

# **ESCOSA DISCUSSION PAPER**

## **Inquiry Into Retail Electricity Price Path**

**September 2004**

**AGL RESPONSE**

*Public Version*



## **PREAMBLE**

On 26 May 2004 the Minister for Energy issued Terms of reference to the Essential Services Commission of South Australia (The Commission) requiring the Commission to undertake an inquiry into standing contract prices to apply to small customers from 1 July 2005 for a period of no less than 3 years.

AGL South Australia Pty Ltd (AGL) supports the move to provide price certainty for residential and small business customers and the energy industry over the medium term. Establishing a multi-year price path is consistent with pricing approaches in the other states and is an important step in the transition to market based prices.

The Commission released an Issues Paper in June 2004 and a Discussion Paper in September 2004 seeking comments from interested parties. AGL submitted our price path proposal to the Commission on the 20 August 2004 as requested in the Issues paper.

The level of information sought by the Commission means that the Inquiry into AGL's price proposal will be the most comprehensive and exhaustive review for setting retail prices undertaken in any jurisdiction in Australia. AGL is providing the Commission with independently audited financial statements, tax returns, accounting information, operating costs and a review of historical results for 2003. AGL's wholesale costs have also been independently audited and have been provided to the Commission.

AGL welcomes the opportunity to provide detail comment to the Commission on the matters raised in the discussion paper.

## EXECUTIVE SUMMARY

AGL South Australia Pty Ltd (AGL) has proposed that electricity prices for residential and small business customers be varied as follows:

	January - June 2005	July 2005 - June 2006	July 2006 - June 2007	July 2007 - June 2008
Retail Price Change %	CPI	1.3%	CPI	CPI

Under AGL's proposal changes to network charges (either increases or decreases) would flow through to customers as an adjustment to the price path outlined above.

AGL considers that the prices proposed reflect the costs and risks of purchasing and supplying electricity to residential and small business customers who remain on standing contracts.

AGL has provided the Essential Services Commission of South Australia (The Commission) with a comprehensive and exhaustive range of information to support the proposed prices. AGL's responses to the issues raised by the Commission are summarised as follows:

- A lighthanded approach should be adopted to the form of regulation, balancing the flexibility to make standing contract prices cost reflective whilst ensuring customers do not experience unacceptable price changes. So whilst average prices would increase in line with the proposed price path individual tariffs must not be varied in a way that would see the annual bill of a customer increase by more than CPI+5% or \$40 (excluding GST), whichever is the greater.
- The price path should only be reopened in special circumstances for events that have a significant impact on the costs of retailers. This requires an appropriate allowance for expected risks and variations in the benchmarks established by the Commission.
- Costs that are beyond the control of AGL should be fully passed through to customers such as network charges, changes in taxes, market related changes, new charges and service standards events. Once reserve trader costs are known AGL expects to fully pass these costs through to customers.
- AGL's actual 2003 wholesale electricity costs were consistent with those projected by AGL at the time of the 2003 price review and were above the benchmarks allowed by the Commission.
- AGL's proposed SA price path for residential and small business customers is based on its expected wholesale energy costs to supply this market segment. Allens Consulting Group (ACG) has looked at AGL's existing contract portfolio and confirmed that AGL has acted prudently in its purchasing of wholesale electricity contracts.
- AGL is firmly of the view that given the comprehensive and robust modelling of future wholesale costs that AGL has undertaken and ACG's confirmation of the prudence of

AGL's contract purchases the Commission should adopt AGL's projected wholesale electricity costs.

- The Commission should adopt these costs used for the price path as the minimum costs in making its determination. These costs relate to the activities undertaken to deliver on AGL's standing contract obligations and to meet the increased demands of standing contract customers and the new operating arrangements in the industry.
- The retail margin based on a percentage of total sales is appropriate and should be set in the 5-10% range as this would be the commonly accepted return for a business of this nature. Whilst AGL does not accept the return on investment approach to setting retail margin, analysis using this approach would suggest a retail margin in the 5-10% of total sales range is appropriate in any event.

## 1 SUMMARY OF AGL PRICE PROPOSAL

Prices which reflect the costs and risks of supplying electricity to residential and small business customers are paramount to achieving the Commission's objectives of protecting the long term interests of consumers and ensuring that a financially viable energy industry is maintained in South Australia.

AGL's proposed three and a half year price path meets the Commission's objectives of protecting the long term interests of customers because it will:

- allow a safe and reliable supply of electricity commensurate with the level of supply interruption that consumers are willing to bear;
- cover the cost of providing the service levels that consumers desire;
- allow AGL to manage the wholesale price risks thereby giving small customers a level of price stability over the medium term;
- provide a return to AGL consistent with the actual risks faced and sufficient to ensure our continued investment in the energy industry in SA;
- cover the costs of generators running their existing SA generation plant at the times when consumers demand their energy and the costs of maintaining this plant;
- enable a stable South Australian electricity market to continue to develop; and
- provide customers with a level of comfort that electricity will be available when they wish to consume and is based on the fair and reasonable costs reflecting the risks of supplying electricity to customers over the medium to long term.

In finalising AGL's price proposal we have undertaken a comprehensive analysis of wholesale and operating costs and the prices proposed reflect the costs of supplying electricity to those customers on standing contracts.

AGL proposes that retail electricity prices for residential and small business customers on standing contracts be varied as follows:

	<b>January - June 2005</b>	<b>July 2005 - June 2006</b>	<b>July 2006 - June 2007</b>	<b>July 2007 - June 2008</b>
Retail Price Change %	CPI	1.3%	CPI	CPI

Under AGL's proposed prices small customers will see stable electricity prices with increases in line with inflation over the price path period. In determining our proposed retail price path we have used the existing network charges and the above retail price path would be adjusted to give effect to any changes to network charges (either decreases or increases).

AGL believes this price path proposal will help strike the appropriate balance between protecting consumer interests and ensuring a financially viable electricity industry is maintained in South Australia

## 2 FORM OF REGULATION

### 2.1 TIMING OF PRICE DETERMINATION

#### Summary of Commission's Discussion and Issues Raised

The Commission currently considers that as any price determination must be for a period of at least three years then the Commission needs to either:

- Issue a final determination in December, covering the period 1 January 2005 to 30 June 2008, thereby removing the opportunity for stakeholder comment following the release of its proposed draft report in November; or
- Delay a final determination until March, covering the period 1 July 2005 to 30 June 2008, thereby preventing any price changes from 1 January 2005 but providing sufficient time for stakeholder consultation.

The Commission is seeking comment on:

1. *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.*

#### AGL Comments

AGL strongly supports the establishment of a multi-year price path as this provides a level of price certainty for both customers and the industry.

AGL considered a range of alternative price paths and proposed an integrated 3.5 year price path which provides the greatest level of stability for customers – effectively being a CPI increase in prices over the 3.5 years from 1 January 2005 to 30 June 2008. As detailed in our confidential pricing submission a fully cost reflective price path would warrant a different structure to the proposed price path with a greater increase on 1 January 2005 and smaller increases in later years than that under the smoothed price path proposed.

AGL has adopted a smoothed price path to avoid any further “significant” price increases to customers.

Should the Commission not make a price determination for 1 January 2005 in accordance with AGL's proposal then a higher increase would be required on 1 July 2005 than currently proposed. AGL does not consider this to be in the best interests of consumers or the industry.

AGL's legal advice is that the Commission is not prevented from making price determinations in December 2004 and March 2005 as originally intended in the Government's Terms of Reference. AGL's advice is that, whilst a determination must be for a period of at least 3 years, the Commission has the powers before 1 July 2005 to revoke a determination and make a new determination.

This would allow for a “bridging price” for the period 1 January 2005 to 30 June 2005 to be established in December and for the price determination for the subsequent 3 year period from 1 July 2005 to be finally determined in March.

Accordingly, AGL considers the extent of consultation envisaged at the commencement of the current review process still achievable.

AGL has advised the Commission of its views.

## 2.2 INSTRUMENT OF CONTROL OF PRICE PATH

### Summary of Commission's Discussion and Issues Raised

The Commission is required to set a medium-term price path for standing offer prices, with provision for annual adjustments within limits subject to a compliance review, rather than reviewing these tariffs on an annual basis.

The Commission recognises that determining a medium-term price path of at least three years will entail greater risk and complexity than reviewing prices annually. The Commission sees the challenge as establishing a form of regulation that ensures that AGL does not fail to achieve a reasonable level of profits and consumers do not pay more than necessary.

The Commission is concerned with ensuring that the right form of price path control is applied. Control can be applied to average revenue, individual tariffs or a "basket" of tariffs. In this regard the Commission makes reference to its understanding of the current approach in NSW where the movement in the average tariffs is controlled rather than average revenues.

The Commission is seeking comment on:

2. *To what measure should any price path control be applied, ie, average revenue per customer or per MWh, weighted average tariffs, individual tariffs, etc?*
3. *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)?*
4. *What flexibility should AGL SA be given to change individual tariffs (increasing some, reducing others, but within the overall average price constraint)?*
5. *Given the complexities outlined above, is there a preferred approach to controlling tariffs to ensure compliance under the price path and protect individual consumers?*

### AGL Comments

AGL considers that there are number of principles that should be adopted when considering the form of regulation for standing contract customers. In summary, these are:

- Tariffs that reflect the costs and risks of purchasing and supplying electricity to customers;
- Cross-subsidies across tariff categories and within tariffs to be progressively removed to eliminate the potential for "cherry picking" by retailers who do not have an obligation to supply standing contract customers and to avoid the risk of subsequent price shocks to customers who remain on standing contracts; and
- Tariffs to be established on a transparent basis with fixed costs recovered through the fixed component of each tariff to avoid the potential for under or over recovery of these fixed costs.

AGL's preference is for a less prescriptive approach that allows tariffs to be moved to cost reflective levels over the period of the price path and to be adjusted to accommodate changes in market conditions. There should be few controls on both the balance between supply charges and energy charges and the relativity between individual tariffs.

AGL considers that the form of regulation should be light-handed and simple, as has been the general tenor of responses to the Commission's Issues Paper. The form of regulation adopted in NSW and Victoria, where multi-year price paths have been established, is showing an increasing trend towards simpler and lighter handed approaches:

- IPART amended its approach to electricity tariffs in NSW to have price increases controlled by consideration of the overall revenue from tariffs as a whole. IPART considered that controls based on the annual change in revenue for each tariff too inflexible and they would make the transition to cost reflective tariffs too slow. IPART has determined that the annual bill for any customer must not increase by more than CPI+5% or \$35 (excluding GST), whichever is the greater;
- In Victoria, electricity and gas tariffs are varied each year by the agreed average price change with a constraint that the average price does not increase for any one tariff by more than CPI+5%;
- Gas tariffs in NSW are allowed to increase on average by CPI each year (based on average revenues) with a constraint on the average increase in any customer's annual bill of CPI+5% or \$15 (excluding GST) per annum, which ever is the greatest. No specific constraint is placed on individual tariffs nor on the components of tariffs (supply charge and energy rate); and
- IPART considers that the electricity retail supply charge should be established at a level equal to the network fixed charge plus 85% of the retail operating cost allowance. Similarly, under the Victorian price path arrangements the supply charge is based on the network fixed charge plus a percentage of the retail operating cost allowance.

AGL's original proposed form of regulation is consistent with the arrangements established in NSW and Victoria and is based on an average price increase of CPI with the constraint of the average increase in an individual tariff being CPI+5%. The load weighted average revenue across all tariffs is used to calculate the average increase in prices. AGL has given further consideration to the impact on individual customers as discussed in the section on rebalancing and has proposed a further variation to the constraint.

## 2.3 PERIOD OF PRICE PATH AND REOPENING

### Summary of Commission's Discussion and Issues Raised

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

The Commission states that the need for reopening the price path can be limited by allowing AGL to pass through certain costs, such as changes in network costs. The Commission notes AGL's proposal for reopening of the price path where prices above the specified levels can be justified. The Commission's current view is that:

- It would be inappropriate to reopen price path for deviations in costs largely controllable by AGL, such as operating costs, or for reviewing the operating margin;
- Changes in network costs (up or down) should be accepted as a cost pass through;
- Reopening could be triggered by significant deviations in wholesale electricity costs or customer consumption levels which impact AGL's ability to recover reasonable costs or result in significant over recovery of costs.

The Commission is seeking comment on:

6. *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?*
7. *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?*
8. *How often should a re-opening of the price path be allowed?*
9. *Which parties should be able to seek a re-opening?*

### AGL Comments

AGL strongly believes that allowance should be made for the price path to be reopened in special circumstances. AGL considers such special circumstances are likely to include:

- Large force majeure events such as failure of the Moomba gas production facilities and incapacity of generation assets to produce expected energy;
- events which lead to significant changes to actual or expected wholesale energy costs;
- significant changes to market structures or obligations placed on the retailer; and
- significant changes to consumption levels of standing contract customers.

As a matter of principle, AGL considers that the benefits to customers and the industry are best achieved when the circumstances for the reopening of the price path are limited only to those special circumstances outlined above.

In this regard, an appropriate allowance should be made in either the cost benchmarks or the retail margin to cater for potential variations and risks that may occur over the 3.5 year price path period but would not give rise to special circumstances.

AGL considers that a reopening should be at the request of the retailer who should provide the Commission with a comprehensive statement of the impacts of the special circumstances on the retailer's costs and the expected variations to retail prices. The preferable approach is to focus on the matter that gives rise to the reopening.

In view of the likely significant impact of a price reopening event on customers and AGL, the initiation and consideration of the special circumstances would need to be undertaken in a timely manner with any variation to price being implemented soon as a reasonably possible.

## 2.4 PASS-THROUGH ITEMS

### Summary of Commission's Discussion and Issues Raised

The Commission considers that pass-through items should be limited to those that are entirely beyond the control of AGL. In its price path proposal, AGL has recommended that network charges, changes in taxes, market related changes (including national regulator levies) and new charges (such as reserve trader charges) should also be passed through.

The Commission is seeking comment on:

10. *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 retailers, bear the risks?*

### AGL Comments

AGL believes that costs that are beyond the control of AGL should be identified and treated as pass-through items with the retail prices being adjusted by the full cost of these items.

AGL has identified a broad range of categories of potential pass-through items (outlined in the Commission summary above). In this regard, to the extent these pass-through items are currently known, they have been included in the price path proposal, with the exception of an allowance for reserve trader arrangements that NEMMCO has invoked for 2005. The details of such arrangement are yet to be advised by NEMMCO but are expected in December 2004. The reserve trader arrangements are a potential significant additional cost. On the previous occasion the reserve trader scheme operated (prior to the commencement of the National Electricity Market (NEM)) significant costs were incurred by the market.

AGL would be seeking to vary the price path proposal to take account of all changes in these pass-through items. For example, the price path has been based on the current network charges and AGL would expect that changes to the network charges (either increase or decrease) arising from the Commission's current review would fully pass through to customers.

AGL considers that changes to regulatory structures, obligations and service standards that result in changes to a retailer's operating costs (either decrease or increase) should be treated as pass-through items under market related changes.

For the benefit of clarity, items that are also considered to be pass-through items include costs arising from changes to the obligations placed on retailers relating to greenhouse gas and carbon emissions and those associated with the implementation of new or increased requirements to administer government initiatives or schemes.

## 2.5 REBALANCING

### Summary of Commission's Discussion and Issues Raised

The Commission believes that, whilst tariffs should be cost reflective, the unwinding of current cross-subsidies should be balanced with the need to protect customers from unacceptable price increases.

The Commission has stated that many cross-subsidies in South Australia have been removed over recent years so that most consumers are now paying their "true" costs of supply and AGL would like to remove the remaining cross-subsidies during the price path period.

The Commission acknowledges that many needy consumers have high levels of consumption and 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.

The Commission also acknowledges that the balance between the fixed supply and the variable energy charges can impact customers differently depending on the customer's consumption level.

The Commission proposes to give careful consideration to the level of involvement it should have in defining actual tariff structures and prices for standing contract supply. It now needs to decide how quickly it will allow the unwinding of these cross-subsidies and whether, as in other jurisdictions, individual tariff categories will be allowed to change at different rates to the overall tariff class.

The Commission is seeking comment on:

11. *Should the Commission support continued efforts to remove cross-subsidies between consumer tariff categories and within tariffs?*
12. *Should the Commission attempt to control the allowable changes for both supply charges and energy charges within a tariff category?*
13. *What level of price increase is tolerable for customers who are currently on under-recovering tariffs? Is the NSW rebalancing restriction acceptable?*
14. *Are there alternative approaches to setting a "Socially Responsible Tariff" as proposed by CCSA, that overcome the problems identified?*

### AGL Comments

AGL reiterates its view that the progressive removal of cross-subsidies from standing contract prices is paramount as cross-subsidies are not sustainable in a competitive market. As discussed earlier, the Commission should continue with its light handed approach to tariff structures. IPART has recognised that the regulatory constraints on tariff rebalancing has in the past precluded or unnecessarily slowed the move towards cost reflective tariffs.

AGL understands the principles behind the Conservation Council of South Australia (CCSA) Socially Responsible Tariff. However, like the Commission, AGL has concerns regarding

any attempt to address social inequities via standing contract tariffs. AGL agrees with the Commission that it is better to provide support to those in need in a transparent manner through appropriate concessions or other arrangements funded by the government. AGL notes that the SA Government has increased the annual electricity pension concession to \$120 and the Federal Coalition announced a policy to provide a utilities allowance of \$100 for pensioners and \$200 for self-funded retirees.

AGL accepts that one aspect of rebalancing tariffs is the potential impact on low volume residential consumers particularly in consideration of the mix of supply charge and energy rates. In this regard AGL would consider it appropriate that the rebalancing control be amended to be consistent with NSW where the constraint is the greater of CPI + 5% or a \$35 increase in the annual bill of a customer using the same quantity of energy. AGL considers that for SA residential customers the constraint should be CPI+5% or \$40 (excluding GST) which ever is the greater.

AGL does not consider there is a need for any further constraints to be placed on tariff structures beyond those outlined above.

### **3 WHOLESALE ELECTRICITY COSTS (WEC)**

#### **3.1 COMMISSION'S APPROACH TO ASSESSING WHOLESALE COSTS**

Wholesale Electricity Costs (WEC) have generated the greatest level of debate in prior year pricing determinations. The Commission acknowledges that AGL's wholesale energy costs will be dependent on a range of factors. These factors include customer load profile, the spot market prices, weather conditions, terms of hedging contracts, the proportion of the load that is uncontracted, the supply/demand balance in the NEM, strategies adopted by the generators and retailers in bidding and contracting and customer churn.

The Commission is undertaking a comprehensive assessment of the retailer's prudent strategy to cover the standing contract customer demand. The Commission has engaged Allens Consulting Group (ACG) to review AGL's actual contract costs using estimates of Long Run Marginal Costs (LRMC) for small customer demand prepared by Electricity Supply Industry Planning Council (ESIPC) and to develop credible options for purchasing hedges for loads not yet covered by the contracts for each year of the price path.

The Commission has requested ESIPC to provide advice on the LRMC of supplying electricity to small customers as one input into its consideration of wholesale costs, consistent with the recommendation from IPART. The Commission is also undertaking an analysis of large customer contracts.

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

#### AGL Comments

AGL welcomes the Commission's comprehensive approach to assessing wholesale electricity costs. AGL has provided the Commission with full details of AGL's electricity purchase costs for the price path period. AGL is confident that its wholesale electricity purchases have been prudent and efficient. This has been recognised by the Commission's consultants, Allens Consulting Group.

As acknowledged by the Commission there are a number of significant factors impacting on wholesale costs which AGL manages on behalf of its standing contract customers. AGL purchases its wholesale electricity in accordance with its Board-approved wholesale energy risk management policy, entering into hedging arrangements which balance costs and risks.

AGL's modelling of wholesale electricity costs takes into account the complex interrelationships of factors impacting the wholesale costs as outlined by the Commission.

AGL considers that aspects of both the ACG modelling and the estimates of LRMC undertaken by ESIPC as detailed in the reports released concurrently with the Commission's discussion paper must be reconsidered as they understate AGL's wholesale electricity which are acknowledged by the Commission's consultants are a result of AGL operating prudently and efficiently.

### 3.2 ANALYSIS OF PRUDENT WHOLESALE ELECTRICITY COSTS

#### Summary of Commission's Discussion and Issues Raised

The ACG analysis presumes 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.

ACG has reviewed all AGL's wholesale electricity contracts that relate to supply to small customers for the period 2005-2008. ACG has concluded that:

- The prices achieved by AGL were efficient and similar to prices achievable by a prudent retailer; and
- The timing of AGL's purchases was appropriate and prudent.

ACG accepts that AGL's existing contract quantities and prices are prudent and should be used in the modelling of WEC going forward.

ACG has developed a model that has established, for each of five varying load forecast and future price scenarios, a portfolio of hedge contracts that minimises the risks associated with load demand and pool price. Each scenario has been weighted by considering the likelihood and financial consequences of occurrence. Pass-through costs (NEMMCO fees, etc) and line losses have been added before determining an 'optimum' mix of contracts.

The outcomes of the ACG modelling are outlined in the following table.

**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

The Commission is seeking comment on:

15. *Are the scenarios developed by ACG credible and appropriate?*
16. *Are the assumptions used by ACG credible?*
17. *Which of the three future contract price options is preferred for setting the WEC, and on what basis?*

## AGL Comments

AGL has based its SA price path proposal for residential and small business customers on its expected wholesale energy costs (WEC) to supply this market segment. AGL has undertaken comprehensive and robust modelling of its actual contract position and has taken account of a number of variations to load and pool price forecasts in deriving AGL's expected WEC. AGL has looked at the existing AGL portfolio of contracts and has confirmed that AGL has purchased prudently. Given this AGL is strongly of the view that the Commission should adopt AGL's wholesale electricity costs in determining AGL's price path.

AGL notes that the Commission has stated that it intends to base its determination of wholesale energy costs on scenario modelling outcomes from the AGL consultancy. AGL has at no stage agreed to this approach and does not believe that the proposed scenario approach being adopted by AGL is appropriate for deriving AGL's wholesale energy costs.

AGL's assessment of the modelling methodology and input assumptions (scenarios) used by AGL has resulted in AGL having serious concerns as to the appropriateness of this process in determining the Wholesale Electricity Cost. AGL's analysis of the modelling undertaken by AGL indicates significant shortcomings due to the limitations in the manner in which it reflects the complex interrelationship between the factors acknowledged by the Commission as having an impact on WEC. These factors include customer load profile, the spot market prices, weather conditions, terms of hedging contracts, the proportion of the load that is uncontracted, the supply/demand balance in the NEM, strategies adopted by the generators in bidding and contracting and customer churn.

AGL has provided the Commission on a confidential basis an initial comprehensive assessment of AGL's modelled wholesale electricity costs, methodology and assumptions developed by AGL to determine these costs. In summary, AGL considers that the AGL modelling has the following limitations:

- it adopts scenarios which do not adequately address the complex interrelationship between AGL's contract position, demand and the subsequent pool prices that will prevail due to generator bidding behaviour and are consequently not plausible. For example, AGL cannot accept that the high risk, high demand AGL scenario results in WEC substantially less than the expected scenario;
- it ignores that generators will behave in a fashion that rationally defends their contracted position and look to opportunistically bid uncontracted residual volumes into the spot market. A high level of AGL exposure to pool price usually give rise to high pool prices particularly in periods of high demand, similarly low pool prices occur at times of low exposure;
- it uses averaged historical pool prices in all scenarios and as a consequence there is no diversity in pool price outcomes;
- while using AGL's contracts prices and quantities the AGL model does not adequately take account of AGL's contract structures. The modelling of contract volumes on a quarterly basis causes a significant averaging impact which creates marked differences in the volume of contract cover at various times and therefore can significantly impact modelled costs when coupled with non correlated pool prices. This simple view of

the AGL portfolio is significantly contributing to a lower ACG modelled wholesale energy cost outcome;

- ACG's modelling of additional contracts has sought to optimise costs but results in contract purchases that would not occur in the market place. ACG has determined additional contract quantities based on an optimisation that is intended to create a portfolio that minimises variations to the WEC from changes to pool price and/or demand forecasts. What this methodology, coupled with the limitations of scenarios used, has caused is at times a significantly over-contracted portfolio. AGL operates within a Board approved risk management policy that would not allow for what could only be viewed as speculative activity.

Under this optimisation approach the additional contracts have been modelled by ACG in periods of high pool price creating significant positive cashflows to the retailer as a result of being overcontracted at times of high pool price. The ACG model does not address the likely generator response to this situation and the subsequent impact that such a contract position would have on lowering the pool price.

- AGL's initial response to the weightings used in the ACG model was from a risk management and potential financial impacts perspective, or consequence. With the benefit of understanding how the ACG model works it is apparent that it is more appropriate to be looked at from the perspective of likelihood. This fundamentally changes the weightings AGL had tentatively suggested.
- The prices for swaps, caps and renewal energy certificates used by ACG are lower than the currently available broker market prices for these products. In addition, ACG have failed to include in their REC costs any costs incurred by the retailer in surrendering RECs to the Office of the Renewable Energy Regulator. The REC costs submitted by AGL include such costs as they are actually incurred in complying with this mandatory scheme.
- There is no allowance for other risks; and

ACG has acknowledged that the matters raised by AGL do reflect limitations in their scenario approach and modelling.

The combined effect of the difficulties in modelling complex interrelationships, the limitations in the modelling structure and the inappropriate weightings result in the ACG wholesale electricity costs substantially below AGL's prudent and efficient costs.

AGL considers that its own modelling of Wholesale Electricity Costs is more appropriate and robust than that undertaken by ACG. AGL has modelled seven separate scenarios (all having a reasonable probability of occurrence) and considered the risk of variation from these scenarios. As a result AGL considers its own estimates of Wholesale Electricity Costs to be more accurate for consideration by the Commission in determining the Retail Electricity Price Path.

AGL's modelling has consideration of the following:

- Pool price forecasts have been derived using a widely accepted electricity market analysis tool, Prophet. The input assumptions used in the Prophet modelling of pool prices has included various demand scenarios, generation supply scenarios (including forced outages

and planned maintenance), interconnect capacity assumptions, and generator bidding behaviour including the impact of various contracting strategies on such behaviour. The result is a variety of forward-looking pool price scenarios that reflect, in AGL's view, a probable range of outcomes. This modelling has been undertaken for the entire NEM, not simply South Australia in isolation from the remainder of the market.

- AGL has modelled its own contract position based on the relevant range of demand scenarios that were also applied to the pool price modelling. The result is that the contract position modelled reflects the actual contract quantities that would result from each demand scenario.
- The mass-market demand scenarios modelled are also derived from the total SA demand forecasts used in the modelling of pool price outcomes. These forecasts incorporate a level of customer churn away from AGL that is expected over the duration of the price path determination.
- Total system demand forecasts have been developed for all regions of the NEM for inclusion in the pool price modelling, the derivation of mass-market demand forecasts, and for the calculation of AGL's contract portfolio. The regional system demand forecasts have been derived with reference to NEMMCO's Statement of Opportunities (SOO) forecast of maximum demand for the 50% probability of exceedence and system energy for medium economic growth. The profile (or distribution of energy consumption) across the year has been derived using a base year that has been adjusted to ensure consistency with long-term historical weather patterns. This ensures that outlier weather conditions have been removed from the forecast to eliminate the distortion that may occur with using a single base year. It should be noted that all regions of the NEM have been modelled in a consistent manner.
- AGL's WEC also includes a premium to allow for the risk of variations from the forecasts of demand (economic and weather conditions), customer churn estimations and pool price forecasts. It also includes amounts of embedded generation contracts AGL is obliged to purchase electricity under and an amount for limited small events of circumstances outside the control of AGL, eg NEMMCO directions, what if pricing and supply side failures, which AGL considers too administratively onerous to treat under pass through provisions.

The above components of the Wholesale Electricity Cost calculation are integral in determining the accuracy of such costs. The Commission has acknowledged that the Wholesale Electricity Costs will depend on such factors. Given this dependence, it is essential that the included components are credible and have a reasonable probability of occurrence. AGL's comprehensive modelling of such components, including its use of industry accepted analysis tools such as Prophet and its reference to external sources such as the SOO for vital input assumptions, ensures the WEC outcomes that have been modelled are robust and valid.

AGL has based its SA price path proposal for residential and small business customers on its expected wholesale energy costs (WEC) to supply this market segment. As outlined above AGL has undertaken comprehensive and robust modelling of its actual contract position and taken account of a number of variations to load and pool price forecasts in deriving our expected WEC. AGL has looked at the existing AGL portfolio of contracts and has confirmed that AGL has purchased prudently.

AGL is strongly of the view that the Commission should adopt AGL's wholesale electricity costs in its consideration of AGL's price path.

AGL has provided the Commission and ACG with additional analysis including the outcomes of AGL's modelling and AGL's half-hourly future contract position to assist ACG in their further work. AGL's has and continues to offer the Commission and ACG full access to AGL's models.

### 3.3 LONG RUN MARGINAL COSTS (LRMC)

#### Summary of Commission's Discussion and Issues Raised

ESIPC has developed a range of estimates for the LRMC as outlined in the table below. The estimates incorporate different assumptions, including the rate of return for investing in generation plant.

*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

ESIPC also undertook further analysis of a wider set of assumptions (as detailed in its report) resulting in a LRMC range (including market fees and losses and off-peak hot water demand) of \$64.5 to \$76.6 per MWh.

The Commission is seeking comment on:

18. *Are the assumptions used by ESIPC appropriate?*
19. *What is the appropriate rate of return for investment in generating plant for use in determining the LRMC?*

#### AGL Comments

The Commission's discussion paper makes reference to comments made by AGL in regard to LRMC outcomes. AGL has always stated that LRMC can be useful approximation of the medium to long term WEC if the economic estimates derived are appropriately adjusted for market risks, current market structure and market realities. Such adjustments have not been made in the ESIPC analysis.

AGL provides the following summary comments on the detailed assumptions outlined in the ESIPC report on "Estimates of the long run marginal cost of supplying electricity to small customers in 2005". Specific comments on the ESIPC report are contained in Attachment B. AGL considers that for the ESIPC base case:

- The fixed capital costs appear low, especially for peaking plants;
- Plant size for base load operation is 50% larger than the existing largest unit – in reality this would result in a higher charge for reserve margin than has been modelled;
- Pass-through costs, variable fuel cost rates and variable OPEX are considered low; and

- The financing costs assumed are too low for a project that is likely to assume merchant risk – whilst the financing rate used by the ESIPC may be appropriate for a generation project whose revenue was underwritten by a power purchasing agreement, it is unlikely that any generation project in the NEM would be sufficiently underwritten to satisfy financiers suitably;
- Inclusion of transportation costs in the variable fuel charge would not allow for full recovery of fuel transportation costs; and
- The market premium required in the base case has been understated.

It is relatively easy to demonstrate that the fuel cost assumptions are incorrect for both CCGT and SCGT units, as well as the fact that the financial assumptions attributed to the base case scenario are not commercially realistic. AGL believe that the correct new entrant curve to use for the derivation of LRMC estimates is Curve 8 (as detailed on page 32 of the ESIPC report) which incorporates a 3.5% higher fuel cost and higher financing assumptions. This would mean that the average cost of delivered energy (excluding hot water load) is not the \$60.34/MWh as indicated by the Base Case, but is at least \$65.22/MWh.

If increase in costs resulting from a larger reserve margin is also taken into account, the fact that fixed capital costs may be above those indicated in the report, and the effect of a decline in the AUD/USD exchange rate as modelled it is likely that the actual new entrant cost curve is close to new entrant Curve 9 (\$69.88/MWh).

The ESIPC LRMC estimates assume that all plant can be located at the regional reference node (that is Adelaide metropolitan location). Accordingly, the LRMC estimate ignores the transmission losses that occur between the generator location and the regional reference node. For this to occur in reality it would mean that the equivalent of in excess of 1,000MW of generation that is presently located outside of the metropolitan area would be required to be located in the Adelaide metropolitan area and that no energy is transported from interstate. AGL estimates that these losses not being reflected in the LRMC will result in the actual WEC at the regional reference node being artificially reduced by at least 4%.

### 3.4 LARGE CUSTOMER CONTRACTS

#### Summary of Commission’s Discussion and Issues Raised

The Commission has some reservations about the ability to infer prudent wholesale energy prices for the standing contract retailer from small blocks of power for large customers. The Commission nevertheless accepts that this is another piece of information it should have regard to when making its informed decision.

The information available to the Commission on a confidential basis produces wholesale electricity costs as outlined in the table below.

**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
<b>AVERAGE</b>	<b>57.5</b>	<b>83.5</b>	<b>53</b>	<b>45.5</b>	<b>51.5</b>

The Commission is seeking comment on:

20. *Whether large customers are able to secure lower prices (or more precisely, whether other retailers are able to) after AGL as the dominant retailer has settled its contracts.*
21. *Whether there remain any significant liquidity problems facing AGL in meeting its contractual supply obligations.*

#### AGL Comments

It would be expected that large use customers should be able to secure lower prices for the cost of wholesale electricity than customers on the standing tariff. The predominant reason for this is that the consumption profile of large use customers are less driven by the effects of weather and thus substantially less peaky than customers using less than 160MWh per annum.

ESIPC confirm this at page 32 of their report to the Commission where they summarise their analysis demonstrating the costs to supply the small customer segment exceed the cost of supplying the greater than 160 MWh customer segment

As a result of this reduced variability in consumption patterns, large use customers are not required to pay as much for the requirement to have generation supply available, but rarely operating during the year except on days with extreme weather conditions.

These factors result in prices delivered to large use customers being a poor indicator of the wholesale electricity cost that ought to apply to customers on standing tariff.

### **3.5 AGLSA HISTORICAL WEC COSTS FOR 2003**

#### AGL Comments

AGL has provided the Commission with full details of the wholesale electricity costs for supply to standing contract customers in 2003. AGL has also provided the Commission with the independent audit confirmation of these costs.

The wholesale electricity costs at the customer meter incurred in 2003 are within the projected cost range advised by AGL at the time of the 2003 price review. The costs are above the benchmark cost allowed by the Commission of \$71.

AGL strongly urges the Commission to establish realistic and achievable benchmarks for the various cost components making up the retail price. In this regard, any under-recovery arising from a benchmark set below actual costs results in a significant reduction in the retail margin actually achieved. This matter is further discussed later in the report.

## 4 Retail Operating Costs (ROC)

### Summary of Commission's Discussion and Issues Raised

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 of a standing contract retailer set out in the Energy Retail Code and other regulatory instruments; and
- corporate overheads (including licence fee and Ombudsman charges).

In the past, the Commission has set the allowance for Retail Operating Costs (ROC) by reference to the allowances made by regulators in other jurisdictions. However, the Terms of Reference of the Inquiry require the Commission to obtain a more reliable estimate of the ROC and AGL has provided its actual operating costs for the calendar year 2003.

The Commission intends on reviewing its current allowance of \$82 (being \$80 determined by the Commission to reflect reasonable costs in 2003, updated for inflation) but wishes to maintain a benchmark approach to setting ROC in line with other regulatory decisions.

The Commission is seeking comment on:

22. *Are there opportunities for stapled distributors/retailers to achieve lower costs than stand alone retailers?*
23. *What are the most appropriate benchmark estimates to use for the current review?*
24. *How should retail operating costs for AGL SA be set in relation to these benchmarks?*
25. *Should retail operating costs be inflation and efficiency adjusted within the medium-term price path?*

### AGL Comments

AGL is strongly of the view that the Commission should adopt at least the AGL costs in making its determination as they are reflective of the costs of the activities undertaken to deliver on AGL's standing contract obligations, to meet the increased demands of standing contract customers and the new operating arrangements in the industry.

AGL has provided the Commission with comprehensive details of AGL's operating costs for calendar year 2003 and expected operating costs for the price path period including an explanation of variations in costs. These costs take into account AGL's service standards obligations, the increased demand and expectations from customers, additional costs for new

systems and processes for handling meter data and other transactions with the distributor on behalf of customers, established new programs to help customers manage their energy consumption, implemented assistance programs for customers in financial hardship and administered government initiated programs.

Stand-alone retailers generally have higher costs than retailers stapled to a distributor. Stand-alone retailers need to operate separate systems and Business-to-Business (B2B) costs with the distributor are high. Higher administration costs are also experienced when exceptions need to be managed.

In South Australia, some service standards are more onerous than those in other jurisdictions (such as the requirement to answer 85% of calls within 30 seconds) and this should be taken into consideration when setting ROC allowances. The Commission also needs to consider whether it intends on further increasing regulatory obligations, such as performance indicators and audits.

AGL considers that operating cost benchmarks should take into account the actual cost incurred by AGL in meeting its service obligations to standing contract customers. Benchmarked operating costs from other states range between \$70 per customer (in NSW) to \$92 per customer (Victorian price path allowance). The Victorian operating costs are most closely aligned to South Australia as the level of stapled arrangements between retailers and distributors is less than in NSW.

As AGL is the sole standing contract retailer in SA the shift of small customers to market offer contracts has a greater impact on AGL than similar transfer rates have on the five Victorian incumbent retailers. This is primarily as a result of the need to recover fixed costs over a reducing customer base. Details of these impacts have been provided to the Commission on a confidential basis as part of the comprehensive analysis discussed above.

Regulators have often approached the setting of operating cost benchmarks with the view of providing retailers with an incentive to improve the efficiency of their operations by adopting a CPI – X% adjustment to operating costs. While less than the full amount of an increase may be considered to provide incentive to improve efficiency it ignores the underlying cost drivers impacting retail operating costs. For example, a significant proportion of costs relate to labour associated with the taking and responding to customer enquiries and these costs escalate at the enterprise bargaining agreed rates which can often be higher than the inflation rate.

AGL does not agree with the Commission's treatment of bad debts. AGL is strongly of the view that bad debts are part of the ordinary activities of a retailer and as such should be included in operating costs. Bad debts have always been treated as an operating cost in the energy market with only the potential increase in bad debts arising from full retail competition being treated as a risk and being incorporated into the retail margin. Reference is made to the recent review of electricity prices in NSW and in particular IPART's supporting consultants report prepared by NERA which clearly discusses bad debts as part of operating costs.

## **5 RETAIL MARGIN**

### **5.1 COMMISSION'S APPROACH TO RETAIL MARGIN**

The Commission states that 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.

The current "allowance" by the Commission of 5% of total costs provides a \$44 per customer margin per annum (after allowing for GST), for the average residential consumer with a \$1000 annual bill.

The Commission has stated that it considers the margin provides investors with funds to cover:

- a return on funds invested
- depreciation and amortisation allowance
- bad debts
- income tax payable

The Commission has proposed that the level of retail margin needs to be established and that the form of the margin is secondary to this consideration. The Commission infers that it will continue with the current form of the margin based on the advice received by consultants NERA 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. NERA noted that the existing percentage of sales margin has some legitimacy by virtue of the fact that sales will be broadly related to the required investment in working capital. NERA also noted that a percentage of sales margin is the most comparable with measures used elsewhere and arguably the simplest to apply.

#### AGL Comments

AGL notes the Commission's intention to continue with the current form of the margin based on a percentage of sales approach. AGL strongly supports margins being based on a percentage of total sales as it is consistent with the approach adopted in all other jurisdictions and with general industry trends.

## 5.2 LEVEL OF MARGIN

### Summary of Commission's Discussion and Issues Raised

The Commission notes that:

- The Terms of Reference for the price review prevent the Commission considering the margin allowed in NSW as the price established in NSW takes into account the NSW Government's ETEF risk management scheme.
- The margin allowed in SA is below that being achieved by Victorian retailers despite the higher network charges in SA.
- AGL SA retail business bears a higher risk than Victorian retailers as it bears all the risk for nearly 90% of the standing contract market that it is responsible for unlike Victoria where these risks are spread across five standing contract retailers.

The Commission proposes to use a retail margin derived from return on investment as a guide to see whether the benchmarked margins are within a reasonable range. In this regard the Commission has proposed estimating the dollar amount of the justifiable retail margin based on:

- Return on Investment considering:
  - a working capital requirement between \$120 million and \$140 million
  - a range of values for intangible assets of \$139 million to \$167 million
  - a range of \$22 million to \$33 million for tangible assets relating to the AGL's SA business
  - a rate of return on the total asset base of between 8.1% to 11.1% real pre tax
- Return of Investment considering depreciation and amortisation of intangible assets of \$4 million to \$5 million
- Allowance for bad debts of between \$4 million and \$7 million

The Commission states that it 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.

The Commission is seeking comment on

26. *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?*
27. *Should the purchase price be considered as an investment for the purposes of determining the retail margin for AGL SA?*
28. *If so, does the range \$138m to \$167m represent a reasonable value for the efficient level of investment to be used in this analysis?*
29. *What is the relevant rate of return that should be used to derive the return on investment for AGL SA?*
30. *Is the provision for amortisation credible, or should the amount in AGL SA's annual accounts for depreciation and amortisation be used to set the appropriate level of return of investment, or is an alternative approach preferred?*
31. *Should bad debts be included in the retail margin calculation or should they be allowed for within the operating cost?*
32. *What level of bad debts should be assumed in the future?*
33. *Are the assumptions used in the Commission's estimate of the quantum of justifiable retail margin credible?*
34. *Is the current 5% on total costs margin still appropriate, or should the Commission adopt an alternative margin for the price path period?*

#### AGL Comments

AGL strongly considers that the appropriate margin to address the level of risk in the South Australian electricity market and AGL's continuing obligation to supply standing contract customers is in the 5-10% range. At this level the margin would be below the margin allowed retailers in Victoria but would recognise the full pass through of changes to costs beyond AGL's control and the provision for a reopening of the price path in special circumstances being a part of the overall form of regulation.

AGL has also advised the Commission that it recognises the sensitivity amongst stakeholders to the level of retail margin earned by retailers and taking into account these views AGL proposed a retail margin at the bottom of the appropriate margin range acceptable for the level of risk associated with supplying electricity to small customers. **Fundamental to this consideration is the retail price path being structured on a realistic assessment of AGL's wholesale and operating costs and appropriate provisions for changes to costs beyond AGL's control to be fully passed through to customers.**

Any consideration of benchmarks below the costs as submitted by AGL would be equivalent to reducing the retail margin achievable by AGL and would be tantamount to setting a retail margin below 5%. This is clearly evidenced by the financial outcomes for the small customer market for South Australia in calendar year 2003. The benchmarks established and the

volumes projected resulted in an understatement of AGL's actual cost with an actual margin below the Commission's benchmark of 5%.

AGL notes that the Commission, in seeking to inform itself of an appropriate quantum of retail margin, wishes to undertake a return on investment type analysis. In this regard the Commission has sought comment on a range of matters that would be considered in undertaking such analysis.

AGL is not aware that the return on investment approach has been adopted for retail margins in any other jurisdiction. EBIT to sales is a commercially accepted approach to retail margins across a range of industries and is the approach adopted by the energy industry in the US and UK.

Notwithstanding the appropriateness or not of this approach we provide a range of comments on the matters discussed in the Commission's paper as follows:

- The "regulatory asset base" to be used for the purposes of the Commission's consideration should comprise the working capital of the retail business, the intangible assets which represent the current value of the investment in the business (customer base) and the tangible assets (systems and physical assets) applied to the delivery of the business;
- For distribution businesses the WACC is applied to the Depreciated Optimised Replacement Cost (DORC). This raises the question about the appropriate valuation for the intangible assets for a retail business. Adopting a similar approach to the valuation of retail intangible assets would give rise to revaluing the customer base of a retailer using recent purchase transactions. The Commission has noted that recent electricity business purchase transactions have valued these businesses in the range of \$519-\$625 per customer. There is an amount of circularity to this aspect and the overall return on investment approach as the price path set for a business governs the returns for a business which in turn governs the valuation of the business which in turn governs the future price paths.
- The Commission has indicated the potential use of a WACC range of between 8.1% and 11.1% real pre-tax. AGL has a view that the WACC of a retail business would be at the upper end of this range based on:
  - Debt as percentage of debt plus equity of 20-30%. Relative to electricity generation and distribution a retail business supports a much lower leverage. We note that the ESIPC report proposes 50% leverage for generation assets and ESCOSA and other Australian regulators have historically assumed a 60% leverage for gas and electricity distribution businesses. An electricity retailer would support much lower levels of debt than either generation or distribution businesses for the following reasons:
    - Proportionally lower tangible assets that could be used as collateral for debt;
    - Higher cash flow volatility; and
    - NEMMCO prudential requirements which reduce borrowing capacity.

Analysis suggests a gearing level of 20-30% for non-substantially integrated retailers is consistent with credit ratings between A and BBB.

- Asset Beta of 0.7 to 0.9 reflecting the relatively higher systematic risk of electricity retail businesses relative to generation and distribution. This asset beta would equate to an equity beta in the range of 0.87 – 1.38;
- AGL endorses a gamma of zero, as this is consistent with the leading empirical evidence and dominant market practice.
- Under this approach it would also be appropriate to undertake an assessment of the probability that the margin achieved will deliver the required return on investment, given the risks of retailing not reflected in the beta estimates.
- AGL has commented on the relevance of the treatment of bad debts as a component of margin. Should the Commission continue with its proposed approach then the full amount of bad debts should be allowed and consideration needs to be given to the increase in bad debts that occur subsequent to full retail competition being established. In addition, the Commission should give consideration to the additional cost incurred by AGL on bad debts as a GST refund is not available for the network portion of this cost as a tax refund.

Taking account of the above comments a preliminary analysis of the quantum of return based on a ROI approach would suggest return for a business such as AGL's SA business equivalent to a retail margin in the range of 5-10% of sales.