conditions be those set out in Part B of the Energy Retail Code.¹²

The obligation to sell electricity at the standing contract price is dealt with under the *Electricity Act 1996* through a scheme set out in section 36AA. That scheme, by reference to the Commission's power to regulate retail prices in section 35A(1) of the *Electricity Act 1996*, draws on the Commission's price determination powers under Part 3 of the ESC Act.

⁷ *Essential Services Commission Act 2002*, section 5(1)(a).

⁸ *Essential Services Commission Act 2002*, section 24(2)

⁹ *Electricity Act 1996*, section 36AA(4a)(a).

¹⁰ South Australian Government Gazette, 12 September 2002, page 3384.

¹¹ *Electricity Act 1996*, sections 36AA(1) and (2).

¹² See AGL SA Pty Ltd Electricity Retail Licence, clauses 4.2 and 21.1 (<http://www.escosa.sa.gov.au/resources/documents/030930-O-AGLRetailLicence.pdf>) and Energy Retail Code (ERC/01), clauses 1.1.1 and 1.1.3 (<http://www.escosa.sa.gov.au/resources/documents/040227-C-EnergyRetailCodeFinal.pdf>).

When those provisions are read together, the section 36AA scheme provides that the Commission may make a price determination for a period of not less than three years regulating prices, conditions relating to prices, or price-fixing factors, for the sale of electricity to small customers under AGL SA's standing contract. Further, the price determination may provide that prices may vary across that period at specified times according to a formula specified in the determination itself.

As the price determination will ultimately be made under the ESC Act, as authorised by sections 35A(1)(a) and 36AA of the Electricity Act, it is appropriate to briefly consider in more detail the relevant provisions of Part 3 of the ESC Act.

Sections 25(1) and 25(2) of the ESC Act have a combined effect of empowering the Commission to make price determinations where authorised to do so by relevant industry regulation Acts, such as the Electricity Act.

Section 25(3) of the ESC Act provides that the Commission may make a price determination that regulates prices, conditions relating to prices or price fixing factors in any manner it considers appropriate. Examples of the manner in which a price determination might operate are stated to include:

- ▲ fixing a price or the rate of increase or decrease in a price;
- ▲ fixing a maximum price or maximum rate of increase or minimum rate of decrease in a maximum price;
- ▲ fixing an average price for specified goods or services or an average rate of increase or decrease in an average price;
- ▲ specifying pricing policies or principles;
- ▲ specifying an amount determined by reference to a general price index, the cost of production, a rate of return on assets employed or any other specified factor;
- ▲ specifying an amount determined by reference to quantity, location, period or other specified factor relevant to the supply of goods or services;
- ▲ fixing a maximum average revenue, or maximum rate of increase or minimum rate of decrease in maximum average revenue, in relation to specified goods or services; and
- ▲ monitoring the price levels of specified goods and services.

The examples given are not exhaustive, and the Commission may make a price determination to operate in a manner it considers appropriate. The additional power granted under section 36AA of the Electricity Act to include within a price determination a mechanism for varying prices at specified times must be seen as complementary to the examples listed above.

It is important to recognise that the current Inquiry (referred by the Minister for Energy) gives the Commission no powers or requirements to make a price determination (see Term of Reference 3.3). The Commission will issue a final report to the Minister on the

Inquiry, but it will not include a determination on the level of prices. The Commission will, separate to and following on from the Inquiry, make a determination on price in accordance with the relevant sections of the ESC Act referred to above.

3.2. Price Path Provisions

Section 1.2 above has outlined the new legislative provisions which were passed by Parliament in July and those parts which were proclaimed to take effect from 19 August 2004. The terms of the new provisions were not available to the Commission when it released its Issues Paper on 25 June 2004, and neither was the information concerning the applicable dates of the legislation.

The legislation as passed by Parliament relevant to this Inquiry (and to any subsequent price determination) is the amendment to Section 36AA of the *Electricity Act 1996*. Parts (4a) (a) to (c) commenced operation on 19 August 2004 (and hence are now relevant to the conduct of this Inquiry and price determination), whereas Parts (4a) (d) and (e) do not commence until 1 July 2005.

Relevant to this Inquiry, therefore, Part (4a) (b) requires that any determination must provide for its expiry at the end of a period of not less than three years. Such a requirement prevents the Commission from implementing its earlier proposal in the Issues Paper that it would issue a “bridging” price determination covering the period January to June 2005, and a price path determination in March 2005 for the period July 2005 to June 2008.

If the Commission wishes to introduce a new price for the period January to June 2005, it will now be required to determine the price for a period of at least three years, and to finalise this in December 2004 (rather than March 2005 as originally proposed).

The Commission will therefore need to decide which approach it will adopt:

1. Issue a final determination in December 2004 for the period January 2005 to June 2008, thereby removing the opportunity for stakeholders to comment on the proposed draft determination over the period November 2004 to March 2005; or
2. Delay a final determination until March 2005 (to take effect immediately or from 1 July 2005) in order to provide sufficient time for consultation with stakeholders on the draft determination, as was recommended by IPART in its review – thereby preventing any price changes from 1 January 2005.

The Commission is not in a position to make a decision on these matters at this time. It will be guided by its conclusions about the appropriate prices to apply, which can only be determined when it completes its analysis in November 2004. The decision would be informed by the magnitude of the proposed changes in prices: if small, it may be appropriate to delay implementation until July 2005 and provide an appropriate time frame



for consultation; if large, it may be desirable to implement immediately from 1 January 2005.

Comments Sought

The Commission seeks any views about the timing of its implementation of a price determination following the conclusion of this Inquiry, and whether stakeholders believe there is a need for a long period of consultation on its report and draft determination.

3.3. Options for the Form of Regulation

Recent amendments to the legislation, based on recommendations made in the IPART report, require the Commission to set a medium-term price path for standing offer tariffs, with provision for annual adjustments within limits subject to a compliance review, rather than reviewing these tariffs on an annual basis.

Determining a medium-term (at least three year) price path for standing offer tariffs will necessarily entail greater risk and complexity than reviewing prices on an annual basis. These risks will need to be managed within the regulatory framework. A medium-term price path will be more risky in the sense that any error will be longer-lived, potentially resulting in AGL SA failing to achieve a reasonable level of profits or consumers paying more than necessary, if charges in the market differ from assumptions used in setting the price path. The balance of risks may not be 'even', in the sense that consumers will retain the option of seeking alternative supply arrangements in the competitive market should standing offer tariffs be significantly above costs. However, AGL SA is compelled to provide services to standing offer customers and may see an increase in customer numbers if these tariffs become lower than what the competitive market is able to offer.

In setting a price path, the Commission will need to decide not only the appropriate level of allowable revenue for AGL SA, but more importantly how that will be reflected in actual tariffs. There are a number of tariffs that currently cover standing contract supply, and it is necessary to decide if the control applies to each tariff, or a few of the key ones, or a "basket" of selected tariffs, or something else. This is complicated by the number of consumers on each tariff changing over time, and also if AGL SA wishes to remove some tariffs and create new ones. While setting a price path may seem a simple task, there are many decisions to be made as to the most appropriate form of controlling individual prices.

3.3.1. Submissions

The form of regulation proposed by AGL SA is outlined in section 2.2.

Submissions by the retailers were generally supportive of light-handed regulation:

“...ESCOSA should take as light handed an approach as possible...”¹³

“...the ERAA believes that competition in SA has reached a level of maturity where a light-handed approach is more appropriate for the minimum 3-year price path.”¹⁴

“...The ERAA urges the Commission to adopt a light-handed approach in SA to provide the maximum capacity for the market forces to come into effect.”¹⁵

“...the risk of over-regulation and suppression of prices poses the greater threat of stifling retail competition and market entry, compared with the risk of over-estimating prices, which merely acts to encourage more rapid development of the competitive market.”¹⁶

TXU suggested a three to four year price path with a mid-term review and stated:^{17, 18}

“Perhaps the most fundamental parameter to be decided on with regard to the form of regulation to be used, is the length of the price path to be adopted...In our view the path should be long enough to span the full transition period between monopoly retail service provision (ie. prior to full retail contestability), and the development of an effectively competitive retail market...If this transition can be achieved, it should then be possible to remove the requirement for price-caps following the price path, leaving competition and market forces as the primary determinants of retail pricing thereafter.”

In contrast, Business SA stated its view that the electricity market is immature and requires some government intervention until maturity is reached.

Many submissions supported a simple price path based on CPI: IPA and NRG Flinders advocated a CPI-X methodology. TXU supported a price path with total allowable revenue escalated by CPI over the period.

Most respondents supported developing a price path that would be re-opened in limited circumstances only. For instance, Origin and NRG Flinders suggested allowing appropriate pass-throughs such as network tariffs so that fewer factors would be likely to trigger a re-opening of the price path.¹⁹ NRG Flinders additionally suggested the inclusion of an adjustment factor for force majeure events.²⁰

¹³ Origin Energy Submission, 30 July 2004, page 1 (<http://www.escosa.sa.gov.au/resources/documents/040730-Origin-ElePricePath.pdf>)

¹⁴ ERAA Submission, 2 August 2004, page 8 (http://www.escosa.sa.gov.au/resources/documents/040802-ERAA_ElecPricePath.pdf)

¹⁵ ERAA Submission, 2 August 2004, page 8

¹⁶ NRG Flinders Submission, 23 July 2004, page 2 (<http://www.escosa.sa.gov.au/resources/documents/040730-NRG-ElecPricePath.pdf>)

¹⁷ TXU Submission, 30 July 2004, page 4 (<http://www.escosa.sa.gov.au/resources/documents/040730-TXU-ElePricePath.pdf>)

¹⁸ TXU Submission, 30 July 2004, page 3

¹⁹ Origin Energy Submission, 30 July 2004, page 4 – 5; NRG Flinders Submission, 23 July 2004, page 3

²⁰ NRG Flinders Submission, 23 July 2004, page 3

TXU noted two major categories of changes that could impact on the validity of the price path and provided suggestions for how these could be incorporated in the re-opening mechanism:²¹

- ▲ a major change in input cost assumptions such as network tariffs. A mid-term review could be conducted to assess whether a change had caused the retail margin to fall outside a band of acceptable margins; and
- ▲ an unforeseen and unmanageable event outside the control of a prudent retailer. A force majeure re-opening provision should be adopted to allow a price re-opening assessment at any time providing a force majeure event had occurred.

IPA suggested that several factors should be considered when deciding whether to re-open the price path including substantial changes in:

- ▲ market outcomes compared to the key assumptions made by ESCOSA in the price determination;
- ▲ ETSA charges;
- ▲ legislation or regulation; and
- ▲ underlying wholesale price levels that support new investment.

However Business SA believed the price path should be reviewed annually and noted:²²

“Both wholesale and retail electricity prices have demonstrated their ability to fluctuate over time. It is important that any price path contains the ability to monitor and be amended to reflect changes in the electricity market.”

The majority of respondents were also of the view that tariffs should gradually move to levels which reflected their true costs of supply²³. For example, ERAA stated:²⁴

“To ensure individual tariffs transition to cost reflective levels, the Commission should consider tariff constraints in excess of the average price threshold whilst ensuring that customers are not subject to unacceptable price shocks.”

TXU believed the main objective of rebalancing should be to bring tariff classes closer to cost-reflectivity.²⁵

²¹ TXU Submission, 30 July 2004, page 9 - 10

²² Business SA Submission, 27 July 2004, page 1 – 2 (<http://www.escosa.sa.gov.au/resources/documents/040701-O-BusinessSA-ElecPricePath.pdf>)

²³ For example ERAA, TXU and AGL SA

²⁴ ERAA Submission, 2 August 2004, page 8. AGL SA commented similarly, page 6

²⁵ TXU Submission, 30 July 2004, page 4

3.4. Observations and Considerations

The Commission is yet to determine the most appropriate form of regulation. However, on the basis of its review of AGL SA's proposal, submissions to the *Issues Paper* and advice from NERA, the following observations and considerations are raised for the purposes of discussion.

3.4.1. The Instrument of Control

Regulated restrictions on tariff movements can be implemented by applying the restrictions to a choice of variables, such as average revenue, individual tariffs or a basket of tariffs. As indicated previously, the restrictions might need to be applied to individual components within a tariff, such as the supply charge and the energy charge(s). Each alternative will have different implications for the balance of risks to AGL SA (and its customers) and for the degree of flexibility offered to AGL SA.

As previously noted, there are a number of different tariffs within the standing contract obligation: these currently cover residential, off-peak hot water heating, business, farms and others. The tariff control chosen has to apply either to each tariff individually, or to them all as a combined group, or to a selection of key tariffs. Choosing a method of control is a difficult decision, and needs to have regard to the ability to monitor/police the outcomes as well as to the impact on individual consumers.

AGL SA has proposed that the price path apply to its average revenue per MWh. Under such an arrangement:

- ▲ total revenue from standing contract customers divided by total MWhs consumed by those customers would be able to change each year by the percentage specified in the price path;
- ▲ an unexpectedly high level of consumption could provide AGL SA with a 'windfall gain', since total revenue could increase in proportion with consumption even though some costs would be fixed;
- ▲ an unexpectedly low level of consumption could provide AGL SA with a 'windfall loss'; and
- ▲ AGL SA would have considerable flexibility to rebalance tariffs, subject of course to any additional side constraints imposed by the Commission (discussed further below).

Despite the potential for such an approach to provide AGL SA with gains in the event that consumption is unexpectedly high, a constraint on average revenue per MWh may be considered preferable to a constraint on average revenue per customer. This would be particularly so if the ongoing development of competition resulted in relatively high-volume (and high margin) customers being bid away from

AGL SA, as such a price path could result in greater tariff increases for customers remaining on standing contracts.

However, an average revenue per MWh constraint may not be as appropriate as a constraint on average tariffs, which would allow a weighted average of tariffs to change according to the specified price path. In contrast with a constraint on average revenue per MWh, an average tariff constraint would limit the extent to which total revenue fluctuated in response to differences in actual versus expected MWh consumption levels. This is because of the supply charge component of AGL SA's tariffs. However, AGL SA's revenues would still fluctuate in response to consumption changes due to the variable component of tariffs.

The regulatory framework in New South Wales (NSW) are based on restricting movement in average tariffs, rather than average revenues.

It may be that the price path should not apply to individual tariffs, as this would curtail AGL SA's ability to unwind existing cross-subsidies or to respond to changing market conditions. However, some restriction on the movement of individual tariffs may be appropriate and is discussed below (see 3.4.5).

Comments Sought

To what measure should any price path control be applied, ie, average revenue per customer or per MWh, weighted average tariffs, individual tariffs, etc?

Is it necessary to control changes in both the supply charge and energy charges (as it would be possible for AGL SA to increase supply charges significantly and reduce energy charges while still maintaining the allowable average charge, thereby impacting more severely on small consumers)?

What flexibility should AGL SA be given to change individual tariffs (increasing some, reducing others, but within the overall average price constraint)?

Given the complexities outlined above, is there a preferred approach to controlling tariffs to ensure compliance under the price path and protect individual consumers?

3.4.2. The Period of the Price Path

AGL SA has proposed a three year price path (commencing on 1 July 2005), which is the minimum period over which the Commission is required to set prices. Responses to the submissions varied from TXU's suggestion of a four-year price path (with a midterm review) to Business SA's suggestion of annually reviewed prices.

The period over which the price path is set must balance the risks associated with setting prices at inappropriate levels (either too high or too low) and the benefits of increased certainty. Thus the appropriate timeframe will, in part, depend on the scope for rebalancing, the costs AGL SA is able to treat as pass-through items and the flexibility AGL SA has in rebalancing tariffs to allow it to respond to changing conditions.

The Commission intends to adopt the period proposed by AGL SA ending on 30 June 2008.

3.4.3. The Conditions for Reopening

The need for reopening can be limited by allowing AGL SA to treat certain costs, such as network costs, as pass-through items. These are discussed in the following section 3.4.4.

AGL SA has proposed that it be able to reopen the price determination in the event that price increases above the specified levels can be justified.

This approach would allow for potentially greater flexibility in the price path than proposed in most of the submissions, which generally suggested that the price path be reopened only under exceptional circumstances or when costs fell outside some specified band, rather than simply when costs are above anticipated levels. If the conditions for reopening are too broad, the regime will provide little certainty to consumers as the price may be subject to regular variations and it will be questionable whether the Commission would have met its objective of establishing a medium-term price path.

Furthermore, the Commission notes that AGL SA's proposal does not allow for prices to be reopened in the event that costs are substantially lower than anticipated. However, unless the conditions for reopening are limited to readily identifiable 'force majeure' events, any symmetrical arrangement will necessarily entail ongoing monitoring of AGL SA's costs and/or revenues.

AGL SA's costs are limited to network, wholesale energy, operating and capital costs. Together, network and wholesale energy costs comprise around 80 per cent of allowable costs; the remaining 20 or so per cent is made up of operating costs, the retail margin and GST.

It is the Commission's view that reopening would not be appropriate for deviations in operating costs (since these are largely controllable by AGL SA) or for reviewing the level of the operating margin. The Commission accepts that changes in network costs should be accepted as a cost pass-through (upwards and downwards).

The possible causes for reopening could therefore be restricted to:

- ▲ significant deviations in the price of wholesale electricity from expected levels;
or
- ▲ significant deviations in consumption levels for standing contract customers that impacted AGL SA's ability to recover reasonable costs or resulted in significant over-recovery of costs.

Comments Sought

Is it appropriate for the price path to be reopened in the case of significant deviations between actual and expected wholesale energy costs or consumption levels, or should the risk of such fluctuations be borne by AGL SA in the interests of securing a more certain price path?

In the event of a reopening, should the review be limited only to those components of the price that triggered the reopening, or should a more comprehensive review be undertaken at that point?

How often should a re-opening of the price path be allowed?

Which parties should be able to seek a re-opening?

3.4.4. Pass-through Items

The Commission considers that pass-through items should be limited to those that are entirely beyond the control of AGL SA, in order to impose appropriate incentives on the retailer. The Commission has previously stated that it intends to continue to allow network charges to be treated as a pass-through item (as it has during 2003 and 2004).

AGL SA has proposed that network charges, changes in taxes, market related changes (such as an industry levy for the national regulator) or new charges introduced (such as reserve trader charges) should be treated as passthrough items.

Comments Sought

Does the list of pass-through items proposed by AGL SA accurately reflect the costs that are entirely beyond AGL SA's control and for which it is appropriate that consumers, rather than the retailer, bear the risks?

3.4.5. Flexibility for Rebalancing

Almost all submissions agreed that there was a need for tariffs to become cost reflective and for the current cross-subsidies to be unwound. However, the Commission is of the view this must be balanced against the need to protect customers from unacceptable price increases.

AGL SA has proposed that individual tariffs be permitted to increase by up to CPI+5% in each year of the price path.

Although AGL SA has suggested that its proposal would be consistent with arrangements in other states, this is not quite accurate:

- ▲ in Victoria, average tariffs for any customer category are able to increase by up to 5 per cent more than the average increase allowed for that retailer (but these increases are all less than CPI); and
- ▲ in NSW, retailers may not increase any customer's bill (for an identical level of consumption) per year by more than CPI+5% or \$35, whichever is greater.

Overall, however, AGL SA's proposal is similar to the arrangements in Victoria and NSW. Nevertheless, it is possible that impacts on individual consumers could be greater if AGL SA was able to alter supply charges at a different rate than the average charge.

It should be noted that the ability of the Commission to control individual tariffs is extremely limited.

The Commission has commented (specifically in its 2002/03 Performance Report on the Electricity Industry) about the progressive removal of cross-subsidies in South Australian tariff structures since the late 1980s, and the impact this has had on residential consumers.

It stated that, in a competitive market, it is not possible to implement tariff structures which involve deliberate cross-subsidies between consumer types (eg business and residential) or within consumer groups (eg large and small consumers). If a tariff structure is forced on a retailer which involves some consumers paying well above their true cost of supply, so that other consumers will pay less than their true cost of supply, other retailers will target the consumers with a high margin, leaving the original retailer to supply proportionately more of the consumers with a low or negative margin, without the ability to cross-subsidise. Such a situation eventually becomes untenable, unless a third party (ie government) is prepared to pay a specific subsidy to cover the low margin customers.

South Australia has, since the late 1980s, removed many cross-subsidies – such that most consumer classes are now generally paying their “true” costs of supply. South Australia has one of the most open and competitive electricity markets in Australia, but this has resulted in significant increases in price for residential and

small business consumers whilst large business prices have fallen substantially as these cross-subsidies have been removed.

However, a number of cross-subsidies remain, and AGL SA has indicated a desire to remove these progressively during the price path period.

In its Final Report of October 2002 on the Inquiry into Standing Contract Electricity Prices, the Commission in Section 7.3 “Profit Margin and Cross Subsidy” examined the profit margins earned in individual customer categories and highlighted the cross-subsidies that existed between and within the categories.

While the overall margin for all small customer categories combined was 5.0%, there were key differences identified as follows:

- ▲ domestic (residential) consumer margins varied from –20% at very low consumption levels to +12% at very high levels, with the average consumption of 5000 kWh/a delivering the target 5% margin. In other words, there is a significant cross-subsidy within the residential group from large to small consumers below that level.
- ▲ off-peak residential water heating achieves a margin of –0.6%, and is reasonably constant across all consumption levels. Other customer categories (eg residential and business) were cross-subsidising the costs of off-peak water heating.
- ▲ small business consumer margins varied from about 0% at very low consumption levels to +13% at higher levels, with an average margin of 11.8% (well above the target 5%). In other words, there are significant cross-subsidies from larger to smaller business consumers within the small consumer group, and from all business consumers to other consumer groups.
- ▲ other business and institutional tariffs had margins well in excess of the 5% target, with the exception of the farm with off-peak tariff, where an under-recovery occurred.

The CCSA, in its submission to the Issues Paper, has raised the prospect of a “Socially Responsible Tariff” (SRT).

The principles behind an SRT are that:

1. All households are entitled to access sufficient quantities of essential services (such as electricity, gas and water) as required to sustain a decent standard of living and meet the health needs of the occupants; and
2. All households are entitled to access this quantity at an affordable cost.

The CCSA suggested that an SRT might follow an inclining block tariff structure:

- ▲ low or no fixed charge;
- ▲ an “entitlement” to energy (up to a threshold level) that reflects a quantity that can sustain a basic standard of living at an affordable rate;

- ▲ one or more further bands of consumption where the cost per unit increases in each band.

The CCSA indicated that an SRT should be linked to a targeted Community Service Obligations regime (with concessions or rebates provided by government or industry).

However, removal of the cross-subsidies identified earlier would most likely involve increasing supply charges (so that smaller consumers pay more) and by increasing residential and rural charges further (and reducing business charges). This is presumably what AGL SA intends when it asks for restraints on tariff changes to be lifted and for cross-subsidies to be reduced.

Such changes go in the opposite direction to those proposed by CCSA.

The Commission has sought recent information from AGL SA on the consumption levels of residential consumers classified as permanent concession card holders, temporary concession card holders and others. AGL SA does not obtain information on income or any other means of identifying the status of a consumer – the concession card holders are assumed to be a reasonable measure of the disadvantaged.

The information (based on 2003/04 consumption data from small consumers) shows:

- ▲ the average consumption of concession card holders is approximately 15% lower than the average consumption of non-concession residential consumers; but
- ▲ significant proportions of concession card holders consume above the average level of consumption for all consumers.

The information indicates that disadvantaged consumers do not necessarily have low consumption. There is a significant number of concession card consumers with annual consumption above 5000 kWh (about 70,000 consumers), and there is a significant number of non-concession card consumers with consumption below 4000 kWh/a (about 194,000). On this evidence, it is not possible to assume that all disadvantaged consumers have low electricity consumptions.

If the Commission were to lower charges for small levels of consumption, and increase charges for higher levels of consumption, it might inadvertently increase costs to many needy consumers and reduce costs to many of those most able to pay (eg those with holiday homes and consequent low levels of consumption).

The Commission is concerned that attempts to address social inequities via tariff structures run the risk of causing additional pain to some needy families and rewarding others who are quite capable of paying the true cost of their consumption.

On the other hand, the Commission is sympathetic to the objective of CCSA in ensuring needy consumers receive sufficient electricity at an affordable price. At the current time, the Government provides an annual subsidy of \$120 to concession card holders, to reduce the impact of electricity costs on those judged to be at risk. Whilst the process of determining eligibility for the concession is difficult to target precisely to those in need, it is in the Commission's view preferable to attempting to do this via tariffs.

However, if AGL SA wishes to take steps to reduce cross-subsidies even further, the Commission does need to come to a decision about how rapidly it will allow cross-subsidies to be unwound. In other words, it needs to determine the nature of the constraints it will allow on changes to individual tariffs.

As indicated previously, regulators in Victoria and NSW (and elsewhere) have accommodated such changes by allowing tariffs to change by larger amounts than the overall change. For example, if the Commission approved the overall average charge to increase each year by (say) CPI minus 2.0%, it might allow any individual tariff to be changed by an amount up to CPI plus 3.0% (provided that the overall average was maintained). Such an approach would allow off-peak water heating and farm tariffs to be increased at a faster rate than others, and business tariffs to be reduced. There would be an impact on certain consumer groups of a greater magnitude than the overall average impact.

Additionally, however, there is the issue of changing the balance of charges within a particular tariff group. For example, if supply charges were increased to increase the margin obtained from small consumers relative to large consumption levels, the smaller consumers would be impacted more even though the overall contribution from the tariff category remained the same.

The Commission will need to give careful consideration to the level of involvement it should have in defining actual tariff structures and prices for standing contract supply.

Comments Sought

Should the Commission support continued efforts to remove cross-subsidies between consumer tariff categories and within tariffs?

Should the Commission attempt to control the allowable changes for both supply charges and energy charges within a tariff category?

What level of price increase is tolerable for customers who are currently on under-recovering tariffs? Is the NSW rebalancing restriction acceptable?

Are there alternative approaches to setting a "Socially Responsible Tariff" as proposed by CCSA, that overcome the problems identified?

4. RETAIL COST COMPONENTS

4.1. *The Building Block Approach*

AGL SA's standing contract tariffs have previously been set according to a "building block approach" whereby the efficient costs incurred in supplying electricity are added together to establish the total revenue requirement, including a retail margin or profit. The question was raised in the Issues Paper as to whether an alternative approach to the building block methodology should be considered. AGL SA, TXU, IPA, Origin and NRG Flinders were supportive of the building block approach.²⁶ No submission offered an alternative.

The cost of supplying electricity can be broken down into five components:

- ▲ wholesale electricity costs;
- ▲ network costs;
- ▲ retail operating costs;
- ▲ a retail margin; and
- ▲ Goods and Services Tax (GST).

AGL SA's proposal in relation to each of these elements has been outlined in Chapter 2. The main issues raised in the submissions and the analysis undertaken to date by the Commission's independent consultants are outlined in the following sections.

The Terms of Reference of the Inquiry restrict the Commission to a consideration of the retailer's controllable costs, which exclude the network charges attributable to ETSA Utilities (Distribution Use of System - DUOS) and ElectraNet (Transmission Use of System – TUOS). In other words, the Commission is required to consider the wholesale energy costs, retail operating costs and retail margin. The other two components (network charges and GST) are to be passed through as incurred.

The average residential consumer bill for electricity in South Australia is approximately \$1000 per annum. This annual cost can be allocated across the five components as follows:

	ANNUAL COST (\$)	%
Network charges	436	44
Wholesale energy cost	346	35
Retail operating cost	83	8
Retail margin	44	4
GST	91	9
TOTAL	1000	100

²⁶ TXU Submission, 30 July 2004, page 14; International Power Australia Submission, 30 July 2004; Origin Energy Submission, 30 July 2004, page 3; NRG Flinders Submission, 23 July 2004, page 5



It can be seen that the dominant contributors are the network charges and wholesale energy cost, accounting between them for nearly 80 percent of the total. Retail operating cost and retail margin account for about 12 percent: it requires significant reductions in these components to have a major impact on the overall price.

4.2. Wholesale Electricity Costs (WEC)

4.2.1. Overview of Approach

Wholesale electricity costs have generated the greatest level of debate through the 2003 and 2004 price reviews and are potentially the most difficult cost component to determine. AGL SA's wholesale energy costs will depend on numerous factors, including its customer load profile, the spot market prices, weather conditions, terms of hedging contracts, the proportion of load that is uncontracted, the supply/demand balance in the NEM, strategies adopted by generators and retailers in bidding and contracting, customer churn, etc.

The Commission's estimates of WEC for the 2003 and 2004 price reviews relied heavily on modelling advice from the consultant Intelligent Energy Systems (IES). In both reviews, the underlying model was identical, but the assumptions were reassessed and updated for the purpose of the 2004 price review. The elements of the modelling analysis that were particularly controversial were:

- ▲ the period of contracting;
- ▲ the swap contract prices;
- ▲ the cap contract prices; and
- ▲ hedge mismatch and other risks.

In the *Issues Paper* released in June 2004, the Commission sought comments on the usefulness of undertaking a similar modelling exercise, given that it is now faced with the even more difficult task of determining wholesale electricity costs over the medium-term, rather than for a single year.

Responses on this issue were mixed. Some respondents supported the ongoing use of such modelling. NRG Flinders stated its view that the Commission's established methodology for approximating the costs of a prudent retailer could be adapted to determine a forward three-year price path. In addition, it proposed that aggregate (rather than actual) contract cost data should be used to provide a comparison only to avoid the risks of cost-based pricing regulation.²⁷ Similarly, Origin believed that the Commission should primarily rely on some form of prudent cost methodology. While it did not endorse the IES methodology previously used by the Commission or the Charles River Associates' (CRA) methodology used by the Victorian Government, it did believe these styles of analysis were well suited to a regulatory context. Origin indicated its intention to comment at a later stage of the Inquiry on the estimation of prudent wholesale electricity costs which:²⁸

²⁷ NRG Flinders Submission, 23 July 2004, page 2 - 3

²⁸ Origin Energy Submission, 30 July 2004, page 3

“...will address, for example, the failure of the existing models to adequately recognise the significant impact of hedging practices and compliance costs, flowing through into estimated wholesale electricity costs, of the standard risk management regimes that all (prudent) retailers use to constrain their exposures to potential electricity trading losses.”

AGL SA was of the view that a cost estimate based on the long run marginal cost would be more appropriate and stated that:

*...the current SA wholesale electricity costs incurred by AGL for the small customers market are at a level consistent with the fuel costs, the costs of imports, the market risks and characteristics of the SA load shape. **These costs are above what has been allowed by the Commission.***

AGL SA expressed concern with the IES methodology, particularly in relation to the underlying hedge strategy. It noted that long run marginal cost (LRMC) outcomes can be a reasonable estimate of long run wholesale electricity prices if correctly calculated, taking into account market risks and characteristics.²⁹

TXU noted that the IES methodology was fairly robust but that the major issue is the sourcing of accurate forward contract pricing to be used as input data. TXU recommended that the annualised cost recovery required by a new entrant plant should be used as a basis for determining what the medium term wholesale energy prices should be. TXU stated that this is fundamentally the same as the LRMC based approach adopted by IPART; however, TXU's proposed approach included a hedge mismatch risk factor.³⁰

IPA also recommended a forward-looking, new entrant based regulated price which it believed may assist in providing reasonable 'headroom', thus encouraging retail competition and also ensuring consumers receive the correct signal regarding the cost of a reliable electricity supply.³¹

The ERAA was particularly concerned with factors that would place pressure on wholesale electricity costs in the future, including the more volatile South Australian wholesale electricity price and anticipated shortfall in supply capacity. ERAA highlighted the importance of including these factors in the assessment of wholesale costs in order to provide incentives for new investment in generation/transmission and to ensure the viability of retail businesses in the short to medium term.³²

Given the range of responses, for the purposes of the current inquiry the Commission has decided to undertake a comprehensive assessment of a retailer's prudent strategy to cover the standing contract demand, and has engaged the consultant ACG to develop this scenario model and provide advice to the

²⁹ AGL SA Submission, 30 July 2004, page 9 (<http://www.escosa.sa.gov.au/resources/documents/040730-AGL-ElecPricePath.pdf>)

³⁰ TXU Submission, 30 July 2004, page 5-6

³¹ International Power Australia Submission, 30 July 2004 (<http://www.escosa.sa.gov.au/resources/documents/040803-IP-ElecPricePath.pdf>)

³² ERAA Submission, 2 August 2004, page 10

Commission on prudent wholesale electricity costs for the period to June 2008. ACG's work also requires it to review:

- ▲ AGL SA's actual contract costs;
- ▲ estimates of LRMC for SA small consumer demand prepared by ESIPC; and
- ▲ credible options for purchase of hedging contracts for loads not yet covered by contracts for each year of the price path.

The Commission has decided that this scenario planning approach is the most credible methodology available to it to set a prudent wholesale electricity cost for each year of the price path period. It will also have regard to two other sources of information:

- ▲ the ESIPC estimate of the LRMC of electricity supply to standing contract customers; and
- ▲ the contract prices paid by larger consumers in recent years for small contract quantities.

The above information will be used to confirm input data into the ACG scenario model.

The estimated wholesale energy cost is quite dependent on projections of demand and the load profile. These assumptions are discussed in the following section. The succeeding sections then outline the analysis completed to date on each of the wholesale energy cost estimate methodologies.

4.2.2. Key Assumptions

4.2.2.1. Summary of Submissions

In the *Issues Paper*, the Commission requested responses regarding alternative approaches to estimating demand parameters and managing the uncertainty associated with such estimates. Responses to these questions varied:

- ▲ AGL SA noted that weather significantly impacts on demand, while pointing out that the quantity and timing of energy purchases will be impacted by the number of customers moving to a market contract, their usage pattern and overall growth in energy consumption.³³
- ▲ TXU suggested using the 10 per cent Probability of Exceedence (POE) regulated customer demands in addition to the ongoing reduction in the load factor. [Note: 10% POE demand is an estimate of the peak demand level to be supplied which has only a 10% probability of being exceeded]. In relation to the impact of customer

³³ AGL SA Submission, 30 July 2004, page 15

churn, TXU suggested that a scenario test could be conducted with assumptions on the percentage of total churn contributed by high and low value segments. TXU noted that factoring in weather dependencies may be problematic.³⁴

- ▲ IPA advocated the use of historical domestic sector activity as well as trends elsewhere in Australia such as Victoria and competitive international markets such as New Zealand.³⁵
- ▲ CCSA raised the question of how consumption relates to household size, concession eligibility and other household attributes, while suggesting that the use of inclining block tariffs may reduce the risks of forecasting demand.³⁶
- ▲ NRG Flinders pointed out that an important demand consideration is the shape of the average (residential) system demand profile. The use of other measures such as a representative sample of individual meters may assist with testing the accuracy of the load shape estimate.³⁷
- ▲ Origin has stated its intention to address the first part of this question at a later time. In relation to the second part of this question, it suggested that Monte Carlo methods may enhance the robustness of current methodologies.³⁸

4.2.2.2. Customer and Demand Assumptions

The development of a 3 year price path for AGL SA's standing contract customers requires forecasts to be made of the following variables:

- ▲ the pattern of usage, or load profile, of these customers (on a half hourly basis) throughout a year;
- ▲ the growth in overall sales volume on a year by year basis; and
- ▲ the change in standing contract customer numbers reflecting both growth in overall customer numbers and movement into, and out of, market contracts.

Estimates of all three of the above variables are required in the assessment of wholesale electricity costs.

³⁴ TXU Submission, 30 July 2004, page 13 - 14

³⁵ International Power Australia Submission, 30 July 2004

³⁶ Conservation Council of South Australia Submission, 30 July 2004 (<http://www.escosa.sa.gov.au/resources/documents/040730-CCSA-ElecPricePath.pdf>)

³⁷ NRG Flinders Submission, 23 July 2004, page 4

³⁸ Origin Energy Submission, 30 July 2004, page 5

In addition, if a form of regulation based on the movement in average revenue is adopted in line with AGL SA's pricing proposal, assumptions relating to overall sales volume will impact on this measure. Furthermore, customer number assumptions are important in the allocation of retail operating costs.

4.2.2.3. ESIPC Forecasts

In its pricing submission, AGL SA has made reference to ESIPC's 2004 Annual Planning Report for the next 10 years and, in particular, has identified the following key projections:

- ▲ total customer sales in SA are projected to grow by an average of 2.1% per annum over the next 10 years.
- ▲ over the same period, peak demand is forecast to grow at 2.8% per year, reflecting a continuing deterioration in the SA load shape.

ESIPC has also prepared forecasts of the growth in small customer sales volume. This is expected to average just under 2% per annum over the next 3 years or so.

4.2.2.4. AGL SA's forecasts for standing contract customers

AGL SA has indicated in its submission the range of factors it has taken into account in establishing standing contract customer demand for each year of the price path. These include:

- ▲ average volume growth
- ▲ average peak load – with and without hot water
- ▲ average hot water load
- ▲ household growth per annum and AGL SA's share
- ▲ percentage of customers lost by AGL SA to other retailers (customer churn-out)
- ▲ percentage of customers expected to return from market contracts to standing contracts
- ▲ percentage of customers expected to move to AGL SA market contracts.

AGL SA has provided its assumptions relating to the above variables on a confidential basis to the Commission.

The Commission has sought to secure agreement between ESIPC and AGL SA on the demand forecasts and load profiles to be used in the assessment of wholesale electricity costs. It will continue to seek

resolution of any differences between the two parties, but ultimately will be guided by ESIPC as an independent party on this matter.

4.2.3. Analysis of Prudent Wholesale Electricity Costs

The TOR of the Inquiry require the Commission to review the controllable costs of AGL SA and determine if they are prudent. In particular, it is required, under TOR 3.4, to have regard to:

- “3.4.2 The wholesale electricity contracts and hedging strategies that would be utilised by a prudent electricity entity in providing the standing contracts to each of the residential and business customer classes in SA;*
- 3.4.3 the electricity entity’s actual underlying wholesale electricity contracts, hedging strategies and other arrangements for securing electricity for supply in SA, as well as the method for allocating these costs between large and small customers and within the small customer class.”*

If it were to proceed to make a price determination, the Commission would also be required to consider “the cost of making, producing or supplying the goods or services”. Further, IPART, in its review of ESCOSA’s 2003 pricing methodology, suggested the Commission should consider a number of other approaches to inform itself in choosing the wholesale electricity price to be used in setting retail prices (such as LRMC and large customer contract prices).

One of the challenges arising from an approach which seeks to determine a number of different estimates of WEC is how ultimately to select the preferred cost: whether to choose one of the different estimates, or an average of all estimates, or a weighted estimate.

However, the Commission has elected to adopt a different approach which incorporates all of the alternative requirements set out in the Terms of Reference. This approach is outlined below, and is believed by the Commission to best reflect the approach that a prudent retailer would have adopted given the same situation as applied to AGL SA.

As reported previously, the Commission has engaged ACG to undertake:

- ▲ an assessment of the prudence of AGL SA’s existing contracts for supply of electricity to small customers over the review period (1 July 2005 to 30 June 2008); and
- ▲ modelling to determine the prudent cost of purchasing the remaining (as yet unhedged) proportion of the load for the review period.

A copy of the ACG report to the Commission (with confidential information removed) is to be released at the same time as this Discussion Paper. This section provides a brief summary of the ACG report: stakeholders are encouraged to read the full report. It should be noted that the Commission has

not formed a view yet on the appropriate wholesale energy cost, and is releasing the ACG report in order to obtain stakeholder comment on the assumptions and methodology. The Commission will consider those comments prior to forming a view in its draft report to be released in November.

The underlying presumption of the analysis undertaken by ACG is that a prudent retailer would create a portfolio of swaps and caps that minimises the risks associated with the variability of customer demand and pool price.

The first issue relates to the “prudence” of the actual contracts that AGL SA has already entered into. On the one hand, it could be argued that AGL SA signed these contracts at the time of peak contract prices and hence they should not be considered to be prudent behaviour by the retailer. However, this analysis of contract prices can only be made with the benefit of hindsight. Also, if it is assumed that AGL SA’s action was not prudent, the Commission will need to determine what contract price was “prudent” at the time a prudent retailer would have contracted to meet its standing contract obligations.

Current contract prices from AFMA or other brokers (or even such prices at around the time AGL SA did contract) may not provide a reasonable basis for this assessment, since they represent prices in an environment where a reasonably large load had already been contracted by AGL SA. It is difficult, if not impossible, to estimate the contract prices that would have applied in an environment where AGL SA was wholly uncontracted (and what the contract prices would subsequently have been when AGL SA sought to obtain contracts for this load).

ACG have reviewed all of AGL SA’s contracts signed over the period 2001 to 2004 that relate to supply to the small customer market for the period 2005 to 2008, and compared the AGL SA contract prices to those available in the market at that time. In a confidential report to the Commission, ACG have concluded:

- ▲ the prices achieved by AGL SA were efficient and similar to prices achievable by a prudent retailer; and
- ▲ the timing of AGL SA’s purchases was appropriate and prudent.

ACG have advised the Commission that it considers there is no basis other than to accept AGL SA’s existing contract quantities and prices as prudent for use in its modelling of WEC going forward.

4.2.3.1. ACG Methodology

With regard to determining the prudent purchase cost of the currently unhedged portion of AGL SA’s load, the methodology used by ACG can be summarised as follows:



- Step 1: A load profile for AGL SA's small customer load is developed (using base data provided by ESIPC).
- Step 2: Five scenarios are developed to value the level of under/over contracting, using various assumptions regarding the load and future spot prices (including their co-relations). These five scenarios are:
- ▲ Historical pool prices, AGL SA load forecast, January and February demand and price correlated;
 - ▲ Historical pool prices, AGL SA load forecast, demand and price correlated
 - ▲ AGL SA load forecast, 30 high price events (15 @ \$10,000 / MWh, 15 @\$5,000 / MWh), average pool price at new entrant level, January and February demand and price correlated
 - ▲ Historical pool prices, AGL SA load forecast lowered by difference between ESIPC forecasts of 50%POE base case and 90%POE low economic growth case, January and February price and demand correlated
 - ▲ Pool prices between historical and new entrant, AGL SA load forecast higher by difference between ESIPC 50% POE base case and 10% POE high economic growth case, January and February price and demand correlated
- Step 3: Weighting is given to each one of these scenarios by considering the likelihood of a scenario occurring and the financial consequences of it occurring.
- Step 4: A set of contract prices is constructed based on varying assumptions about the cost of purchasing the balance of load not covered by existing contracts.
- Step 5: The model then creates, for each contract price case, a portfolio of hedge contracts (swaps and caps) that minimises the risks associated with the variability of customer demand and pool price. It calculates a load-weighted hedge cost for each case.
- Step 6: Pass-through costs (NEMMCO fees, ancillary service charges, bank guarantee, Mandatory Renewable Energy Target (MRET)) and line losses are then added to calculate total wholesale electricity costs.

4.2.3.2. Assumptions

The ACG report details the assumptions used in modelling the WEC estimate so as to minimise the risk to the retailer in supplying electricity to standing contract consumers under the five scenarios. The model chooses the optimum mix of contracts and caps to minimise the risk of outcomes away from the optimal contracting strategy.

Key assumptions in the model include:

- ▲ demand forecast and load profile for small customer market of AGL SA;
- ▲ AGL SA existing contract levels and prices for each year of the three year period (progressively less cover for each successive period);
- ▲ prices for new contracts yet to be entered into (progressively increasing requirements for each successive period) based on three alternative cost levels:
 - existing contract prices from brokers;
 - existing prices with a risk margin (based on current cost of options);
 - new entrant prices based on ESIPC estimates.
- ▲ weightings for each of the five scenarios.

Information about these assumptions is provided (where it is not confidential) in the ACG report.

4.2.3.3. Results

The ACG report presents WEC cost estimates for each of the three years (2005/06, 2006/07 and 2007/08) based on the three pricing possibilities for new contracts.

The estimated WEC (energy only) for each case is summarised in Table 1 below:

Table 1: Energy only WEC – nominal dollars

	\$/MWH 2005/06	\$/MWH 2006/07	\$/MWH 2007/08
AGL SA existing contracts plus new contracts at:			
- Current contract price	60.02	58.84	58.18
- Current with risk margin	60.11	59.04	59.00
- New entrant price	60.11	59.56	64.17

The actual WEC payable by a retailer needs to be adjusted by allowances for:

- ▲ market and other charges
- ▲ network losses.

After adjustment for these factors, ACG has provided the following estimates of WEC to be used in the building block for determining prudent controllable costs of AGL SA for standing contract supply.

Table 2: Wholesale Energy Costs - nominal dollars

CONTRACT PRICING BASIS	\$/MWH 2005/06	\$/MWH 2006/07	\$/MWH 2007/08
Current contract price	67.53	66.63	66.29
Current with risk margin	67.63	66.84	67.17
New entrant price	67.63	67.40	72.76

Comments Sought

Are the scenarios developed by ACG credible and appropriate?

Are the assumptions used by ACG credible?

Which of the three future contract price options is preferred for setting the WEC, and on what basis?

4.2.4. Long Run Marginal Cost (LRMC)

IPART, in its review of the Commission's methodology for reviewing 2004 standing contract prices, recommended that the Commission should consider, as one input into estimating the wholesale electricity price, the long run marginal cost of electricity supply for standing contract consumers in South Australia. This was supported by a number of the submissions to the Issues Paper.

Accordingly, the Commission requested ESIPC to provide it with advice in this regard. ACG have used the LRMC determined by ESIPC in setting the new entrant price for contracts in its model.

A copy of the ESIPC report is to be released with this Discussion Paper.

As indicated in its report, ESIPC has determined a long run marginal cost of supplying electricity to the standing contract consumers in 2005. To do this, ESIPC has independently developed a load profile of customers based on information

provided by AGL SA and ETSA Utilities, as well as from its own sources (including its demand forecasts).

The candidate new entrant generators examined by ESIPC were all gas fired and included both open cycle and combined cycle plant of several sizes. Prices were determined in conjunction with consultants and checked with industry information: the prices are believed to be achievable by an efficient participant.

The peaky load profile of standing contract consumers requires a large amount of plant to meet the peak load, and such plant has therefore poor utilisation. The optimal mix determined included around 49% of combined cycle plant operating at an average load factor of 63%, complemented by some 51% of open cycle plant operating at an average load factor of only 0.1%.

The LRMC is the cost of meeting an additional block of small customer demand, treating it as a stand-alone market. The LRMC will not necessarily align with AGL SA's actual contract costs over the next few years.

The ESIPC report considers a number of different scenarios, each a variation from a base case. Obviously, the values are very dependent on the assumptions fed into the model.

It is not the intention of the Commission in this Discussion Paper to present all of the results – readers are referred to the ESIPC report. Nevertheless, the following values for “base case” scenarios are reported to illustrate the advice received from ESIPC.

SA Long Run Marginal Cost <160MWh Customers (\$/MWh)

	INCLUDING OFF PEAK HOT WATER	EXCLUDING OFF PEAK HOT WATER
Energy only	58.9 - 62.3	60.3 - 63.9
Energy, fees & losses	65.3 - 69.0	66.8 - 70.7

The ranges of cost above represent different assumptions about the required rate of return for investing in generation plant. ESIPC also undertook further analysis of a wider set of assumptions (as detailed in its Report) resulting in a range of LRMC (\$/MWh) (including market fees and losses and off-peak hot water demand) of \$64.5 to 76.6 per MWh.

ESIPC repeated the estimation for all consumers with annual consumption greater than 160MWh. These consumers have a significantly less peaky demand profile than the small consumer group. The LRMC (including fees and losses) for these consumers was approximately \$8-9/MWh lower than that determined for the smaller customer class, illustrating the significant impact on price of small customer peaky demand.



As indicated previously, ACG have used the ESIPC new entrant price as an input into their model: therefore the ESIPC analysis is an important part of the Commission's determination of the WEC.

Comment Sought

Are the assumptions used by ESIPC appropriate?

What is the appropriate rate of return for investment in generating plant for use in determining the LRMC?

4.2.5. Large Customer Contracts Analysis

Previous decisions of the Commission in setting 2003 and 2004 prices specifically addressed the costs of wholesale electricity that might be incurred by a prudent retailer meeting the standing contract consumer load. Regard was also had to AGL SA's actual contracts, where such information was able to be applied to standing contract loads.

A number of submissions received by the Commission referred to energy prices achieved by larger customers, which were reported to be well below the levels determined by the Commission as appropriate for the standing contract retailer. Submissions indicated that the Commission should gather information on prices achieved by larger customers as a guide to contract prices that were potentially available to AGL SA.

The Commission indicated that such information needed to be treated with caution, as it was not necessarily the case that prices for small parcels of electricity (a few MWs) would apply to large parcels of some hundreds of MWs. Indeed, the Commission had already observed such problems in using AFMA data (for 10MW loads) to determine AGL SA's contract prices. Further, AGL SA had indicated that generators were able to sell small parcels of load at lower prices only after they had secured long run costs by entering into larger contracts at higher prices with AGL SA (as the dominant retailer).

While the Commission has some reservations about the ability to infer prudent wholesale energy prices for the standing contract retailer from prices for small blocks of power for larger customers, it nevertheless accepts that this is another piece of information which it should have regard to in coming to an informed decision about wholesale electricity costs.

The Commission has been collecting information on wholesale electricity prices for large customers (>160MWh/a) for some years, as part of another of its obligations (setting electricity prices for inset reselling customers). Indeed, it has a

comprehensive data base on a significant number of contracts entered into by large customers with retailers over the period 2001 to 2004. However, it is limited in its ability to use and publish such information, as it is commercially confidential. The Commission has entered into confidentiality agreements to obtain such information.

The data obtained shows the price that a company has agreed to pay a retailer for the supply of electricity. Network charges, losses and other fees are in addition to the agreed “energy” charge. The “energy” charge, however, includes payments to a retailer for its operating costs and margin.

The energy contract price obtained by the Commission therefore needs to be adjusted, firstly by increasing it by 8.1% for losses and adding \$1.50 for market charges; and secondly by reducing it by (say) 7% to remove retailer operating costs and margin. The prices do not include GST.

The information available to the Commission, based on many hundreds of contracts between large customers and retailers, after adjustment as outlined above, produces the following wholesale energy cost estimates:

Large Customer Wholesale Energy Cost (\$/MWh)

	YEAR OF SIGNING CONTRACT				
	2000	2001	2002	2003	2004
Peak	76	121	73	60	73
Off-peak	39	46	33	31	30
AVERAGE	57.5	83.5	53	45.5	51.5

For standing contract consumers, approximately 50% of consumption occurs in each of the peak and off-peak periods, so a simple arithmetic average of the prices should be a reasonable approximation of average energy cost over the year.

Based on this contract price information for large customers obtained by the Commission, the key assumption in estimating future average wholesale energy prices for the period 2005-08 for standing contract supply can be seen to be the proportion of contracts that were entered into in 2001 (and to some degree 2002): this assumes that contract prices achieved by large customers are a guide to the prices that AGL SA could have achieved as a prudent retailer over the contracting period.

The main query about the relevance of large customer contract prices in confirming AGL SA’s costs is whether large customers are able to secure lower prices (or more precisely, whether other retailers are able to) after AGL SA as the dominant retailer has settled its contracts. In other words, do generators “sell off” small blocks of capacity at lower prices only after they have secured their required income by selling

the bulk of their output at higher prices to the retailer who has to supply most of the market?

On the other hand, with the maturing of the SA electricity market, it is not clear that there remains any significant liquidity problems facing AGL SA in meeting its contractual supply obligations.

The Commission is keen to receive comments on these issues.

4.2.6. AGL SA Historical WEC for 2003

As a check on the credibility of estimating methods for WEC for future years, the Commission has also sought to review AGL SA's historical WEC for supply to standing contract customers in 2003.

While the 2003 WEC is not a reliable indicator of costs in 2005 and following years, it is of some relevance to learn whether the actual WEC for AGL SA in 2003 was similar to the estimate of the Commission in its December 2002 determination.

The auditing firm Deloitte is working with the Commission and AGL SA to give independent confirmation of the historical 2003 WEC by reviewing payments by AGL SA to generators and the market. Although this sounds a simple exercise, it does require considerable judgement as to the appropriate allocation of AGL SA's costs between SA and other jurisdictions, and between large and small customer groups.

This work has not been completed at the time of writing this Discussion Paper.

4.2.7. WEC Summary

As indicated previously, the Commission intends to base its determination of the WEC for 2005/06, 2006/07 and 2007/08 on the scenario modelling outcomes from the ACG consultancy.

That model requires a number of inputs, and the Commission is relying on the independent evaluation of costs by ESIPC, the comparison with large customer contract costs, and the review of AGL SA actual contract prices, to provide confirmation of the credibility of the input assumptions used in the modelling.

Comments Sought

The Commission encourages stakeholders to review the ACG and ESIPC reports released with this Discussion Paper, and to provide comments to the Commission on the credibility of those assumptions. The Commission will take account of all comments received in making its final determination of WEC in November 2004.

4.3. Retail Operating Costs (ROC)

The allowance for retail operating costs (usually expressed as dollars per customer per annum) is intended to cover the retailer's costs associated with activities such as:

- ▲ billing and revenue collection;
- ▲ operating a telephone call centre;
- ▲ providing advice and assistance to consumers;
- ▲ fulfilling obligations as standing contract retailer set out in the Energy Retail Code and other regulatory instruments; and
- ▲ corporate overheads (including licence fee and Ombudsman charges).

The Terms of Reference of the Inquiry require the Commission to have regard to:

- TOR 3.4.4 the retail operating costs that would be incurred by a prudent electricity entity in delivering the range and standard of services that are required of the electricity entity in providing standing contract services to South Australian small customers;*
- TOR 3.4.5 the electricity entity's actual operating costs in providing standing contract services to South Australian small customers, and the method of allocating its costs between the different customer classes".*

In the earlier reviews by the Commission of the 2003 and 2004 standing contract prices, the allowance for ROC was set by reference to the allowances made by regulators in other jurisdictions.

No regulator in the past few years has examined a retailer's actual operating costs and been able to set an efficient cost benchmark based on such analysis. All previous regulatory decisions have been based on broad benchmarks of acceptable ranges.

At the present time, regulators in Victoria, Australian Capital Territory (ACT), Tasmania and South Australia (SA) have adopted an ROC in the range of \$80 – 85 per customer in their regulatory decisions. Subsequent pricing agreements between the Government and retailers in Victoria have acknowledged an ROC up to \$90 per customer.

On the other hand, the NSW regulator (IPART) has adopted a lower number of \$70 per customer (although IPART also indicated that current tariffs in NSW do not allow a retailer to fully recover its costs).

It should be noted that the difference between all of these regulated benchmarks is relatively small (plus or minus \$10 per customer per annum in a total cost of \$1000 to the average consumer, or 1%). On the other hand, a difference of \$10 per customer represents a total income to AGL SA of approximately \$7 million per annum.

In an attempt to obtain a more reliable estimate of the operating cost of a retailer, and to comply with the Terms of Reference of the Inquiry, the Commission has required AGL SA to provide detailed information on its actual 2003 operating costs. It is expected that such

information will assist the Commission determine whether AGL SA's proposed ROC is prudent and justified.

4.3.1. AGL's Actual 2003 Operating Costs

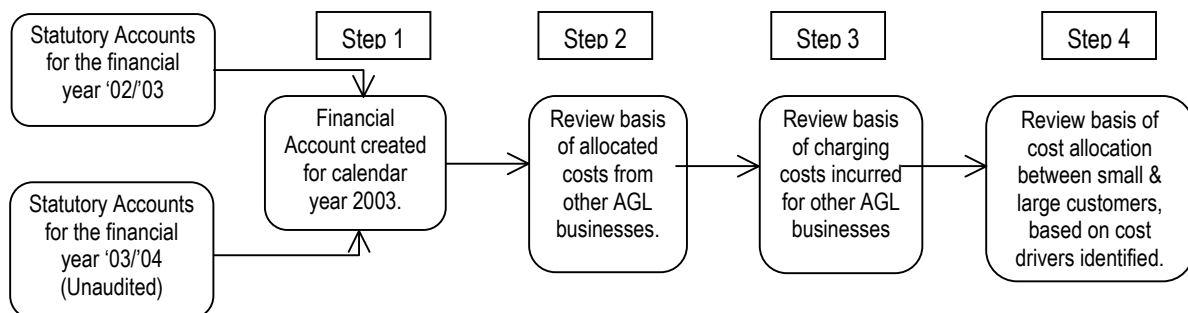
AGL SA has provided detailed data to the Commission on its actual operating costs for the calendar year 2003.

The data is derived from AGL SA's statutory accounts which are publicly available. However, detailed supporting data has also been provided in confidence by AGL SA to the Commission.

The 2003 calendar year data derived from AGL SA's statutory accounts needs to be reviewed to confirm the basis on which costs from Head Office and interstate related businesses have been allocated to AGL SA, and secondly how AGL SA costs incurred for interstate related business have been recovered.

Finally, the confirmed costs relating to AGL SA operations need then to be allocated between AGL SA's large and small customers, using a basis of cost allocation determined for each component (eg energy sales, number of consumers, equal shares etc).

The process is illustrated below:



The main issues in evaluating AGL SA's actual operating costs relate to the transfer of costs in and out of AGL SA, and the allocation between small and large customers. The Commission is currently evaluating the appropriateness of these underlying assumptions. The Commission is reliant on the agreed upon procedures audit that has been conducted by Deloitte for an assessment of the arithmetic accuracy of the cost allocations and of the process described above.

At the time of writing this Discussion Paper, this evaluation of AGL SA's 2003 operating costs has not been completed.

4.3.2. AGL's 2005 – 2008 Projected Operating Costs

The cost analysis described above relates to the actual operating costs incurred in 2003. In its confidential submission to the Commission, AGL SA has used its budgeted costs for 2004/05 to forecast its retail operating costs for the period 1 July 2005 to 30 June 2008.

AGL SA has stated that its projected operating costs for 2004/05 are higher than those incurred in 2003 as a result of a number of cost changes, including:

- ▲ development of the “business to business” system with ETSA Utilities required to facilitate transfer of customers and to manage service orders;
- ▲ requirement to provide ETSA Utilities with service orders to perform tasks previously under the direct control of AGL SA;
- ▲ additional work resulting from customer enquiries relating to meter reading which is no longer under the direct control of AGL SA; and
- ▲ increased numbers of telephone contacts from customers with the average duration of calls increasing to meet customers’ information and transaction requirements.

Without undertaking a full cost evaluation of AGL SA’s operations, and using a “building block” approach to determine an appropriate annual operating expenditure allowance, the Commission is unable to determine if these matters are material and whether they represent any significant increase in responsibilities relative to 2004 (or relative to interstate retailers where similar benchmarks apply). It is also not possible to determine if such cost increases are (or should be) offset by increasing efficiencies.

As indicated previously, regulators have in the past set the ROC allowance by using a benchmark. This has avoided the need to examine operating costs as outlined above, because of the difficulty of making decisions about cost allocations on each item of expenditure. Regulators have sought to avoid micro-managing, and highlighted the perverse incentive of deriving the ROC from actual costs (in that this would provide no incentive to a retailer to reduce costs, if its actual costs are to be accepted).

The Commission proposes in this Inquiry to continue this benchmarking practice, but with one modification. It will attempt to inform itself based on the evaluation of 2003 operating costs whether or not its current allowance of \$82 per customer is “around the mark”. If it is, then it will continue to apply a benchmark ROC rather than derive an AGL SA specific allowance.

If the Commission proceeds on the basis of a benchmark ROC using interstate regulatory practice, it does need to decide if there are any reasons why AGL SA’s

ROC should be higher or lower than the benchmark. The following statistics may assist:

	SOUTH AUSTRALIA	VICTORIA	NSW
Number of small customers	740,000 ³⁹	2.3 million ⁴⁰	2.7 million ⁴¹
% of small customers on standing contract tariffs	90% ⁴²	83% ⁴³	88% ⁴⁴
Number of default retailers	1	5	4
Average number of consumers per default retailer	660,000	380,000	600,000
Number of retailers	11 (5 of which sell to small customers) ⁴⁵	17 ⁴⁶	20 (9 of which sell to small customers) ⁴⁷

On the above numbers, AGL SA could be expected to benefit from some economies of scale relative to the Victorian average retailer. However, AGL SA is a non-stapled retailer: each default retailer in NSW and all but one in Victoria has the benefit of sharing its operations with the associated distribution business, with the potential for significant reduction in consumer service costs (with shared call centres, corporate overheads etc). The lack of such opportunities may offset any benefits from AGL SA's larger size.

The 2003 price review by the Commission considered the range of operating cost estimates obtained from other jurisdictional regulators and selected a range of \$45 to \$70, exclusive of full retail competition (FRC) costs, or \$50 to \$80 including these costs.

AGL SA, in its late 2002 response, argued that \$85 per-customer per-annum was an appropriate allowance for operating costs at that time, including FRC costs. Based on further investigation, the South Australian Independent Industry Regulator (SAIIR) concluded that \$10 was a reasonable upper limit for FRC costs and maintained its \$50 to \$80 band. The allowance for retail operating costs was then set at \$80 per-customer per-annum, to apply for 2003 standing contract prices.

³⁹ ESCOSA (Feb 2004) *Monitoring the Development of Electricity Retail Competition in South Australia: Statistical Report*, page 7. (http://www.escosa.sa.gov.au/resources/documents/040217-R-MonERC_StatRptFeb04.pdf)

⁴⁰ ESCV (2004) *Special Investigation: Review of Effectiveness of Retail Competition and Consumer Safety net in Gas and Electricity Background Report*, page 20. (http://www.esc.vic.gov.au/apps/page/user/pdf/FinalReportBackgroundFRC_June2004.pdf)

⁴¹ IPART (2004) *NSW Electricity Regulated Retail Tariffs 2004/05 to 2006/07 – Final Report and Determination*, page 33. (<http://www.ipart.nsw.gov.au/pdf/Det04-1.pdf>)

⁴² ESCOSA (2004), page 6.

⁴³ ESCV (2004), page 20.

⁴⁴ IPART (2004) , page 33.

⁴⁵ ESCOSA (2004), page 4.

⁴⁶ ESCV (2004), page 23.

⁴⁷ IPART (2004), page 31.

At the time of the review of 2004 prices, the Commission initially proposed retaining the \$80 allowance, on the grounds that there was no significant new information and any adjustment for CPI should be offset by a corresponding 'X' factor to account for efficiencies.

In response, AGL SA argued that an allowance of \$95 per-customer per-annum would better reflect consumers' increased demands and expectations and the company's need to implement new billing systems. Furthermore, AGL SA argued that it incurs higher per-customer per-annum costs because it is not 'stapled' to a distribution business. In a subsequent submission, however, AGL SA indicated that its actual costs were around \$85 per-customer per-annum. Origin and TXU also argued that retail operating costs were around \$90 per-customer per-annum. The retailers referred to a report by CRA for the Victorian Government that had suggested a \$90 allowance might be appropriate, based on retailers' assessments of their costs.

By contrast, the Energy Consumers Council (ECC) argued that the allowance of \$80 was already at the upper end of relevant benchmarks and that it should be reduced to \$70, in line with the 2001 decision by the Essential Services Commission Victoria (ESCV). In response to retailers' citation of the CRA report, the ECC noted that in relation to this estimate CRA had stated:⁴⁸

This figure is being used in the absence of any research concerning retail operating costs in Victoria, and readers of this report should not take this to constitute a new benchmark figure.

After considering submissions, the Commission concluded that its analysis for the purposes of the 2003 price review was still relevant. Because the allowance of \$80 was intended to reflect 'reasonable' costs in 2003, the Commission determined that it would be appropriate to update this figure for inflation, to an amount of \$82. The Commission determined that this fell within the range of up to \$85 per-customer per-annum that had been recently endorsed by the ESCV for Victorian gas retailers, and used by the ACT regulator for electricity retailing.

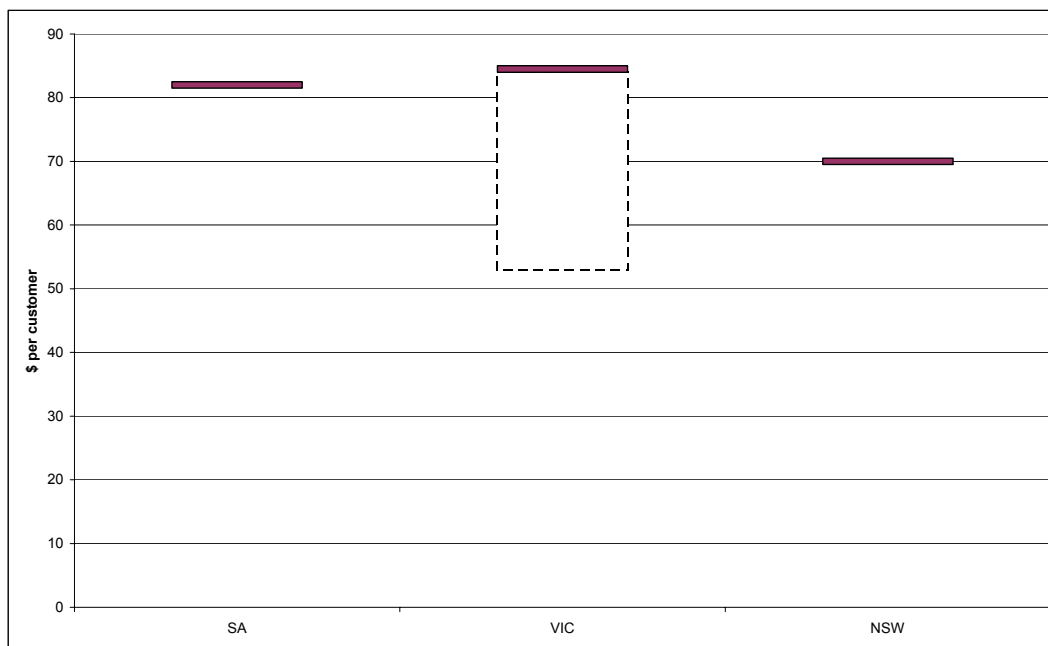
The following chart depicts the most recent decisions by the relevant regulators on the appropriate retail operating cost per customer to supply electricity.⁴⁹

Although the Victorian regulator established a range of retail operating costs, it is reasonable to look only at the top of the range since retailers were allowed to fall anywhere within this range. The Victorian regulator's 2001 electricity decision has not been updated since that time, as prices in Victoria are now set by the Minister – and a three year price path was negotiated in late 2003 with retailers on the basis of the CRA \$90 ROC allowance, with prices increasing each year at approximately half CPI for the next four years.

⁴⁸ Energy Consumers' Council (2003) *A Review of the Proposed 2004 Electricity Standing Contract Prices*, page 21. (<http://www.escosa.sa.gov.au/resources/documents/031121-O-PriceReviewSub-ECC.pdf>)

⁴⁹ Note that these costs include FRC costs

Regulated Retail Operating Costs



NSW's operating costs are lower, a fact which was recognised by IPART in its most recent review of regulatory tariffs:⁵⁰

The Tribunal noted that the costs allowed in other jurisdictions are above the actual costs (on average) reported by NSW standard retailers therefore, the use of a higher benchmark based on allowances in other jurisdictions is inconsistent with setting efficient costs.

The Commission will review its current \$82 allowance in the light of its findings on AGL SA's actual costs for 2003, but is attracted to maintaining a benchmark approach to setting ROC in line with other regulatory decisions.

Comments Sought

Are there opportunities for stapled distributors /retailers to achieve lower costs than standalone retailers?

What are the most appropriate benchmark estimates to use for the current review?

How should retail operating costs for AGL SA be set in relation to these benchmarks?

Should retail operating costs be inflation and efficiency adjusted within the medium-term price path?

⁵⁰ IPART, *NSW Electricity Regulated Retail Tariffs 2004/05 to 2006/07: Final Report and Determination*, June 2004, p. 41-42

4.4. Retail Margin

The retail margin is intended to compensate and reward retailers for their investment in the business and the risks they assume in order to provide retail services.

As reported previously, the current “allowance” by the Commission of 5.0% of total costs provides a \$44 per customer margin per annum, for the average residential consumer with a \$1000 annual bill (equivalent to almost 5 MWh/annum).

This retail margin is intended to provide a risk adjusted return on investment. Such a proxy is generally used in businesses that are represented by high turn over and relatively low sunk costs. The margin provides investors with funds to cover:

- ▲ a return on funds invested
- ▲ depreciation and amortisation allowances
- ▲ bad debts
- ▲ income taxes payable.

4.4.1. AGL SA’s Actual Margins

The Terms of Reference of the Inquiry require the Commission to have regard to:

“TOR 3.4.6 The electricity entity’s proposed margin on standing contract sales, and its actual margin achieved in recent years, and whether these are reasonable having regard to the entity’s investment in the business, the risks of standing contract retailing in South Australia, and the equivalence with standing contract retailer margins interstate without Government risk management schemes”.

AGL SA publishes its public accounts each year, and these are available for inspection by the public. A brief summary is presented below for the most recent years (2003/04 accounts are to be released shortly).



Summary AGL SA Profit and Loss Accounts (\$000)

	2001/02	2002/03
Revenue from ordinary activities	585,793	658,377
DUOS/TUOS	459,300	486,000
TOTAL REVENUE	1,045,093	1,144,377
Expenses from ordinary activities*	549,080	623,817
Cost of goods sold	510,818	580,391
Administrative costs	10,574	10,680
Employee entitlements	16,414	15,734
Contractors	4,941	7,954
Other expenses	6,333	9,058
DUOS/TUOS	459,300	486,000
TOTAL EXPENSES	1,008,380	1,109,817
Earnings before interest, depreciation, tax and amortisation (EBIDTA)	36,713	34,560
EBIDTA as % of revenue	3.5%	3.0%
Bad debt net of recoveries	3,887	7,278
Depreciation and amortisation	6,115	5,868
Earnings before interest and taxes (EBIT)	26,711	21,414

It should be noted that full retail competition commenced half-way through the 2002-03 financial year, although AGL SA retained almost all of the small customer market for that year. AGL SA noted in its accounts that revenue increased as a result of the January 2003 price rise, but profits fell as a result of the costs of implementing the new billing system CIS+.

According to its published accounts, AGL SA is earning below the 5% margin approved by the Commission, for both 2001-02 and 2002-03.

However, it is extremely difficult to draw conclusions about the actual margin achieved on standing contract sales from these accounts, since revenue and costs are not allocated between large and small customers (or between market contract and standing contract customers). The assumptions underpinning the allocation of costs are also not clear, and it would be difficult to conclude whether AGL SA's actual margin is reliably represented through its published accounts.

The evaluation of AGL SA's actual returns in 2003 (the first full year of standing contract supply) with the assistance of Deloitte's may provide a clearer view of returns from standing contract sales, but at the time of writing this Paper, this work has not been completed (see 4.2.6 and 4.3.1 above).

4.4.2. Form of Retail Margin

In the context of the 2004 electricity prices review, the ECC expressed concern that the form of the margin, combined with benchmarking to margins in other comparable States, provided AGL with relatively high profits.⁵¹

Due to the relatively higher effective wholesale prices and network prices allowed in South Australia, the application of a 5 % profit margin (as allowed by ESCOSA) leads to much higher levels of absolute profit, when expressed in money values or as a \$/MWh figure...

Council believes that ESCOSA should apply the allowable profit margin as a \$/MWh figure, set to be comparable to the profit allowance used in other States when expressed in this way. In simple terms, the retailer in South Australia should not make a percentage profit on the higher wholesale and network costs applying in the State nor on some of the other elements of the final retail price.

IPART also raised the question of the appropriate measure upon which margins should be set.⁵²

...the option of setting a dollar margin rather than a percentage margin (or some mix of the two) deserves further consideration.

Given these concerns, for the purpose of assessing AGL SA's proposed 2005 to 2008 price path, the Commission has asked NERA to consider the measure upon which the margin is set and benchmarked against margins in comparable jurisdictions.

NERA has advised that in most regulated industries, the allowance for company profits is based on the capital invested, proxied by asset values, multiplied by an estimate of the commercial rate of return, generally the weighted average cost of capital (WACC). This approach is suitable for many of the traditionally regulated companies, such as electricity wires, gas pipelines and telecommunications fixed lines, for which the value of the fixed assets acts as a relatively accurate proxy for the required investment in the company.

The same cannot be said for electricity retail companies, which do not have large physical assets. The major component of the asset base of a retail company will be working capital. In its 1992 Consultation Paper, the United Kingdom (UK) Office of Electricity Regulation (OFFER) noted:⁵³

⁵¹ Energy Consumers' Council (2003) *A Review of the Proposed 2004 Electricity Standing Contract Prices*, page 21.

⁵² IPART (2004) *South Australia 2004 Electricity Standing Contract Price Review of ESCOSA Methodology*, Report to the Premier of South Australia, page 27.

⁵³ OFFER (1992) *The Supply Price Control Review: Consultation Paper*, page 39.

There is relatively little capital required in the supply businesses. It mainly comprises working capital to finance unbilled consumption and amounts owed by customers (which in turn depends on the method of payment discussed earlier), and capital required in respect of premises and equipment. For the twelve RECs [regional electricity companies] the latter totals only around £140 million. This contrasts sharply with the distribution businesses of the RECs where the assets (the distribution networks) are valued in excess of £11 billion.

Working capital is the difference between a firm's current assets and current liabilities. The components of working capital that would be of primary importance for electricity retailers are accounts receivable and accounts payable. A certain amount of investment in working capital is necessary for a retailer to run its normal operations; billing and credit policies will determine accounts receivable and accounts payable is a normal source of financing for a firm's working capital.

The value of working capital, and other assets, could be estimated from a retailer's balance sheet and an appropriate return applied to this to provide an allowance for profits. However, the fluidity of working capital and the control that a retailer will have over its measured level at any point in time may limit the usefulness of this approach.

Instead of basing the profit allowance for electricity retailers on a measure of an appropriate return on invested capital, regulators have tended to use margins, defined as a percentage of sales. The main reasons for this are that:

- ▲ this approach will provide a link between profits and the invested capital, to the extent that assets largely comprise working capital, which is closely linked to sales; and
- ▲ the interpretation of margins is well understood and they are commonly used to analyse the performance of businesses.⁵⁴
- ▲ NERA has advised that the most appropriate measure for setting allowances for profits will relate to the capital employed and risk exposure of the retailer. Furthermore, it would be desirable for the measure to be:
 - ▲ comparable with measures used by other regulators;
 - ▲ consistent with desirable incentives for retailers; and
 - ▲ simple to apply and easy to understand.

While there is any number of margin measures available, the most feasible alternatives to the existing % of sales approach, and those which NERA has considered, include:

- ▲ $\$/MWh$ – the allowance for AGL SA's profits would be specified as a set amount per MWh sold, thereby allowing the total profit allowance to vary according to usage;

⁵⁴ For example, see Palepu, Bernard and Healy (1996) *Business Analysis & Valuation Using Financial Statements*, page 4-7 to 4-8.

- ▲ *\$/customer* – AGL SA's profit allowance would be set per default customer, regardless of consumption levels or fluctuations in underlying costs; and
- ▲ *% of retailer-revenues* – AGL SA profit allowance would be set as a percentage of total revenues less network costs.

NERA noted that the existing *% of sales* margin has some legitimacy by virtue of the fact that sales will be broadly related to the required investment in working capital. The other measures will also be related to working capital, but not to the same extent. NERA also noted that the *% of sales* margin was the most comparable with measures used elsewhere and was arguably the simplest to apply, since it was most readily understood.

In short, NERA has advised that the existing approach of setting a margin allowance on the basis of a percentage of sales is likely to be preferable to alternative measures.

In setting a margin, the Commission is actually determining a quantum of money which is needed to cover investors' risk capital exposed to the business. If this quantum is insufficient to justify an investor placing funds in the industry (because it can obtain a better risk-adjusted return elsewhere), then the industry will not be financially viable. The Commission is required to have regard to the financial viability of the industry, and to provide incentive for ongoing investment, when it makes a price determination.

Ultimately, it does not matter whether the margin is expressed as a % of total sales, a \$/MWh, a \$ per customer or a \$ per retailer costs: it is the quantum that is important having regard to the capital invested in, and risk of, the business.

The current 5% of total revenue could also be expressed as 10% of non-network costs or \$8/MWh: the measure is not particularly relevant. The key issue is the quantum of funds to be collected, and hence the level at which the margin is to be set for the particular measure selected.

4.4.3. Level of Retail Margin

The level of retail margin has traditionally been benchmarked on the margins allowed in other States. However, for the purpose of this inquiry, the Commission has also considered a return on investment methodology that could be applied to the retail business. Both these approaches to determining the quantum are discussed below.

4.4.3.1. Benchmarking of Retail Margins

The concern of the ECC expressed earlier is that applying (say) a 5% of total costs benchmark, derived from interstate regulators, gives AGL SA an unjustified larger quantum of funds because of the significantly higher

network charges in SA. If network charges in SA were similar to Victorian charges, the retail margin for the average residential consumer in SA (with a current \$1000 cost) would fall from \$44 to \$34, a reduction of \$10 per year.

The additional concern of the ECC is that the 5% margin is too high, when NSW retailers are allowed only a 2.5% margin by IPART.

The Commission should firstly consider whether the NSW margins are appropriate for AGL SA. It should be noted that Term of Reference 3.4.6 specifically prevents the Commission from considering the NSW margin as it restricts the comparison to “standing contract retailer margins interstate without Government risk management schemes”.

This reference specifically recognises the impact of government schemes in NSW and Queensland which operate to reduce significantly the level of risk for a retailer.

For example, the NSW government operates an Electricity Trading Equalisation Fund (ETEF), based on the long run marginal cost (LRMC) of electricity. This scheme provides certainty to retailers regarding the cost of purchasing electricity for the purpose of supplying regulated retail customers. The ETEF scheme involves any deviations in pool prices from the LRMC to be paid into or withdrawn from the ETEF by retailers. This ensures that the effective wholesale energy cost for NSW tariffs is consistent with the estimated LRMC, and the retailer is protected from any risks of wholesale energy costs above those included in the WEC (in SA, any scenario outside those used to estimate WEC can result in unforeseen and unrecovered costs – and even the WEC is the risk minimised cost, not necessarily the actual cost). A similar scheme to ETEF operates in Queensland.

It is for these reasons that the Terms of Reference exclude consideration of the margins that apply in NSW and Queensland.

The most appropriate benchmark to set margins against is therefore the margin that applies in Victoria.

In its 2001 retail price investigation, the ESCV advised the Victorian Minister that margins up to 5% were appropriate, and that any standing contract prices based on a 5% margin should be accepted. Victorian standing contract prices were then set by the Minister on this basis.

In setting the Victorian standing contract price path for the period 2004 to 2008, the Victorian Minister had regard to the report from CRA on the appropriate levels of WEC, operating costs and retail margin. The CRA report identified margins of 7 to 9% implicit in the prices agreed for 2004,

increasing in subsequent years under the CPI-X agreement. These margins were not endorsed by the ESCV, as it was not involved in this process.

In its June 2004 Special Investigation⁵⁵, the ESCV estimated that actual margins being achieved by retailers in Victoria for a 5 MWh residential customer were in the order of \$60 to \$70, and for a 5 MWh small business were approximately \$70 to \$100.

These margins compare to the estimated \$44 per 5 MWh customer allowed for in the current AGL SA standing contract prices.

It can be seen that, at the present time, the margin allowed in SA tariffs is below that which is being achieved by Victorian standing contract retailers under the agreed tariffs, despite the impact of the higher network charges on the AGL SA margin.

Nevertheless, if the 2001 ESCV decision of a 5% margin on Victorian retailer costs was considered the appropriate benchmark, then the \$44 for the “average” customer could be reduced by up to \$10 to adjust for the higher network charges in SA (or 4% of the total costs including network charges).

Are there any reasons why AGL SA should receive the higher margins associated with higher network charges? First, AGL SA is responsible for paying to ETSA Utilities all of the network charges incurred by standing contract customers, even if customers do not pay AGL SA and default on their payments. ETSA Utilities does not incur bad debts from electricity consumers; AGL SA in 2002/03 incurred over \$7 million of bad debt from consumers who did not pay their accounts.

Secondly, AGL SA is required to fund the higher network charges, between the time it receives ETSA Utilities’ account (monthly) and the time it receives payment from consumers (on average, about two to three months from the time of consumption and ETSA Utilities’ billing). The working capital AGL SA is required to provide is higher than it would be if network charges were at the Victorian level.

The third reason why the higher effective margin could be justified for AGL SA is the lack of risk diversification in this market. In Victoria, there are five standing contract retailers covering the market, and risks of market failure and consumer default are spread across these businesses. In SA, AGL SA

⁵⁵ ESCV (2004) *Special Investigation: Review of Effectiveness of Retail Competition and Consumer Safety Net in Gas and Electricity*, Background Report from page 77

is responsible for nearly 90% of the standing contract market and stands alone in bearing this undiversifiable risk.

4.4.3.2. Retail Margin derived from Return on Investment

A possible way to check the appropriateness of the benchmarked retail margin is to estimate from first principles the required return on the efficient level of investment made by AGL SA. However, due to the significant difficulty in assessing the relevant level of investment and the appropriate cost of capital for an electricity retail business, this method is used here only as a guide to see whether the benchmarked margins are within a reasonable range.

Also included in the retail margin (and hence excluded from operating costs) are the depreciation and amortisation amount and a reasonable allowance for incurring bad debts. Taxes are payable out of the annual margin, so the return on capital is set as a real, pre-tax return (and applied to the adjusted capital value for each year).

These issues relating to the derivation of retail margin are discussed in the remainder of this section.

Determining the level on efficient investment

Unlike a network business, an electricity retail business does not have large tangible assets. As such, the determination of an efficient level of investment cannot be determined by using a proxy, such as replacement cost of the existing physical assets.

The investment in an electricity retail business is characterised by a reasonably large working capital. As discussed, inclusion of the working capital in determining the relevant investment level is critical for the electricity retail service provider.

Moreover, there are other “intangible assets” that may be included in the determination of the relevant investment level for AGL SA. A fuller discussion on the relevance of intangible assets in determining the efficient level of investment is included below.

Finally, the efficient level of tangible assets relating to the provision of retail electricity services is included in the efficient level of investment.

Hence, the retail margin represents the risk adjusted return on:

- ▲ the working capital,
- ▲ the intangible assets associated with the purchase of the franchise customer base, and

- ▲ the tangible assets that are necessary to provide the retail service (such as computer systems),

together with an appropriate allowance for depreciation, amortisation, and bad debts.

Working Capital

To derive the relevant amount of working capital applicable to the standing contract customers only, an assumption about the timing of the cost payout to various entities and the receipt of revenues from consumers has to be made.

With regard to the cost, the majority of the costs relate to the WEC and network charges. AGL SA's operating costs are incurred each month, but are not separately considered in this evaluation. The Commission has assumed that the wholesale market payment terms for the WEC are every 20 days, which is roughly in accordance with the NEMMCO requirements. For the network charges, it has assumed that AGL receives a bill from ETSA Utilities every month and has 10 days to make payment.

With regard to revenues, the majority of the revenue is derived from standing contract customers who are billed quarterly and have 14 days to pay the bill. However, due to a reasonably large number of customers making payments well after the due date, the payment profile is assumed to be approximately as follows:

- ▲ 60% on due date,
- ▲ 15% within 14 days after the due date,
- ▲ 20% within 30 days after the due date, and
- ▲ the remainder within 100 days after the due date.

There are some customers who do not pay at all, and those costs are captured under bad debts.

Using these assumptions, and the cost and revenue data, the Commission derived a working capital requirement between \$120m and \$140m for the standing contract part of the retail business.

Comments Sought

Are the assumptions used to derive AGL SA's working capital reasonable? Are there any other factors that the Commission should consider in determining the relevant amount of working capital required by AGL SA as standing contract retailer?

Intangible assets

As discussed above, a significant proportion of AGL SA's assets are classified as "intangible assets". In the main, these assets relate to the purchase of the retail business. The purchase price for AGL SA was \$175m in January 2000.

In considering whether the purchase price should be included in determining the efficient level of investment, it is important to evaluate the make-up of the purchase price.

In an economic sense, the purchase price must represent the present value of the benefits that AGL SA expected to derive by owning the 1st tier⁵⁶ electricity retail business, such as:

- ▲ any expected benefit associated with having the sole licence to supply to all franchise customers. This benefit could only have been expected until the introduction of Full Retail Contestability (FRC).
- ▲ any expected benefit of starting FRC from a position of having 100% of the market share (for standing contract customers). This includes the benefit of not investing in marketing to win customers. Due to the 'sticky' nature of electricity consumers, this benefit is considered to last for a reasonably long period (eg. over 20 years).
- ▲ any expected net benefits derived from the retail business' contract position.
- ▲ any expected benefit of any strategic advantages, such as brand image, competency and sharing of knowledge base, lower costs due to economies of scale etc.
- ▲ any expected benefits from 'super normal' profits that AGL SA may generate due to AGL SA's market dominance.

The investment associated with some of the benefits mentioned above may be relevant in determining the appropriate level of investment to include in the derivation of the profit margin. For example, a proportion of the purchase price associated with the benefit of having 100% of the market share at the start of FRC may be included as efficient investment for the incumbent retailer. However, it is difficult to know what proportion would relate to this benefit.

⁵⁶ That is, the incumbent retailer with all the franchise loads.

Some insight may be gained by comparing the purchase price paid by AGL to some of the other purchases of energy retail businesses in Australia. For this exercise, a simple benchmark measure of purchase price per customer is used.

Including AGL, there are four electricity transactions that have been used in the benchmark. These are as follows:

- ▲ Origin Energy⁵⁷ paid \$137m for the purchase of Citipower in July 2002. At the time it is estimated that Citipower had about 264,000 customers, implying a benchmark of \$519 per customer.
- ▲ Origin Energy⁵⁸ paid \$315m⁵⁹ for the purchase of Powercor's retail business in June 2001. At the time, it is estimated that Powercor's retail business had about 582,000 customers, implying a benchmark of \$541 per customer.
- ▲ Pulse Energy⁶⁰ paid \$350m for the purchase of United Energy's electricity retail business in June 2000. At the time, it is estimated that United Energy's retail business had about 560,000 customers, implying a benchmark of \$625 per customer.
- ▲ AGL⁶¹ paid \$175m for the purchase of ETSA Power (at the time owned by CKI/HEI) in January 2000. It is estimated that at the time of purchase, ETSA Power had about 734,000 customers, implying a benchmark of \$238 per customer.

Given the benchmark amounts paid per customer, AGL SA's purchase price indicates that there may not be much of a premium added on for other benefits, such as any expectations of earning super normal profits from acquiring the incumbent electricity retail business in SA.

Finally, the total purchase price should be allocated between small and large customers. However, given the customers greater than 750 MWh were already contestable when AGL bought the retail business, there would not be substantial benefits associated with these customers. The remaining large customers (between 160

⁵⁷ Origin Energy to acquire Citipower electricity retail business, Origin Energy Press Release, 19 July 2002.

⁵⁸ 'Acquisition of Powercor's Retail Business', Briefing to the Investment Market, 17 April 2001, Grant King, Managing Director.

⁵⁹ This is the gross value paid by Origin, which includes \$80m for the value of Powercor's hedge position. Excluding the hedge value, the benchmark number is \$404 per customer.

⁶⁰ United Energy, Concise Annual Report 2000, page 14.

⁶¹ 'AGL Adds 734,000 Electricity Customers in South Australia, Media Release, 14 January 2000.

MWh pa and 750 MWh pa) were soon to be made contestable, and are generally not as 'sticky' as the small customers: the expected benefit associated with this group of customers may have been relatively small. However, even if the purchase price is spread equally amongst all customers, the allocation of the purchase price (based on customer numbers) to large customers would be less than \$1m.

As such, the amount of purchase price that could be considered as an efficient level of investment for the purpose of determining the profit margin for standing contract customers may be in the range of \$140m to \$170m (in January 2000 dollars). Adjusting this amount for inflation to January 2005, and removing amortization over the period of an estimated \$4 to 5 million per year, gives a possible range of values for intangible assets of \$ 138 to \$167 million.

Comments Sought

Should the purchase price be considered as an investment for the purpose of determining the retail margin for AGL SA?

If so, does the range \$138m to 167m represent a reasonable value for the efficient level of investment to be used in this analysis?

Tangible Assets

The tangible asset (plant, property and equipment) value is recorded in AGL SA's 2002-03 audited statutory accounts at approximately \$9m. Some of these assets should be allocated to the large consumer group. For the purpose of this analysis, it is assumed that the asset allocated to the standing contract customer load is in the order of \$7m to \$8m.

Also, AGL have stated that the majority of assets AGL SA utilises are held interstate (such as CISplus billing systems). Therefore, the asset base must be increased to incorporate a proportion of these assets. Based on some preliminary discussions with AGL SA, these may be in the range of \$15m to \$25m that are allocated to the standing contract customers in SA.

Total Investment

The total amount of investment on which a rate of return should be applied has been estimated to lie in the following range:

ASSET	VALUE RANGE (\$M)	
Working capital	120	140
Intangible Assets	138	167
Tangible Assets	7	8
Interstate allocation of Assets to AGL SA	15	25
Total Investment	280	340

Rate of return

It is difficult to determine the appropriate rate of return for the electricity retail business because, as mentioned, a retail business generally uses a “retail margin” measure rather than a “return on investment” measure. However, some benchmarks can be used to provide an indication of the appropriate rate of return to use. For example, the report by the Electricity Supply Industry Planning Council (ESIPC) on the long run marginal cost of supplying electricity to small customers (see Section 4.2.4) suggests that the pre tax, real return for a new entrant generator is 9.6%.

It could be argued that the necessary return to a retailer should be less than for a generator, as the generator has committed their assets in a particular location and is limited as to the contracts it can achieve. On the other hand, retailing could be seen as a risky business, with exposure to risks over and above those already covered in the risk adjusted WEC. There is limited information available to the Commission on which it can base its decision. Accordingly, it has elected to use a range of 1.5% around the ESIPC number used for generators, and seeks comment on the appropriateness of this range (ie from 8.1% to 11.1% real pre-tax).

Applying this range of rates of return to the level of investment discussed earlier, the range for the return on investment lies between \$23m and \$38m.

Comments Sought

What is the relevant rate of return that should be used to derive the return on investment for AGL SA?

Return of Investment (Depreciation)

The return of investment (depreciation) also forms part of the retail margin. Based on the previous analysis of the current value of intangible assets, which included an analysis of the depreciation and amortisation amount relating to the standing contract customers, the amortisation allowance has been estimated to be in the range of \$4m to \$5m per annum, consistent with the investment level assumed. This is lower than AGL SA provides for in its accounts (approximately \$18m in 2002-03).

Comments Sought

Is the above provision for amortisation credible, or should the amount in AGL SA's annual accounts for depreciation and amortization be used to set the appropriate level of return of investment, or is an alternative approach preferred?

Bad debts

Finally, since the profit margin represents the risk adjusted rate of return, bad debts are included in the profit margin, rather than under operating costs. This better represents the nature of bad debts that relate to the risk that the retailer undertakes rather than the cost of day-to-day operations of the business. Including bad debts in the profit margin rather than operating costs also makes it easier to forecast, since bad debts are a function of the revenue earned by AGL SA.

Bad debts increased significantly for AGL SA in 2002-03. One reason is likely to be the rise in electricity price. Bad debts are a business cost that is subject to management in the same way as are other business costs. A skilful retailer will have some bad debts, but it is difficult for an observer to estimate what is the lowest prudent level that can be achieved. In 2001-02 the level for AGL SA was \$3.8m. Given the increase in electricity prices since then, it is likely that the minimum level of bad debts has risen somewhat. For the purposes of determining a relevant retail margin figure for AGL SA, bad debts are assumed to be in the range of \$4m to \$7m.

Comments Sought

Should bad debts be included in the retail margin calculation or should they be allowed for within the operating cost?

What level of bad debts should be assumed in the future?

Calculation of Retail Margin

In total, the dollar amount of the justifiable retail margin for the standing contract retailer is estimated to be in the following range:

CATEGORY	RANGE (\$M)	
Return on investment	23	38
Return of investment	4	5
Bad debts	4	7
Total amount of retail margin	31	50

No allowance is included for tax, and it is assumed tax is payable from the retail margin.

On the total revenue base (including the network charges) for standing contract customers of approximately \$910m, the above totals represent a range of 3.4% to 5.5% profit margin.

The purpose of the above analysis was to determine whether the current level of 5.0% of total revenue was ‘around the mark’, given that there had been some criticism of the benchmark adopted in previous Commission decisions. The above analysis might suggest that a retail margin around that level could be justified, but it is critically dependent on the assumptions regarding:

- ▲ the purchase cost of the business
- ▲ the level of working capital, and
- ▲ the appropriate rate of return for a retail business.

4.4.4. Summary on Retail Margin

The Commission has in its previous decisions adopted a retail margin as a “percentage of total costs” measure based on a benchmark from other jurisdictions. An analysis by NERA on the appropriateness of the measure concluded that the current measure should be retained.

On setting the quantum of margin, the Commission has considered relevant benchmarks interstate, and checked for reasonableness by using the return on investment approach in the previous section.

The Commission will need to determine at which level it should set the margin. Possible alternatives are:

- ▲ around 3 to 4%, reflecting a change of its current 5% benchmark to remove the impact of higher network charges; or

- ▲ at 5%, based on its previous assessment of an appropriate margin; or
- ▲ around 6 to 7%, based on current margins achieved in the Victorian market.

Comments Sought

Are the assumptions used in the Commission's estimate of the quantum of justifiable retail margin credible?

Is the current 5% on total costs margin still appropriate, or should the Commission adopt an alternative margin for the price path period?

4.5. Interstate Benchmarking of Retail Prices

Term of Reference 3.4.8 requires the Commission to have regard to:

“the prices charged and costs incurred in providing comparable services in other States and Territories of Australia, and whether the reasons for any differences can be justified”.

Comparisons of the regulated retail tariffs can only be meaningful to the extent that they are intended to compensate retailers for similar costs. One complication with benchmarking between states is that it can be difficult to compare the individual components of tariffs (wholesale costs, retail operating costs, network costs and margins) because of the different treatment of cost categories. For example, it may be the case that the allowance for retail operating costs in one jurisdiction is particularly low, but that the allowed margin more than compensates for this. Such interdependencies suggest that, in addition to benchmarking the component costs, it is useful to compare tariffs across jurisdictions at a higher level.

The States that are considered most similar to SA for the purpose at hand are NSW and Victoria, which are the only other States to have implemented full retail competition (FRC). Previous benchmarks have focussed on Victoria and NSW for this reason, and the Commission intends to continue with this approach.

However, there are important differences between the approaches for establishing reasonable default retail tariffs in these States that must be borne in mind when interpreting the comparative information.

The SA electricity market differs from that in other States for several reasons, namely that:

- ▲ the SA market is characterised by the greatest degree of “peakiness” in its load profile, which increases the cost of hedging and the risks borne by the default retailer: hence its wholesale energy costs are higher;
- ▲ SA has only one default retailer, with nearly 90% of the small customer market, which introduces different dynamics in contracting and market operation;
- ▲ the network charges in SA are significantly higher than in NSW and Victoria;
- ▲ although retail tariffs in Victoria were set on the basis of a building block approach for 2002, since then retailers have been able to increase prices by specified amounts (up to CPI for 2003 and CPI-X retailer specific limits between 2004 and 2007) without triggering a review;
- ▲ in its *2004 Determination*,⁶² IPART noted that there was a need for further price increases in NSW because prices have in many cases been lower than the cost of supply as estimated by IPART;

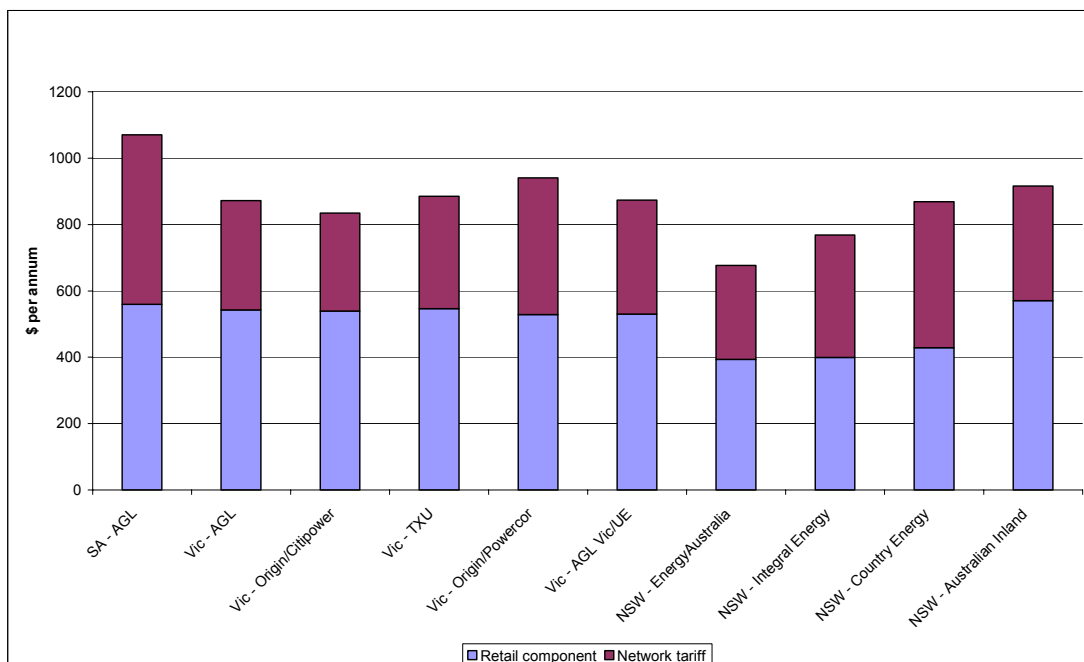
⁶² IPART (2004) *NSW Electricity Regulated Retail Tariffs 2004/05 to 2006/07: Final Report and Determination*, page 1.

- ▲ the NSW government operates the Electricity Trading Equalisation Fund (ETEF); which impacts on wholesale and retail energy prices;
- ▲ standing contract retailers in NSW and Victoria may benefit from links with distribution businesses; and
- ▲ retailers in NSW are government owned and therefore have a lower cost of capital.

Comparison of electricity retail prices between States is further complicated by the fact that the structure of tariffs differs between retailers. Tariffs generally have different combinations of fixed supply charge and variable energy rates and may incorporate steps or blocks in their price structures. This means that benchmarking must be undertaken on the basis of assumptions regarding ‘average’ consumption levels. For the purpose of this comparison, we have used domestic and small business users consuming 5,000 and 10,000 kWh per annum respectively. Relative tariffs will differ slightly for different consumption levels; however, the selected levels are reasonable approximations to the average consumption levels for households and small businesses.

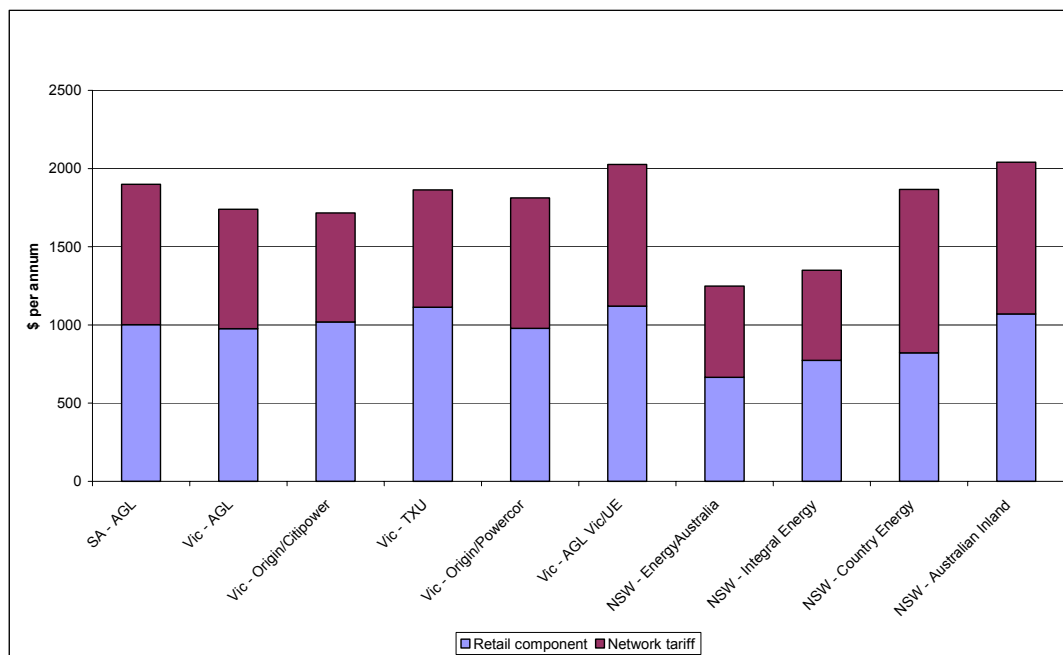
The following charts illustrate the overall level of prices currently charged by retailers in South Australia, Victoria and NSW in terms of network costs and the retailer controllable costs. Network costs have been estimated on the basis of the network tariffs of the relevant distribution business. Retailer controllable costs have been estimated as the difference between retail tariffs and network costs.⁶³

Domestic Tariffs (5000 kWh)



⁶³ Current network and retail tariffs for South Australia are published on ESCOSA’s website. Victorian network tariffs were obtained from the Essential Services Commission of Victoria’s website and Victorian retail tariffs are published on the Victorian Department of Infrastructure’s website. Network and retail tariffs in NSW are available from each company’s website.

Business Tariffs (10,000kWh pa)



This comparison confirms that domestic consumers in South Australia are paying the highest tariffs, primarily attributable to the higher network charges. The retailer controllable costs of other retailers are similar, with the exception of EnergyAustralia, Country Energy and Integral Energy in NSW.

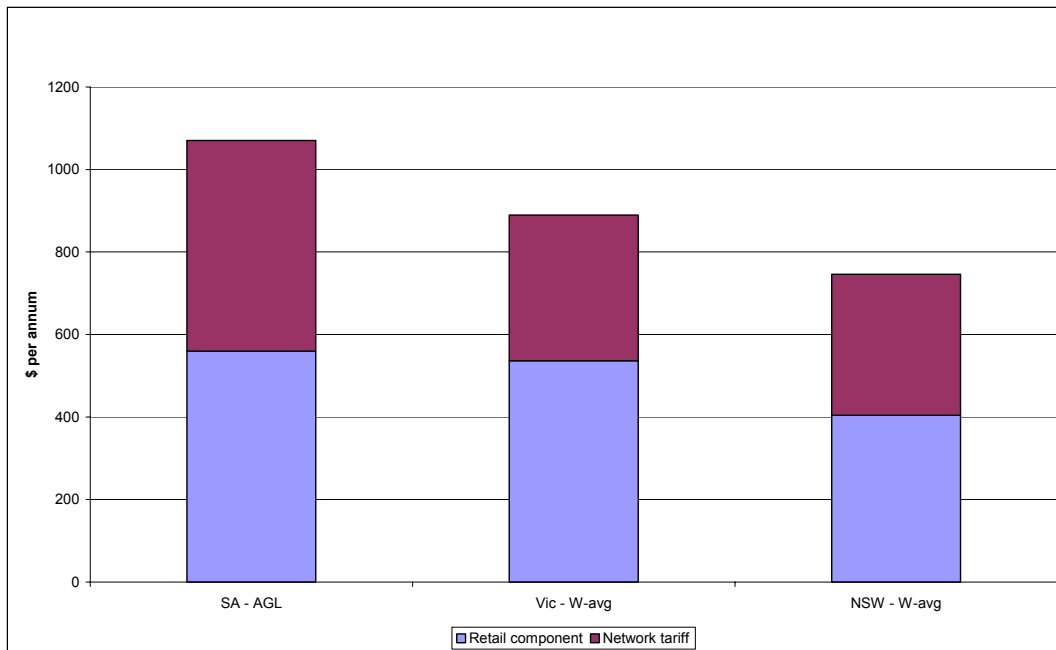
In contrast, South Australia has the third highest prices for businesses, although the majority of tariffs are similar. Again, EnergyAustralia and Integral Energy are the noticeable exceptions.

The results confirm that the revenues attributable to AGL SA (ie, total revenues less network costs) are more comparable to that in other States than indicated by headline tariffs.

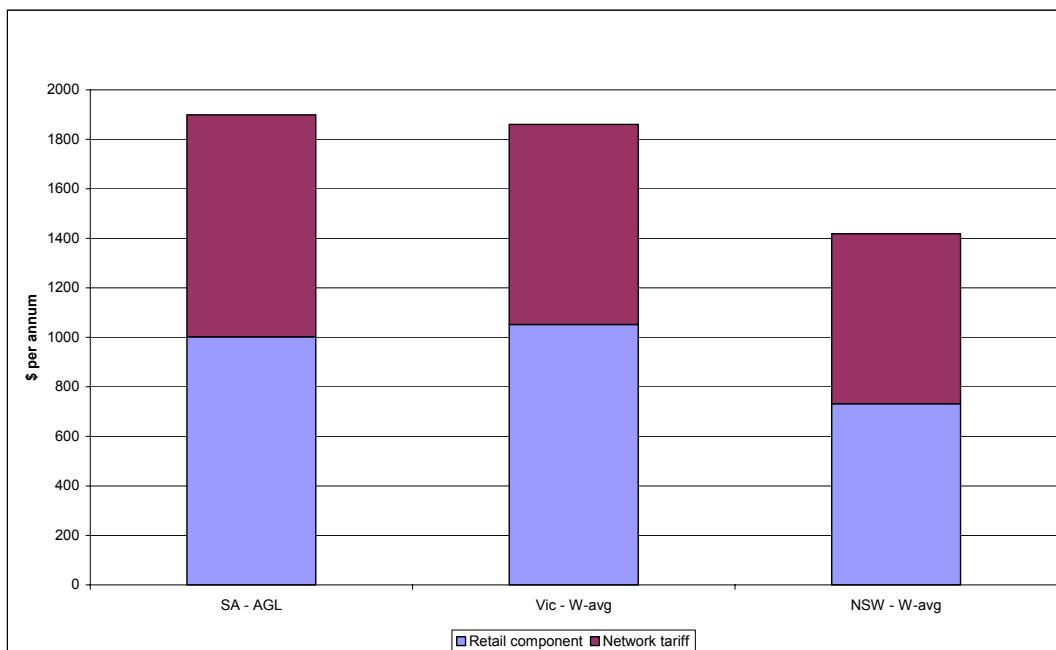
The charts below present a State-based illustration of the level of tariffs in South Australia, Victoria and NSW using a weighted average based on market share of the individual retailers. This representation demonstrates that, as represented above, and based on the illustrative tariffs for residential customers consuming 5,000 kWh and small business customers consuming 10,000 kWh per annum, South Australian consumers are charged, on average, a higher tariff than their counterparts in Victoria and NSW. Small businesses, however, are paying similar tariffs in South Australia and Victoria.

When considering the retailer controllable cost component, however, the charts illustrate that AGL SA's net revenue after network costs is consistent with that obtained by retailers in Victoria.

Domestic Tariffs (5000 kWh pa)



Business Tariffs (10,000 kWh pa)



In summary, the comparison of AGL SA's existing (2004) tariffs with interstate retailer tariffs confirm the previous position reported by the Commission, namely that:

- ▲ SA and Victorian tariffs are higher than NSW, in both network charges and retailer controllable cost components;

- ▲ SA tariffs are higher than Victorian tariffs, primarily due to the higher network charges;
- ▲ retailer controllable costs (covering WEC, ROC and margin) are similar in SA and Victoria.

In other words, the difference between SA tariffs and those interstate is explainable in terms of the difference in network charges, and in the case of NSW, lower retailer controllable costs associated with:

- ▲ Government ownership;
- ▲ the ETEF fund reduction of risk;
- ▲ WEC being set at a low LRMC rather than based on market contract prices; and
- ▲ prices set at a level below cost.

Retailer controllable costs in aggregate (covering WEC, ROC and margin) are similar in SA and Victoria, but the components making up these costs are different. In particular, WEC is lower in Victoria and therefore the allowance for the other components must be higher.



5. NEXT STEPS

The Commission has prepared this Discussion Paper to highlight key issues it intends to address in reviewing AGL SA's price path proposal.

It is keen to receive stakeholder comment on these issues to assist it in its deliberations.

The Commission currently has a number of studies underway, with the assistance of consultants, to examine the detailed cost elements of the proposal. The key study, being undertaken by the Allen Consulting Group, is developing the Commission's view on the appropriate wholesale energy cost for each year of the price path period. A report on the work to date will be released at the same time as this Discussion Paper, but the final determination of WEC using this model will not be completed until following the receipt of comments on the assumptions used.

The Commission is seeking stakeholder comment on the issues raised in this Discussion paper by **15 October 2004**. It will then organise a public meeting to allow the Commission to discuss submissions and to clarify any outstanding issues.

The Commission intends to release a Draft Final Report on the Inquiry in early November, and a Draft Price Determination shortly thereafter. A Final Report will be released in early December 2004.

The Commission is yet to decide if it will release a Final Price Determination in December 2004, or whether that will be delayed until March 2005.



ATTACHMENT 1

Essential Services Commission Act 2002

NOTICE OF REFERENCE UNDER PART 7

Standing Contract Prices of AGL from 2005

1. BACKGROUND

- 1.1 Pursuant to Part 7 of the *Essential Services Commission Act 2002* ("**the Act**") an industry Minister may, by written notice, refer any matter relating to a regulated industry to the Essential Services Commission ("**the Commission**") for the Commission to conduct an inquiry into that matter.
- 1.2 By virtue of section 14D of the *Electricity Act 1996*, the electricity industry is a regulated industry for the purposes of Part 7 of the Act.
- 1.3 The Hon Patrick Conlon, Minister for Energy ("**the Minister**") is the Minister administering the *Electricity Act 1996*.
- 1.4 Pursuant to section 36AA of the *Electricity Act 1996* the Governor may declare an electricity entity to be subject to section 36AA of the *Electricity Act 1996*.
- 1.5 By proclamation in the Gazette, edition of 12 September 2002 (p.3384), AGL South Australia Pty Ltd ACN 091 105 092 ("**the electricity entity**") is a declared electricity entity pursuant to section 36AA of the *Electricity Act 1996*.
- 1.6 The Government has announced a legislative amendment process in response to the recommendations of the Report by the Independent Pricing and Regulatory Tribunal (IPART) of March 2004. These changes will be pursued whilst the price inquiry to which these terms of reference apply is in progress.
- 1.7 It is anticipated that the Commission's final report and determination (should the Commission consider it appropriate) will be issued pursuant to the new legislative regime.

2. REFERENCE

I PATRICK CONLON, Minister for Energy, hereby refer to the Commission the matter described in paragraph 3.1 of the Terms of Reference for the Commission to investigate pursuant to Part 7 of the Act, in accordance with the Terms of Reference specified below.

3. TERMS OF REFERENCE

The following are the Terms of Reference for the inquiry specified pursuant to section 35 of the Act:

- 3.1 The Commission is to investigate the standing contract price proposal (“the Proposal”) that will apply to small customers from 1 July 2005 for a period of no less than three years.
- 3.2 In assessing the proposal, the Commission’s evaluation will be limited to reviewing the electricity entity’s prudent controllable costs which, together with the relevant network tariffs, comprise the final standing contract prices charged to small customers. There should be no provision for specific headroom allowed in the prudent controllable costs determined by the Commission.
- 3.3 On completion of the inquiry, the Commission may issue a determination under Part 3 of the Act in conjunction with the making of its final report on the inquiry.
- 3.4 In determining whether the electricity entity’s controllable costs are justified as the prudent costs incurred in supplying small customers, in addition to the requirements of Parts 2 and 3 of the Act, the Commission is to have regard to:
 - 3.4.1 the electricity entity’s justification for its proposed charges, presented as part of the proposal;
 - 3.4.2 The wholesale electricity contracts and hedging strategies that would be utilised by a prudent electricity entity in providing the standing contracts to each of the residential and business customer classes in South Australia;
 - 3.4.3 The electricity entity’s actual underlying wholesale electricity contracts, hedging strategies and other arrangements for securing electricity for supply in South Australia, as well as the method for allocating these costs between large and small customers and within the small customer class;
 - 3.4.4 The retail operating costs that would be incurred by a prudent electricity entity in delivering the range and standard of services that are required of the electricity entity in providing standing contract services to South Australian small customers;
 - 3.4.5 The electricity entity’s actual operating costs in providing standing contract services to South Australian small customers, and the method of allocating its costs between the different customer classes;
 - 3.4.6 The electricity entity’s proposed margin on standing contract sales, and its actual margin achieved in recent years, and whether these are reasonable having regard to the entity’s investment in the business, the risks of standing contract retailing in South Australia, and the equivalence with

standing contract retailer margins interstate without Government risk management schemes;

- 3.4.7 Any cross-subsidies between, and within, business and residential small customer classes, and whether these cross-subsidies are justified to prevent a disproportionate price impact on any small customer group;
- 3.4.8 The prices charged and costs incurred in providing comparable services in other States and Territories of Australia, and whether the reasons for any differences can be justified; and
- 3.4.9 any other factors the Commission considers relevant.

4. CONDUCT OF INQUIRY

- 4.1. Following the receipt of these terms of reference, the Commission's inquiry process shall consist of at least the following:
 - 4.1.1 The publication of a notice of inquiry, as required pursuant to section 36 of the Act, no later than 7 days following receipt of these terms of reference;
 - 4.1.2 The release of an issues paper within 1 month of receipt of these terms of reference, in whatever form the Commission considers appropriate, setting out the information it requires the electricity entity to provide by a date specified in the Paper, and seeking comment on the key issues it should address in its investigations;
 - 4.1.3 The release of a Discussion Paper following the release of the electricity entity's proposal, as the basis of a consultation process on the proposal and on other information available to the Commission on components of the electricity entity's controllable costs;
 - 4.1.4 The release of a draft decision and determination (if applicable) to the Minister and electricity entity for comment no later than one week prior to the public release of a draft decision and determination;
 - 4.1.5 The release of a draft decision and determination (if applicable) no later than 30 November 2004, including provision for a bridging price for the period to 30 June 2005; and
 - 4.1.6 The submission of a final report and price determination (if applicable) to the Minister and electricity entity no later than 31 March 2005, and to the public no later than 7 days thereafter.
- 4.2. The final price determination (if considered appropriate) should allow for an adjustment within the period for which the determination applies based on such factors and as frequently as considered appropriate by the Commission.



- 4.3. The consultation process may consist of a public hearing, public seminar or workshop but the Commission may receive and consider any written submissions as it thinks appropriate.

5. DEFINITIONS

In this notice:

- 5.1 “business customer class” means those small customers not included in the residential customer class and excluding unmetered supplies;
- 5.2 “controllable costs” refer to those costs of the electricity entity which comprise the wholesale cost of electricity, retail operating costs, retail profit margin and any other cost (other than network charges) incurred by the electricity entity in carrying out its obligations under relevant legislation;
- 5.3 “proposal” refers to the document or documents provided by the electricity entity to the Commission in response to its initial information request as set out in the Issues Paper. The documents may include confidential components which the Commission must not publicly release and must treat in accordance with section 30 of the Act;
- 5.4 “residential customer class” means the group of small customers consuming electricity in premises wholly or principally as private residence; “small customer” has the meaning given to it in the Electricity Act 1996;and
- 5.5 “standing contract price” has the meaning given to it by section 36AA(6)(b) of the Electricity Act 1996

Dated 26 May 2004

HON PATRICK CONLON MP
Minister for Infrastructure
Minister for Energy
Minister for Emergency Services