Independent Pricing and Regulatory Tribunal

Changes in regulated retail gas prices from 1 July 2014

Gas — Draft Report
April 2014

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Invitation for submissions

IPART invites written comment on this document and encourages all interested parties to provide submissions addressing the matters discussed.

Submissions are due by 21 May 2014.

We would prefer to receive them electronically via our online submission form <www.ipart.nsw.gov.au/Home/Consumer_Information/Lodge_a_submission>.

You can also send comments by mail to:

2014 Review of regulated retail gas prices
Independent Pricing and Regulatory Tribunal
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We may choose not to publish a submission—for example, if it contains confidential or commercially sensitive information. If your submission contains information that you do not wish to be publicly disclosed, please indicate this clearly at the time of making the submission. IPART will then make every effort to protect that information, but it could be disclosed under the *Government Information (Public Access) Act 2009* (NSW) or the *Independent Pricing and Regulatory Tribunal Act 1992* (NSW), or where otherwise required by law.

If you would like further information on making a submission, IPART's submission policy is available on our website.

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1 Executive summary

The Independent Pricing and Regulatory Tribunal (IPART) is responsible for regulating retail gas prices for around a quarter of residential and small business customers[1] in NSW. These are the prices the Standard Retailers in this state – AGL, ActewAGL and Origin Energy – charge customers who have not signed a market contract with them or another retailer.[2]

Under our draft decisions average retail gas prices can increase by up to 17.5% across NSW over the next 2 years – or by between 14.4% and 19.4% in the Standard Retailers' individual supply areas.

For the past 10 years, we have regulated these gas prices using a relatively light-handed approach that involves making multi-year pricing agreements with each Standard Retailer (known as Voluntary Pricing Arrangements). This reflects the significant level of competition in the retail gas market. The Standard Retailers then set their own regulated prices to comply with these agreements, and we monitor their compliance.

In 2013, we reached new pricing agreements with the Standard Retailers, for the period 1 July 2013 to 30 June 2016. Due to the high degree of uncertainty about the wholesale gas market and costs, the Standard Retailers made a pricing proposal for the first year of the 3-year term only (ie, 2013/14). The pricing agreements allow the Standard Retailers to submit pricing proposals annually, provide for IPART to conduct a review in 2014 to assess how each retailer can change regulated retail prices in the second and third years, and set out the approach for this review.

In line with the agreements, the Standard Retailers submitted their pricing proposals for 2014/15 and 2015/16 to us in February 2014.[3] We are now conducting our review of, and have made draft decisions on, these pricing proposals. This report sets out our draft decisions, and explains how we reached them and balanced the objectives of *Gas Supply Act 1996*, including protecting the interests of customers and encouraging development of the competitive market.

1 All customers that consume less than 1 terajoule (TJ) per year are eligible for supply under a standard form customer supply contract.

2 We set regulated retail prices paid by customers who have not signed a contract with an energy retailer or who have chosen to return to the regulated price.

3 Note that under the pricing agreements the Standard Retailers have the option of requesting another annual review before the 2015/16 price change if they consider it necessary.

1.1 Regulated gas prices will rise significantly over the next 2 years

The Standard Retailers made revisions to their initial proposals, and resubmitted them. In reaching our draft decisions, we assessed each Standard Retailer's revised pricing proposal[4] to ensure they reflect reasonable efficient costs of supply and also meet the objectives of the Act in promoting retail competition.

We also considered stakeholder comments on the proposals. In addition, we took account of forecast network price increases, most of which are subject to approval by the Australian Energy Regulator[5] and forecast inflation.[6] We found the following total average increases over the 2 years to 30 June 2016 to be reasonable:

- 17.6% for AGL, which supplies gas to over 80% of small regulated retail customers in NSW, covering Sydney, Wollongong, Newcastle, Dubbo, Orange, Parkes, and parts of the Riverina region. The draft decision represents an increase of 16.9% in 2014/15 and 0.7% in 2015/16. The 2014/15 increase adds an extra $152 to an average residential customer's annual bill and $709 on average for small business customers.
- 17.5% for ActewAGL, which supplies the regions around the NSW/ACT border (including Young, Goulburn, and Yass) and South East NSW (including Shoalhaven). The draft decision represents an increase of 17% in 2014/15 and 0.4% in 2015/16. The 2014/15 increase adds an extra $219 to an average residential customer's annual bill and $848 on average for small business customers.
- 14.4% for Origin Energy (Albury/Murray Valley), which supplies customers on the NSW - Victorian border, including the Albury and the Murray Valley Towns. The draft decision represents an increase of 18.6% in 2014/15 and a decrease of 3.4% in 2015/16. The 2014/15 increase adds an extra $173 to an average residential customer's annual bill and $610 on average for small business customers.

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4 Throughout this report, references to the retailers' proposals mean the revised versions of these proposals (which are available on our website).

5 Network costs reflect the charges that retailers must pay to deliver gas through the low pressure distribution network to homes and businesses. These charges are regulated by the Australian Energy Regulator (AER) through Access Arrangements and we take these regulated costs and include them in the retail prices. We note that ActewAGL has a small distribution network in the Shoalhaven. These network prices are not regulated.

6 Forecast inflation is 2.7% for 2014/15 and 2.5% for 2015/16.

- 19.4% for Origin Energy (Wagga Wagga)[7], which supplies the South Western regions of NSW including Wagga Wagga and Gundagai and inland cities such as Tamworth. The draft decision represents an increase of 21.8% in 2014/15 and a decrease of 2% in 2015/16. The 2014/15 increase adds an extra $224 to an average residential customer's annual bill and $764 on average for small business customers.

In line with these findings, we have made draft decisions to agree to each Standard Retailer's proposed increase in average regulated prices over the 2 years to 30 June 2016. In our view, these increases are consistent with balancing the longer and shorter term objectives for this price review.

We note that the pricing agreements include provisions for adjusting regulated retail prices to reflect reductions in carbon-related costs, for example if the carbon price is repealed before 1 July 2015. In this event, IPART will request proposals from the retailers for removing carbon costs from prices. If repeal of the carbon price does not take effect by 1 July 2015, the carbon price for 2015/16 is unknown. In this case, we will agree with the Standard Retailers an approach to estimating the appropriate carbon component of regulated retail prices for 2015/16.

1.2 Reasons for these price increases

The allowed increases in regulated retail gas prices follow increases in prices in 2012/13 and 2013/14.[8] The main reason for these past increases were sustained rises in network costs.[9]

In the coming 2 years, the reasons for the increase are different. The main reason relates to structural changes that are emerging in the wholesale gas market. These changes are driving increases in wholesale gas prices, and so all 3 Standard Retailers have wholesale gas costs that are significantly higher than in 2013/14.

7 On 1 March 2011, the state-owned Standard Retailer - Country Energy – was sold to Origin Energy. Country Energy supplied gas to the South Western regions of NSW including Wagga Wagga and Gundagai and inland cities such as Tamworth. We have referred to these customers as Origin Energy (Wagga Wagga).

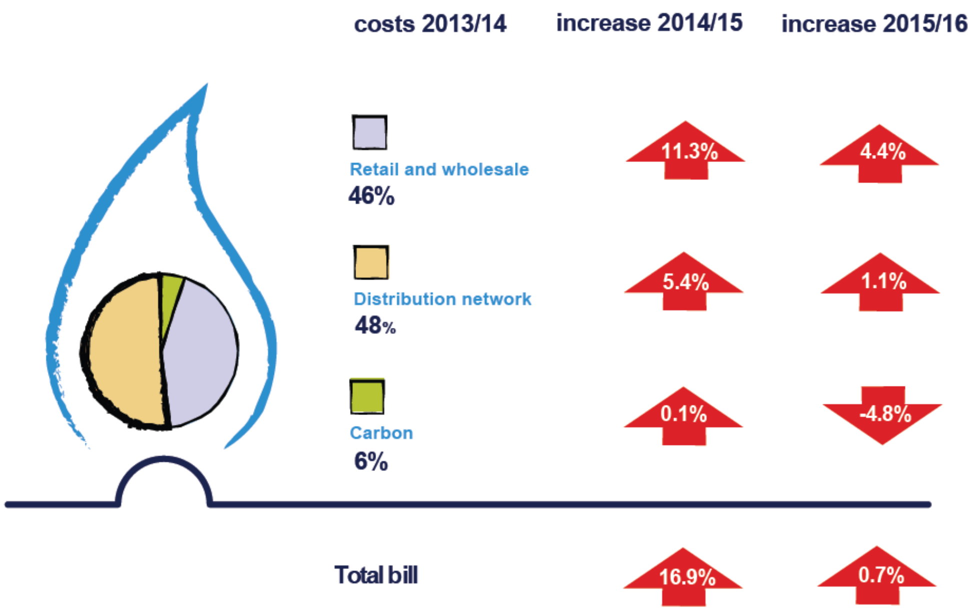
8 Average retail gas prices increased by 8.5% across NSW on 1 July 2013, or by between 5.2% and 9.2% in the Standard Retailers' individual supply areas. Average retail gas prices increased by 14.2% across NSW on 1 July 2012, or by between 9.3% and 14.9% in the Standard Retailers' individual supply areas.

9 Recent network cost increases have primarily been the result of Jemena's successful appeal to the Australian Competition Tribunal (ACT) of the AER's final decision on the maximum prices and charges they can levy on retailers for use of the distribution network. Information on the Jemena Access Arrangement can be found here.

However, we note there is still considerable uncertainty around how fast wholesale gas prices will rise and what level they will peak at.[10] This uncertainty means there remains a wide range (and a high level of risk) in forecast efficient wholesale gas costs, which we considered as part of our assessment of the Standard Retailers' proposed price changes.

For AGL's regulated prices, there are 2 main reasons for price increases (Figure 1.1). The first is the proposed increase in wholesale gas costs. The second reason is that the network cost component of AGL's regulated prices is continuing to increase in 2014/15. AGL customers on regulated prices are supplied by the Jemena gas distribution network, and its distribution charges are expected to increase by 11.3% in 2014/15.[11]

Figure 1.1 Drivers of increases in AGL's average regulated retail gas prices from 1 July 2014 to 30 June 2016 (nominal, %)



Note: Totals may not add due to rounding.

10 Wholesale gas prices are likely to be influenced by the development of liquefied natural gas (LNG) facilities on the eastern coast of Australia and the subsequent export of LNG. This means that Australia's domestic gas market will increasingly be influenced by the international market. However, there is still significant uncertainty around the impact this will have on gas prices in the domestic market.

11 We note that 2014/15 is the final year of Jemena's existing Access Arrangement and that a new Access Arrangement is expected to be established for the period 2015/16 to 2019/2020. To illustrate the potential impact of price increases, we have increased Jemena's distribution charges by forecast inflation in 2015/16. The cumulative effect of network charges on AGL's regulated retail prices is an increase of 6.8% over the remainder of the regulatory period.

For ActewAGL's average regulated prices, the main reason for the increase over the next 2 years is the proposed increase in wholesale gas costs. This increase accounts for most of the 17.5% increase in regulated retail prices over the remainder of the regulatory period (Table 1.1).

For Origin Energy's average regulated prices the main reason for the increase over the next 2 years is the proposed increase in the retail and wholesale component of regulated prices. In addition to proposed increases in wholesale gas costs, Origin Energy has proposed an increase in the retail margin recovered through regulated prices, consistent with our 2013 findings on a reasonable margin range. These increases account for most of the 14.4% to 19.4% increase in regulated retail prices over the remainder of the regulatory period (Table 1.1).

For all 3 Standard Retailers, we have made draft decisions to agree to their proposal for the carbon component in average regulated prices for 2014/15. The reduction in carbon costs in 2015/16 shown in Figure 1.1 (and Table 1.1 below) reflects a carbon component of zero in 2015/16, in line with the current Commonwealth Government's commitment to repeal carbon pricing legislation.

Table 1.1 Drivers of increase in average regulated retail gas prices from 1 July 2014 to 30 June 2016 (nominal, %)

Cost component	Retail and wholesale	Distribution network	Carbon	Total bill increase
Standard Retailer				
AGL				
increase 2014/15	11.3%	5.4%	0.1%	16.9%
increase 2015/16	4.4%	1.1%	-4.8%	0.7%
Increase over 2 years				17.6%
ActewAGL				
increase 2014/15	14.0%	2.9%	0.1%	17.0%
increase 2015/16	5.4%	1.0%	-6.0%	0.4%
Increase over 2 years				17.5%
Origin (Albury/Murray Valley)				
increase 2014/15	16.4%	1.0%	1.1%	18.6%
increase 2015/16	3.6%	0.8%	-7.8%	-3.4%
Increase over 2 years				14.4%
Origin (Wagga)				
increase 2014/15	18.6%	2.4%	0.6%	21.7%
increase 2015/16	3.2%	1.0%	-6.0%	-1.7%
Increase over 2 years				19.4%

Note: Totals may not add due to rounding.

1.3 Likely changes in annual bills for households and small businesses

To illustrate the potential impact of the price increases on customers' annual gas bills, we have calculated an indicative annual gas bill for residential and business customers with average usage in each gas supply area (Table 1.2 and 1.3).[12] Almost all of the price increases will occur in 2014/15. These increases will be followed by very modest increases in 2015/16 or, for Origin Energy customers, small decreases.

Table 1.2 Indicative annual bill for typical residential customers of each Standard Retailer (nominal $, inc GST)

Standard Retailer	Current bill (2013/14)	Estimated bill 2014/15)	Estimated bill (2015/16)	$ increase over 2 years
AGL	901	1,053	1,060	159
ActewAGL	1,292	1,512	1,519	226
Origin Energy (Albury/Murray Valley)	933	1,105	1,067	135
Origin Energy (Wagga Wagga)	1,027	1,251	1,225	199

Note: This assumes a typical customer uses 23GJ, 45GJ, 45GJ, and 37GJ of gas per annum in the AGL, ActewAGL, Origin Energy (Albury/Murray Valley) and Origin Energy (Wagga Wagga) areas. Impact on bills includes GST.

Table 1.3 Indicative annual bill for typical business customers of each Standard Retailer (nominal $, excl GST)

	Current bill (2013/14)	Estimated bill (2014/15)	Estimated bill (2015/16)	$ increase over 2 years
AGL	4,201	4,910	4,942	741
ActewAGL	4,997	5,845	5,871	875
Origin Energy (Albury/Murray Valley)	3,295	3,906	3,771	476
Origin Energy (Wagga Wagga)	3,503	4,267	4,181	678

Note: This assumes a typical customer uses 184GJ, 246GJ, 209GJ and 231GJ of gas per annum in the AGL, ActewAGL, Origin Energy (Albury/Murray Valley) and Origin Energy (Wagga Wagga) areas. Impact on bills excludes GST.

12 We cannot calculate how our draft decisions will affect individual customers' annual gas bills. This impact will depend on how much gas they use, which of their Standard Retailer's regulated prices they are on, and how the Standard Retailer changes these individual prices.

1.4 How we met and balanced the requirements for this review

In 2013, we reached new pricing agreements with the Standard Retailers, for the period 1 July 2013 to 30 June 2016. In making these agreements, we were required to consider the objects of the *Gas Supply Act 1996* (the Act), which are to:

1. encourage the development of a competitive market in gas, so as to promote the thermally efficient use of gas and to deliver a safe and reliable supply of gas in compliance with the principles of ecologically sustainable development
2. regulate gas reticulation and gas supply, so as to protect the interests of customers and to promote customer choice in relation to gas supply
3. facilitate the continuity of supply of natural gas to customers, and
4. promote the safe use of gas.[13]

For this 2014 review we have to meet the same requirements as for the 2013 price review. We consider that regulated retail prices over the regulatory period need to balance 2 objectives:

- To encourage efficiency and protect customers from prices that are higher than efficient levels in the short term by setting regulated prices that reflect the efficient cost of supply.
- To support the interests of customers in the long term by setting regulated retail prices that create sufficient incentives for retailers to compete and customers to participate in the market.

We have made an assessment of the Standard Retailers' pricing proposals and exercised our own judgement to make draft decisions on whether they are reasonable and balance the above objectives.

1.5 Competition in the gas retail market

Based on our analysis for this report, we consider that competition in the retail gas market is now effective enough to provide sufficient protection to customers, as well as offering more choices and better price and service outcomes. We also consider that a competitive market is best placed to manage the uncertainties that are emerging in the wholesale gas market and note that other States have removed formal price regulation of retail gas.

Our analysis suggests that the retail gas market is already transitioning towards a largely deregulated market (ie one where few customers remain on regulated prices). Less than 25% of small customers are on regulated prices in NSW now and we consider that the incentives included in current regulated prices are sufficient to facilitate a transition to a market where around 90% of customers are on market contracts within 4 years. Therefore, in general, there is no need for an

13 *Gas Supply Act 1996*, section 3.

additional incentive or competition allowance in regulated retail gas prices in NSW.[14]

We recognise that these indicative increases in regulated gas prices are relatively high compared to previous years, and are likely to be significant for many customers. However, we note that IPART price regulation cannot protect customers from price increases driven by other regulatory, policy and market factors. Nor can price regulation protect customers from general financial distress.

In our view, effective retail competition – where retailers strive to offer customers products and services they value – is the best way to ensure that gas prices are driven towards the efficient cost of supply. We consider that a well-functioning competitive market is in the long-term interests of customers. Customers should look at market offers to find a deal that best suits them.

We note that the Australian Energy Market Commission (AEMC) found that retail gas customers in ActewAGL's Shoalhaven region are not currently part of the competitive market and cannot choose to switch to an alternative retailer.[15] We recommend that the NSW Government direct the Australian Energy Market Operator (AEMO) to ensure that the Shoalhaven area is covered by the same national regulatory framework that enables competitive supply in other gas networks in NSW.

In October 2013, the AEMC released its final report on the competitiveness of the NSW energy market. It found that competition is delivering discounts and other benefits to small consumers in the NSW retail electricity and natural gas markets. The AEMC expects that removing retail price regulation for all consumers will lead to more innovation, increased product choice, and competitive pricing.[16] Whether or not to remove retail price regulation is a matter for the NSW Government to decide. Recently the NSW Government announced that retail electricity prices will be fully deregulated from 1 July 2014.[17]

1.6 How stakeholders can comment on this draft report

We are seeking comment on this draft report and our draft decisions for 2014/15 and 2015/16. We will hold a public hearing on Tuesday 13 May 2014. We also invite written submissions by 21 May 2014. (For information on how to make a submission, see page iii at the front of this report.)

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14 Appendix B provides further information on our analysis of the need for an additional competition allowance in regulated retail gas prices.

15 AEMC, *Review of Competition in the Retail Electricity and Natural Gas markets in New South Wales, Final Report*, October 2013, p 51.

16 AEMC, *Review of Competition in the Retail Electricity and Natural Gas markets in New South Wales, Final Report*, October 2013, p i.

17 http://www.resourcesandenergy.nsw.gov.au/energy-consumers/energy-sources/electricity/removal-of-electricity-price-regulation

We will consider all the issues raised at the public hearing and in submissions, and make our final decisions in June in time for price changes on 1 July 2014.

1.7 What does the rest of this report cover?

The rest of this paper is structured as follows:

- Chapter 2 outlines the context for this review and the approach we used to make our draft decisions
- Chapter 3 sets out our draft decisions and discusses our assessment of the Standard Retailers' proposed changes to regulated retail prices for 2014/15 and 2015/16
- Chapter 4 explains our draft decisions on the carbon component for 2014/15
- Chapter 5 analyses the impacts of the draft decisions on small customers
- Appendices A to D provide additional information, including why we have not used any additional customer acquisition and retention cost allowance (or competition allowance) to ensure regulated retail gas prices include sufficient incentive for competition (as we did for regulated retail electricity prices in 2013/14).

2 Context and approach for the review

As Chapter 1 noted, when we reached our pricing agreements with the Standard Retailers in 2013, we specified the amount by which each Standard Retailer could increase its average regulated retail gas price in 2013/14. Due to the high level of uncertainty in the wholesale gas market, we agreed to conduct a review in 2014 to determine the change in average regulated prices over 2014/15 and 2015/16.

We are now conducting this review. In doing so, we must continue to have regard to terms of reference provided by the NSW Government for the 2013 review, and take account of key developments in the gas sector since we concluded that review. We are using the analytical approach we set out in our June 2013 final report on the pricing agreements.

The sections below discuss the terms of reference, key developments and analytical approach. Box 2.1 outlines our review process to date and timetable for completing the review.

2.1 Terms of reference

The terms of reference (provided in Appendix A) require us to regulate tariffs for small retail gas customers in accordance with section 27 of the *Gas Supply Act 1996* (the Act).[18] It also requires us to ensure we take the objects under section 3 of the Act into account. These are:

1. to encourage the development of a competitive market in gas, so as to promote the thermally efficient use of gas and to deliver a safe and reliable supply of gas in compliance with the principles of ecologically sustainable development
2. to regulate gas reticulation and gas supply, so as to protect the interests of customers and to promote customer choice in relation to gas supply
3. to facilitate the continuity of supply of natural gas to customers, and
4. to promote the safe use of gas.

[18] Under the Act, regulated prices are available to customers consuming less than 1 terajoule (TJ) per year. We note that we received a submission on the Standard Retailers' pricing proposals from Maitland City Bowls Sports and Recreation Club. As a consumer of between 5 to 6 TJs of gas per year, Maitland City Bowls Sports and Recreation Club would not be eligible for a regulated price and would negotiate a competitive market price.

We need to balance these objectives, particularly as customers have both short and longer term interests in relation to price, quality and security of supply. In our view, this provides us with some discretion to set regulated prices above the efficient short run level if we consider this will support competition and ultimately deliver benefits to customers in the long term.

2.2 Developments in energy sector since our 2013 review

Since we reached our pricing agreements with the Standard Retailers in 2013, the Australian energy sector has continued to evolve. The most significant developments in the past 12 months include:

- improvements in competition in the NSW retail market, and the Australian Energy Market Commission (AEMC) finding that this competition is effective[19]
- the increased internationalisation of domestic gas prices
- possible changes associated with the proposed emissions reduction fund, the possible repeal of the carbon pricing mechanism and the review of renewable energy target, and
- changes to gas distribution prices.

2.2.1 Improving competition in the retail market

Since our 2013 review, the competiveness of the retail gas market in NSW has continued to increase:

- Small retail customers have continued to move from regulated prices to market-based prices. Currently less than 25% remain on regulated prices in NSW, compared to around 31% in 2011/12.[20]
- Most customers who participate in the competitive market are experiencing positive outcomes.[21]

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19 AEMC, *Review of Competition in the Retail Electricity and Natural Gas markets in New South Wales, Final Report*, October 2013, p i.

20 Based on information provided by the Standard Retailers and gas reticulation authorisation holders.

21 AEMC, *Review of Competition in the Retail Electricity and Natural Gas markets in New South Wales, Final Report*, October 2013, p vi.

In our view, competition in the retail gas market in NSW now protects customers against market power by offering more choices and better price and service outcomes. On this basis, we consider that gas retail price regulation is no longer necessary in NSW and that the removal of retail price regulation is likely to:

- Improve customer engagement in the market by removing the confusion in relation to the difference between regulated and market prices.[22]
- Remove the risk that price regulation distorts the competitive market, particularly given the dynamic nature of energy markets. This will encourage more retailers to enter the market, which should deliver better customer outcomes in the long term, including providing a better 'value for money' service through reduced costs and/or innovation.

In addition, the AEMC released its final report on the competitiveness of the NSW energy market in October 2013. It found that competition is delivering discounts and other benefits to small consumers in the NSW retail electricity and natural gas markets. It also found removing retail price regulation for all consumers will likely lead to more innovation, increased product choice, and competitive pricing.[23] Whether or not to remove retail price regulation is a matter for the NSW Government to decide. Recently the NSW Government announced that retail electricity prices will be fully deregulated from 1 July 2014.[24]

2.2.2 Increasing internationalisation of gas markets

Increasingly, Australian domestic gas markets are influenced by the international market. This market – particularly the international demand for gas – is changing the incentives faced by domestic producers and consumers of fossil fuels (including natural gas).

It is clear that the domestic price of wholesale gas will move towards the international market price over time. In the medium term, the supply and demand dynamics in the Eastern Australian gas markets are uncertain. For example, higher international prices for gas have altered the expectations of some gas producers, which in turn, have provided incentives for further development of gas supplies. However, the limited liquid natural gas (LNG) export capacity in the medium term may mean that there is limited scope for some producers to access these international prices.

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22 The AEMC's survey found that few participants knew if they were on a regulated or market price, suggesting there is a lack of understanding about the difference between regulated and market prices, which potentially influences effective customer engagement in the market. Roy Morgan Research, *Survey of Residential Customers of Electricity and Gas in NSW: Effectiveness of Retail Competition*, February 2013, p 53.

23 AEMC, *Review of Competition in the Retail Electricity and Natural Gas markets in New South Wales, Final Report*, October 2013, p i.

24 http://www.resourcesandenergy.nsw.gov.au/energy-consumers/energy-sources/electricity/removal-of-electricity-price-regulation

In the longer term, we expect domestic gas prices to rise towards international levels, increasing the cost of supplying gas to small retail customers. But again, there is considerable uncertainty about how fast and how far prices will rise. One contributing factor is a lack of clarity about the precise timing of some LNG projects in Australia, which means the timing and extent of longer term increases in LNG export capacity is not known.

Another factor is the possible impact of competing sources of gas supply, such as coal seam gas (CSG). There is currently considerable development in the CSG industry in Australia. The impact of additional CSG supply on domestic gas prices is uncertain, particularly as export capacity grows. Further factors influencing the demand, supply and price of gas include uncertainty about the price of oil, country-specific policies, and the global economy.

Overall, we expect the process of transitioning to international gas price levels is unlikely to be smooth. The changing market dynamics have the potential to lead to increasing levels of price uncertainty in the gas market for some time.

2.2.3 Changes to green schemes

Since we made our pricing agreements with the Standard Retailers, the Commonwealth Government has:

- introduced into federal parliament a package of bills to repeal the carbon pricing mechanism[25]
- released its emissions reduction fund (ERF) Green Paper, and
- released terms of reference for a review of the renewable energy target (RET) to make sure it is working efficiently and effectively, which is to be completed by mid-June 2014.

Our regulatory framework allows for the carbon price to be removed from regulated prices should the mechanism be repealed.

2.2.4 Changes to gas distribution network prices

Gas distribution network costs (which account for around half of a typical customer bill) are currently passed through to small retail customers in their gas bills. The Standard Retailers have no control over these costs, as they typically depend on the network prices set out in the gas distribution access arrangements determined by Australian Energy Regulator (AER).

25 We note that Senate voted down this legislation on 20 March 2014.

For the past 3 years (2011/12 through 2013/14), the average network costs passed through most gas customers in NSW (those connected to the Jemena distribution network) increased materially. As Table 2.1 shows, these customers face further material increases in average network costs in 2014/15.

Table 2.1 Regulated gas distribution access arrangements

Gas retail supplier	Gas distribution network supplier	Period of access arrangement	Allowed real price changes in remaining years[a]
AGL	Jemena	1 July 2010 – 30 June 2015	8.39% in 2014/15
ActewAGL[b]	ActewAGL (Australian Capital Territory)	1 July 2010 – 30 June 2015	0% in 2014/15
	Jemena (Capital region)	1 July 2010 – 30 June 2015	8.39% in 2014/15
Origin Energy	Envestra (Wagga Wagga)	1 July 2010 – 30 June 2015	2.5% in 2014/15
	Central Ranges Pipeline (Tamworth)	1 July 2004 – 1 July 2019	0% pa until 2018/19
	Envestra (Albury)	1 January 2013 – 31 December 2017	0% pa until end 2017

a Price increases exclude inflation.

b The Shoalhaven natural gas network which ActewAGL uses to supply its Shoalhaven customers is not regulated. However, ActewAGL's pricing proposal includes no real network price increases for the Shoalhaven network in 2014/15 and 2015/16.

Note: Average price increases will depend on a number of external factors including pass through amounts for unaccounted gas and carbon costs.

Source: AER, *Access Arrangement information for the access arrangement JGN's NSW gas distribution networks 1 July 2010 – 30 June 2015, Amended by order of the Australian Competition Tribunal, 30 June 2011, Further amended with regard to mine subsidence expenditure*, 26 September 2011, June 2010, p 32. AER, *Access Arrangement Information for the ACT, Queanbeyan and Palerang gas distribution network 1 July 2010-30 June 2015, Amended by order of the Australian Competition Tribunal, 23 September 2010,* April 2010, pp 66 & 85. AER, *Access arrangement variation for the Wagga Wagga gas distribution network 1 July 2010-30 June 2015*, September 2010, p 5. IPART, *Access Arrangement for the Central Ranges Pipeline Gas Network*, November 2005, p 15. AER, *Access Arrangement Final Decision Envestra Ltd Albury & Victoria Gas Distribution System 2013 – 2017, Part 1*, March 2013, p 14.

In the final year of the current regulatory period (2015/16), the change in network costs is uncertain for most customers, as the access arrangements for the Jemena, ActewAGL and Envestra (Wagga Wagga) networks are due to expire on 30 June 2015. Several policy and regulatory developments may influence network tariffs included in the renewed access arrangements, including the AER's new determinations which will apply under amended National Gas Rules (NGR)[26] and changes to the Limited Merits Review Regime for gas businesses.[27]

Until details on the renewed access arrangements are available, we have assumed no real increases in network charges in 2015/16.

2.3 Our analytical approach for agreeing average price increases from 1 July 2014

To assess the Standard Retailers' pricing proposals for 2014/15 to 2015/16 we did not reconsider key features of the 2013 agreements, such as the form of regulation. Rather, our approach included:

1. Assessing each retailer's proposed increase in average regulated prices, and forming a view on whether the resulting prices are reasonable and balance the objects in the Act.
2. Based on this assessment, making draft decisions on whether to agree to each retailer's proposal (or specifying the changes we require in order to agree).
3. Analysing the impact of the price changes on customers.

As noted in section 2.1 above, in assessing whether the proposed price increases meet the objects of the Act we considered whether they balance 2 shorter and longer term objectives:

- encouraging efficiency and protecting customers from higher than efficient prices in the short term by reflecting a 'reasonable range' for the forecast efficient cost of supply, and
- supporting the interests of customers in the long term by including sufficient incentives for retailers to compete and customers to participate in the competitive market.

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26 In November 2012, the Australian Energy Market Commission (AEMC) released a final determination and amendments to the economic regulation provisions in the NGR. See http://www.aemc.gov.au/news/announcements/final-determination-made-on-network-regulation-rule-changes.html

27 The National Gas Law (NGL) includes a limited merits review regime to provide parties affected by the AER's decisions with recourse to a review mechanism. In December 2013, a number of significant changes to the regime, including a strengthened materiality threshold, increased user and consumer consultation, removed the risk of prohibitively high costs being awarded against users and consumers in a review. See https://scer.govspace.gov.au/files/2011/12/EMRWG-Bulletin-21-Proclamation-of-LMR-Amendments1.pdf

As in past reviews, we have formed our own view on the reasonable range for the forecast efficient costs of supply by analysing the forecast retail costs of supply, and estimating the forecast network and carbon costs. The approach we use is similar to the one we used for the 2013 review.

Box 2.1 Process for this review

The process we followed in conducting this review included public consultation and detailed analysis. As part of this process, we:

- Received pricing proposals from the Standard Retailers for 2014/15 and 2015/16 (ie, the remainder of the regulatory period).
- Released a Fact Sheet in February 2014. This paper outlined our proposed approach for assessing the Standard Retailers' pricing proposals and invited all interested parties to make a submission in response to the Standard Retailers' pricing proposals.
- Sought information from the Standard Retailers and other sources in relation to the forecast cost of supplying gas over the period.
- Engaged consultants, Jacobs SKM, to provide expert advice on wholesale gas costs.
- Conducted our own analysis in line with the approach outlined in section 2.1, and considered stakeholder submissions and comments.
- Received revised pricing proposals from the Standard Retailers in March 2014.

We are now seeking submissions on this draft report and invite comments from interested parties. Submissions are due by 21 May 2014. Details on how to make a submission can be found on page iii at the front of this report. We will also hold a public hearing on the draft report on 13 May 2014. We will consider all submissions and comments before finalising our report.

We will release our final report in June 2014.

3 Assessing the proposed increases in total prices

We assessed each Standard Retailer's pricing proposal for 2014/15 and 2015/16 (the remainder of the 2013 regulatory period) in line with the approach set out in Chapter 2. In particular, we considered each retailer's proposed increase in average regulated prices, and formed a view on whether the resulting prices are reasonable and balance the longer and shorter term objectives for this review.

To help us form our view, we analysed the forecast efficient retail costs that a retailer is likely to incur in supplying gas to customers over the 2-year period. However, in contrast to the approach we used for reviewing regulated electricity prices we did not assess and make decisions on each individual forecast cost component in the retailers' proposals. Instead, we used a more holistic approach that involved:

- analysing each of the retail costs of supply and considering stakeholder comments to form a view of the reasonable range for each of these efficient costs over the remainder of the regulatory period
- using the above ranges, and the expected network and carbon costs,[28] to inform our view of the reasonable change in regulated retail prices over this period, and
- deciding whether to agree to the retailer's proposed price changes, based on whether or not they are consistent with this reasonable change.

The sections below provide an overview of our draft decisions and then discuss the analysis which helped us make these decisions.

[28] We note that the Standard Retailers' pricing proposals did not include a carbon component for 2015/16. The regulatory framework allows the retailers to propose a carbon component for 2015/16 in February 2015, should a carbon price continue to apply.

3.1 Overview of draft decisions on proposed increases in regulated retail gas prices

1 IPART's draft decisions on the proposed increases in regulated retail gas prices are to:

- agree to AGL's proposal to increase regulated retail prices by CPI+13.8% in 2013/14 and CPI-1.8% in 2015/16 (includes carbon in 2014/15 only)
- agree to ActewAGL's proposal to increase regulated retail prices by CPI+13.9% in 2013/14 and CPI-2.0% in 2015/16 (includes carbon in 2014/15 only)
- agree to Origin Energy's (Albury/Murray Valley) proposal to increase regulated retail prices by CPI+15.4% in 2013/14 and CPI-5.8% in 2015/16 (includes carbon in 2014/15 only)
- agree to Origin Energy's (Wagga Wagga) proposal to increase regulated retail prices by CPI+18.6% in 2013/14 and CPI-4.4% in 2015/16 (includes carbon in 2014/15 only).

These draft decisions reflect our assessment that the Standard Retailers' proposed average regulated price changes are reasonable and balance the longer and shorter term objectives for this price review. In our view, the proposed changes will result in prices that provide sufficient protection to the minority of small retail customers who remain on regulated prices, and also include sufficient incentive for retailers to compete in the competitive market and consumers to enter this market.

We note that the reasonable range for the forecast efficient retail cost components over the regulatory period is large. This reflects the high degree of uncertainty about the extent of expected increases in wholesale gas costs. In reaching our view on the reasonable range for these costs we considered expert advice and stakeholder comments.

3.2 Analysing the retail costs of gas supply

The retail costs of gas supply[29] reflect the controllable costs retailers incur in supplying gas to customers. These include wholesale gas costs, retail operating costs and a retail margin. To analyse these costs, we commissioned expert advice on the potential range for wholesale gas costs, and considered the analysis undertaken for the 2013 price review.

29 The retail costs of gas supply are referred to as the 'R component'. Regulated prices are the sum of the R component plus and network costs and carbon costs.

3.2.1 Wholesale gas costs

Wholesale gas costs include gas commodity and transmission costs, the costs associated with being able to serve peak demand, and market-related costs. All 3 Standard Retailers have proposed significant increases in gas commodity costs over the remainder of the regulatory period and this cost increase is the main driver of the increase in regulated retail gas prices.[30]

As Chapter 2 discussed, the domestic gas market in Australia is currently characterised by an unprecedented level of uncertainty. In the longer term, we expect gas commodity prices to rise towards international levels, increasing the costs of supplying gas to retail customers. However, the process of transitioning to international price levels is unlikely to be smooth, with changing market dynamics having the potential to lead to increasing levels of price uncertainty in the medium term. As a result of this uncertainty there are a range of views about current and future gas prices in NSW, and a corresponding range of views about the costs of supplying gas to retail customers.

Several submissions raised issues around wholesale gas supply in NSW. The Lock the Gate Alliance considers that justifying higher gas prices on the basis of a gas shortage is incorrect as supply has "hugely increased over the last eight years".[31] In our view, it is the transition of gas commodity prices towards international levels that is putting upward pressure on wholesale gas prices. P Tarjani considers that only those gas volumes that are surplus to domestic needs should be sold as exports.[32] We note that domestic gas reservations policy is a matter for Government.

For this review, we asked Jacobs SKM to provide advice on the potential range for the wholesale gas costs an efficient new entrant gas retailer serving the small customer market in NSW is likely to face over remainder of the regulatory period. Jacobs SKM based its advice on new gas contract prices in NSW. In particular, it considered:

- new contract gas price projections, estimated using its MMAGas modelling tool, and
- publicly available reports of recent domestic and export contract prices.

Jacobs SKM's draft report is available on our website.[33]

30 Proposed costs for additional deliverability, transmission and market costs are broadly in line with our estimates of efficient costs for the 2013 price review.

31 Lock the Gate Alliance submission to Fact Sheet, p 3.

32 P Tarjanyi submission to Fact Sheet, p 1.

33 Jacobs SKM, *New Contract Gas Price Projections*, Report, March 2014. Available on the IPART website (www.ipart.nsw.gov.au).

We also considered the benchmark wholesale gas costs that were established as part of our 2013 gas price review. In work commissioned for that review, ACIL Tasman (ACIL) modelled projected gas prices at Moomba and Longford under a number of scenarios. This resulted in projected price ranges from $6.46 to $8.31/GJ in 2014/15 and $6.40 to $8.28/GJ in 2015/16.[34] (ACIL's report from the 2013 review is available on our website.[35])

In our view, Jacobs SKM's advice and ACIL's previous advice establish a reasonable range for forecast efficient costs over the remainder of the regulatory period. We consider this range (shown in Table 3.1) captures the uncertainty in relation to estimates of gas commodity costs over this period. For 2014/15 and 2015/16, all 3 Standard Retailers have proposed gas commodity costs that are within this range.

Table 3.1 Reasonable range for wholesale gas costs over remainder of regulatory period ($2013/14/GJ)

	2014/15	2015/16
Jacobs SKM 2014		
Draft advice	$6.25 - $9.00/GJ	$6.75 - $9.00/GJ
Modelled prices:		
- Long run LNG netback	$6.52 - $9.38/GJ	$7.09 - $8.60/GJ
- Short run LNG netback	$6.04 - $8.39/GJ	$6.72 - $9.74/GJ
ACIL 2013	$6.46 - $8.31/GJ	$6.40 - $8.28/GJ

Notes: ACIL figures were inflated from $2013 using inflation of 1.4%.

Sources: Jacobs SKM, *New Contract Gas Price Projections*, Report, March 2014, p 32 and 33. Available on the IPART website (www.ipart.nsw.gov.au). ACIL Tasman, *Costs of gas for the 2013 to 2016 regulatory period*, Final Report, Public Version, June 2013, p 25.

3.2.2 Retail operating costs

Retail operating costs are the costs a retailer incurs in performing the functions required to serve its customer base. This includes the costs of billing and revenue collection, call centres, marketing, and an appropriate allocation of corporate overheads. Retail costs could also include the costs associated with customer acquisition and retention.

34 These ranges reflect the midpoint of ACIL's projected prices under its low and medium scenarios for each source of gas supply. The low price scenario reflects production costs, while the medium price scenario reflects estimates of the liquefied natural gas (LNG) netback price. That is, the price at which an exporter would be indifferent between re-selling gas in the domestic market or exporting it as LNG. In broad terms the LNG netback price is calculated as the (market) LNG price less liquefaction and pipeline transportation costs. ACIL figures were inflated from $2013 to $2013/14 using inflation of 1.4%.

35 ACIL Tasman, *Costs of gas for the 2013 to 2016 regulatory period*, Final Report, Public Version, June 2013.

In our 2013 price review, we found the reasonable range for efficient retail operating costs (ROC) **excluding** customer acquisition and retention costs[36] (CARC) to be $94 to $113 per customer ($2013/14). We considered that this range would remain appropriate for the duration of the regulatory period. (Our analysis of retail operating costs for the 2013 price review can be found in our June 2013 final report.) For 2014/15 and 2015/16, all 3 Standard Retailers have proposed retail operating costs excluding customer acquisition and retention costs that fall within our reasonable range.

We note that AGL's and ActewAGL's agreed average regulated prices for 2013/14 recover some customer acquisition and retention costs. Several submissions questioned the validity of recovering customer acquisition and retention costs through regulated prices. For example, the Minster for Resources and Energy considers that proposals seeking to add a new category of CARC require careful consideration, and would need to be strongly justified by evidence.[37] We considered whether it would be appropriate to recover **additional** customer acquisition and retention costs (or a 'competition allowance') through regulated retail gas prices in 2014/15 and 2015/16.

Our analysis suggests that the retail gas market is already transitioning towards a largely deregulated market (ie one where few customers remain on regulated prices). We consider that the incentives included in current regulated retail prices are sufficient to facilitate a transition to a market where around 90% of gas customers in NSW are on market contracts within 4 years. Therefore, in general, we concluded there is no clear need for an additional incentive or competition allowance in regulated retail prices in NSW. However, we acknowledge that the position may be different in some of the small(er) standard supply areas. (Appendix B provides further information on our analysis of the need for an additional competition allowance in regulated retail gas prices.)

36 Customer acquisition and retention costs (CARC) include marketing campaigns, discounts and other incentives for customers to switch retailers or market offers. In our 2013 electricity price review, we set a distinct allowance for CARC, in addition to the allowance for retail operating costs (ROC), which covered customer service (eg, operating call centres, billing and collecting revenue), finance, IT systems and regulation (eg, paying licence fees).

37 Minster for Resources and Energy submission to Fact Sheet, p 1. In addition, an anonymous submission considers that the discounts available to customers through market offers suggests that gas and electricity regulated prices are already too high. We note that in allowing the recovery of some customer acquisition and retention costs customer acquisition and retention costs we are balancing the short and longer term interests of customers. We also note that customers on regulated prices can switch to a market offer.

3.2.3 Retail margin

For our 2013 price review, we engaged Strategic Finance Group (SFG) to assist us in estimating a reasonable range for the retail margin of gas retail suppliers. SFG's final advice was that this range is 6.3% to 7.3% of earnings before interest, tax, depreciation and amortisation (EBITDA).[38] We have received no new evidence during this annual review to suggest that a change to this reasonable range would be appropriate. For 2014/15 and 2015/16, all 3 Standard Retailers have proposed a retail margin that falls within our reasonable range.

3.3 Assessing Standard Retailers' pricing proposals for 2014/15 and 2015/16

Based on the analysis discussed above, we have formed a view on the reasonable change in regulated retail prices for each Standard Retailer. As in past reviews, we formed this view by establishing a reasonable range for the forecast efficient retail costs of supply (the R component) and adding our estimates of the expected network and carbon costs (the N and C components).

Then we compared this range to each retailer's pricing proposal, to decide whether the pricing proposal is reasonable and balances the longer and shorter term objectives for this price review. We did not assess and make a decision on the individual cost components underlying the retailers' proposals.

3.3.1 Establishing the reasonable range for the R component

To establish the reasonable range for the R component, we used the analysis discussed in section 3.2 above and the following scenarios:

- **A low price scenario.** This scenario reflects the lower end of our reasonable ranges of efficient gas commodity costs and retail margin, the midpoint of our reasonable range for retail operating costs and the recovery of some customer acquisition and retention costs.
- **A high price scenario.** This scenario reflects the upper end of our reasonable ranges of efficient gas commodity costs and retail margin, the midpoint of our reasonable range for retail operating costs and the recovery of some customer acquisition and retention costs.

Table 3.2 shows the assumptions underlying our 2 scenarios.

38 This range reflects the results of all 3 of the approaches it used, and places equal weight on each result. See SFG, *Estimation of the regulated profit margin for gas retailers in New South Wales*, Final Report, June 2013, p 7.

Table 3.2 Assumptions used in pricing scenarios for 2014/15 and 2015/16 ($2013/14)

	Assumption	Comments
Low case scenario		
Gas commodity costs	6.52/GJ in 2014/15 and 7.09/GJ in 2015/16	Consistent with Jacobs SKM and ACIL advice
Retail costs	$115/customer	Midpoint of ROC range and recovery of some CARC
Retail margin	6.3%	Bottom of benchmark range
High case scenario		
Gas commodity costs	$8.39/GJ in 2014/15 and $8.60/GJ in 2015/16	Consistent with Jacobs SKM and ACIL advice
ROC and CARC	$115/customer	Midpoint of ROC range and recovery of some CARC
Retail margin	7.3%	Top of benchmark range

Table 3.3 shows the price increases associated with our 2 scenarios, and sets out the implied price increase for 2014/15 as well as the cumulative increase after both 2014/15 and 2015/16 (ie, over the remainder of the regulatory period).

Table 3.3 Increases in the regulated retail prices (R+C+N) for 2014/15 and cumulative (2014/15 to 2015/16) under the scenarios ($2013/14)

	Low case scenario		High case scenario	
	2014/15	**Cumulative**	**2014/15**	**Cumulative**
Modelled increase				
AGL	CPI+11.0%	CPI+7.5%	CPI+18.6%	CPI+13.9%
ActewAGL	CPI+8.1%	CPI+3.9%	CPI+17.2%	CPI+11.5%
Origin (Albury/Murray)	CPI+14.5%	CPI+7.8%	CPI+27.0%	CPI+18.3%
Origin (Country Energy)	CPI+17.7%	CPI+12.9%	CPI+26.0%	CPI+19.5%

Source: IPART modelling. We have used network price increases as per the relevant network access arrangement. Where these are unavailable we have used CPI. Carbon costs are included in the price change for 2014/15 only.

3.3.2 Comparing each retailer's pricing proposal to the reasonable range for the total cost of supply (R+N+C components)

The Standard Retailers pricing proposals for 2014/15 and 2015/16 are set out in Table 3.4, as well as the cumulative increase over both years. Both AGL's and Origin Energy's pricing proposals fall within the range established by the scenarios set out above. We have made draft decisions to agree to AGL's and Origin Energy's pricing proposals.

ActewAGL's pricing proposal is slightly higher than the increase implied by the top end of the reasonable range for all 3 underlying retail cost components. We acknowledge that using the top end of the range is likely to lead to an upward bias in regulated retail prices, and favour the longer term objectives for this price review over the shorter term objectives.[39] However, we consider that this is appropriate for ActewAGL's regulated prices, as ActewAGL has a much larger proportion of customers on regulated retail prices than the average across NSW. In our view ActewAGL's pricing proposal will encourage retailers to enter the market and customers to participate in it, consistent with the long term objectives for this review. Accordingly, we have made a draft decision to agree to ActewAGL's pricing proposal.[40]

Table 3.4 Retailers' pricing proposals for 2014/15 and 2015/16 ($2013/14)

Proposals	2014/15	2015/16	Cumulative
AGL	CPI+13.8%	CPI-1.8%	CPI+11.8%
ActewAGL	CPI+13.9%	CPI-2.0%	CPI+11.6%
Origin (Albury/Murray Valley)	CPI+15.4%	CPI-5.8%	CPI+8.7%
Origin (Country Energy)	CPI+18.6%	CPI-4.4%	CPI+13.4%

Source: Retailers' proposals.

We consider that our draft decisions appropriately balance efficient prices in the short term and facilitating competition and the longer term customer interests. However, we recognise that these increases in regulated gas prices are relatively high compared to previous years, and are likely to be significant for many customers. Several submissions raised concerns about the impacts of the pricing proposals on gas customers[41] and we analyse the impacts of gas price increases and overall energy bills in Chapter 5. We also note that IPART price regulation cannot protect customers from price increases driven by other regulatory, policy and market factors. Nor can price regulation protect customers from general financial distress.

In our view, effective retail competition – where retailers strive to offer customers products and services they value – is the best way to ensure that gas prices are driven towards the efficient cost of supply. We consider that a well-functioning competitive market is in the long-term interests of customers. Customers should look at market offers to find a deal that best suits them.

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39 Conversely, using the bottom end of the reasonable range for all 3 underlying cost components is likely to lead to a downward bias on regulated retail prices, and favour the shorter term objectives for this price review over the longer term objectives.

40 We note that we agree an *average* change in regulated retail prices. Standard Retailers with more than one supply area can apply different price increases across different areas, as long as they comply with the *average* increase.

41 See Combined Pensioners and Superannuants Association of NSW submission to Fact Sheet, p 3; C Bull submission to Fact Sheet, p 1; J Celmins submission to Fact Sheet, p 1; and Minster for Resources and Energy submission to Fact Sheet, p 1.

We note that the Australian Energy Market Commission (AEMC) found that retail gas customers in ActewAGL's Shoalhaven region[42] are not currently part of the competitive market and cannot choose to switch to an alternative retailer.[43] We recommend that the NSW Government direct the Australian Energy Market Operator (AEMO) to ensure that the Shoalhaven area is covered by the AEMO's Retail Gas Market Procedures. This will ensure that the same national regulatory framework that enables competitive supply in other gas networks in NSW applies in the Shoalhaven. We consider that it is the threat of competition that is important for driving retailer behaviour.

Recommendation

2 IPART recommends that the NSW Government direct the Australian Energy Market Operator (AEMO) to ensure that the Shoalhaven gas network area is covered by AEMO's Retail Gas Market procedures. This will ensure that the same regulatory framework that enables competitive supply in other gas networks in NSW applies in the Shoalhaven area.

42 There are less than 3,000 small gas customers in the Shoalhaven region.

43 AEMC, *Review of Competition in the Retail Electricity and Natural Gas markets in New South Wales, Final Report*, October 2013, p 51.

4 Assessing the proposed increase in the carbon component

In supplying their customers, Standard Retailer's incur costs in complying with the Federal Government's Carbon Pricing Mechanism (CPM). This mechanism, which commenced on 1 July 2012, places direct costs on around 350 entities[44] by requiring them to pay for their carbon emissions. Many of these liable entities will be part of the gas supply chain that delivers gas to households and businesses in NSW.

The Standard Retailers have estimated the carbon costs they will incur in 2014/15 and propose to pass these through in regulated gas prices. As Chapter 3 discussed, our draft decision is to agree to the Standard Retailers' pricing proposals, including the amount of carbon costs to be passed through in regulated gas prices in 2014/15. Our regulatory framework allows for the carbon price to be removed from regulated prices should the mechanism be repealed.

The sections below present our draft findings on the retailers' proposed carbon cost components, and outline our approach to assessing the reasonableness of their proposals.

4.1 Overview of draft finding on proposed carbon cost components

1 IPART's draft findings on the proposed carbon cost components of regulated retail gas prices in 2014/15 are that:

– AGL's proposal of $1.76/GJ is reasonable.

– ActewAGL's proposal of $1.75/GJ is reasonable.

– Origin Energy's (Albury Murray) proposal of $1.78/GJ is reasonable.

– Origin (Wagga Wagga) proposal of $1.78/GJ is reasonable.

Each Standard Retailer's proposed carbon cost component reflects the legislated increase in the carbon price in 2014/15. Note that the findings above are expressed in nominal amounts.

44 http://www.cleanenergyregulator.gov.au/Carbon-Pricing-Mechanism/Liable-Entities-Public-Information-Database/LEPID-for-2012-13-Financial-year/Pages/default.aspx as at 21 March 2014.

4.2 Our assessment of the retailer's proposed carbon cost components

Under the *Clean Energy Act 2011* (Cth) gas producers and network operators are liable for the emissions associated with their facilities (ie, extracting and transporting gas), and natural gas retailers are liable for the emissions associated with their customers' usage of gas.

The carbon cost component of regulated gas prices needs to reflect an estimate of the costs that are directly payable by the entities along the supply chain. These costs are estimated as a function of the price of carbon emissions and the amount of emissions from the supply chain. From 1 July 2014, the price of carbon emissions is legislated at $25.40 per tonne CO_2-e[45,46], up 5.2% from the current carbon price of $24.15. Table 4.1 summarises the retailers' proposed changes in their carbon cost components for 2014/15.

Table 4.1 Standard Retailers' proposed carbon cost components for 2014/15 ($nominal, per GJ)

Standard Retailer	Current	2014/15	
	$/GJ	$/GJ[a]	% change
AGL	$1.72	$1.76[b]	+2.1%
ActewAGL	$1.72	$1.75[b]	+1.7%
Origin – Albury/Murray	$1.56	$1.78	+13.9%
Origin – Wagga Wagga	$1.63	$1.78	+9.0%

a The carbon costs presented in this table differs slightly from those in the retailers' written proposals, as we have applied our own forecast of inflation.

b The difference between AGL's and ActewAGL's proposed carbon costs is due to rounding.

Source: IPART, *Review of regulated retail prices and charges for gas – From 1 July 2013 to 30 June 2016 – Final Report*, June 2013, p 43; Standard Retailers' proposals to IPART, February 2014; and IPART calculations.

45 http://www.cleanenergyregulator.gov.au/Carbon-Pricing-Mechanism/About-the-Mechanism/Fixed-Price-2012-15/Pages/default.aspx accessed 24 March 2014.

46 CO_2-e means CO_2 equivalence, ie, the amount of CO_2 emissions that would have the same amount of global warming impact as the greenhouse gas being considered. See http://ecometrica.com/white-papers/greenhouse-gases-co2-co2e-and-carbon-what-do-all-these-terms-mean/

In assessing each Standard Retailer's proposed carbon cost component for 2014/15, we compared the proposals with our estimates of reasonable carbon costs, which were based on:

1. the legislated carbon price of $25.40 per tonne CO_2-e in 2014/15
2. the most recently published National Greenhouse Account (NGA) emissions factors[47]
3. the retailers' proposed retail margins.

Using this approach, we found that the retailers' proposed carbon costs are reasonable. (See Appendix C for our assessment of proposed carbon costs.)

4.3 Potential repeal of the Carbon Pricing Mechanism

The Voluntary Pricing Agreements include provisions for adjusting prices to reflect reductions in carbon related costs, for example if the CPM is repealed before 1 July 2015. In this event, IPART will request proposals from the retailers for removing carbon costs from prices.

If the repeal of the CPM does not take effect by 1 July 2015, the carbon price for 2015/16 is unknown. In this case, we will agree with the Standard Retailers an approach to estimating the appropriate carbon price for 2015/16.

[47] The NGA emissions factors include estimates of the typical CO_2-e emissions intensity of a gas supply chain (ie, production and transportation of gas) as well as the emissions intensity of gas consumption (ie, the burning of gas). Source: Australian Government – Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education, *Australian National Greenhouse Accounts – National Greenhouse Accounts Factors*, July 2013, pp 14, 71.

5 Impact of price increases on customers

The impact of the increases in regulated gas price over the 2 years from 1 July 2014 on individual customers will vary – depending on factors such as their gas usage and Standard Retailer, the regulated price they are on, and how they respond to the price increases (eg, whether they can reduce their usage to manage their bills).

Given this, we conducted a set of analyses to explore the likely range of impacts on customers. In particular, we analysed:

- the impact of the draft decisions on annual gas bills for typical residential and small business customers for each Standard Retailer
- gas and energy bills as a proportion of household disposable income, and how this varies for different households in the metropolitan NSW.

The sections below summarise our key findings then discuss our analysis in detail. Box 5.1 also provides a brief overview of who uses gas in NSW, and what gas is used for.

5.1 Overview of key findings on the impact of the price increases on customers

Under our draft decisions, the annual gas bills of 'typical customers' – those with average gas usage in metropolitan NSW and in non-metropolitan NSW– increase by:

- about $135 to $226 for residential customers, and
- about $476 to $875 for small business customers over the 2 years to 30 June 2016.

We recognise that these indicative increases in regulated gas prices are relatively large. They also come after a sustained period of large increases in energy (ie, gas and electricity) prices. Gas prices have increased by about 40% in real terms between 2006/07 and 2013/14, while regulated retail electricity prices increased by more than 80% over the same period. To consider the impact of gas price increases on household energy affordability, we looked at both gas bills and combined electricity and gas (ie, energy) bills.[48]

A useful measure of energy affordability is the proportion of household disposable income spent on energy. Our analysis indicates that for the **majority** of households (more than 75%) that use gas, gas bills will represent less than 2% of their disposable income in 2014/15 and energy bills will represent less than 6% of their disposable. However, some low-income households will spend more than 6% of their disposable income on energy.

We also found that household expenditure on energy bills as a proportion of disposable income will increase only marginally between 2013/14 and 2014/15. One reason for this is that electricity prices will decrease slightly in 2014/15, and this decrease will to some extent offset the increase in gas bills for dual fuel households.

48 We note that on 7 April 2014 the NSW Government announced that retail electricity prices will be fully deregulated from 1 July 2014. We have used the Government's transitional tariff for 2014/15, ie, a fall in residential bills of 1.5%, for the purpose of this analysis.

Box 5.1 Who uses gas and what for?

Only some NSW households use mains gas[a] - about half of households in the Sydney metropolitan area[b] and about 40% of all NSW households.[c] Around 80% of the households on a regulated gas price live in AGL's standard supply area, which covers Sydney, Wollongong, Newcastle, Dubbo, Orange, Parkes, and parts of the Riverina region, and is served by the Jemena gas distribution network.

Gas is more commonly used by higher income households than those with lower incomes. For example, our Sydney (2010) household survey found that about 60% of high-income households use gas compared to about 40% of low-income households.[d]

Gas is used instead of electricity for cooking, hot water and/or space heating. Some households use gas for all 3 purposes, while others use it for only 1 or 2 purposes. In Sydney in 2010, about one third of households with gas used it for cooking and hot water and another third used it for all 3 purposes.[e]

How much gas a household uses depends on a number of factors, including:

- What it uses gas for. Households that use gas only for cooking use a small amount of gas, while those that use gas for 2 or 3 purposes use far more gas.
- How many people are in the household, particularly if gas is used for hot water.
- The type and size of dwelling, particularly if gas is used for heating.
- The climate zone, particularly if gas is used for heating.[f]

a Mains gas refers to gas supplied by gas distribution pipes connected to the dwelling.

b IPART, *Residential Energy and Water Use in Sydney, the Blue Mountains and Illawarra - Results from the 2010 household survey*, December 2010, p 75.

c Calculated from information provided by Jemena Gas Networks.

d IPART, *Residential Energy and Water Use in Sydney, the Blue Mountains and Illawarra - Results from the 2010 household survey*, Appendix E, Table 1, December 2010.

e IPART, *Residential Energy and Water Use in Sydney, the Blue Mountains and Illawarra - Results from the 2010 household survey*, December 2010, pp 82-83.

f See IPART, *Determinants of residential energy and water consumption in Sydney and surrounds. Regression analysis of the 2008 and 2010 household survey data*, December 2011, Chapter 4.

5.2 Impact of draft decisions on typical customer bills in each supply area

To estimate the potential impact of our draft decision on customers, we have calculated an indicative annual gas bill for residential and business customers with average usage in each gas supply area (Table 5.1 and 5.2).[49,50]

49 AGL, the Standard Retailer for the Sydney metropolitan region, has only one regulated tariff for residential customers and one for business customers. The other standard retailers have a number of different residential and business tariffs, and supply more than 1 region (with different regional network tariffs).

50 We cannot calculate how our draft decisions will affect individual customers' annual gas bills. This impact will depend on how much gas they use, which of their Standard Retailers' regulated prices they are on, and how the Standard Retailer changes these individual price.

This analysis indicates that in the 2-year period to 2015/16:[51]

- Typical residential customers will face an increase of between $135 and $226 in their annual gas bill.
- Typical small business customers will face increases of between $476 and $875 in their annual gas bill.

Almost all of the increases will occur in 2014/15, and will be followed by small increases or decreases in 2015/16 (Table 5.1 and 5.2).

Table 5.1 Indicative annual bill for typical residential customers of each Standard Retailer (nominal $, inc GST)

	Current bill (2013/14)	Estimated bill (2014/15)	Estimated bill (2015/16)	$ increase over 2 years
AGL	901	1,053	1,060	159
ActewAGL	1,292	1,512	1,519	226
Origin Energy (Albury/Murray Valley)	933	1,105	1,067	135
Origin Energy (Wagga Wagga)	1,027	1,251	1,225	199

Note: This assumes a typical customer uses 23GJ, 45GJ, 45GJ, and 37GJ of gas per annum in the AGL, ActewAGL, Origin Energy (Murray Valley) and Origin Energy (Wagga Wagga) areas respectively. Bills are for regulated prices and include GST.

Source: AGL, ActewAGL, Country Energy and Origin; IPART calculations.

Table 5.2 Indicative annual bill for typical business customers of each Standard Retailer (nominal $, excl GST)

	Current bill (2013/14)	Estimated bill (2014/15)	Estimated bill (2015/16)	$ increase over 2 years
AGL	4,201	4,910	4,942	741
ActewAGL	4,997	5,845	5,871	875
Origin Energy (Albury/Murray Valley)	3,295	3,906	3,771	476
Origin Energy (Wagga Wagga)	3,503	4,267	4,181	678

Note: This assumes a typical customer uses 184GJ, 246GJ, 209GJ and 231GJ of gas per annum in the AGL, ActewAGL, Origin Energy (Murray Valley) and Origin Energy (Wagga Wagga) areas respectively. Bills are for regulated prices and exclude GST.

Source: AGL, ActewAGL, Country Energy and Origin; IPART calculations.

51 The increases in typical gas bills do not take account of any increases in energy rebates available to low and middle-income households from 1 July 2014. Energy rebates are credited to electricity bills.

5.3 Energy bills as a proportion of disposable income

To consider the impact of the draft decisions on households we focused on household energy bills as a proportion of household disposable income, where disposable income means income after accounting for tax.[52] This is a useful measure, as it takes into account movements in household incomes as well as energy bills. In addition:

- We looked at and combined electricity and gas (ie, energy) bills, because this provides a more complete picture of energy affordability than looking at gas bills alone.
- We focused our analysis on metropolitan NSW (Sydney, Blue Mountains, Illawarra, Hunter and Central Coast) because we have detailed information on energy usage, energy costs, and household characteristics from our Household Surveys in these areas. We included in the analysis only households that use both mains gas and electricity (ie, dual fuel households).
- We focused on impacts in 2014/15, because almost all of increase in gas prices occurs in this year.
- We took into account rebates on energy bills, but we show gas bills without energy rebates.[53]

The section below discusses the key findings of our analysis.

5.3.1 How do energy bills as a proportion of disposable income vary in metropolitan NSW?

We also looked at expenditure by dual fuel households on energy as a proportion of disposable income. Using the data on electricity and gas usage from our household surveys data, information about changes in average energy usage since our surveys,[54] our draft decisions on regulated gas prices and the Government's announcement regarding electricity price deregulation and the price decrease of 1.5% under the transitional tariff for 2014/15, we found that more than 75% of all dual fuel households in the Sydney metropolitan area will spend less than 6% of their disposable income on energy bills in 2014/15. In addition, only 7% of household in this area are likely to spend more than 10% of their disposable income on energy.

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52 We also took into account the Commonwealth Government's Household Assistance Package, which was introduced in 2012 to compensate households for the introduction of the carbon. For an explanation of how we did this, and for more information about the Package, see IPART, *Changes in regulated electricity retail prices from 1 July 2012 – Final Report*, June 2012, pp 68-69 and 76-82.

53 The rebates are for energy, and typically appear on a customer's electricity bill.

54 Information from the NSW electricity network businesses shows that average electricity consumption per household fell by about 12% between 2009/10 and 2012/13.

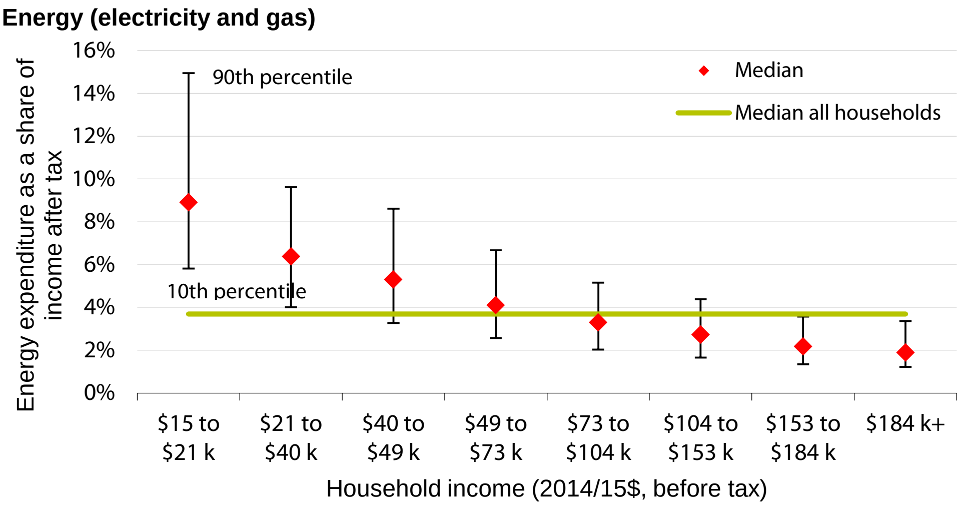
As Figure 5.1 shows, median household spending on energy across all income categories will be just less than 4% of disposable income. However, looking at different income categories, median household spending on energy varies quite widely:

- In the middle and higher income categories (more than $49,000 per year), median household spending on energy will range from about 2% to 4% of disposable income.
- In the 2 low-income categories ($40,000 or less per year), median spending on energy will range from around 6% to 9% of disposable incomes.

Between households with similar disposable incomes in the lower income categories, there is substantial variation. For example, in the lowest income category, households with median energy use are likely to spend about 9% of their disposable income on energy, while those in the 10th percentile will spend about 6%, and those in the 90th percentile will spend about 15%. In the second lowest income category, median households will spend about 6% of their disposable income on energy, while those in the 90th percentile will spend almost 10% on energy.[55]

[55] For information about why energy bills vary so much between low-income households in Sydney, see IPART, *Changes in regulated electricity retail prices from 1 July 2012 - Final Report*, June 2012, Appendix E.

Figure 5.1 Annual spending on energy as a share of disposable household income — Sydney and surrounding regions, 2014/15



Note: The income for the middle of each band is used to calculate disposable income. Disposable income as a share of household income is derived from ABS household income distribution data for 2009/10. Income for each band is inflated to 2012/13 using the change in average weekly earnings. Income forecasts for 2013/14 and 2014/15 use NSW Treasury's forecast increase in the average wage index of 2.75% and 3% respectively. Disposable income is further adjusted for the impact of the carbon compensation package. Distributions are presented without weighting survey responses.

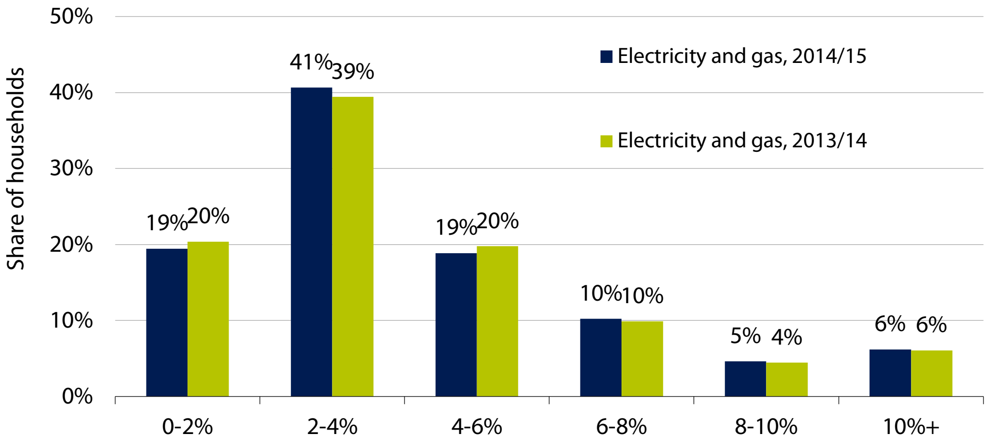
A **percentile** is the value below which a certain percentage of observations fall. For example, the 10th percentile is the value below which 10% of the observations may be found. In the above diagram, 10% of customers in each income band would fall below the bottom of the vertical line (paying less than that amount) and 10% of customers would pay more than the top of the vertical line.

Sources: IPART Household Surveys, 2008 and 2010; ABS, ABS, Average weekly earnings, Australia, November 2011 and November 2013, Catalogue 6302.0, Table 11A; NSW Government, 2013-14 Half-Yearly Review, 20 December 2013, p 29; IPART calculations.

Despite the increase in gas prices, household expenditure on energy bills as a proportion of disposable income will increase only marginally between 2013/14 and 2014/15 (Figure 5.2). One reason for this is that electricity prices will decrease slightly in 2014/15, and this decrease will to some extent offset the increase in gas bills for dual fuel households.[56]

[56] On 7 April 2014 the NSW Government announced that retail electricity prices will be fully deregulated from 1 July 2014. We have used the Government's transitional tariff for 2014/15, ie a fall in residential bills of 1.5%, for the purpose of this analysis.

Figure 5.2 Distribution of annual spending on energy as a share of disposable household income — Sydney metropolitan area, 2013/14 and 2014/15



Note: Disposable income as a share of household income is derived from ABS household income distribution data for 2009/10. Income for each band is inflated to 2012/13 using the change in average weekly earnings. Income forecasts for 2013/14 and 2014/15 use NSW Treasury's forecast increase in the average wage index of 2.75% and 3% respectively. Disposable income is further adjusted for the impact of the carbon compensation package. Customer bills have been adjusted to reflect lower average electricity consumption per household. Customer bills are net of the Low Income Household Rebate. We have assumed that average electricity prices in the Sydney metropolitan region will decrease by 1.5% in nominal terms, in line with the Government's transitional tariff.

Data source: IPART Household Surveys, 2008 and 2010; ABS, ABS, Average weekly earnings, Australia, November 2011 and November 2013, Catalogue 6302.0, Table 11A; NSW Government, 2013-14 Half-Yearly Review, 20 December 2013, p 29; IPART calculations.

Our June 2013 final report from the 2013 price review provided additional analysis of the impact on residential customers of increases in energy prices since. In broad terms, most of this analysis remains valid for the 2 years to 2015/16 and is therefore not repeated here.[57]

[57] IPART, *Review of regulated retail prices and charges for gas From 1 July 2013 to 30 June 2016 – Final Report*, June 2013, chapter 8.

Appendices

A Terms of Reference

Chris Hartcher MP
Minister for Resources and Energy
Special Minister of State and
Minister for the Central Coast

V12/4188

Dr Peter Boxal
Chairman
Independent Pricing and Regulatory Tribunal
PO Box Q290
QVB POST OFFICE NSW 1230

Dear Dr Boxall

Pursuant to section 43EA(1) of the *Electricity Supply Act 1995* (the Act) , I am referring to the Tribunal for investigation and report, the determination of regulated electricity retail tariffs and charges in New South Wales for the period from 1 July 2013 to 30 June 2016. Please find further details in the attached Terms of Reference to the Tribunal.

I confirm that an amendment regulation will be made to extend the operation of Part 4, Division 5 of the Act to 30 June 2016, under which the Tribunal's determination may be made.

With regard to gas tariffs and charges, I note that the current standard tariffs for gas small retail customers, previously agreed by the Tribunal and the standard gas retailers under Voluntary Transitional Pricing Arrangements (VTPAs) are due to expire on 30 June 2013.

I further request that the Tribunal continue to regulate the standard tariffs for small retail gas customers for the period 1 July 2013 to 30 June 2016, in accordance with section 27 of the *Gas Supply Act 1996* (the Act). I request that the Tribunal ensure that either new VTPAs or gas pricing orders are in place for the period 1 July 2013 to 30 June 2016.

In regulating such prices, the Tribunal should ensure that the objects under section 3 of the Act are taken into consideration, and that stakeholders are consulted as part of the review process. In order to ensure that standard retail gas tariffs reflect the efficient costs of supplying natural gas to small retail customers, I request the Tribunal to consider whether it should undertake a review of these costs, and to undertake such a review if deemed necessary.

I look forward to the Tribunal's final report on both these matters in time for commencement on 1 July 2013.

GPO Box 5341, Sydney NSW 2001
Phone: (61 2) 9228 5289 Fax: (61 2) 9228 3448 Email: office@hartcher.minister.nsw.gov.au

V12/4188

If you require further information on this matter, please contact Jessie Foran, Senior Policy Advisor for Energy, in my office on (02) 9228 5289.

Yours sincerely

Chris Hartcher MP

Encl. 27·9·12

B Customer acquisition and retention costs

IPART's terms of reference for the 2013 review of regulated retail gas prices indicate that we must ensure the objects under section 3 of the *Gas Supply Act 1996* are taken into account. Among other things, these objects include:

- to encourage the development of a competitive market in gas
- to regulate gas reticulation and gas supply, so as to protect the interests of customers and to promote customer choice in relation to gas supply.

In their original pricing proposals for 2014/15 and 2015/16, AGL and ActewAGL noted that we included an allowance for customer acquisition and retention costs (CARC) in setting prices in our 2013 review of regulated retail prices for electricity (and that we had used this allowance to ensure that regulated prices provided sufficient incentive to encourage competition). AGL and ActewAGL initially proposed that a consistent approach be adopted for regulated retail gas prices; however their revised proposals do not include any additional competition allowance.[58]

We have not previously included a specific competition allowance in assessing the reasonable range for gas prices (although some of the Standard Retailers have included some customer acquisition costs in their proposals). We have therefore considered whether a CARC or a similar competition allowance in the retail gas price is required.

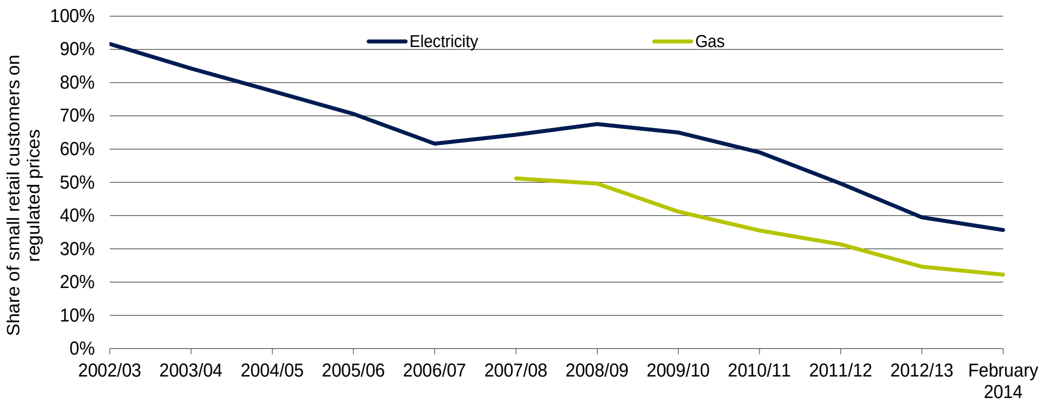
B.1 Approach to setting the incentives in regulated gas prices

For electricity, our 2013 determination included an incentive in regulated retail prices that is consistent with a reasonable transition path to a largely deregulated market. This balanced the short term objective of setting prices that reflect efficient costs against the longer term objective of promoting competition. Our view is that, over time, a higher incentive will lead to a more rapid transition to a largely deregulated market and a lower incentive to a less rapid transition.

58 AGL submissions, 11 February 2014, pp 21-22 and 21 March 2014, pp 1-2; ActewAGL submissions, 11 February 2014, p 6 and 25 March 2014, p 1.

Across NSW and as at February 2014, the share of small customers on regulated prices in the gas market is smaller than in the electricity market (Figure B.1).[59] In both markets, the share of customers on regulated prices has declined over the past 4 years.

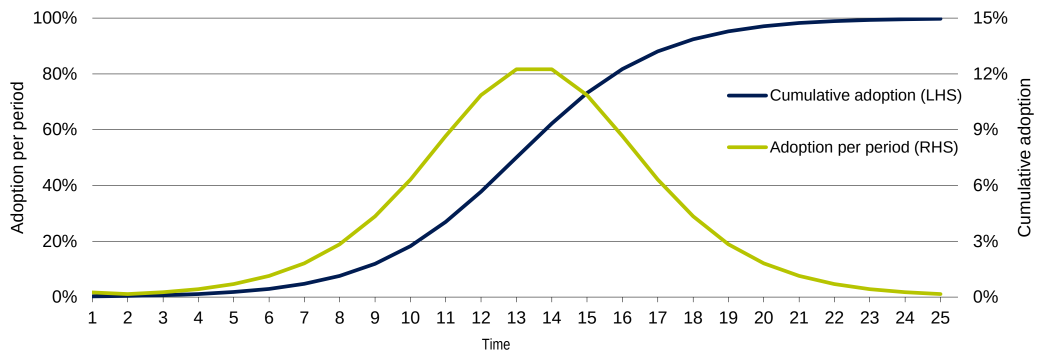
Figure B.1 Share of small retail customers on regulated prices for electricity and gas



Data source: IPART calculations based on information provided by distributors and retailers.

We consider it likely that the rate of uptake of market offers will slow, as the share of customers remaining on regulated prices is smaller. This would be consistent with the S-shaped curve of diffusion, which can be used to analyse the adoption of market offers (Figure B.2).

Figure B.2 S-shaped adoption curves for market offers



Data source: Rogers, E. M. (1962) *Diffusion of innovations*. New York: Free Press.

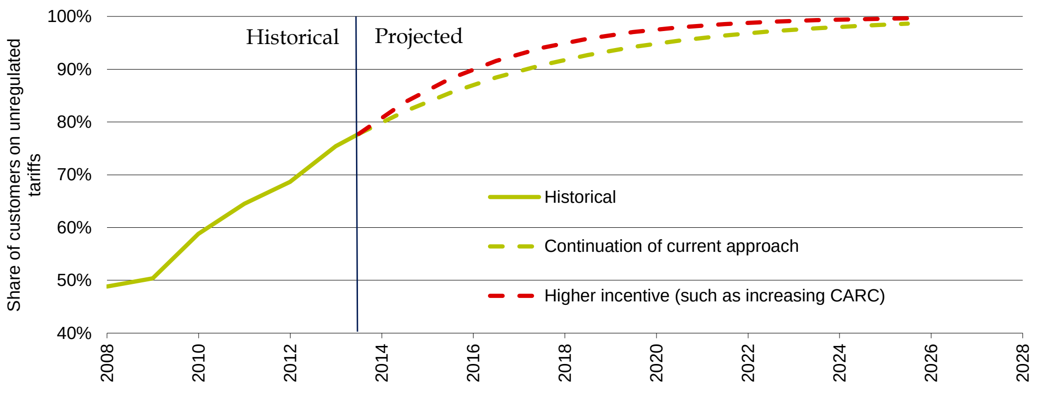
59 We note that on 7 April 2014 the NSW Government announced that retail electricity prices will be fully deregulated from 1 July 2014.

Our view is that a level of CARC should be allowed that will lead to a reasonable transition to a largely deregulated market for gas. We anticipate that, across NSW, the vast majority (90%) of small gas retail customers will be on market offers within 4 years, if we accept the revised pricing proposals made by the Standard Retailers (Figure B.3).

If we allowed for an additional CARC allowance, beyond that allowed in our current approach, then this would speed up the movement off regulated prices further.

The number of customers switching to market offers will of course depend on factors other than the regulated retail price. For example, the substantial increases in regulated prices proposed for some areas would likely lead to more customers looking for alternative offers.

Figure B.3 Customers on market offers under alternative regulatory incentives



Note: The standard transition model is an S-shaped function. This analysis uses a Gompertz function: $\frac{\dot{c}}{c} = -\propto \log\left(\frac{c}{\bar{c}}\right)$ where c is the share of adopters (in this case of an unregulated price or market offer), $\dot{c}$ is the rate of change of adopters, $\bar{c}$ is final adoption level (in this case 100%) and $\propto$ is a parameter that determines the speed of change. The speed of change under alternative incentives is mapped to historical observed changes.

Data source: IPART calculations.

B.2 Reasonable transition path

The Jemena gas distribution network serves the majority of gas customers in NSW (AGL and ActewAGL are the Standard Retailers on this network). Our analysis indicates that this market has transitioned more rapidly than electricity,[60] with 90% of small customers likely to be on market offers within 4 years. We have made our draft decision on the basis of what is occurring for the majority of gas customers. Accordingly, we consider that there is no reason to make an adjustment to regulated retail prices to incorporate an additional CARC allowance.

For other smaller distribution areas there is potential for competition (except for the Shoalhaven area at present). For these areas there may be scope to allow for an additional incentive in regulated retail prices to encourage retailers to enter and customers to participate in the competitive market.

60 Although we note that with the NSW Government's announcement of full retail electricity price deregulation, there will be no customers on regulated electricity prices from 1 July 2014.

C Assessment of proposed carbon costs

This appendix sets out the input values, assumptions and calculations we have used to undertake our assessment of the Standard Retailers' proposed carbon costs.

Table C.1 Carbon price per tonne CO_2-e in 2014/15 ($ nominal)

	$25.40

Source: http://www.cleanenergyregulator.gov.au/Carbon-Pricing-Mechanism/About-the-Mechanism/Fixed-Price-2012-15/Pages/default.aspx

Table C.2 NGA emissions factors from 1 July 2013 (kg CO_2-e/GJ)

	Metro	Non-Metro
Upstream	12.8	13.5
Consumption	51.33	51.33

Source: Australian Government – Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education, *Australian National Greenhouse Accounts – National Greenhouse Accounts Factors*, July 2013, pp 14, 71.

Table C.3 Retailer specific inputs

	AGL	ActewAGL	Origin
Share of gas customers in metro vs. non-metro regions[a]			
Metro	50%	50%	0%
Non-metro	50%	50%	100%
Retailers' emissions factors (kg CO_2-e/GJ)[b]			
Upstream emissions factor	13.15	13.15	13.50
Consumption emissions factor	51.33	51.33	51.33
Proposed retail margin[c]	7.0%	7.3%	7.0%

a Sourced from the retailers' proposals for AGL and ActewAGL. Assumed for Origin, on the basis of the notes to Table 37 in: Australian Government – Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education, *Australian National Greenhouse Accounts – National Greenhouse Accounts Factors*, July 2013, p 71.

b Calculated as the weighted average Metro vs non-metro emissions factors as per Table C.2, using the share of customers in metro vs. non-metro regions as weights.

c Sourced from the retailers proposals.

Table C.4 Estimated reasonable carbon costs 2014/15 ($ nominal /GJ)

	AGL	ActewAGL	Origin
Upstream costs	0.33	0.33	0.34
Consumption costs	1.30	1.30	1.30
Margin	0.11	0.12	0.12
Total	**1.75**	**1.76**	**1.76**

Source: IPART calculations on the basis of the carbon price (Table C.1) and the retailer specific inputs in Table C.3.

Table C.5 Proposed carbon costs vs. estimated reasonable carbon costs

	AGL	ActewAGL	Origin
Proposed total carbon costs ($2014/15)	1.76	1.75	1.78
Deviation from reasonable estimates	+0.2%	-0.4%	+0.8%

Note: The proposed carbon costs in this table differ slightly from those in the retailers' proposals, as we have used our own forecast inflation numbers.

Source: Standard Retailers' proposals and IPART calculations.

D List of submission on Standard Retailers' pricing proposals

Table D.1 List of submissions received

Submitter Name/Organisation	Date of submission
Maitland City Bowls Sports and Recreation Club, Hunter Region	19 February 2014
Anonymous	25 February 2014
C. Bull	1 March 2014
Combined Pensioners and Superannuants Association of NSW Inc	7 March 2014
J. Celmins	10 March 2014
P. Tarjanyi	10 March 2014
Lock The Gate Alliance	11 March 2014
The Hon Anthony Roberts MP – Minister for Resources and Energy	11 March 2014

These submissions are available on our website.