



Independent Pricing and Regulatory Tribunal

Review of regulated retail tariffs and charges for electricity 2010-2013

Electricity — Issues Paper
July 2009



Independent Pricing and Regulatory Tribunal

Review of regulated retail tariffs and charges for electricity 2010 - 2013

Electricity – Issues Paper
July 2009

© Independent Pricing and Regulatory Tribunal of New South Wales 2009

This work is copyright. The *Copyright Act 1968* permits fair dealing for study, research, news reporting, criticism and review. Selected passages, tables or diagrams may be reproduced for such purposes provided acknowledgement of the source is included.

ISBN 978-1-921238-96-1 DP114

The Tribunal members for this review are:

Dr Michael Keating, AC, Chairman

Mr James Cox, Chief Executive Officer and Full Time Member

Ms Sibylle Krieger, Part Time Member

Inquiries regarding this document should be directed to a staff member:

Anna Brakey (02) 9290 8438

Alexus van der Weyden (02) 9290 8460

Independent Pricing and Regulatory Tribunal of New South Wales

PO Box Q290, QVB Post Office NSW 1230

Level 8, 1 Market Street, Sydney NSW 2000

T (02) 9290 8400 F (02) 9290 2061

www.ipart.nsw.gov.au

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 3 August 2009.

We would prefer to receive them by email <ipart@ipart.nsw.gov.au>.

You can also send comments by fax to (02) 9290 2061, or by mail to:

Review of regulated retail tariffs and charges for electricity 2010-2013
Independent Pricing and Regulatory Tribunal
PO Box Q290
QVB Post Office NSW 1230

Our normal practice is to make submissions publicly available on our website <www.ipart.nsw.gov.au>. If you wish to view copies of submissions but do not have access to the website, you can make alternative arrangements by telephoning one of the staff members listed on the previous page.

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 subject to appeal under freedom of information legislation.

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

Contents

Invitation for submissions	iii
1 Introduction	1
1.1 What has IPART been asked to do?	1
1.2 The challenges of this Determination	2
1.3 How does IPART propose to approach this Determination?	2
1.4 What are IPART's preliminary thoughts in relation to this approach?	3
1.5 How and when can stakeholders provide input to IPART's review?	5
1.6 Overview of issues on which IPART seeks comment	5
1.7 What does the rest of this paper cover?	9
2 Consider the contextual factors that affect the Determination	11
2.1 Terms of reference	11
2.2 Policy, market and regulatory developments	12
3 Distil the contextual factors into assessment criteria for the review	19
3.1 IPART's proposed assessment criteria	19
4 The effectiveness of retail market competition in NSW	21
4.1 What were IPART's findings on retail market competition for the 2007 Determination?	21
4.2 How has competition in the NSW retail electricity market developed since then?	22
4.3 How does IPART propose to assess the effectiveness of retail market competition in NSW over the 2010 Determination period?	25
4.4 What are the key challenges for assessing the level of retail market competition for the 2010 Determination?	25
5 The form of regulation	27
5.1 What tariffs should be regulated?	27
5.2 How should tariffs be regulated?	30
5.3 Is there a need for additional regulatory instruments?	35
5.4 On what date should regulated retail tariffs change during the Determination period?	39

6	Analyse the costs that an efficient Standard Retailer will occur in supplying customers on regulated tariffs	41
6.1	Energy purchase costs	42
6.2	Retail operating costs	57
6.3	Retail margin	59
6.4	Energy losses	61
6.5	Market and ancillary fees	61
7	Non-tariff fees and charges	63
7.1	Security deposit	63
7.2	Late payment fee	64
7.3	Dishonoured bank cheque fee	64
8	Customer impacts	65
8.1	Recent trends in retail electricity prices	65
8.2	NSW Government customer assistance measures	67
8.3	Federal Government hardship assistance measures	68
8.4	IPART's advice to the NSW Government on customer impacts of the 2010 Determination	69
	Appendices	71
A	Terms of Reference	73
B	Overview of the electricity market	77

1 Introduction

For the past seven years, the market for retail electricity in NSW has been open to competition. All small retail electricity customers have had the option to choose their retail supplier and negotiate a retail supply contract, or to remain on a regulated tariff with their Standard Retailer.¹ The NSW Government (along with other Australian governments) has agreed to an agenda that phases out retail electricity price regulation where it can be demonstrated that effective competition exists.²

However, the Government recently committed to retaining the option of regulated retail tariffs at least until 2013. Since the current Determination on regulated retail electricity tariffs will cease to apply on 30 June 2010, the Minister for Energy has asked the Independent Pricing and Regulatory Tribunal of NSW (IPART) to undertake a review and make a new Determination for the period 1 July 2010 to 30 June 2013.

1.1 What has IPART been asked to do?

Like the current Determination, the 2010 Determination will apply to the regulated retail tariffs and charges levied by the three Standard Retailers in NSW: currently EnergyAustralia, Integral Energy and Country Energy. It will also apply to the purchasers of these businesses. The Determination will be made under section 43EB of the *Electricity Supply Act 1995*, and must be consistent with the terms of reference provided by the Government.

These terms of reference are similar to those for the 2007 review and Determination. They require IPART to use an approach that results in prices that recover an efficient Standard Retailer's costs in meeting the forecast demand of the regulated customers it is obliged to serve, including energy purchase costs, retail operating costs and a retail margin. They also require IPART to make decisions that are consistent with the Government's policy aim of reducing customers' reliance on regulated prices. But despite these similarities, IPART considers that the 2010 Determination will present new challenges.

¹ All customers that consume less than 160MWh per year are eligible for supply under a standard form customer supply contract. While increasing numbers of these customers are opting to negotiate a contract, as at 31 December 2008 around 66 per cent remained on a standard form customer contract and regulated tariff.

² Council of Australian Governments' Meeting, *Communique*, 10 February 2006, Appendix A to Attachment B, p 8.

1.2 The challenges of this Determination

Since the 2007 Determination, there have been several important developments in the market, policy and regulatory environment. Some of these developments will impact on retail electricity prices over the coming years, including most notably:

- ▼ the Federal Government's climate change mitigation strategy, including the planned introduction a Carbon Pollution Reduction Scheme (CPRS) and planned expansion of the mandatory Renewable Energy Target (RET)
- ▼ the Australian Energy Regulator's recent Determination on transmission and distribution network electricity prices for the period 2009/10 to 2013/14.

At the same time there are developments that will lead to uncertainties within the market for a period of time. These include:

- ▼ The passage of the Federal Government's climate change mitigation strategy. There is uncertainty relating to the timing and content of the legislative package as it passes through parliament. Further, for the last year of the Determination, 2012/13, there are uncertainties regarding the impact of the CPRS on electricity prices.
- ▼ The NSW Government's planned energy reform strategy, including the planned privatisation of the Standard Retailers and the sale of trading rights to the state-owned generators. The final strategy is still under consideration, and it is likely that IPART will make its Determination before the details are known.

Finally, the terms of reference for IPART's review require it to provide a draft report and Determination within six months of receiving these terms, and a final report and Determination within a further three months. This is a shorter timeframe than usual for IPART's price Determinations, and will add to the challenges involved.

Given this context, IPART considers it important that it clearly establishes the high-level approach it will take to the analysis and decision-making for this Determination. It also considers it important that it sets out its proposed approach early in the review process, together with its preliminary thinking on issues associated with this approach, so that stakeholders can consider and comment on it. IPART particularly wants to ensure that its approach takes appropriate account of the contextual factors for this review, the challenges and risks these factors pose, and the matters it is required to consider under its terms of reference.

1.3 How does IPART propose to approach this Determination?

IPART's proposed approach involves a number of explicit steps and interim 'decision points'. These steps include the following:

1. Carefully consider the terms of reference and other contextual factors that affect the Determination.

2. Distil these factors (and the principles of good regulatory practice) into a set of assessment criteria to guide the analysis and decision making and help communicate the rationale for decisions.
3. Consider the effectiveness of retail market competition in NSW to decide whether there is a need for any additional regulatory mechanisms to promote competition.
4. Consider the form of regulation to be used in determining retail tariffs.
5. Analyse the costs that an efficient Standard Retailer will incur in supplying small retail customers on regulated tariffs over the Determination period, taking into account the electricity purchase costs, retail operating costs and retail margin, and the risks and challenges associated with forecasting these costs for the Determination period.
6. Take account of the above considerations and analysis, and use the assessment criteria to make decisions on:
 - the form of regulation
 - the value of the regulated retail price controls within this form of regulation, and
 - the regulated retail charges.

1.4 What are IPART's preliminary thoughts in relation to this approach?

IPART has done preliminary thinking on some of the steps in its proposed approach. It has considered the contextual factors, and developed proposed assessment criteria for the review. It has also considered the form of regulation, done some preliminary research on the level of competition in NSW and considered the methodology it will use to estimate costs.

IPART proposes to use its 2007 Determination as the starting point for its considerations for the 2010 review. This Determination included a 'regulatory package' designed to compensate a hypothetical retailer for the costs and risks that it faced in supplying small retail customers. This package included:

- ▼ Cost allowances, including energy purchase costs (based on a conservative, market-based estimate of electricity costs supplemented with an allowance to compensate for energy market volatility), retail operating costs (including customer acquisition costs), and a retail margin. These allowances were developed in a manner that recognised their interrelationships.
- ▼ An annual review of the market-based energy purchase cost allowance, to account for any step change in the electricity market.
- ▼ A pass-through mechanism to allow retailers to pass through to customers material increases or decreases in costs associated with regulatory or taxation change events that were unanticipated at the time of the Determination.

- ▼ A weighted average price cap that allows the Standard Retailers to recover the costs of retailing together with the applicable network charges. IPART allowed the Standard Retailers the flexibility to set their own cost reflective tariffs within an overall cap.

IPART considers that this package was robust and effective, and is likely to be consistent with the assessment criteria and terms of reference for 2010 Determinations. Therefore, it proposes to consider the effectiveness of this package, and identify how it can be modified and enhanced to take account of the policy and regulatory developments since 2007. In doing so, IPART will consult with stakeholders, undertake its own analysis and seek expert advice.

It is important to note that in developing the 2007 regulatory package, IPART was careful to ensure that all relevant costs and risks were compensated for, but only once. IPART intends to do the same for the 2010 Determination. Therefore, it will need to carefully consider how each relevant cost or risk that is incurred by retailers is best compensated for, and decide on the most appropriate allowance or mechanism. It will need to take account of a range of factors, including the impacts on regulatory certainty, the incentives created for retailers, the risks of over- or under-estimating particular costs and which party is best placed to manage those risks, and the implications for administrative costs.

In relation to estimating a Standard Retailer's efficient costs, IPART is disposed to maintain the methodology it used for the 2007 review to determine allowances for electricity purchase costs, retail operating costs and retail margin, but update this to reflect the context of the 2010 review. It also will engage Frontier Economics to provide expert advice on energy costs (including an LRMC and market based estimate) and SFG to provide expert advice on the retail margin using a similar methodology to the 2007 review. Specifically, IPART will augment the methodology to reflect the developments in the market, policy and regulatory environment, and to provide additional information (including a statement of detailed assumptions) to improve the transparency and predictability of its framework.

IPART considers that building on the methodology it used for the 2007 review is consistent with its terms of reference. It also considers that this is prudent, given that:

- ▼ there is a reasonable degree of knowledge and acceptance among stakeholders about the 2007 methodology
- ▼ building on the current methodology should increase the regulatory certainty of the 2010 review
- ▼ developing and consulting on a completely new methodology would be very difficult given the short timeframe for the review.

1.5 How and when can stakeholders provide input to IPART's review?

IPART intends to conduct a full and thorough review and consultation process. This issues paper is the first stage in this process. All stakeholders and interested parties are invited to make submissions in response to this paper. These submissions are due on 3 August 2009. Details on how to make a submission can be found on page iii, at the front of this paper.

IPART will meet with key stakeholders throughout the review and will form working groups to consider specific issues, including regulated retail charges.

Table 1.1 provides an indicative timetable for the review, including further opportunities for stakeholder input.

Table 1.1 Indicative timetable for IPART's 2010 review of regulated retail electricity tariffs and charges

Key tasks	Time
Receive final terms of reference and post on website	Late June 2009
Release Issues Paper and invite submissions	Early July 2009
Receive stakeholder submissions	3 August 2009
Release draft methodology paper and invite stakeholder submissions	August 2009
Hold public forum on methodology paper	August 2009
Receive stakeholder submissions on methodology paper	September 2009
Release IPART's draft report and Determination and expert reports and invite stakeholder submissions	Early Dec 2009
Hold public hearing on draft report	Mid December 2009
Receive stakeholder submissions on draft report	Late Jan 2010
Release IPART's final report and Determination	March 2010

1.6 Overview of issues on which IPART seeks comment

Throughout this paper, IPART has identified the issues on which it particularly seeks stakeholder comment at this stage of the review. Stakeholders may address all or some of these issues, and are also free to raise and discuss any other issues that they feel are relevant to the terms of reference. For convenience, a full list of the issues IPART seeks comment on is provided below:

Chapter 3 Distil the contextual factors into assessment criteria for the review

- 1 Are IPART's proposed assessment criteria appropriate to guide IPART's analysis and decision making? 20

Chapter 4 The effectiveness of retail market competition in NSW

- 2 What are the relevant markets for the supply of electricity in NSW? Is there any evidence to suggest that there are separate sub-markets defined along consumption, income, residential/business or homeowner/tenant lines for small retail customers? 24
- 3 Has there been any significant change in the number of retailers supplying small retail customers in the metropolitan areas relative to the non-metropolitan areas? 24
- 4 Are there any barriers (or emerging barriers) to entry that may limit the potential for competition in the NSW retail electricity markets? 24
- 5 What is driving the apparent reduction in retailer marketing activity? Is there sufficient information available to customers in NSW to allow them to exercise choice? 24
- 6 While there appears to have been a reduction in the discounts offered to customers, has there been any innovation in the price/service packages offered to customers? 24
- 7 Has there been any change in the types of customers being offered competitive contracts? Is there any evidence to suggest that there are particular groups of customers that have been more or less active in the competitive market, such as pensioners or tenants? 24
- 8 Is IPART's proposed approach for analysing the effectiveness of retail market competition appropriate for this review? Are there any other factors IPART should consider? 25
- 9 Are there any persistent factors that may prevent the level of competition from developing over the medium term? How might IPART's 2010 Determination address these factors? 26
- 10 How should IPART take into account the NSW Government's strategy to restructure and reform the energy sector in NSW in assessing the future level of competition? 26

Chapter 5 The form of regulation

- 11 Should IPART continue to regulate all the Standard Retailers' existing regulated retail tariffs and charges for small customers? 30
- 12 Where a customer on a regulated tariff elects to pay a premium for green energy, should IPART continue to leave the green premium component unregulated? 30

- 13 Should IPART continue to limit Standard Retailers' ability to establish new regulated tariffs to where there are exceptional circumstances, and where IPART's prior approval has been obtained? If not, why not? 30
- 14 Should IPART continue to provide Standard Retailers with the flexibility to rationalise their regulated retail tariffs and remove obsolete tariffs, as long as they continue to offer a regulated tariff to small retail customers? If not, why not? 30
- 15 Should IPART continue to subject Country Energy to an additional condition such that if it seeks to remove a regulated tariff and transfer customers from that tariff to another tariff, it must obtain IPART's prior approval if the price applying to the two tariffs (including level and structure) is not the same? If not, why not? 30
- 16 Has the WAPC approach to regulating retail tariffs facilitated the rationalisation of regulated retail tariffs and the removal of obsolete tariffs over the 2007 Determination period? 34
- 17 Is there any evidence that a WAPC approach to regulating retail tariffs has allowed the Standard Retailers to segment certain customers and charge prices that significantly exceed the efficient costs of supply? 34
- 18 Does a WAPC based on a build-up of network charges approved by the AER and retail costs blocks estimated by IPART best meet the objectives for this review? Are there enhancements that can be made to the current approach? 34
- 19 Are there other approaches to determining retail tariffs that IPART should consider? 35
- 20 Would imposing additional price limits on individual tariffs or tariff components be consistent with the assessment criteria for the 2010 Determination? If so, what form should these price limits take? 39
- 21 How effective was the 'threshold price increase test' for Country Energy in providing additional protection to customers against prices that were significantly above costs without limiting Country Energy's ability to rationalise tariffs? 39
- 22 If IPART's analysis of the effectiveness of retail competition in the non-metropolitan market indicates that a similar test is needed over the 2010 Determination period, what modifications or enhancements could be made to the current test to improve its consistency with the assessment criteria for this Determination? 39
- 23 Is there any reason why IPART should not include a cost pass-through mechanism as part of the 2010 Determination? 39
- 24 What enhancements could be made to the current cost pass-through mechanism to make it more consistent with the assessment criteria for this Determination? 39

- 25 Is there support for altering the price change date? What are the potential benefits and complications? 40

Chapter 6 Analyse the costs that an efficient Standard Retailer will incur in supplying customers on regulated tariffs

- 26 Is there any reason why IPART should not set a bundled 'black and green' (carbon-inclusive) energy purchase cost allowance and then add an allowance for the costs of complying with other green schemes including the MRET? 49
- 27 How would any IPART decision to set a carbon-inclusive energy purchase cost allowance relate to the scope and timing of any periodic review? 49
- 28 Is there publicly available data on future electricity prices that could be used to estimate a market-based energy purchase cost allowance? What are some of the benefits and complications of using this data? 50
- 29 Should the approach to estimating the market-based energy purchase cost allowance be based on a particular 'point in time' or rolling estimate? What are the implications for the other cost components? 51
- 30 Is a volatility allowance an efficient and reasonable means of addressing the risk of wholesale electricity price volatility in the context of the CPRS? Or should this risk be managed and compensated elsewhere? 53
- 31 What is the appropriate scope of IPART's periodic review and how should it be conducted? 55
- 32 What is the appropriate frequency and timing of the periodic review? 56
- 33 Is there any reason to adopt a threshold for change of more or less than 10 per cent? 56
- 34 Is there any reason that the periodic review should not be symmetrical such that both material increases and decreases are reflected in regulated retail tariffs? 57
- 35 Have there been any significant changes to retail business activities? Are previous retail operating cost analyses and benchmarks a valid starting point? If not what are the alternative approaches? 58
- 36 What is an appropriate basis for assessing the customer acquisition costs of an efficient Standard Retailer? 59
- 37 Is IPART's proposed approach for determining the retail margin for the 2010 Determination appropriate? If not, what are the alternative approaches? 60
- 38 Have there been any significant changes to retail business activities? And if so, what are the implications for the retail margin? 61

- 39 Are there any reasons why IPART should alter the approach it used for the 2007 Determination to incorporate energy losses into regulated retail prices? 61
- 40 Are NEM fees and ancillary charges likely to significantly change from their current levels over the 2010 Determination period? 62

Chapter 7 Non-tariff fees and charges

- 41 Is there any reason to change the level of the security deposit or the circumstances surrounding the charging of security deposits? 64
- 42 Is there any reason to change the level of the late payment fee or the circumstances surrounding the charging of the late payment fee? 64
- 43 Is there any reason to change the level of the dishonoured cheque fee or the circumstances surrounding the charging of the dishonoured cheque fee? 64

Chapter 8 Customer Impacts

- 44 What are the likely impacts of higher electricity prices on different types of customers? 70
- 45 Given NSW and Federal Government customer assistance measures, are there any additional measures, including better targeting of existing measures, that may alleviate the impacts of higher prices? 70

1.7 What does the rest of this paper cover?

The rest of this issues paper discusses each step in IPART's proposed approach for the review in more detail, and outlines IPART's preliminary thinking on each. It also outlines how the Determination is likely to affect electricity customers and the non-tariff fees that may change. It is structured as follows:

- ▼ Chapter 2 considers the contextual factors that will affect the Determination.
- ▼ Chapter 3 distils these factors and their implications into a set of proposed assessment criteria for the review.
- ▼ Chapter 4 looks at the effectiveness of retail market competition in NSW including developments since the 2007 Determination, and the matters IPART intends to consider in assessing the level of competition.
- ▼ Chapter 5 discusses how IPART proposes to consider the form of regulation, including which tariffs should be regulated, how they should be regulated and whether there are any additional regulatory mechanisms required.
- ▼ Chapter 6 discusses the retail costs involved in supplying electricity to small retail customers, the key decisions that need to be made in determining an allowance for each of these retail cost components, the matters that need to be taken into consideration and how IPART proposes to approach these decisions.

- ▼ Chapter 7 discusses the non-tariff fees that the Standard Retailers can charge.
- ▼ Chapter 8 outlines the potential customer impacts of IPART's Determination, taking into account the impact of the Australian Energy Regulator's recent Determination on network tariff increases and the potential for increases in the retail component of regulated tariffs. It also considers Government customer assistance measures and outlines what IPART proposes to consider in providing advice to the Government on impact of the Determination on small consumers.

2 Consider the contextual factors that affect the Determination

The first step in IPART's proposed approach for the 2010 Determination is to carefully consider the contextual factors that will affect the Determination. As Chapter 1 discussed, the NSW Government has provided terms of reference that prescribe what IPART must consider and outline the aims IPART is to achieve in making this Determination. In addition, there have been a range of policy, market and regulatory developments since the 2007 Determination.

The sections below summarise the terms of reference and the main developments and the challenges they pose.

2.1 Terms of reference

In accordance with section 43EA of the *Electricity Supply Act 1995*, the Minister for Energy has asked IPART to investigate and determine regulated retail tariffs and charges to apply to small retail customers in each of the three NSW Standard Retailer's supply districts for the period 1 July 2010 to 30 June 2013.

The terms of reference provided by the Minister are broadly similar to those for the 2007 Determination. The terms of reference note that to promote retail competition and investment the 2007 Determination aimed to achieve regulated retail tariffs that fully reflect the market-based costs of meeting each Standard Retailer's obligations to serve its regulated customers by the end of that Determination period. They indicate that the 2010 Determination should:

- ▼ ensure the aims and approach of the 2007 Determination are preserved
- ▼ be consistent with the Government's policy aim of reducing customer' reliance on regulated prices
- ▼ result in regulated tariffs that recover the efficient cost of supplying small retail customers, including customers who revert from negotiated tariffs.

In addition, the terms of reference specify that the efficient cost of supplying small retail customers should comprise three distinct cost components: an energy purchase cost allowance, a retail operating cost allowance, and a retail margin allowance. In relation to the energy purchase cost allowance, they specify that IPART should:

- ▼ result in prices that are based on the efficient costs of supplying small retail customers

- ▼ use a transparent and predictable methodology to set the allowance at a level that would allow a Standard Retailer to recover the efficient costs of managing the risks associated with purchasing electricity from the National Electricity Market (including the CPRS)
- ▼ have regard to the efficient costs of meeting Standard Retailers' other obligations in relation to energy purchases, including those of complying with greenhouse and energy efficiency schemes
- ▼ ensure that the allowance for each year is not lower than the least-cost mix of generating plant
- ▼ allow for a periodic review of the energy purchase cost allowance including the costs of greenhouse schemes and energy efficiency schemes.

In relation to the retail operating cost allowance, the terms of reference indicate that these costs include those associated with customer service, finance, IT systems and regulation. They also specify that IPART should:

- ▼ determine this allowance based on the efficient operating costs of a Standard Retailer in NSW and other information on efficient operating costs for retailers
- ▼ include customer acquisition costs in the allowance, to ensure that regulated retail tariffs are set at a level that encourages competition.

In relation to the retail margin allowance, the terms of reference specify that IPART should determine an appropriate allowance giving consideration to any risks arising from supplying regulated customers that are not compensated for through the other allowances.

A copy of the terms of reference is provided in Appendix A.

2.2 Policy, market and regulatory developments

Since the 2007 Determination, there have been a number of developments that will affect the electricity market and retail electricity prices over the 2010 Determination period. Some of these developments will place significant upward pressure on electricity prices while some create uncertainties when forecasting these costs. This Determination will be challenging and important.

The major developments include:

- ▼ the Federal Government's climate change mitigation strategy, including the planned introduction of the Carbon Pollution Reduction Scheme (CPRS) and the expansion of the Renewable Energy Target (RET)
- ▼ NSW Government's planned reforms and restructuring of the energy sector and the changes to the planned phase-out of the Electricity Tariff Equalisation Fund
- ▼ the Australian Energy Regulator's final Determination on distribution network electricity tariffs

- ▼ the decision to delay the Australian Energy Market Commission's (AEMC) review of the NSW retail electricity market's competitiveness to 2011 (rather than 2009 as originally planned).

2.2.1 The planned introduction of the Carbon Pollution Reduction Scheme

The Federal Government is implementing a national strategy for mitigating climate change that will directly affect behaviour and investment in electricity (and gas) markets. The key initiative in this strategy is the proposed CPRS which will place a price on carbon emissions and set a medium-term national target for emissions reduction. The energy sector will be covered by the scheme, and will be particularly impacted by it given that such a large proportion of electricity is produced from coal. Under the scheme, electricity generators will be required to purchase permits for each tonne of greenhouse gas they emit into the atmosphere. This will push up the price of wholesale electricity, with flow on effects for retail electricity.

The Government's 2008 White Paper indicated that the CPRS would start in 2010, with a medium-term target to reduce Australia's greenhouse gas emissions by between 5 - 15 per cent below 2000 levels by the end 2020, and a long-term target to reduce emissions by 60 per cent below 2000 levels by 2050.³ In May 2009, the Government announced several modifications to this plan,⁴ including that:

- ▼ the start date for the CPRS will be delayed by one year to 1 July 2011
- ▼ the medium-term target will increase to a 25 per cent reduction in national greenhouse gas emissions below 2000 levels by 2020 if there is global commitment to a target of this level
- ▼ the price of permits will be fixed at \$10 per tonne of CO₂ emissions for the first year the scheme is operating (2011/12), and the transition to full market trading will start from 1 July 2012.

The design of the CPRS is not yet finalised with the legislation required to enact the scheme not yet passed by the Federal Parliament. Further, there is speculation about the impact of the CPRS on electricity prices in 2012/13. Therefore, there is significant uncertainty about the CPRS and how it will affect electricity wholesale costs and retail prices over the coming years.

When coupled with the volatility in the wholesale price of electricity purchased through the National Electricity Market (NEM) over the last few years, IPART expects that this uncertainty will make it more difficult than usual to accurately estimate Standard Retailers' annual electricity purchase costs over the Determination period.

³ Federal Government, *Carbon Pollution Reduction Scheme – Australia's Low Pollution Future, White Paper*, December 2008.

⁴ Federal Government, *Media Release – New Measures for the Carbon Pollution Reduction Scheme*, 4 May 2009.

However, IPART considers that once the details of the scheme are finalised, that it will be possible to estimate the impact on electricity prices for inclusion in the retail price for both 2011/12 and 2012/13.

2.2.2 The expansion of the national Renewable Energy Target

Another important element of the national climate change mitigation strategy is the proposed expansion to the Renewable Energy Target (RET). This proposed target is for 20 per cent of Australia's electricity to come from renewable sources by 2020.⁵ It is much higher than the current target, which is for two per cent of electricity to come from renewable sources by 2010.⁶

The expanded RET will affect Standard Retailers' energy purchase costs, as under the RET scheme, they will need to create or purchase an increasing number of Renewable Energy Certificates each year (in line with their annual target) to meet their legal obligations under the scheme. Failure to meet these obligations will attract penalties.

2.2.3 NSW Government's planned energy sector reforms

On 1 November 2008, the Premier announced the NSW Government would proceed with a revised electricity reform strategy which consists of:

- ▼ keeping electricity transmission, distribution and generation assets in public ownership
- ▼ transferring the electricity retailing operations of EnergyAustralia, Integral Energy and Country Energy to the private sector
- ▼ contracting the right to sell electricity produced by state-owned generators to the private sector (the Gentrader model)
- ▼ selling a number of potential development sites for new power stations.⁷

On 5 March 2009, the Government released a strategy document outlining options for the reform of the energy sector in NSW.⁸ This paper noted that the primary objective of the energy reform process is to optimise the conditions to ensure private sector investment in generation capacity in NSW is adequate, economic and timely.⁹ The paper set out some of the key policy options the Government is considering as it finalises its approach to the transactions, and their advantages and disadvantages. It

⁵ http://www.climatechange.gov.au/renewabletarget/publications/pubs/ret_schemedesign.pdf

⁶ The RET scheme expands on the existing Mandatory Renewable Energy Target (MRET) and absorbs existing and proposed State and Territory renewable energy schemes into a single national scheme.

⁷ NSW Government, *Media Release - Rees delivers to secure the State's energy supply*, 1 November 2008.

⁸ NSW Government, *NSW Energy Reform Strategy: Defining an Industry Framework*, March 2009.

⁹ NSW Government, *NSW Energy Reform Strategy: Defining an Industry Framework*, March 2009, p 1.

also indicated that the Government had sought feedback from the market about its options.

On 12 May 2009 the NSW Government released an update on its international market testing.¹⁰ This document indicated that in response to the market testing the Government is working on a second paper to provide more detail on its electricity reform strategy and respond to issues raised by the market. It expects to release this paper and then call for formal expressions of interest in the second half of this year.¹¹

This Determination will apply to the Standard Retail Suppliers. While the NSW Government has released information on its industry reform and restructure, it is unlikely that IPART will know the final market structure (including the identities of purchasers of the generation trading rights and retail suppliers) at the time of making its decision. However, it is likely that both the retail supply and generation markets will differ from current arrangements. The market structure influences IPART's deliberations in two ways:

1. the competitiveness of the retail market informs IPART's views on the prescriptiveness of the regulatory control formula
2. the generation ownership structure affects the electricity purchase cost allowance by influencing the bidding behaviour in the NSW market (as captured in the electricity market model¹²)

Until the sale process is finalised, uncertainty will remain. However, IPART considers that the regulatory framework can be developed in a manner that accommodates this uncertainty. For example, the ownership structure could be addressed in the annual reviews of electricity purchase allowances. The advantages and disadvantages of including changes to ownership structure in the scope of the periodic review are discussed in Section 6.1.8.

2.2.4 Australian Energy Regulator's recent Determination on network tariffs

Network charges comprise around 44 per cent of the total bill for small retail customers. The Australian Energy Regulator (AER) recently released its final Determinations on distribution network charges and transmission network charges for the period 2009/10 to 2013/2014.¹³ The AER's Determination on **distribution network charges** provides for the NSW distribution network service providers (DNSPs) to increase the charges they levy on all electricity retailers, including the

¹⁰ NSW Government, *NSW Energy Reform Strategy: International Market Testing Update*, May 2009.

¹¹ NSW Government, *NSW Energy Reform Strategy: International Market Testing Update*, May 2009, p 5.

¹² The ownership structure impacts on Frontier Economics' SPARK model.

¹³ Under the National Electricity Law (NEL) and the National Electricity Rules (NER), the Australian Energy Regulator (AER) is responsible for the economic regulation of electricity distribution services provided by distribution network service providers (DNSPs) in the national electricity market (NEM).

Standard Retailers, by levels significantly higher than the change in CPI (see Table 2.1).

Table 2.1 AER’s final decision on the percentage each NSW DNSP can increase its distribution network charges in addition to the change in the CPI, 2009/10 – 2013/14

NSW DNSPs	2009/10	2010/11	2011/12	2012/13	2013/14
Country Energy	13.41	13.31	12.00	12.00	0
EnergyAustralia	17.86	12.00	12.00	12.00	8.00
Integral Energy	12.58	7.00	7.00	2.00	0

Source: AER, *Final Decision - NSW distribution Determination 2009/10 – 2013/14*, April 2009, p xlvi.

The AER noted that its decisions reflect the need for significant increases in investment on the electricity networks. This investment is necessary to improve the network security and reliability of supply to meet new licence conditions imposed by the NSW Government.¹⁴

The AER Determination on **transmission network charges** also allows for significant increases in charges primarily due to increases in its capital expenditure needs.¹⁵ The AER estimates that its final decision will result in a 4.8 per cent per annum (nominal) increase in average transmission charges in the next regulatory control period, or an increase of 2.3 per cent per annum in real terms (\$2008/09).¹⁶

However, both the NSW distribution and transmission businesses have appealed the AER’s final decisions on network charges.¹⁷ If the appeal is successful distribution and transmission price increases will exceed those set out above.

IPART has previously allowed the applicable network charges to be passed through to regulated retail charges and sees no reason to depart from this approach. Therefore, the network price increases will increase the total retail bill significantly.

2.2.5 Changes to the planned phase-out of the Electricity Tariff Equalisation Fund

The NSW Government established the Electricity Tariff Equalisation Fund (ETEF) in 2001 to manage retailer risks associated with purchasing wholesale electricity for the regulated load. These retailers contribute to and/or withdraw from the fund based on differences between the actual price they pay for wholesale electricity and the cost of this electricity assumed in setting regulated retail tariffs. Government-owned

¹⁴ AER, *Final Decision - NSW distribution Determination 2009/10 – 2013/14*, April 2009, p xi.

¹⁵ The AER determined that TransGrid’s capital expenditure would be \$2.4 billion which is an increase of over 72 per cent from the current level of \$1.4 billion in the current regulatory control period in real terms (\$2007/08).

¹⁶ AER, *TransGrid transmission Determination: 2009–10 to 2013–14, Final Decision*, 28 April 2009, p xxi.

¹⁷ <http://www.competitiontribunal.gov.au/listings.html>

generators are also required to contribute to the fund when it falls below a certain level.

At the time of the 2007 Determination, the Government planned to phase out the ETEF so that from 28 September 2008 to 28 March 2009, only 80 per cent of the Standard Retailer' regulated load would be covered by the ETEF, and this percentage would reduce to:

- ▼ 60 per cent between 29 March 2009 and 26 September 2009
- ▼ 40 per cent between 27 September 2009 and 27 March 2010
- ▼ 20 per cent between 28 March 2010 and 26 June 2010
- ▼ 0 per cent from 27 June onwards.

However, in February 2009, the NSW Treasurer, in consultation with the Minister for Energy, amended the ETEF Payment Rules to change this plan. The amended Payment Rules provide that up to and including 26 September 2009, 100 per cent of the standard retail suppliers' regulated load will remain subject to the ETEF. From 27 September 2009, 40 per cent of the regulated load will be subject to the fund. While no decision has been made to alter the timing of phase out further,¹⁸ the future of ETEF is likely to be linked to the NSW Government's reform and restructure the energy sector.

The phasing out the ETEF affects IPART's Determination to the extent that it impacts on the bidding behaviour and hence the prices in the electricity market.

2.2.6 The decision to delay the review of NSW retail market's competitiveness to 2011

The Council of Australian Governments (COAG) has committed to a range of reforms to Australia's energy markets, including an agreement to phase out retail price regulation where effective competition is demonstrated.¹⁹ To this end, the AEMC is to undertake regular assessments of the effectiveness of competition in the states' retail energy markets until all retail energy price controls are phased out.

The AEMC has completed reviews of the Victorian and South Australian markets. In both cases, it found that competition is effective and recommended that regulation should be phased out. The Victorian Government accepted this recommendation and ceased its oversight of the standing offers (regulated tariffs) on 31 December 2008.²⁰ All retail energy prices have been set by the market in that state since

¹⁸ Notice of the amendment to the Payment Rules is published in the NSW Government Gazette. http://www.treasury.nsw.gov.au/etemc/etemc_bgrd

¹⁹ Council of Australian Governments' Meeting, *Communiqué*, 10 February 2006, Appendix A to Attachment B, p 8.

²⁰ The new regime requires electricity retailers to publish widely the prices they individually offer. In addition, prices cannot change more frequently than once every six months. ESC, Media Release, 18 December 2008.

1 January 2009. However, the South Australia Government did not accept the AEMC's recommendations and has maintained retail price control for the time being.²¹

The AEMC was originally scheduled to review the NSW energy markets in 2009. However, the NSW Government noted that one of its key considerations in determining its final strategy for privatising the Standard Retailers in NSW is the protection of NSW electricity customers. To this end, it committed to continuing retail price regulation until 2013 or beyond, until it is satisfied there is sufficient competition in the NSW retail energy market.²²

The document also noted that as part of the national energy reform process, the AEMC will now conduct an independent review of the effectiveness of competition in NSW in 2011.²³ This review will include a non-binding recommendation to the Government regarding whether retail price regulation should be retained or removed in the future.

²¹ Letter to AEMC from The Hon Patrick Conlon MP, South Australian Minister for Energy, dated 6 April 2009.

²² NSW Government, *NSW Energy Reform Strategy: Defining an Industry Framework*, March 2009, p 4.

²³ NSW Government, *NSW Energy Reform Strategy: Defining an Industry Framework*, March 2009, p 4.

3 Distil the contextual factors into assessment criteria for the review

After considering all of the contextual factors discussed in Chapter 2, including the terms of reference and a range of policy, market and regulatory developments, the second step in IPART's proposed approach is to distil these factors and their implications into a set of assessment criteria for the review. IPART will also include the principles for good-regulatory-practice in these criteria.

IPART intends to use the criteria in interpreting the terms of reference, to guide its analysis and decision-making throughout the review, and to assist it in communicating the rationale for its decisions. For example, when considering options for the form of regulation and the need for additional regulatory control mechanisms, IPART intends to test the options against the assessment criteria and select those that are most consistent with the criteria, or most likely to lead to price outcomes that are consistent with the criteria.

Given this role in guiding decision-making, IPART considers it particularly important that these criteria accurately reflect the Government's objectives and requirements for the Determination (as indicated in the terms of reference) and help it take appropriate account of the risks and uncertainties created by the other contextual factors. It is also important that stakeholders carefully consider IPART's proposed criteria and raise any concerns they have about the accuracy and appropriateness in their submissions in response to this issues paper.

3.1 IPART's proposed assessment criteria

IPART proposes to use the following assessment criteria to guide it in undertaking its analysis, testing options and making decisions for the 2010 Determination.

IPART's Determination should:

1. Protect small retail customers by:
 - a) resulting in prices that are based on the efficient cost of supply in each year of the Determination
 - b) developing a regulatory framework that facilitates the development of effective retail competition
2. Ensure that the framework covers all relevant risks and efficient costs without double counting.

3. Be consistent with the aim of reducing customers' reliance on regulated retail tariffs.
4. Provide advice to the Government regarding the impact of the Determination on small retail customers
5. Be consistent with principles of regulatory best practice by:
 - a) Ensuring that where possible, decisions are made by parties in the best position to make those decisions (avoid micro-management).
 - b) Being practical, pragmatic and feasible.
 - c) Being simple and understandable.
 - d) Being targeted at the regulatory objectives.
 - e) Being proportionate with the problem.
 - f) Being internally consistent.
 - g) Being as transparent as possible.

IPART seeks comments on the following

- 1 Are IPART's proposed assessment criteria appropriate to guide IPART's analysis and decision making?

4 The effectiveness of retail market competition in NSW

The third step in IPART's proposed approach for making the 2010 Determination is to consider the effectiveness of retail market competition in NSW. This analysis will affect IPART's considerations on the form of regulation to be used in determining retail tariffs (Chapter 5). If competition is effective, it will impede retailers' ability to keep tariffs significantly above cost reflective levels. This means that regulation can be more light-handed, as competition will provide customer choices and limit prices to efficient levels.

The sections below discuss:

- ▼ IPART's findings on the level of competition for the 2007 Determination.
- ▼ The developments in retail market competition since this Determination.
- ▼ The approach IPART proposes to use to assess the effectiveness of electricity retail market competition in NSW over the 2010-13 period.
- ▼ The key challenges associated with this assessment.

4.1 What were IPART's findings on retail market competition for the 2007 Determination?

As part of its 2007 review, IPART considered the level of retail market competition in the three standard supply areas in NSW and found that there were differences across the supply areas. IPART found there was a similar level of retail market competition in the EnergyAustralia and Integral Energy supply areas. Subsequently IPART considered this to be the metropolitan market. This was in contrast to the Country Energy's supply area, or non-metropolitan market.

IPART considered whether there are certain customer groups within these markets that do not have access to the competitive market and as such constitute sub-markets (eg, customers with high or low consumption, residential or business customers, homeowners or tenants). It concluded that for the purposes of its review, there were no sub-markets in either of the main markets.

IPART also found that while retail competition was developing in both the metropolitan and non-metropolitan markets, there were differences in the effectiveness of this competition:

- ▼ In the EnergyAustralia and Integral Energy supply areas (the metropolitan market) there was sufficient competition to restrain increases in individual tariffs. Although there was still a high degree of market concentration, the fact that new entrants had acquired a significant number of small customers implied that there were no material barriers to entry in this market.
- ▼ In the non-metropolitan market, it was unclear whether there was sufficient competition to restrain increases in each individual tariff. IPART noted that new entrants to this market had not acquired a significant number of small retail customers, and a high number of customers remained on the regulated tariff.

IPART concluded that there were material barriers to entry in the non-metropolitan market, but there was potential for competition to develop further if these barriers were addressed. In addition, the 2007 Determination were intended to address some of the key barriers by:

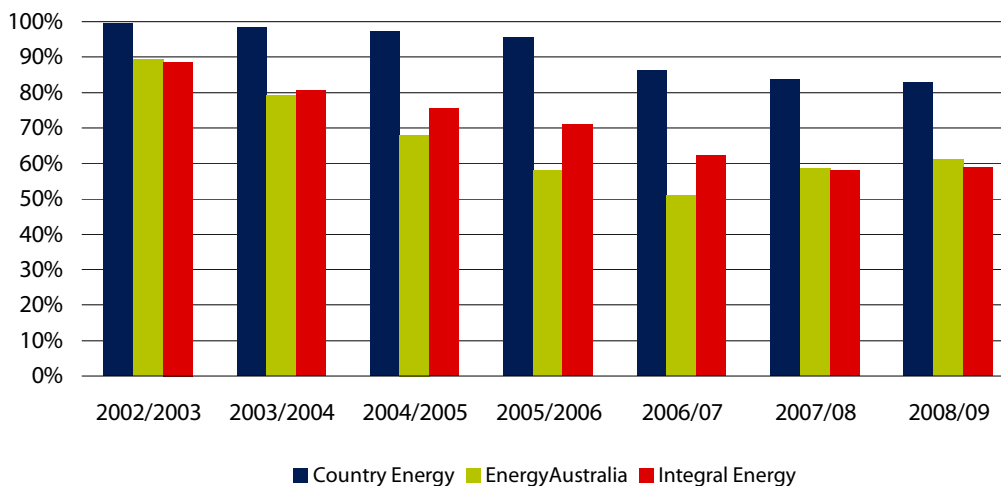
- ▼ accounting for the removal of the ETEF arrangement in the energy purchase cost allowances
- ▼ allowing regulated retail tariffs to increase to cost-reflective levels
- ▼ allowing Country Energy sufficient pricing discretion to rationalise its high number of regulated tariffs (including removing obsolete tariffs), which IPART considered were hindering the development of retail competition.

4.2 How has competition in the NSW retail electricity market developed since then?

At this stage, IPART has only limited information available to consider the developments in retail market since the 2007 Determination. However, this information suggests that:

- ▼ The Standard Retailers have continued to lose market share to new entrants. This suggests that the current conditions for entry into and expansion within the retail energy sector are a positive influence on retail competition.
- ▼ While some customers have moved off the regulated tariff, a number of customers have moved back onto the regulated tariff, particularly in the EnergyAustralia supply area (Figure 4.1). This suggests that while IPART's 2007 Determination did address some of the impediments to competition and reduced customer's reliance on regulated prices in some areas, this was not necessarily the case across all areas.

Figure 4.1 Percentage of small retail customers on regulated tariffs in each standard supply area 2002/03 – 2008/09

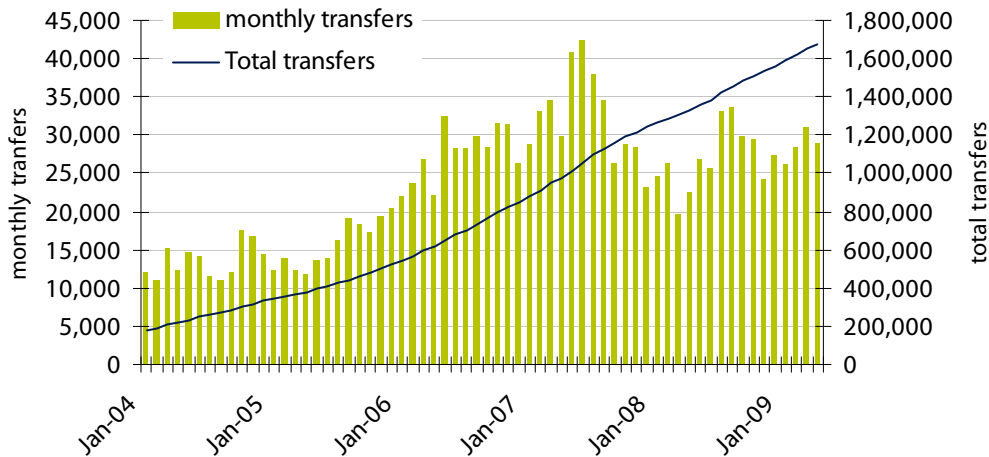


Note: 2008/09 figure is based on customer numbers as at 31 December 2008.

Source: Standard retailer annual pricing proposals.

- ▼ The level of retailer marketing activity appears to have decreased since 2007, and in the metropolitan market the discounts available to those on negotiated tariffs have decreased from up to 10 per cent to up to 5 per cent less than regulated tariffs.
- ▼ Customer switching activity appeared to have peaked during 2007, but there was still been a high level of customer switching during 2008 and 2009. However, some of this switching may be due to customers returning to a regulated tariff from second tier or incumbent retailers (Figure 4.2).

Figure 4.2 Customer switching activity in NSW 2004 - 2009



Note: The data do not include customers who have switched from a default arrangement to a market contract with their existing retailers or vice versa.

Data source: NEMMCO.

IPART seeks comments on the following

- 2 What are the relevant markets for the supply of electricity in NSW? Is there any evidence to suggest that there are separate sub-markets defined along consumption, income, residential/business or homeowner/tenant lines for small retail customers?
- 3 Has there been any significant change in the number of retailers supplying small retail customers in the metropolitan areas relative to the non-metropolitan areas?
- 4 Are there any barriers (or emerging barriers) to entry that may limit the potential for competition in the NSW retail electricity markets?
- 5 What is driving the apparent reduction in retailer marketing activity? Is there sufficient information available to customers in NSW to allow them to exercise choice?
- 6 While there appears to have been a reduction in the discounts offered to customers, has there been any innovation in the price/service packages offered to customers?
- 7 Has there been any change in the types of customers being offered competitive contracts? Is there any evidence to suggest that there are particular groups of customers that have been more or less active in the competitive market, such as pensioners or tenants?

4.3 How does IPART propose to assess the effectiveness of retail market competition in NSW over the 2010 Determination period?

IPART intends to seek key information from the Standard Retailers and other stakeholders that will enable it to assess the current level of competition in the NSW retail electricity market, and to consider whether the 2007 Determination was effective in facilitating the development of this completion.

IPART proposes to analyse the effectiveness of retail market competition by considering the structural features of the retail electricity market(s) in NSW, the conduct of this market(s), and the outcomes for customers. Specifically, IPART intends to consider:

- ▼ the definition of effective competition
- ▼ the definition of the market, including the existence of sub-markets defined along consumption, income, residential/business and homeowner/tenant lines
- ▼ market structure, including the number of retailers contesting the market, market concentration, and barriers to entry
- ▼ market conduct, including customer awareness, retailer marketing activity and market information, and retailer offers to customers
- ▼ customer outcomes, including the exercise of customers' choice and customer switching behaviour.

This approach is broadly similar to IPART's approach for 2007 Determination. It is also in line with the approach used by the AEMC in examining the effectiveness of retail energy market competition in Victoria and South Australia.

IPART seeks comments on the following

- 8 Is IPART's proposed approach for analysing the effectiveness of retail market competition appropriate for this review? Are there any other factors IPART should consider?

4.4 What are the key challenges for assessing the level of retail market competition for the 2010 Determination?

While the approach outlined above will enable IPART to assess the current level of retail market competition in NSW, it will also need to consider how the level of competition is likely to develop over the 2010 Determination period. This includes considering whether there are any impediments to retail competition that can be addressed by the 2010 Determination.

One of the key challenges in considering how competition will develop will be to identify any persistent factors that may prevent its development over the medium term, particularly in the non-metropolitan area.

Another will be to understand the implications of the NSW Government's strategy for reforming and restructuring the energy sector in NSW for the development of competition. For example, the Government has outlined the potential for transferring the electricity retailing operations of EnergyAustralia, Integral Energy and Country Energy to the private sector. Depending on the details of the transaction this may impact on the effectiveness of retail market competition in NSW. However, as Chapter 2 discussed, the final details of the Government's strategy may not be completed prior to IPART's final report and Determination.

IPART seeks comments on the following

- 9 Are there any persistent factors that may prevent the level of competition from developing over the medium term? How might IPART's 2010 Determination address these factors?
- 10 How should IPART take into account the NSW Government's strategy to restructure and reform the energy sector in NSW in assessing the future level of competition?

5 The form of regulation

Following the consideration of the terms of reference and other contextual factors, a set of assessment criteria to guide the analysis and decision making and the effectiveness of retail market competition in NSW, the fourth step in IPART's proposed approach for the review is to consider the form of regulation for the 2010 Determination period. The form of regulation can be defined as the rules and methodologies a regulator uses to determine, monitor and change tariffs for regulated services over a Determination period. Different forms of regulation can create different incentives and may have different impacts for different stakeholders and for competition in the market for small retail customers.

The key questions IPART proposes to consider in relation to the form of regulation are:

- ▼ What tariffs should be regulated?
- ▼ How should these tariffs be regulated?
- ▼ Are additional regulatory mechanisms needed?
- ▼ On what date should regulated retail tariffs change during the Determination period?

IPART proposes to use the decisions it made in relation to these questions for the 2007 Determination as the starting point for its considerations in this review. It will assess whether those decisions are consistent with the assessment criteria for the 2010 Determination, or whether enhancements or changes are needed to improve their consistency.

The sections below discuss each of the key questions listed above. They outline IPART's decisions as part of the 2007 Determination, discuss changes or developments since that Determination that may suggest different decisions would be more appropriate for the 2010 Determination, and identify the issues on which IPART particularly seeks stakeholder comment.

5.1 What tariffs should be regulated?

IPART will consider what tariffs or components of tariffs should be regulated. It will also consider whether Standard Retailers should be able to introduce new regulated tariffs and remove obsolete regulated tariffs.

5.1.1 What tariffs did IPART decide to regulate for 2007 Determination?

For the 2007 Determination, IPART decided to continue to regulate all existing regulated retail tariffs and charges for small customers who have not chosen to enter a negotiated electricity supply contract, or who have returned from a negotiated contract to a regulated retail tariff.²⁴ IPART considered several other options, including ceasing to regulate all existing regulated tariffs, and instead establishing a small number of new, basic cost-reflective regulated tariffs. Under this option, the Standard Retailers would have discretion over whether they continued to offer the existing tariffs and at what level. Customers on those tariffs would be required to actively choose to stay on their existing (now unregulated) tariff or move on to a new regulated tariff.

IPART noted that this 'opt-in' approach would have several benefits consistent with its terms of reference, including that it would:

- ▼ ensure that all regulated tariffs were cost reflective
- ▼ reduce the number and variety of regulated tariffs, and
- ▼ reduce customers' reliance on these tariffs.

However, IPART also noted that by requiring customers to actively choose to be on a regulated retail tariff, the opt-in approach would not provide as much protection for those who are not aware of their options in the competitive market. In addition, it noted that the approach may have implications for the broader regulatory framework, including the ETEF, the Standard Retailers' licences, and the use of standard form customer contracts. On balance, IPART decided to regulate all existing retail tariffs and charges for small customers who have not chosen to enter a negotiated electricity supply contract, or who have returned from a negotiated contract to a regulated retail tariff.

IPART also made several other decisions related to what tariffs or components of tariffs would be regulated. These include that:

- ▼ It would not regulate the 'green premium' component of regulated tariffs (ie, the premium paid by customers who have chosen that an agreed proportion of their electricity will be sourced from renewable energy or 'green' sources).
- ▼ Standard Retailers would not be able to establish new regulated retail tariffs unless there were exceptional circumstances and they had obtained IPART's prior approval.
- ▼ Standard Retailers would have the flexibility to rationalise their regulated retail tariffs, and to remove obsolete tariffs, as long as they continued to offer a regulated tariff to small retail customers.

²⁴ A small customer is defined as one who uses less than 160MWh of electricity per year, which is equivalent to an annual bill of around \$20,000.

- ▼ Country Energy would be subject to an additional condition such that if it intended to remove regulated tariffs and transfer customers from one tariff to another tariff, it must seek IPART's prior approval if the price applying to the two tariffs (including level and structure) was not the same.

The decision not to regulate the 'green premium' component of regulated tariffs was consistent with IPART's decision for the 2004 Determination and was intended to promote retail competition and cost reflectivity of green premiums.

IPART's decision to limit the circumstances in which new regulated tariffs could be established as well its decision to provide retailers with the flexibility to rationalise existing regulated tariffs was aimed to avoid a proliferation of regulated tariffs, which could prolong customers' reliance on regulated tariffs and have an adverse impact on the development of retail competition. This was consistent with the terms of reference (which required IPART to consider the Government's aim of reducing reliance on regulated tariffs and the effects of its decisions on the development of competition). These decisions also aimed to prevent retailers using new regulated tariffs as a means of segmenting the market (for example, offering more competitive tariffs to some regulated customers, while raising prices above cost reflective levels to customers they consider they are less likely to lose to the competitive market).

The decision to require Country Energy to seek IPART's approval if it proposes to abolish a tariff and transfer customers from that tariff to another tariff that has a different price structure and/or level was designed to ensure that it could not circumvent the threshold test (discussed in Section 5.3.3) by transferring customers from one tariff onto another tariff that is significantly higher.

5.1.2 What's changed since then?

As discussed in previous chapters, the terms of reference for the 2010 Determination are broadly similar to those for the 2007 Determination. In particular, in both cases, the terms of reference specify that the Determination should be consistent with the Government's policy aim of reducing customers' reliance on regulated prices, facilitate the development of effective retail competition for small retail customers, and result in regulated prices that reflect the efficient costs of supplying small retail customers.

This suggests that IPART's decisions for the 2007 Determination in relation to what tariffs should be regulated are likely to be consistent with the proposed assessment criteria for the 2010 Determination (see Chapter 3). However, IPART notes that the 'opt-in' approach it considered for the 2007 Determination would also be consistent with these criteria.

IPART also notes that the planned phase-out of the ETEF would reduce the potential complications associated with the opt-in approach. But changes to the broader regulatory framework would still be required, including changes to the Standard

Retailers' licences and the use of standard form customer contracts. Therefore, IPART is inclined to maintain its decision not to adopt an opt-in regulated tariff.

In relation to the decision not to regulate the green premium component of regulated tariffs, IPART is not aware of any new developments or other reasons that suggest this decision is no longer appropriate. As noted above, IPART made this decision in 2007 to promote retail competition and cost reflectivity of green premiums. These aims are consistent with the proposed assessment criteria for the 2010 Determination. Therefore, IPART is inclined to maintain this decision for this Determination.

In relation to the decisions about limiting the circumstances in which new regulated tariffs can be established and providing the flexibility to rationalise existing regulated tariffs, IPART is also not aware of any new developments or reasons that suggest these decisions are not appropriate for the 2010 Determination. The decisions are consistent with the proposed assessment criteria for this Determination, particularly reducing customers' reliance on regulated tariffs and facilitating the development of retail competition. Therefore, IPART is inclined to maintain these decisions for the 2010 Determination.

IPART seeks comments on the following

- 11 Should IPART continue to regulate all the Standard Retailers' existing regulated retail tariffs and charges for small customers?
- 12 Where a customer on a regulated tariff elects to pay a premium for green energy, should IPART continue to leave the green premium component unregulated?
- 13 Should IPART continue to limit Standard Retailers' ability to establish new regulated tariffs to where there are exceptional circumstances, and where IPART's prior approval has been obtained? If not, why not?
- 14 Should IPART continue to provide Standard Retailers with the flexibility to rationalise their regulated retail tariffs and remove obsolete tariffs, as long as they continue to offer a regulated tariff to small retail customers? If not, why not?
- 15 Should IPART continue to subject Country Energy to an additional condition such that if it seeks to remove a regulated tariff and transfer customers from that tariff to another tariff, it must obtain IPART's prior approval if the price applying to the two tariffs (including level and structure) is not the same? If not, why not?

5.2 How should tariffs be regulated?

IPART will consider what tariff setting approach it should use for the 2010 Determination, including the rules that determine, monitor and change tariffs over the Determination period.

5.2.1 How did IPART regulate tariffs for the 2007 Determination

As part of its 2007 review, IPART considered two broad options for setting regulated tariffs:

- ▼ setting target tariffs that IPART considers to be cost reflective (based on a build-up of the network and retail cost components) and requiring the Standard Retailers to move their regulated tariffs towards these targets (as it did for the 2004 Determination)
- ▼ establishing a weighted average price cap (WAPC) and allowing Standard Retailers to set their own regulated tariffs in accordance with this cap.

IPART decided to use the WAPC approach. This approach limits the average change in regulated tariffs (weighted by the relevant quantity), rather than the change in individual tariffs. It ensures that each Standard Retailer's regulated tariffs do not generate more revenue in total than allowed for by IPART (given the assumed number of customers on regulated tariffs and their assumed electricity consumption). The WAPC formula IPART adopted allows for the retailers' actual network costs to be passed through. However, the values of the other price controls in the formula are based on IPART's estimate of the efficient costs of supplying small retail customers on regulated tariffs (See Box 4.1.).

The WAPC is a more light-handed tariff setting approach than determining target tariffs and requiring retailers to move their regulated tariffs towards them. It gives retailers more discretion in setting individual regulated tariffs. That is, it allows them to decide on the level and structure of these tariffs, as long as they meet the constraint on the change in weighted average prices.

Box 5.1 The WAPC formula adopted by IPART in its 2007 Determination

$$\sum_{i=1}^n \sum_{j=1}^m P_{ij}^t \cdot q_{ij}^{t-1} \leq \sum_{i=1}^n \sum_{j=1}^m C_{ij}^t \cdot q_{ij}^{t-1} + PT^t$$

where:

$i=1, 2, \dots, n$ and $j=1, 2, \dots, m$

that is, the retailer has n regulated tariffs which have up to m components (such as a fixed component and variable components).

P_{ij}^t is the price proposed by the retailer for each component of tariff i

q_{ij}^{t-1} is the relevant quantity (eg, customer numbers or consumption in MWh)

$C_{ij}^t = N_{ij}^t + R_{ij}^t$, that is, the regulated price control set by the Tribunal

PT^t is the cost pass-through amount allowed or required by the Tribunal

More detailed definitions are provided in clause 7 of the determination. A worked example of the WAPC is provided in Box 5.1.

Each year of the determination, the WAPC will be calculated using:

1. the relevant R values determined by the Tribunal as part of this determination
2. the N values, which are equivalent to the actual network charges incurred by the retailer
3. the relevant quantities, including consumption figures and customer numbers for each tariff.

Note: Excerpt from IPART's 2007 Determination, p 55.

Under the previous target tariff approach, retailers were required to move their tariffs to the cost reflective levels determined by IPART. However, the costs used to set target tariffs were IPART's estimates and involved averaging. This means they may not have reflected the actual costs of serving different customers, and may have diverged from actual average costs during the Determination period as circumstances changed. In making its 2007 Determination, IPART considered that this may have the effect of keeping some regulated tariffs below cost-reflective levels, and so could potentially affect the development of effective competition for small retail customers and prolong customers' reliance on regulated tariffs.

In contrast, IPART considered that the WAPC approach minimises the impact of any difference between IPART's estimated costs and the underlying costs of serving different customers, by allowing retailers to respond to changes in their cost base by restructuring individual tariffs to reflect the underlying costs. IPART considered that this would facilitate the development of effective retail competition for small retail customers and reduce customers' reliance on regulated tariffs.

However, IPART recognised that the WAPC on its own, would not ensure that no individual tariffs were higher than the cost-reflective level. The potential for individual prices to exceed costs depends on the level of retail market competition. Therefore, as part of its 2007 review, IPART undertook considerable analysis on the level of retail market competition in NSW and whether competition was sufficient to restrain increases in each individual tariff.

IPART found that there was sufficient competition in the metropolitan market to restrain increases in individual tariffs above the costs of supply. For this reason, it concluded that a WAPC, together with the competitive pressures already present in the metropolitan market, provides reasonable protection against prices that are significantly above costs.

However, in the non-metropolitan market, IPART found there may not be sufficient competition to restrain increases in each individual tariff. In addition, the greater number of regulated tariffs in this market may have provided more potential for customers to be segmented. Therefore, it concluded that a WAPC may not have been sufficient on its own to ensure cost reflectivity for each of Country Energy's regulated tariffs, and that a supplementary mechanism was necessary (the 'threshold price increase test' is discussed in section 5.3.3 below). It noted that this mechanism would not prevent Country Energy from setting regulated tariffs at cost reflective levels.

5.2.2 What's changed since then?

As Chapter 2 discussed, several developments in the policy and market arena will create additional challenges for IPART in estimating some of the components of a retailer's efficient costs. Most notably, the impact of the CPRS on the wholesale electricity market and retailer's energy purchase costs is likely to be uncertain, and will be influenced by a range of factors. This heightens the risk of 'regulatory error' (ie, the risk of costs or impacts as a result of IPART making imperfect decisions).

IPART still considers that a WAPC can minimise the impact of any regulatory error associated with IPART's cost estimations (and facilitate the rationalisation of regulated tariffs), by allowing retailers to respond to changes in their cost base by restructuring individual tariffs to reflect the underlying costs. In addition, it considers that maintaining the WAPC approach would have the advantage of increasing regulatory certainty for key stakeholders, as most are already reasonably familiar with this approach.

However, IPART is aware that not all stakeholders supported its decision to adopt the WAPC approach for its 2007 Determination. In particular, consumer groups expressed concern that a WAPC would provide retailers with too much flexibility to determine the level and structure of these tariffs.²⁵

As discussed above, in making the 2007 Determination, IPART recognised that a WAPC on its own cannot ensure that all individual tariffs are cost reflective, and the potential for individual prices to depart from costs depends on the level of retail market competition. Therefore, it analysed the level of this competition in the two major markets in NSW, and decided to introduce additional measures where this analysis suggested that a WAPC would not be sufficient to provide reasonable protection against individual prices that are significantly above costs (the non-metropolitan market only).

IPART proposes to take the same approach for the 2010 review. Its preliminary analysis of the effectiveness of retail market competition was discussed in Chapter 4. However, IPART is also interested in stakeholder views on whether the WAPC approach allowed the Standard Retailers in the metropolitan market to segment certain customers and charge prices that significantly exceed the efficient costs of supply during the 2007 period, or whether this approach, together with competitive pressures, provided reasonable protection against individual prices that are significantly above costs. IPART notes that in the metropolitan area, the vast majority of regulated customers remain on EnergyAustralia's or Integral Energy's main regulated residential or business tariff.²⁶

IPART is also interested in stakeholders' views on whether there are any new developments or contextual reasons that suggest that the current WAPC approach to regulating retail tariffs may need to be modified or enhanced, or that an alternative better meets the objectives for this review.

IPART seeks comments on the following

- 16 Has the WAPC approach to regulating retail tariffs facilitated the rationalisation of regulated retail tariffs and the removal of obsolete tariffs over the 2007 Determination period?
- 17 Is there any evidence that a WAPC approach to regulating retail tariffs has allowed the Standard Retailers to segment certain customers and charge prices that significantly exceed the efficient costs of supply?
- 18 Does a WAPC based on a build-up of network charges approved by the AER and retail costs blocks estimated by IPART best meet the objectives for this review? Are there enhancements that can be made to the current approach?

²⁵ IPART, *Promoting retail competition and investment in the NSW electricity industry: Regulated electricity retail tariffs and charges for small customers 2007 to 2010*, June 2007, p 53.

²⁶ For example, around 87 per cent of EnergyAustralia's regulated residential customers are on the *Domestic All Time* tariff, while over 99 per cent of Integral Energy's regulated residential customers are on the *Domestic* tariff.

19 Are there other approaches to determining retail tariffs that IPART should consider?

5.3 Is there a need for additional regulatory instruments?

The last issue IPART proposes to consider in deciding on an appropriate form of regulatory control for the 2010 Determination period is whether there is a need for any additional regulatory instruments or mechanism.

5.3.1 IPART's 2007 Determination

For its 2007 Determination, IPART decided that no additional price constraints would apply to either the retail component of prices, or on individual customer bills. This represented a change from the 2004 Determination under which the rate at which retailers could move tariffs towards the target tariff levels were constrained by limits on increases to each retailer's total retail revenue, as well as limits on increases to individual customer bills.

However, IPART decided to introduce three additional regulatory mechanisms:

- ▼ A 'threshold price increase test' for Country Energy, which imposed additional conditions on Country Energy if it proposed to increase individual regulated tariffs above a threshold level.
- ▼ A cost pass-through mechanism, which allowed retailers to pass through to customers material increases or decreases in costs associated with regulatory or taxation change events, which were unanticipated at the time of the Determination.
- ▼ An annual review of the market-based electricity purchase cost allowance.

The sections below discuss the decisions on additional price limits, the threshold price increase test for Country Energy, and the cost pass-through mechanism, and whether they remain appropriate for the 2010 Determination. The decision to undertake an annual review of the market-based electricity purchase cost allowance is discussed in Chapter 6.

5.3.2 Additional price limits

IPART's decision not to impose additional price constraints for the 2007 Determination period was based on several factors, including that:

- ▼ The terms of reference directed IPART to ensure that if any price constraint is imposed, it should not prevent tariffs rising to cost reflective levels.
- ▼ Most of EnergyAustralia's and Integral Energy's customers were on either one or two of their regulated tariffs. This meant that most would face a price increase close to the average price increase imposed by the WAPC.

- ▼ Price constraints would limit tariff rationalisation by constraining the retailers' ability to raise under-recovering or obsolete regulated tariffs to the level of current, cost-reflective tariffs, making it more difficult to move customers onto current tariffs and abolish obsolete tariffs.
- ▼ Most of the significantly under-recovering tariffs were obsolete, which meant that no new customers had access to them. This had equity implications, as it meant that two households with the same characteristics could be on significantly different tariffs.
- ▼ Price constraints would affect the prices of all customers, whether they are vulnerable or not. IPART considered that this was not appropriate, and concerns about the impact of the Determination on specific customer groups could be better addressed through other, more targeted mechanisms.
- ▼ The Government intended to remove the option to be on a regulated tariff at some time in the future, and all customers would have to move to competitive contracts that are likely to be cost-reflective at that time. If regulated prices had been kept below cost-reflective levels, customers could face significant price shocks at that time.

IPART considers that many of these factors are still relevant to the 2010 Determination, given that the objectives for this review are broadly similar to those of the 2007 review.²⁷ IPART would like to hear stakeholders' views on whether additional price constraints are consistent with the objectives for this review, and if so, what form these price constraints should take.

5.3.3 Threshold price increase test for Country Energy

One of the additional regulatory mechanisms IPART decided to introduce in its 2007 Determination was a 'threshold price increase test' for Country Energy, which imposes additional conditions on Country Energy if it proposes to increase individual regulated tariffs above a threshold level, defined as 5 per cent greater than the average increase allowed by IPART (the WAPC).

This mechanism was designed to provide additional protection against prices that were significantly above costs in the non-metropolitan market. IPART emphasises that this mechanism allowed Country Energy to set its tariffs at cost reflective levels.

²⁷ For example the terms of reference note that to promote retail competition and investment, IPART's review should ensure the aims and approach of the 2007 Determination are preserved such that prices are based on the efficient cost of supplying small retail customers. This implies that if price constraints are imposed, they should not prevent tariffs rising to cost reflective levels. Similarly, while IPART's Determination will set prices for another 3 years, retail price regulation may be removed in the future (with the AEMC scheduled to conduct its review in 2011), at which time all customers will be on competitive contracts that are likely to be cost reflective. If regulated prices are kept below cost-reflective levels, customers could face significant price shocks at that time.

IPART decided not to introduce this test to EnergyAustralia and Integral Energy given its finding that competition in the metropolitan market was sufficient to restrain increases in individual tariffs significantly above the cost of supply. However, IPART found that the level of competition in the non-metropolitan market may not be sufficient to restrain increases in each individual tariff. In addition the greater number of regulated tariffs in this market could provide more potential for customers to be segmented, meaning that a WAPC by itself may not ensure cost reflectivity for each of Country Energy's regulated tariffs. For this reason IPART decided to introduce the 'threshold price increase test' for Country Energy.

IPART is interested in stakeholder comment as to the effectiveness of the current 'threshold price increase test' for Country Energy in achieving its objectives including providing additional protection to customers against prices that were significantly above costs without limiting Country Energy's ability to rationalise tariffs. In addition, IPART seeks stakeholder comment on whether there are any enhancements that could be made if a similar test was required as part of the next Determination. Obviously the effectiveness of retail market competition will be a central consideration for IPART and stakeholders in considering whether there is the need for additional regulatory protection for customers over the 2010 - 13 period, particularly in the non-metropolitan area.

5.3.4 Cost pass-through mechanism

For 2007 Determination period, IPART introduced a cost pass-through mechanism which allowed retailers to pass through to customers material increases and decreases in costs associated with regulatory or taxation change events, which were unanticipated at the time of the Determination.²⁸

IPART noted that regulatory events could include:

- ▼ meeting changed obligations related to green energy schemes (existing and future)
- ▼ a retailer of last resort (ROLR) event
- ▼ meeting changed obligations related to government-imposed energy hardship policies
- ▼ one-off NEMMCO charges (such as reserve trader or direction events).

IPART incorporated a pass-through amount into the WAPC formula. The pass-through amount could be positive or negative (so that both material cost increases and decreases associated with an event could be passed through). In addition, the costs had to be incremental to the original revenue allowed under the Determination. IPART also established a materiality threshold per event, so that only costs that

²⁸ The scope of this mechanism is separate to the annual review of the market based energy cost allowance.

would have a material impact on the retailer's financial position could be passed through.

The cost pass-through mechanism was designed to reduce the financial risk associated with material unforeseen or unanticipated changes in costs associated with regulatory or taxation change events. Given that it is difficult to assess the probability of a regulatory or taxation change event occurring, and that these events are both beyond retailers' control and may impose material costs on them, IPART considered it appropriate for the retailers to share some of the risk of these events occurring with customers. IPART considered that this mechanism was preferable to including an allowance for the risk that retailers will incur such costs in the retail margin.

During the 2007 period to date, there have been no regulatory or taxation change events that imposed material costs on retailers. However, regulatory change events may occur over the 2010 period. The possible events include:

- ▼ Additional or changed obligations related to green energy or energy efficiency introduced both at the State or the Federal level (provided these were not captured elsewhere, for example, as part of a periodic review of the energy purchase cost allowance).
- ▼ A Retailer of Last Resort (ROLR) event.²⁹ How the costs associated with such an event will be factored into regulated prices will be influenced by the national ROLR framework being considered by the Ministerial Council on Energy, and the NSW ROLR framework being considered by the NSW Government as part of the privatisation process.
- ▼ One-off NEM charges (such as reserve trader or direction events), which may be levied by AEMO for matters such as network reliability over the next three years. Such charges may be more likely in the 2010 period, as national climate change mitigation policies (such as the expanded RET) may increase the incentives for wind power generation, and may create a number of complexities for network reliability and problems associated with transmission congestion in remote areas.

IPART still considers that the cost pass-through mechanism included in the 2007 Determination remains an appropriate approach for ensuring that tariffs reflect the cost of supplying electricity to small retail customers if an unexpected taxation or regulatory change event occurs during the Determination period. Such a mechanism is also consistent with the aims of facilitating the development of effective retail competition for small retail customers, and reducing customers' reliance on regulated prices, because meeting these aims requires that regulated tariffs reflect all efficient costs of supplying small retail customers throughout the Determination period (even when these cost change as a result of a tax or regulatory change event during this period).

²⁹ The Retailer that would take over financial responsibility for a customer in the event that the currently responsible Retailer was unable to continue its responsibility is referred to as a Retailer of Last Resort (RoLR).

IPART is interested in stakeholders' views on whether there is any reason not to include in the 2010 Determination a mechanism that allows the Standard Retailers to pass through to customers material increases and decreases in their costs associated with regulatory or taxation change events, which were unanticipated at the time of the Determination. In particular, IPART is interested in whether the definition and scope of the pass-through mechanism in the 2007 Determination is appropriate for 2010 Determination period, or whether any enhancements or modifications are needed in light of the context and objectives for the 2010 review.

IPART seeks comments on the following

- 20 Would imposing additional price limits on individual tariffs or tariff components be consistent with the assessment criteria for the 2010 Determination? If so, what form should these price limits take?
- 21 How effective was the 'threshold price increase test' for Country Energy in providing additional protection to customers against prices that were significantly above costs without limiting Country Energy's ability to rationalise tariffs?
- 22 If IPART's analysis of the effectiveness of retail competition in the non-metropolitan market indicates that a similar test is needed over the 2010 Determination period, what modifications or enhancements could be made to the current test to improve its consistency with the assessment criteria for this Determination?
- 23 Is there any reason why IPART should not include a cost pass-through mechanism as part of the 2010 Determination?
- 24 What enhancements could be made to the current cost pass-through mechanism to make it more consistent with the assessment criteria for this Determination?

5.4 On what date should regulated retail tariffs change during the Determination period?

Over the 2007 Determination period, regulated retail prices have changed on 1 July of each year. This aligns the change in regulated retail prices with the change in electricity network prices, which are approved each year by the AER.

Over the course of the Determination, retailers have raised the possibility of altering the price change date, outlining a number of reasons including the difficulty of meeting the AER and IPART timeframes for approving regulated retail tariffs for 1 July each year and the fact that this date means prices increase during winter when most customers have higher usage.

IPART would like to hear stakeholders' views on whether there is support for altering the price change date, and any potential benefits and complications that could arise. IPART notes that to meet the terms of reference any change to the price change date would need to be revenue neutral in net present value terms. That is, if price changes were moved to 1 January each year, the price increases in the first year

would be larger than they would if they were changed on 1 July (for the same level of cost recovery).

IPART seeks comments on the following

- 25 Is there support for altering the price change date? What are the potential benefits and complications?

6 Analyse the costs that an efficient Standard Retailer will occur in supplying customers on regulated tariffs

The fifth step in IPART's proposed approach is to analyse the costs that an efficient Retail Supplier will incur in supplying small retail customers on regulated tariffs over the 2010 -13 Determination period.

One component of these costs is the fees retailers incur for using transmission and distribution network services to transport electricity from the generators to their customers' premises (the 'N component' in the current WAPC formula). These fees are regulated by the AER, and retailers have no ability to control or influence them. For these reasons, regulators usually allow retailers to pass through their actual network costs to customers. IPART took this approach for the 2007 Determination, and also intends to do so for the 2010.

However, IPART will need to estimate several other costs that retailers are able to control to determine the efficient levels of these costs over the 2010 Determination. (These costs are represented by the 'R component' in the current WAPC formula.) The terms of reference specify that these costs should include:

- ▼ energy purchase costs
- ▼ retail operating costs
- ▼ a retail margin
- ▼ energy losses, and
- ▼ market and ancillary fees imposed under the National Electricity Rules.

As Chapter 1 indicated, IPART proposes to use the methodology it used to estimate or account for these costs for the 2007 Determination as the starting point. In consultation with stakeholders, it intends to build on this method, modifying or enhancing it as necessary to ensure the new contextual factors for the 2010 Determination are accounted for. IPART considers there several advantages to this approach, including that:

- ▼ the 2007 methodology is likely to be consistent with the proposed assessment criteria for the 2010 Determination, given the similarities in the objectives and terms of reference for the 2007 and 2010 Determinations
- ▼ there is a reasonable degree of knowledge and acceptance of the 2007 methodology among stakeholders

- ▼ building on the 2007 methodology should increase the regulatory certainty for stakeholders over the 2010 Determination period
- ▼ the timetable for the 2010 review would make it difficult to develop and consult on an entirely new methodology.

An important aspect of the 2007 methodology for estimating the cost allowances (and IPART's general framework for the 2007 Determination) was to ensure that all appropriate costs and risks were accounted for, and were accounted for only once. For example, if a particular risk was addressed through the form of regulation (eg, via a cost pass-through mechanism), then the costs of managing this risk were not also included in estimated the cost allowances.

IPART intends to retain this aspect for the 2010 Determination (as reflected in the proposed assessment criterion 'determines the relevant costs and ensures that the framework covers all risks and costs without double counting'). Therefore, an important part of its methodology for estimating the cost allowances will be to analyse and consult on where within the overall 'regulatory package' certain costs or risks are best compensated for (eg, through a particular cost allowance, or another means such as a cost pass-through mechanism or mid-term review). This will involve consideration of a range of factors, including the impacts on regulatory certainty, the incentives created for retailers, the risks of over- or under-estimating particular costs and which party is best placed to manage those risks, and the implications for administrative costs.

In addition to its own analysis IPART intends to engage Frontier Economics to provide expert advice on the wholesale cost allowance and SFG Consulting to provide expert advice on the retail margin allowance in a manner consistent with the 2007 methodology. Specifically, IPART will augment the framework to reflect the developments in the market, policy and regulatory environment, and to provide additional information to improve the transparency and predictability of its framework for estimating the wholesale cost and retail margin allowance.

The sections below discuss each of the costs IPART will need to estimate for the 2010 Determination, including an overview of IPART's approach for determining these costs for the 2007 Determination, its proposed approach for the 2010 Determination, and the key issues it will need to consider.

6.1 Energy purchase costs

The NSW Standard Retailers (like other retailers operating in NSW) buy wholesale electricity in the National Electricity Market (NEM). A certain proportion of this electricity must be from renewable sources to meet their obligations under State and Federal Government schemes to reduce greenhouse gas emissions and increase energy efficiency. They also incur other costs to meet these obligations.

IPART will need to estimate an allowance to cover the costs of purchasing energy and meeting obligations under greenhouse and energy efficiency schemes to meet the demand from regulated customers over the Determination period. This allowance will comprise the largest element of the 'R component' of retailers' costs.

6.1.1 How did IPART estimate the energy purchase cost allowance for the 2007 Determination?

For the 2007 Determination, IPART asked Frontier Economics to provide expert advice and recommendations on the energy purchase cost allowance to be factored into regulated retail prices. Frontier Economics developed two estimates - one based on the long-run marginal cost (LRMC) of electricity generation, and the other a market-based assessment of the costs of electricity purchase.

In summary, the LRMC represents the least cost combination of meeting each Standard Retail Supplier's forecast regulated load to a level of system security. With a well functioning market the cost of purchasing energy in the NEM will reflect the LRMC of electricity generation. This is because the LRMC of electricity generation provides an indication of the price that a generator will require to recover its costs. However, in reality there a range of factors that will cause the two estimates to diverge including the stage of the generation investment cycle and the ultimate mix of investment.

In developing its market-based estimate, Frontier Economics took into account the costs and risks retailers would face in purchasing electricity in the absence of the ETEF. Using a consistent framework and the concepts of portfolio theory adopted in finance and investment optimisation,³⁰ Frontier Economics estimated the efficient mix of electricity purchasing instruments (ie, spot market purchases and electricity contracts of various kinds) for a range of risks. It represented the results as an 'efficient frontier'. This frontier demonstrated an important trade-off between the expected cost of the electricity portfolio and the associated risk. This frontier showed that retailers' expected electricity purchase costs will depend on how they make trade-offs between cost and risk within their portfolio.

IPART considered both Frontier Economics' LRMC and market based estimates and decided to base its decision on the energy purchase cost allowance on the market-based estimate rather than the LRMC of electricity generation, or a blend of the two. IPART noted that this decision was consistent with ensuring that regulated tariffs were at cost-reflective levels by 2010, and reflected the requirement in the terms of reference to consider the risks faced by retailers in the absence of ETEF.

³⁰ Frontier Economics, *Draft methodology for energy cost consultancy and retail costs and margin consultancy*, October 2006.

In relation to the various risks associated with electricity purchasing, IPART considered the nature of the risks, the parties best able to manage these risks, and the need for regulatory certainty. It decided to address the risks associated with market based energy purchase costs in the following way:

- ▼ The risks inherent in the load profile and customer base and managed by retailers through a combination of contracting and spot price exposure were taken into account in estimating the market-based costs, and in selecting the most conservative point on the efficient frontier (reflecting the high level of hedging a risk-adverse retailer would prefer).
- ▼ The risks associated with price variation caused by normal system volatility were taken into account by making an allowance for the cost of retailers holding sufficient working capital to withstand the resulting cash flow variations ('volatility allowance').
- ▼ The risks associated with a step change in the future wholesale electricity market price were addressed through a review of the market-based energy purchase cost allowance conducted annually during the Determination period. If this review concluded that there was a material change in the expected market-based energy purchase cost allowance, as happened in IPART's recent 2009 review, the value of the regulatory control parameter (the 'R component') was adjusted.

6.1.2 How does IPART propose to estimate the energy purchase cost allowance for the 2010 Determination?

As indicated above, IPART proposes to build on the methodology it used to determine the energy purchase cost allowance for the 2007 Determination. It considers this methodology is consistent with the proposed assessment criteria for the 2010 Determination, and the terms of reference for this Determination. These terms of reference specify that in determining the energy purchase cost allowance IPART should:

- ▼ Use a transparent and predictable methodology, and set the allowance at a level that would allow a Standard Retailer to recover the efficient costs of managing the risks associated with purchasing electricity from the NEM (including the possible introduction of the CPRS).
- ▼ Have regard to the efficient costs of meeting any obligations that Standard Retailer must comply with, including the costs of complying with greenhouse and energy efficiency schemes (including present and future State and Federal schemes).
- ▼ Ensure that the allowance for each year is not lower than the least-cost mix of generating plant, including any plant that would be required to meet any regulatory obligation, to efficiently meet each Standard Retailer's forecast regulated load. This suggests that an estimate of the LRMC of electricity generation (the least cost mix of generation plant) should act as a price floor in determining the energy purchase cost allowance.

- ▼ Allow for a periodic review of this allowance, including the costs of complying with greenhouse and energy efficiency schemes.

To build on the 2007 methodology and ensure it is consistent with the assessment criteria for the 2010 Determination, IPART will ask Frontier Economics to again provide advice and recommendations on the energy purchase cost allowance, including an LRMC-based estimate and a market-based estimate of this allowance.

It will ask Frontier Economics to augment its modelling and advice on the allowance for the 2007 review to reflect recent developments in the market, policy and regulatory environment. This will involve updating key assumptions and considering how to accommodate new issues (such as the proposed CPRS). In addition, IPART will release a paper outlining its draft methodology and assumptions, and will make this paper available on its website and seek stakeholder comments on it.

In making its decisions on the energy purchase cost allowance, IPART will also consider and consult on how relevant costs and risks associated with purchasing electricity from the NEM are best compensated for within the whole 'regulatory package' for 2010 to 2013.

6.1.3 What key issues will IPART need to consider in estimating the energy purchase cost allowance?

IPART has identified a range of issues it will need to consider in estimating the energy purchase cost allowances. These include:

- ▼ How should the methodology for estimating the energy purchase costs change in response to national climate change mitigation initiatives?
- ▼ Should the methodology for estimating these costs have more regard to market data?
- ▼ Should the methodology estimate these costs on a 'point in time' or a 'rolling average' basis?
- ▼ How should any uncertainty surrounding the NSW Government's strategy for reforming and restructuring the NSW energy sector be managed?
- ▼ How should the potential volatility in the wholesale electricity price be managed?
- ▼ How should the periodic review of the energy purchase cost allowance be designed?

These issues and IPART's preliminary views on how they should be addressed are discussed below.

How should the methodology for estimating the energy purchase cost allowance change in response to national climate change mitigation initiatives?

IPART's 2007 Determination set the energy purchase cost allowance based on the 'black price' of purchasing energy in the NEM (ie, one reflecting the cost of purchasing energy in the NEM in the absence of any climate change mitigation initiatives). IPART then added separate allowances for the costs of complying with existing mitigation measures, including the NSW Greenhouse Gas Reduction Scheme (GGAS)³¹, the Federal Mandatory Renewable Energy Target (MRET) and the NSW Renewable Energy Target (NRET).³²

However, as discussed in Chapter 2 new national climate change mitigation initiatives are likely to be introduced during the 2010 Determination period, including the proposed Carbon Pollution Reduction Scheme (CPRS) and an expanded Renewable Energy Target (RET). In particular the CPRS will affect energy purchase costs by creating a price for carbon emissions. This will have implications for both the LRMC of electricity generation and a market based estimate of energy purchase costs. (Box 6.1 provides a brief overview of how the CPRS will work.)

In general terms, the creation of a carbon price will create an additional cost for electricity generators (on top of their other costs including fuel, labour, financing etc).³³ This will increase the marginal cost of electricity generation from existing plants. The magnitude of this impact will depend on a range of factors, including the overall level of the annual cap on emissions, the price of the penalty for not purchasing and surrendering sufficient permits, and how the Australian market for permits is linked to international markets. In addition, the impact on an individual generation plant will vary, depending on the carbon intensity of the plant.

³¹ Formerly the Greenhouse Gas Abatement Scheme.

³² The MRET and NRET schemes are designed to promote the generation of electricity from renewable energy sources and require retailers to annually surrender certificates that represent the generation of electricity from renewable energy sources. The GGAS promotes the reduction of greenhouse gases associated with the production and use of electricity to a target level set for each year. Retailers must surrender certificates representing the abatement of greenhouse gases each year, based on their share of the target set for that year.

³³ Whilst the emissions per unit of electricity vary depending on the carbon intensity of generation, on average one tonne of carbon dioxide is released for each megawatt of electricity generated. AEMC, *Review of Energy Market Frameworks in light of Climate Change Policies: 2nd Interim Report*, June 2009, p 51.

Box 6.1 How the Carbon Pollution Reduction Scheme will work

Under the current proposal, the CPRS will be a 'cap and trade' scheme. A cap on the aggregate national greenhouse gas (GHG) emissions from the sectors covered by the scheme will be set annually, and this cap will be reduced each year. The Federal Government will issue permits that entitle the holder to emit GHG emissions. The total number of permits available in any year will be equal to the scheme's cap. Businesses in the sectors covered by the CPRS (including the energy sector) will be required to acquire and surrender a permit for each tonne of GHG emissions they produce during a year.

The annually reducing cap on emissions means the right to emit will become scarce, and therefore valuable. This scarcity will create a price for GHG emissions or a 'carbon price', which is represented by the price of permits. The current plan is to fix this price at \$10 per tonne for the first year the scheme is operating (2011/12), and transition to full market trading from 1 July 2012. Once the price is set by the market, permits should go to businesses that value them most highly (ie, those that face higher relative costs to reduce their GHG emissions).

The additional carbon costs generators will face have implications for estimating a market-based cost allowance because they will potentially influence how existing generators bid into the NEM. It is likely that generators will add their carbon costs to their bids, regardless of whether permits are auctioned or provided to industry as part of the Federal Government's industry assistance, due to the opportunity costs. However, the extent to which generators can pass through their costs will depend on a range of factors including the emissions intensity of the marginal plant (before and after the introduction of the CPRS), the existing mix of generation technologies in each NEM region and the competitiveness of the NEM. One of the key challenges for estimating a market-based cost allowance will be to predict how the additional carbon costs will affect generators' bidding behaviour and how this flows through to the spot and contract markets.

The CPRS also has implications for estimating an LRMC-based cost allowance because it will affect investment in new generation in favour of lower carbon technologies (such as gas) and zero carbon technologies (such as wind). The extent to which the CPRS will increase the LRMC of electricity generation will depend on the timeliness of new entry from lower carbon generation. Therefore, IPART will need to consider the likely investment in lower carbon generation over the three-year Determination period.

IPART has done some preliminary thinking on how the CPRS affects its methodology for determining the energy purchase cost allowance. It considers that Frontier Economics' methodology for estimating the LRMC of electricity generation for the 2007 Determination is able to take account of the introduction of the CPRS. The methodology for estimating the market-based cost allowance for the 2007 Determination is also able to take account of the introduction of the CPRS, as this methodology involves predicting future wholesale energy prices based on a

simulation of the operation of the NEM, including known and possible changes in market structure and operation, including generator bidding behaviour.

In addition, IPART proposes to set a carbon-inclusive cost allowance that represents a 'bundled black and green price' of purchasing energy in the NEM. This is because in the medium to longer term, it expects that generators will treat their carbon costs in a similar way to their other costs, so they will be reflected in wholesale energy markets. In other words, in the medium-long term, it will be highly difficult to separate the 'black' and 'green' elements of electricity prices in the NEM.

IPART also proposes to add allowances for the other 'green' retailer related costs, including those associated with complying with the expanded RET, recognising that GGAS will be discontinued with the introduction of the CPRS and the expanded RET. Estimating these cost allowances is likely to be less controversial than estimating the market-based cost allowance.

However, IPART recognises that in the short term, generators may not treat the cost of carbon as 'just another cost' and it may be possible to separate the 'black' and 'green' elements of electricity prices (ie, determine a 'black' wholesale allowance and then add an allowance for the impact of the CPRS). Therefore, it seeks stakeholder comment on the advantages and disadvantages of setting a carbon-inclusive energy purchase cost allowance (a 'bundled black and green price') relative to a carbon-exclusive cost allowance (a 'black price') and then adding the costs of the CPRS. Importantly IPART emphasises that in theory the final impact of the CPRS on regulated retail prices should not differ between these approaches.

IPART notes that there is likely to be uncertainty over key elements of the CPRS. Once the legislation is finalised some of the key inputs required to model the wholesale electricity purchase cost allowance are likely to be certain. However, others (such as market-based carbon prices through time) will still be subject to significant uncertainty. As noted above, IPART will publish a methodology and assumptions document which addresses a number of these key uncertainties. IPART will seek stakeholder comment on this document.

In addition, although the final details of the CPRS, including the final White Paper and Government negotiation, are scheduled to be completed by mid-2009, IPART will need to develop a process to deal with uncertainty surrounding:

- ▼ the final details of the scheme if the legislation is delayed and/or changed
- ▼ forecasts of key assumptions used to estimate the energy purchase cost allowance such as carbon prices.

One way of dealing with this uncertainty is through a periodic review of the cost allowance. Issues related to this review are discussed in section 6.1.8. However, IPART emphasises that costs and risks associated with purchasing electricity from the NEM must be compensated for once and only once in the regulatory package.

IPART seeks comments on the following

- 26 Is there any reason why IPART should not set a bundled 'black and green' (carbon-inclusive) energy purchase cost allowance and then add an allowance for the costs of complying with other green schemes including the MRET?
- 27 How would any IPART decision to set a carbon-inclusive energy purchase cost allowance relate to the scope and timing of any periodic review?

6.1.4 Should the methodology for estimating energy purchase costs have more regard to market data?

The proposed methodology for estimating the market-based energy purchase cost allowance involve predicting future wholesale market prices based on a simulation of the operation of the NEM. These market outcomes then feed into Frontier Economics' portfolio optimisation model which estimates optimal combinations of contract cover and spot price exposure for given levels of risk.

While in the 2007 Determination (and subsequent annual reviews) Frontier Economics had regard to the retailer's estimates of future costs and market sources (such as d-cypha data³⁴) stakeholders have commented that greater use should be given to publicly available market data.

Part of the reason that Frontier Economics' approach did not rely on market-based data was that at the time of the modelling work for the 2007 Determination, d-cypha trading volumes were such that the market was not considered sufficiently liquid.³⁵ While there are other market indices such as the AFMA curve, IPART has previously noted the potential complications with using this data, including the potential for manipulation given that the AFMA Curve is an industry price survey, and therefore represents each participant's view of where the future market lies (as opposed to actual trading prices).³⁶

The Queensland Competition Authority's (QCA) recent decision on regulated electricity tariffs for 2009/10 noted that its consultant used "publicly available data on the spot electricity price and d-cypha data on the cost of derivative contracts."³⁷ Similarly the Independent Competition and Regulatory Commission's (ICRC) recent decision for 2009/10 tariffs in the ACT noted that it estimated the cost of purchasing electricity, "using publicly available market data on historical and future electricity

³⁴ D-cypha Trade provides electricity futures market data to market participants of the Sydney Futures Exchange Energy derivatives market.

³⁵ Also, hedge price data based on actual trades represents a relatively small and unrepresentative quantity of total trade in the market as most hedging occurs in the Over-The-Counter (OTC) market, the results of which are not publicly available.

³⁶ IPART, *Promoting retail competition and investment in the NSW electricity industry, Regulated electricity retail tariffs and charges for small customers 2007 to 2010 – Final Report and Final Determination*, June 2007, p 86.

³⁷ QCA, *2009-10 Benchmark Retail Cost Index: Final Decision*, June 2009, p 13.

prices combined with a range of assumptions regarding purchasing activities of an electricity retailer.”³⁸

Frontier Economics’ recent report (as part of the 2009 annual energy cost review) indicated that trading volumes for d-cypha contracts have increased since 2007 making it a more liquid market.³⁹ However, it also noted that market trading volumes may not have increased uniformly. At the time of this report, there was relatively low traded volume post 2010/11 reflecting uncertainty surrounding the CPRS and the roll-off of the ETEF.

As discussed above, the CPRS is likely to introduce additional complexity in estimating wholesale market outcomes, particularly while uncertainty remains. Therefore, an important issue for consideration is whether there is reliable publicly available data on future electricity prices and whether Frontier Economics’ approach should incorporate greater use of this data.

Frontier Economics will provide advice to IPART on this issue, which will be discussed in the draft methodology paper. IPART is also interested in hearing stakeholders’ views.

IPART seeks comments on the following

- 28 Is there publicly available data on future electricity prices that could be used to estimate a market-based energy purchase cost allowance? What are some of the benefits and complications of using this data?

6.1.5 Should market-based energy purchase costs be estimated on a ‘point in time’ or a ‘rolling average’ basis?

In estimating the market-based energy purchase cost allowance for the 2007 Determination, Frontier Economics’ approach was to take a ‘snapshot’ of estimated wholesale market price outcomes based on the information available at a particular point in time. It then used these market price outcomes to determine the efficient mix of electricity purchasing instruments (ie, spot market purchases and electricity contracts of various kinds) for each level of risk.

Observable market data on forward contract prices is typically volatile, so that decisions about the time at which forward prices are assessed will have an impact on regulated tariffs. For instance, taking a snapshot of d-cypha data at one particular point in time could lead to very different results than if the snapshot had been taken at another point in time. This is in contrast to estimations of future wholesale market prices (such as Frontier Economics’ estimations which are based on a simulation of

³⁸ The Commission purchased data from d-cypha Trade on electricity futures and swap prices and used that information to estimate average peak, shoulder and off-peak electricity prices. ICRC, *Retail Prices for Non-contestable Electricity Customers, 2009–2010: Final Decision*, June 2009, p 28.

³⁹ Frontier Economics, *Annual energy cost review, Response to submissions from stakeholders*, May 2009, p 2.

the operation of the NEM) which are unlikely to be volatile unless key assumptions are altered in light of new market information.

In its recent decision, the ICRC noted that it had assumed a forward purchasing strategy in which the retailer begins to build its portfolio 24 months in advance. It assumed that the forecast load is hedged for each 6-month period of future delivery. Similarly, the QCA's decision noted that the purchase cost of energy was estimated based on a combination of spot market energy prices and contracts that a prudent and efficient retailer could be expected to purchase over a **two year period** in order to meet the NEM load.⁴⁰

IPART intends to consider whether the market-based energy purchase cost allowance should be based on a particular 'point in time' (or snapshot) relative to a staged or rolling estimate, similar to the ICRC and QCA approach. However, IPART notes that the ICRC has identified a need to undertake a review of this methodology should price regulation continue in the ACT.⁴¹

IPART notes that to allow a 'rolling average' would compensate retailers for any contracts previously entered into that are now 'out of the money'. It would also not reward retailers for contracts previously entered into that are 'in the money'. In other words, using a rolling average contract price would not value the contract at the **current** market price for the instrument (known as 'marking to market').⁴² This issue will be addressed in the draft methodology paper.

IPART will need to analyse this issue consistent with its approach to other costs, and other decisions, including the extent to which it attempts to mirror costs (noting the different strategies employed by retailers) over time.

IPART seeks comments on the following

- 29 Should the approach to estimating the market-based energy purchase cost allowance be based on a particular 'point in time' or rolling estimate? What are the implications for the other cost components?

6.1.6 How should the uncertainty surrounding the NSW Government's strategy for reforming and restructuring the NSW energy sector be managed?

The proposed methodology for estimating the market-based energy purchase cost allowance involves forming a view on the structure of the energy market.

⁴⁰ QCA, *2009-10 Benchmark Retail Cost Index: Final Decision*, June 2009.

⁴¹ ICRC, *Retail Prices for Non-contestable Electricity Customers, 2009-2010: Final Decision*, June 2009, p 45.

⁴² Mark-to-market or fair value accounting reflects that the fact that a contract is not worth what was paid for it but rather its market price today.

The NSW Government's reform strategy paper outlined a number of options for the reform of the energy sector in NSW.⁴³ The Government is currently working on a second paper to provide more detail on its electricity reform strategy and respond to issues raised during the market testing.⁴⁴ However, the final details of the transaction and therefore the ownership structure of the market may not be completed prior to IPART's final report and Determination.

If this is the case, IPART will need to assume an ownership structure when modelling behaviour in the NEM. Under the proposed methodology, the ownership structure will affect the bidding behaviour of the generators and therefore, spot price forecasts. Its preliminary view is that it will assume the current ownership structure if the final details are not known. IPART notes that the impact of changes to the ownership structure could be included in the scope of the periodic review as it was in the 2008 and 2009 annual reviews. This is discussed further in Section 6.1.8.

6.1.7 How should the potential volatility in the wholesale electricity price be managed?

The wholesale energy spot market is influenced by demand, weather, fuel and other input costs, generator outages, transmission constraints and strategic bidding behaviour. Therefore, there is considerable potential for volatility in the wholesale electricity price.

One of the key issues IPART considered as part of the 2007 review was how to deal with this potential volatility over the Determination period. It decided to account for the risks associated with price variation caused by normal system volatility by making an allowance for the cost of retailers holding sufficient working capital to withstand resulting cash flow variations (the 'volatility allowance'). IPART considered that this approach:

- ▼ represented an efficient and reasonable means of addressing this residual risk
- ▼ was consistent with the approach adopted in other decisions where the costs of working capital are taken into account
- ▼ was objective and transparent.

The CPRS introduces a new and potentially uncertain cost into the supply chain for wholesale electricity. The Federal Government has indicated that during the first year of the scheme, the carbon price will be fixed at \$10 per tonne of emissions.⁴⁵ After this, and until a liquid market for carbon develops, carbon costs may be highly volatile and subject to both Australian and international market factors. During this period, retailers may face additional risk if they are required to buy energy in a

⁴³ NSW Government, *NSW Energy Reform Strategy: Defining an Industry Framework*, March 2009.

⁴⁴ NSW Government, *NSW Energy Reform Strategy: International Market Testing Update*, May 2009, p 5.

⁴⁵ Federal Government, *Media Release – New Measures for the Carbon Pollution Reduction Scheme*, 4 May 2009.

highly volatile wholesale market, and they have access to limited hedging, while supplying customers at capped regulated rates. In addition, the Market Price Cap (formerly known as the Value of Lost Load) is to increase from \$10,000/MWh to \$12,500/MWh from 1 July 2010.⁴⁶

One way of dealing with this volatility is through a volatility allowance similar to the allowance provided in IPART's 2007 Determination, updated to reflect new assumptions. In addition, IPART proposes to consider the extent to which retailers are able to effectively hedge against increased wholesale electricity price volatility and whether this represents an efficient means of addressing this residual risk.

IPART is interested in stakeholders' views on this issue. However, again, it emphasises that all appropriate costs and risks associated with purchasing electricity from the NEM should be compensated for once and only once in the regulatory package. This will require analysis and consultation on where within the framework (energy costs, retail operating costs or margin) particular costs and risks are best compensated.

IPART seeks comments on the following

- 30 Is a volatility allowance an efficient and reasonable means of addressing the risk of wholesale electricity price volatility in the context of the CPRS? Or should this risk be managed and compensated elsewhere?

6.1.8 How should the periodic review of the energy purchase cost allowance be designed?

For the 2007 Determination, IPART decided to address the risks associated with a step change in the future wholesale electricity market price by conducting annual reviews of the market-based energy purchase cost allowance during the Determination period. In making this decision, IPART weighed the advantages of setting prices for three years to provide regulatory certainty and incentives for the businesses to pursue efficiency gains against the need to address the risk of under- or over-estimating the volatile wholesale electricity prices. It considered that its decision addressed these risks in a way that provides certainty, minimises perverse outcomes and is relatively simple.

As discussed above, the CPRS introduces a new, and potentially uncertain, carbon cost into the supply chain for wholesale electricity. Therefore, it is possible that as information on carbon prices, and their impact on the wholesale energy market emerges, the energy purchase cost allowance included in the 2010 Determination may significantly over or underestimate the costs of purchasing energy in the NEM. This is most likely to be in the third year of the Determination period (2012/2013) when the permit price begins to be set by the market.

⁴⁶ *National Electricity Amendment Rule 2009 No. 13.*
<http://www.aemc.gov.au/Electricity/Rule-changes/Completed/NEM-Reliability-Settings-VoLL-CPT-and-Future-Reliability-Review.html>

The terms of reference for this review require IPART to allow for a periodic review of the energy purchase cost allowance, including the costs of complying with greenhouse and energy efficiency schemes. To do this, IPART will need to consider a number of issues related to the design of this review, including:

- ▼ the review's scope
- ▼ the review's frequency and timing
- ▼ the level of the materiality threshold
- ▼ whether the review is symmetrical and provides for both cost increases and decreases.

IPART notes that in considering the appropriate design of the periodic review, it will need to take account of factors such the need for addressing the risk of under- or over-estimating the energy purchase cost allowance, the ability of retailers to manage wholesale cost changes⁴⁷, who is best placed to bear this risk, and the incentives created as part of this periodic review. Stakeholders also need to consider the administrative costs associated with a periodic review. A wider scope of the review will increase costs and uncertainty and extend the required timeframes.

What is the appropriate scope for the periodic reviews?

In its 2007 Determination, IPART decided that to increase regulatory certainty and minimise any perverse incentives, the scope of the annual reviews of the energy purchase cost allowance would be limited. It decided that in undertaking these reviews, it would adopt the same approach it used in making the 2007 Determination including:

- ▼ adopting the conservative approach to estimating the market-based energy purchase costs
- ▼ using the same forecast load profiles that were used at the time of the 2007 Determination (ie, that it would not update the load profile).

IPART also decided that it would **not** reconsider the LRMC of generation, the volatility allowance, green energy costs, NEM fees, energy losses, retail operating costs, customer acquisition costs or the retail margin.

However, the terms of reference for the 2010 Determination imply that the scope of period reviews during this Determination period should be wider. In particular, they specify that the reviews should consider the costs of complying with greenhouse and energy efficiency schemes. They also indicate that in determining the energy purchase cost allowance, IPART should use the LRMC of generation as a price floor. This suggests that IPART may need to consider this LRMC as part of the periodic reviews.

⁴⁷ A key focus of IPART's ongoing analysis will be to understand what instruments are available to efficient retailers to manage this risk, how this risk is allocated and the costs associated with managing this risk.

If the LRMC is not expected to change over the 2010 Determination period, there would be no need to reconsider the LRMC – rather, the LRMC determined by IPART when it made the Determination could be ‘locked in’ for the whole period. However, if there is the potential for the LRMC to alter significantly over the period, this would suggest that in conducting its periodic review IPART would need to recalculate the LRMC of meeting each Standard Retail Supplier’s forecast regulated load.

IPART is interested in stakeholders’ views on the extent to which the LRMC is likely to fluctuate over the period, particularly as increases in carbon prices significantly increase the LRMC of carbon-intensive generation.⁴⁸ An important issue would seem to be the timeliness of new entry of lower carbon and zero carbon technologies.

In addition, IPART notes that there are several other costs and risks it could consider as part of the periodic review – including the volatility allowance, the load profile, and the impact of any change in the energy purchase cost allowance on the retail margin (which is calculated as a fixed amount). IPART could also consider the impact of changes to the industry structure and the Federal Government’s climate change initiatives. However, IPART emphasises that the periodic review essentially allocates some risk to customers, suggesting that retailers should not be compensated for these risks elsewhere, such as in the retail margin. This suggests that the wider the scope of the periodic review (or the greater the frequency of the review), the less risks should be accounted for in the retail margin. As noted above, IPART will need to ensure that the costs and risks associated with purchasing electricity from the NEM are compensated for once and only once in the regulatory package. This means that in commenting on the appropriate scope of periodic review, stakeholders should consider where and how within the package each cost and risk is best accounted for.

IPART seeks comments on the following

- 31 What is the appropriate scope of IPART’s periodic review and how should it be conducted?

What is the appropriate frequency and timing for the periodic reviews?

The annual reviews of the energy purchase cost allowance over the 2007 Determination period were not designed to deal with the complexities of the CPRS and the potential impacts the CPRS may have on wholesale energy market prices.

The AEMC, which is currently conducting a review of energy market frameworks in light of climate change policies, has expressed concern that the current retail price regulations do not offer a mechanism to allow sufficient flexibility to deal with potentially significant and rapid changes in retail costs stemming from the CPRS.⁴⁹

⁴⁸ Frontier Economics, *Impacts of climate change policies on generation investment and operation*, Report for the AEMC, December 2008, p 30.

⁴⁹ AEMC, *Review of Energy Market Frameworks in light of Climate Change Policies: 1st Interim Report*, December 2008, p vi, and AEMC, *Review of Energy Market Frameworks in light of Climate Change Policies: 2nd Interim Report*, June 2009, p 52.

Under the current legislation, the CPRS will potentially have the largest impact on wholesale energy prices in the final year of the 2010 Determination period (2012/13). This suggests that in the first two years, an annual review may be sufficient to account of any step change in wholesale energy markets; however, IPART will need to consider whether more frequent reviews are needed in the third year to take account of rapid movements in wholesale energy markets and the extent to which retailers are exposed to any such movement. It will also need to consider that more frequent reviews would impose additional administrative costs on IPART and stakeholders, and would reduce regulatory certainty.

IPART notes that the AEMC has made a draft recommendation that all jurisdictions develop an adjustment mechanism for energy and carbon costs which can be invoked as frequently as six monthly subject to a cost change threshold.⁵⁰

IPART seeks stakeholder comment on the appropriate frequency of a periodic review, taking into account the costs associated with more frequent reviews including the administrative costs, the impacts on regulatory certainty and impacts on incentives for efficiency and risk management.

IPART seeks comments on the following

32 What is the appropriate frequency and timing of the periodic review?

[What is the appropriate materiality threshold for the periodic reviews?](#)

As part of the annual review in its 2007 Determination IPART incorporated a threshold for change of 10 per cent, recognising the principle of materiality, and the objective of regulatory efficiency including minimising administrative costs.

In making this decision, IPART noted that a higher threshold may result in retailers being exposed to costs significantly above the allowance, and may have a significant impact on the competitive market. IPART decided not to set a lower threshold as this implied a very high level of accuracy in the estimates and in the extreme could involve IPART setting new R values each year, which would not be consistent with encouraging retailers to manage small cost changes which would be viewed as part of the ordinary operation of business.

IPART seeks comments on the following

33 Is there any reason to adopt a threshold for change of more or less than 10 per cent?

⁵⁰ AEMC, *Review of Energy Market Frameworks in light of Climate Change Policies: 2nd Interim Report*, June 2009, p 49.

Should the periodic reviews be symmetrical?

If the periodic review is symmetrical, both material increases and decreases in the energy purchase cost allowance would be reflected in regulated retail tariffs.

The terms of reference emphasise that IPART's Determination should protect small retail customers by resulting in prices that are based on the efficient cost of supply in each year of the Determination. This suggests that the review should be symmetrical. This would be in line with the cost pass-through mechanism in IPART's 2007 Determination.

IPART seeks comments on the following

- 34 Is there any reason that the periodic review should not be symmetrical such that both material increases and decreases are reflected in regulated retail tariffs?

6.2 Retail operating costs

Retailers' incur a range of costs in performing their retail business functions – such as costs related to billing, marketing, providing customer advisory services, advertising and promotions, and time spent handling customer inquiries. IPART will need to estimate an allowance to cover the retail operating costs involved in serving regulated customers.

6.2.1 How did IPART estimate the retail operating cost allowance for the 2007 Determination?

The terms of reference for the 2007 review required IPART to consider new entrant retail operating costs in the mass market. This represented a significant change from the approach IPART had taken in its previous Determination.

IPART accepted that the allowance for mass market new entrant retail costs included both retail operating costs and the costs to acquire new customers. IPART engaged Frontier Economics to estimate an appropriate allowance for retail costs including customer acquisition costs.

Frontier Economics developed a range using a bottom-up approach based on cost information provided by the Standard Retailers as a proxy for mass market new entrant costs. Frontier Economics then benchmarked the results against regulatory decisions in other jurisdictions.

IPART's final decision was to provide a retail operating cost allowance of \$105 including customer acquisition costs of \$35. IPART decided to remove \$5 from the allowance to account for double counting in the allowance.⁵¹

⁵¹ IPART, *Promoting retail competition and investment in the NSW electricity industry: Regulated electricity retail tariffs and charges for small customers 2007 to 2010*, June 2007, p 94.

6.2.2 How does IPART propose to estimate the retail operating cost allowance for the 2010 Determination?

The terms of reference for the 2010 Determination specify that IPART is to determine the retail operating cost allowance taking into account NSW Standard Retailers' efficient costs and other available information on efficient operating costs for retailers. The terms of reference also note that to ensure regulated retail tariffs are set at a level which encourages competition in the retail electricity market, IPART should include customer acquisition costs in this allowance.

The scope and nature of retail business activities for regulated customers are relatively well understood. The associated costs are generally viewed as being sufficiently generic and stable for retail operating costs to be assessed through a combination of benchmarking and sourcing data from other jurisdictions and industries.

IPART proposes to undertake its own analysis of retail operating costs given the considerable analysis undertaken as part of the 2007 Determination. IPART will seek information from the Standard Retailers and other stakeholders.

A key difference in the terms of reference for the 2010 review is the requirement for IPART to review the retail operating costs, including the customer acquisition costs, of an efficient Standard Retailer, as opposed to a mass market new entrant. IPART notes that while a mass market new entrant retailer must acquire all its customers, a Standard Retailer has an existing customer base.

In undertaking its analysis of an appropriate allowance for retail operating costs including customer acquisition costs, IPART proposes to consider:

- ▼ Any new retail business activities and changes to existing activities. This will involve understanding the drivers for the changes, assessing whether they are material and assessing whether they are additional to, or instead of other activities.
- ▼ Whether previous analysis and benchmarks are a valid starting point and, if not, whether there are any alternative approaches.
- ▼ The relationship between retail operating costs and other cost allowances.
- ▼ The customer acquisition costs incurred by Standard Retailers.
- ▼ The number of years over which to allocate any customer acquisition costs (the assumed 'life of a customer').

IPART seeks comments on the following

- 35 Have there been any significant changes to retail business activities? Are previous retail operating cost analyses and benchmarks a valid starting point? If not what are the alternative approaches?

- 36 What is an appropriate basis for assessing the customer acquisition costs of an efficient Standard Retailer?

6.3 Retail margin

In relation to the small retail customers, electricity retailers play a buffering role between the supply and demand sides of the market; they buy electricity from supplier through the spot and contract market and then generally sell this to customers at a fixed price. Retailers are compensated for the risk involved in this activity, and the capital employed in this business, through the retail margin.

6.3.1 How did IPART determine the retail margin for the 2007 Determination?

The terms of reference for the 2007 Determination required IPART to consider a mass market new entrant margin. This represented a significant change from the approach IPART had taken in its previous Determination.

IPART engaged Frontier Economics and SFG Consulting to provide advice on an appropriate retail margin reflecting that of a mass market new entrant. Frontier Economics and SFG Consulting recommended a range of 4 to 6 per cent of total sales.⁵² Frontier Economics and SFG Consulting developed this range after applying three approaches, which resulted in:

- ▼ the bottom-up approach – 4.3 to 5 per cent
- ▼ expected returns approach – 4.3 to 6.4 per cent
- ▼ benchmarking approach – 4 to 6 per cent.

IPART decided to adopt a retail margin of 5 per cent, which was an increase from the 2 per cent margin incorporated in the previous 2004 -2007 Determination. This was calculated as a dollar amount on total sales.

6.3.2 How does IPART propose to determine the retail margin for the 2010 Determination?

As noted above, the terms of reference for this Determination require IPART to focus on the efficient costs of NSW Standard Retailers, not mass market new entrants. They also note that IPART should determine an appropriate retail margin taking account of any risks arising from supplying regulated customers not compensated for elsewhere (eg, in another cost allowance or through a cost pass through mechanism or mid-term review).

⁵² Frontier Economics, *Mass market new entrant retail costs and retail margin: Final Report*, March 2007, p 68.

Since the 2007 review, the wholesale electricity market has commenced a transition to a carbon constrained industry; the transition period will be accompanied by uncertainty and potentially increased risk. The wholesale market developments will affect wholesale electricity prices, and may affect the scope and nature of the retail business. In addition, the NSW reforms, which include the ETEF roll-off and potential privatisation, affect the retail business activities.

For the 2010 review, IPART will need to consider how these market changes are likely to affect the retail business and whether or not any additional risks are most appropriately compensated for in the retail margin. To inform its decision on this margin, IPART proposes to seek advice from SFG Consulting. It will ask them to use the same approaches to determining a retail margin as for the 2007 review, but to take account for the requirements in the terms of reference for the 2010 review and the changes in the industry context. These approaches included a bottom-up approach, an expected returns approach and a benchmarking approach:

- ▼ The bottom-up approach estimates the return that a retail business requires for each of the individual risks that it faces in providing the retail service, and combines these individual components of the margin to determine a total retail margin. It is important that when using this approach to estimate the retail margin a consistent approach is used to consider the risks in each of the cost categories (wholesale electricity costs including the periodic review, retail operating costs and retail margin).
- ▼ The expected returns approach is based on the principle that businesses should be compensated for the systematic risk to which they are exposed. This approach estimates the expected cashflows that a retailer will earn and the risk associated with these cashflows, and determines a retail margin that will compensate investors for the systematic risk of the cashflows. As part of the expected returns approach, the correlation of energy consumption and GDP growth activity needs to be considered. Frontier Economics and SFG Consulting will provide advice on this issue.
- ▼ The benchmarking approach examines allowances for the electricity retail margin from regulatory decisions in other jurisdictions, and estimates an appropriate retail margin based on these comparisons.⁵³

IPART will also be undertaking its own analysis of the risks and uncertainties to be taken into account in the retail electricity Determination package, and deciding on how each risk or uncertainty is best allowed for, if at all. This analysis will draw on the proposed assessment criteria set out in Chapter 3.

IPART seeks comments on the following

- 37 Is IPART's proposed approach for determining the retail margin for the 2010 Determination appropriate? If not, what are the alternative approaches?

⁵³ For more detail see, Frontier Economics, *Mass market new entrant retail costs and retail margin: Final Report*, March 2007.

- 38 Have there been any significant changes to retail business activities? And if so, what are the implications for the retail margin?

6.4 Energy losses

The terms of reference note that IPART should allow for energy losses as published by the Australian Energy Market Operator (AEMO).

Energy losses refer to the energy that is lost as it flows through the transmission and distribution networks. As retailers record energy consumption at the customer's meter but are billed for the energy sent out from the generator, their energy purchase costs need to be adjusted for these losses (the difference between total energy purchase and total sales).

The loss factors taken into account in the regulated retail price controls are total system losses. The system loss factors vary for each Standard Retailer and are calculated by multiplying transmission and distribution losses. Transmission and distribution losses are approved by NEMMCO (soon to be AEMO) and the AER. They are then published on the NEMMCO website.

In its 2007 Determination IPART noted that without any means of predicting variation in losses over time, the losses incorporated into the Determination should be based on the most recent information available and should remain the same throughout the Determination period. The annual movement in loss factors is unlikely to have a significant impact on final prices.

The 2007 Determination incorporated a loss factor for each retailer into the R component of regulated retail tariffs. For Country Energy, separate urban and rural loss factors were incorporated. This means converting the loss factors into a dollar per MWh allowance.

IPART seeks comments on the following

- 39 Are there any reasons why IPART should alter the approach it used for the 2007 Determination to incorporate energy losses into regulated retail prices?

6.5 Market and ancillary fees

The terms of reference note that IPART should allow for market fees and ancillary fees as imposed by AEMO under the National Electricity Rules.

National Electricity Market (NEM) fees are levied on retailers, generators and market participants to cover NEMMCO's costs. Ancillary charges cover the cost of the ancillary services purchased by NEMMCO to ensure the power system remains in a secure state. Both NEM fees and ancillary charges are levied on retailers on a per MWh basis according to their electricity purchases. NEM fees do not vary according to retailer.

6 Analyse the costs that an efficient Standard Retailer will occur in supplying customers on regulated tariffs

NEM fees and ancillary charges are a relatively small component of retailers' total costs. NEM fees are relatively stable as they are based on the operational expenditure of NEMMCO. Ancillary service costs are somewhat more difficult to estimate as these costs are likely to vary over time.

IPART proposes to seek Frontier Economics' advice on likely movements in NEM fees and ancillary charges over the 2010 Determination period.

IPART seeks comments on the following

- 40 Are NEM fees and ancillary charges likely to significantly change from their current levels over the 2010 Determination period?

7 Non-tariff fees and charges

The terms of reference require IPART to consider and report on the basis for setting regulated retail non-tariff fees and charges (miscellaneous charges). These charges are fees that energy retailers charge as a result of a request from a customer, or when a customer takes (or fails to take) certain actions. Thus, miscellaneous charges are not a routine part of retail supply services, but arise from particular events associated with the supply of energy to individual customers.

The Electricity Supply Act 1995 (ESA) defines regulated retail charges as a:

- ▼ security deposit
- ▼ late payment fee, or a
- ▼ dishonoured bank cheque fee.

No other retail charges are allowed to be levied on regulated customers.

Since the 2007 review, IPART is unaware of any developments that impact on these charges and does not foresee any major changes to these charges. Nevertheless, IPART intends to establish a working group comprising representatives or retailers, community welfare organisations and EWON to provide information and comment on these charges.

The sections below provide an overview of each of these charges, including the level of the charge under the 2007 Determination and equivalent charges in other jurisdictions.

7.1 Security deposit

Standard Retailers can apply a security deposit at:

- ▼ 1.5 times the average quarterly electricity account, or
- ▼ 1.75 times the average 2-monthly electricity account, or
- ▼ 2.5 times the average monthly electricity account.

The circumstances surrounding the charging and return of security deposit were set out in the 2007 Determination. Since that time, no issues have been raised with IPART regarding the level or imposition of those charges.

IPART seeks comments on the following

- 41 Is there any reason to change the level of the security deposit or the circumstances surrounding the charging of security deposits?

7.2 Late payment fee

In the 2007 Determination, IPART increased the late payment fee from \$5 to \$7 and set out the conditions under which the Standard Retailers could charge the late payment fee.⁵⁴ The late payment fee was subject to debate between the retailers, which felt that the level was too low, and consumer groups, who felt that the level was too high. Some stakeholders considered that the late payment fee should be abolished.

IPART aimed to establish the fee at a cost-reflective level rather than at a level that gave customers the incentive to pay on time. IPART considered the relationship between the retail cost allowance and the late payment fee. The retail cost allowance included the costs for billing and revenue collection.

IPART will seek information from the Standard Retailers about the costs incurred by customers paying their bills late. It will also seek to ensure that the costs are recovered once only between the late payment fee and the retail operating costs.

IPART seeks comments on the following

- 42 Is there any reason to change the level of the late payment fee or the circumstances surrounding the charging of the late payment fee?

7.3 Dishonoured bank cheque fee

In the 2007 Determination, IPART allowed Standard Retailers to set the level of the dishonoured cheque fee at two times the regular fee charged by the bank or financial institution where the Standard Retailer actually incurs a bank or financial institution fee for the dishonoured cheque.⁵⁵

IPART also made a recommendation to Government that it amend the Electricity Supply Act to allow Standard Retailers to charge a fee for non-cheque dishonoured payments. However, the Government has not made such an amendment.

IPART seeks comments on the following

- 43 Is there any reason to change the level of the dishonoured cheque fee or the circumstances surrounding the charging of the dishonoured cheque fee?

⁵⁴ IPART, *Promoting retail competition and investment in the NSW electricity industry: Regulated electricity retail tariffs and charges for small customers 2007 to 2010*, June 2007, p 132.

⁵⁵ IPART, *Promoting retail competition and investment in the NSW electricity industry: Regulated electricity retail tariffs and charges for small customers 2007 to 2010*, June 2007, p 133.

8 Customer impacts

The terms of reference for this review note that IPART should provide advice to the Government regarding the impact of the Determination on small customers.

As indicated in Chapter 2, several of the policy and market developments since the 2007 Determination will lead to significant increases in electricity retailers' costs over the period 2010 to 2013, which will flow through to retail electricity prices. While IPART understands that significant price increases can have adverse impacts on vulnerable customer groups (such as those on low incomes), it will aim to set regulated retail electricity tariffs at a level that reflects the efficient costs of supplying small retail customers throughout the Determination period. This is important not only to comply with the terms of reference, but also to ensure that customers' long-term interests are served by providing the conditions required for a safe, reliable and efficient supply of electricity.

It is important to note that regulated retail prices in NSW need to increase to reflect increases in the Standard Retailers' costs, irrespective of whether these business remain state-owned or are sold to private investors. Further, prices are expected to increase for all electricity customers, whether they are on regulated or unregulated tariff.

The sections below discuss recent trends in retail electricity prices including the future increases in network charges, the likely impact of the CPRS and the NSW and Federal Government customer assistance measures that will be available over the 2010 Determination period. The sections below also outline the issues IPART will consider in formulating its advice to the NSW Government on the Determination's customer impacts.

8.1 Recent trends in retail electricity prices

Over the past few years, retail electricity prices have been increasing in real terms, and this trend is expected to continue over the 2010 Determination period.

Most recently, there were large increases to regulated tariffs effective from 1 July 2009. On average, the regulated tariffs charged by EnergyAustralia increased by 22.5 per cent, those by Integral Energy increased by 21.9 per cent and those by Country Energy increased by 20.2 per cent. The key drivers of these increases were:

- ▼ Increased network charges arising from the AER's final Determination of NSW distribution and transmission prices. On 1 July 2009, average real distribution prices increased by 18, 13 and 13 per cent for EnergyAustralia, Integral Energy and Country Energy, respectively. This was in addition to significant increases in transmission prices and increases in the NSW Government's Climate Change Levy.⁵⁶
- ▼ An increase in the market based electricity purchase cost allowance, reflecting:
 - market uncertainty arising from the policies of governments, including greenhouse policies and ETEF
 - market uncertainty arising from the impact of the drought on generation capacity and output
 - the impact of these uncertainties on contracting behaviour, and
 - updated demand and supply forecasts and ownership changes within the generation market.
- ▼ Real price increases as tariffs transitioned to full cost reflectivity as set out in the 2007 Determination.

Over the 2010 Determination period, two factors are expected to contribute to further significant increases in retail electricity prices. These are the introduction of the CPRS and further increases in network prices under the AER's 2009 Determination on NSW transmission and distribution network prices.

As discussed in previous chapters, the CPRS is planned to commence on 1 July 2011, with a cap of \$10/tonne of CO₂ for the first year. Therefore, there will be no impact on prices in the first year of the Determination, and a relatively predictable cost for 2011/12. However, the impact of the CPRS in the 2012/13 is less certain, although it is likely to be significant. IPART is committed to ensuring that regulated retail tariffs reflect the efficient costs of purchasing energy in the NEM in the presence of the CPRS.

As well as the increases in transmission and distribution network charges effective from 1 July 2009, the AER's Determination allows for both distribution and transmission charges in NSW to increase further in 2010, 2011, 2012 and 2013. These increases will have a considerable impact on customers' bills, as they typically account for around 44 per cent of the total retail bill. Table 8.1 illustrates the ongoing real price increases for each of the NSW distribution businesses.⁵⁷

⁵⁶ The NSW Climate Change Fund was established in July 2007. The Department of Environment and Climate Change notes that this new program is currently being developed and includes the Residential Rebate Program providing rebates for hot water systems, insulation, rainwater tanks and washing machines as well as the NSW Green Business Program.
<http://www.environment.nsw.gov.au/grants/ccfund.htm>

⁵⁷ Exclusive of any recovery of settlement residue and transmission unders and overs.

Table 8.1 Percentage increases to network charges 2009-2014 (real)

	2009/10	2010/11	2011/12	2012/13	2013/14
Transmission					
TransGrid	2.30%	2.30%	2.30%	2.30%	2.30%
Distribution					
Country Energy	13.41%	13.31%	12.00%	12.00%	0%
EnergyAustralia	17.86%	12.00%	12.00%	12.00%	8.00%
Integral Energy	12.58%	7.00%	7.00%	2.00%	0%

Note: These figures are subject to an appeal.

Source: AER, *Final Decision - NSW distribution Determination 2009/10 – 2013/14*, April 2009, p xlvii and AER, *TransGrid transmission Determination: 2009–10 to 2013–14, Final Decision*, 28 April 2009.

8.2 NSW Government customer assistance measures

On 20 May 2009, the NSW Government announced a series of new and improved customer assistance measures.⁵⁸ While these measures were originally part of the energy reform package, the NSW Government brought forward the consumer protection package to ameliorate the impact of the 1 July 2009 price increases on customers experiencing hardship. This includes the Customer Assistance Policy for small domestic customers. The new and improved measures, plus retailers' existing hardship policies, are outlined below.

8.2.1 New and improved customer assistance measures

From July 1, the pensioner rebate for NSW pensioner card holders increase from \$112 to \$130 per year for electricity and gas (paid on the electricity bill) and indexed to inflation annually. This rebate will be extended to include recipients of Carer Allowances (child under 16), Sickness Allowances and Special Benefits.

The Government also provides EAPA vouchers to people experiencing financial hardship.⁵⁹ Over the next five years, an additional \$55 million will be allocated to EAPA funding.

In May 2009, the Government announced a Low Income Household Refit program, for the following eligible groups:

- ▼ Centrelink pensioner concession card holders.
- ▼ Centrelink low income healthcare card holders.
- ▼ Energy utility hardship customers.

⁵⁸ Media Release, NSW Government provides consumer protection package to combat increases in electricity prices, 20 May 2009.

http://www.dwe.nsw.gov.au/about/pdf/media_release_ipart_consumer_package_2005.pdf

⁵⁹ These vouchers have a \$30 value. There is a maximum of 6 vouchers per quarter and no more than 12 vouchers per year.

These households will receive an energy-saving kit that includes shower timers, thermometers draught excluders, energy-efficient compact fluorescent bulbs and water-efficient showerheads. These measures have been estimated to save households about \$100 a year.

8.2.2 Hardship policies, including disconnection policies

The NSW electricity retailers currently develop their own hardship programs, rather than have the Government mandate the content of the programs. The disconnection policies set out procedures including how they gauge whether a customer is in financial difficulty and how they develop payment plans for individual customers.

IPART is currently assessing the effectiveness of aspects of the hardship programs, to ascertain whether the programs are capturing those customers in need. Early analysis shows that some businesses are more effective than others in avoiding disconnections.

8.3 Federal Government hardship assistance measures

The Federal Government also provides assistance to some eligible electricity customers in the form a utilities allowance. In addition, it intends to provide additional assistance to assist low and middle income households adjust to the CPRS.

8.3.1 Utilities allowance

The Federal Government provides a utilities allowance of \$259.40 per member of a couple and \$518.80 for single people (or members of a couple separated by illness).⁶⁰ It is paid in four instalments over a 12 month period to qualified income support payment recipients. These include:

- ▼ Income support who are of age pension age. This includes payments such as Age Pension, Austudy or Parenting Payment.
- ▼ Disability Support Pension.
- ▼ Carer Payment.
- ▼ Wife Pension.
- ▼ Widow B Pension.
- ▼ Bereavement Allowance.
- ▼ Mature Age Allowance.
- ▼ Widow Allowance.
- ▼ Partner Allowance.

⁶⁰ http://www.centrelink.gov.au/internet/internet.nsf/payments/pay_how_utility.htm

8.3.2 Assistance to assist customers transition to the CPRS

As part of its climate change White Paper, the Federal Government acknowledged that low and middle income households would be disproportionately affected by the introduction of the CPRS. This is because the lower income households generally spend more of their income on emissions-intensive goods and may be less able to quickly substitute to other goods.⁶¹

To mitigate the impact of energy price increases on these customers, the Federal Government announced that it would allocate the revenue raised from selling permits to households and small business assistance. Assuming a permit price of \$25, the Government will direct around \$11.5 billion to assisting households and businesses adjust to the CPRS.⁶² This includes a range of household assistance measures, including:

- ▼ additional government payments above automatic indexation payments to pensioners, seniors, carers and people with disabilities
- ▼ changes to the tax and transfer payment system to assist other low income households
- ▼ the introduction of energy efficiency measures for households.⁶³

8.4 IPART's advice to the NSW Government on customer impacts of the 2010 Determination

The terms of reference for this review note that IPART should provide advice to the Government regarding the impact of the Determination on small customers. Small retail customers include business customers using less than 160MWh per annum (an annual bill of around \$35,000). However, IPART's focus will primarily be on residential customers.

In providing advice to Government IPART will consider the:

- ▼ price impacts on small residential customers
- ▼ electricity retail businesses' performance against customer service indicators, especially disconnections of residential small retail customers and trends in the use of alternate payment methods
- ▼ coverage of existing and proposed customer assistance measures, including electricity retail businesses' payment plans.⁶⁴

⁶¹ Federal Government, *Carbon Pollution Reduction Scheme: Australia's low pollution future, White Paper*, 15 December 2008, pp 17.3-17.4.

⁶² Federal Government, *Scheme impact on the cost of living fact sheet*, December 2008.

⁶³ Carbon Pollution Reduction Scheme: *Australia's low pollution future, White Paper*, 15 December 2008, p 17.1.

⁶⁴ Payment plans must be offered where a retailer considers that a customer is facing financial difficulties.

IPART is undertaking research during 2009 to deepen its understanding of the impacts of pricing Determinations on households. In particular, IPART is undertaking research to combine data on:

- ▼ household incomes
- ▼ water and energy consumption
- ▼ water and electricity tariff structures.

IPART has engaged NATSEM to estimate household incomes for a range of household groups within each area by using data from the Australian Bureau of Statistics Census Sample Files and the Surveys of Income and Housing. IPART is continuing to explore with NATSEM how to provide richer and more meaningful information on the social impact of IPART's pricing decisions.

IPART is also using data on water and energy consumption available from its 2006 and 2008 surveys of households in Sydney and the Hunter, Gosford and Wyong, respectively. IPART's surveys are a useful source of information linking water and electricity consumption with household characteristics.

IPART's customer impact analysis will be supplemented by the latest electricity operating statistics, especially trends regarding disconnection of supply and use of alternate payment methods.

Under the current regulatory regime, all electricity retailers licensed to operate in NSW are required to report annually on a series of customer service indicators that provide some indication of the affordability and accessibility of electricity services and of customers' satisfaction with the quality of service they receive. IPART monitors and assesses the retailers' performance against these indicators each year and compares their current performance with performance in previous years.

Drawing on its analysis IPART will comment on the effectiveness of existing measures aimed at alleviating customer impacts. This includes the information that IPART will collect through its energy retailers licence compliance audit, including the operation of payment plans.

IPART seeks comments on the following

- 44 What are the likely impacts of higher electricity prices on different types of customers?
- 45 Given NSW and Federal Government customer assistance measures, are there any additional measures, including better targeting of existing measures, that may alleviate the impacts of higher prices?



Appendices

A Terms of Reference

Terms of Reference for an investigation and report by the Independent Pricing and Regulatory Tribunal on regulated retail tariffs and regulated retail charges to apply between 1 July 2010 and 30 June 2013 under Division 5 of Part 4 of the *Electricity Supply Act 1995*.

1 Reference to IPART under section 43EA

The Minister refers to IPART for investigation and report under section 43EB of the Act:

The Determination of regulated retail tariffs and regulated retail charges to apply to small retail customers in each standard retail supplier's supply district in New South Wales for the period from 1 July 2010 to 30 June 2013.

1.1 Background

In accordance with its commitment to retain the offer of regulated retail tariffs at least until 2013, the Government has extended the current scheme for regulated retail tariffs and charges to apply to small retail customers supplied under a standard form contract. A regulatory amendment will be made for these purposes under section 43EJ of the *Electricity Supply Act 1995* to allow IPART to make a further Determination of regulated retail tariffs and charges that will apply from 1 July 2010 to 30 June 2013.

Since January 2002, every electricity customer in NSW has had the option to negotiate a retail supply contract with any licensed retailer. Small retail customers who do not seek supply from the competitive market are deemed to receive electricity under a 'standard form' customer supply contract from their 'standard retail supplier'. Customers can also switch backwards and forwards between these alternatives. These arrangements were designed to encourage customers to test the market by providing an assurance that they can return to regulated retail tariffs. Approximately nine hundred thousand NSW customers have now moved on to negotiated tariffs.

While retail competition has delivered benefits for those participating in the market, the majority of residential and some small business customers have chosen to remain on standard form customer supply contracts which impose regulated retail tariffs and charges determined by IPART.

The NSW Government considers the reliable provision of electricity to be an essential service. It is therefore important that the financial viability of Standard Retail Suppliers is preserved, in order to ensure that they are able to continue to provide electricity to NSW customers. Network charges and energy purchase costs represent a significant proportion of the costs faced by retailers in the provision of electricity.

To promote retail competition and investment, regulated retail tariffs have been progressively moved toward fully cost-reflective levels over the course of the last three retail tariff Determinations by IPART. The 2007 Determination aimed to achieve regulated retail tariffs by 30 June 2010 that fully reflect the market-based costs of meeting each Standard Retail Supplier's obligations to their regulated customers.

This review should ensure the aims and approach of the 2007 Determination are preserved. IPART's approach should result in prices that are based on the efficient cost of supplying small retail customers, including customers who revert from negotiated tariffs.

In carrying out the review, IPART should provide advice to the Government regarding the impact of the Determination on small consumers.

1.2 Matters that must be taken into account

For the purposes of section 43EB(2) of the *Electricity Supply Act 1995*, in undertaking the review from 1 July 2010 to 30 June 2013, IPART should ensure its Determination is consistent with the Government's policy aim of reducing customers' reliance on regulated prices. Regulated tariffs should reflect the efficient costs faced by a Standard Retail Supplier meeting the forecast demand of the regulated customers they are obliged to serve.

IPART's Determination for the period from 1 July 2010 to 30 June 2013 should:

- ▼ result in prices that recover the efficient costs of supplying small retail customers; and
- ▼ apply any change to regulated tariffs on 1 July 2010 and annually thereafter on 1 July or on a date determined by IPART.

These Terms of Reference refer to three distinct cost components for Standard Retail Suppliers:

- ▼ Energy Costs;
- ▼ Retail Costs; and
- ▼ Retail Margin.

Energy Costs

Energy costs include energy purchases from the National Electricity Market (NEM), greenhouse and renewable energy costs, NEM fees and energy losses.

For energy purchases, IPART should determine a target Energy Purchase Cost Allowance for 30 June 2013 and an Energy Purchase Cost Allowance for each year of the Determination. The Energy Purchase Cost Allowance should be set, using transparent and predictable methodology, at a level that would allow a Standard Retail Supplier to recover the efficient costs of managing the risks associated with purchasing electricity from the NEM (including the Carbon Pollution Reduction Scheme). Additionally, IPART should have regard to the efficient costs of meeting any obligations that Standard Retail Suppliers must comply with, including the costs of complying with greenhouse and energy efficiency schemes (including present and future State and Federal schemes).

The Energy Purchase Cost Allowance for each year must not be lower than the least cost mix of generating plant (based on those plants earning an economic return on their market value), including any plant that would be required to meet any regulatory obligation, (using generation technology that is available in the NEM for the relevant year/period), to efficiently meet each Standard Retail Supplier's forecast regulated load.

IPART should allow for a periodic review of the Energy Purchase Cost Allowance, including the costs of complying with greenhouse and energy efficiency schemes.

IPART should allow for energy losses as published by the Australian Energy Market Operator (AEMO).

IPART should allow for market fees and ancillary fees as imposed by AEMO under the National Electricity Rules.

Retail Costs

Standard Retailers incur retail operating costs in supplying electricity customers, which include the costs associated with customer service (eg, operating call centres, billing and collecting revenue), finance, IT systems, and regulation (eg, licence fees).

IPART will determine an allowance for retail operating costs based on efficient costs. IPART will take into account NSW Standard Retailers' efficient costs and other available information on efficient operating costs for retailers.

IPART should also ensure regulated retail tariffs are set at a level which encourages competition in the retail electricity market by including customer acquisition costs in the retail cost allowance.

Retail Margin

IPART will determine an appropriate retail margin giving consideration to any risks not compensated elsewhere arising from supplying regulated customers.

1.3 Consultation

IPART should consult with stakeholders, conduct public hearings or workshops and consider submissions, within the timetable for the investigation and report. IPART must make its report available to the public.

1.4 Timing

IPART is to investigate and provide a report of its Draft Report and Draft Determination of regulated retail tariffs and charges within six months of receiving the terms of reference and a Final Report and Determination within three months of releasing the Draft Determination. IPART is also to publish an Issues Paper and methodology paper within two months of receiving the terms of reference.

1.5 Definitions

Regulated retail tariff means a tariff for or in relation to the supply of electricity required to be charged to a small retail customer under a standard form customer supply contract, being a tariff specified in a Determination in force under Division 5 of Part 4 of the *Electricity Supply Act 1995*.

Small retail customer means a customer that consumes electricity at less than 160MWh per year as prescribed in clause 7 of the *Electricity Supply (General) Regulation 2001*. A small retail customer is eligible for supply under a standard form customer supply contract.

Standard retail supplier means a retail supplier to whose retail supplier's licence is attached a standard retail supplier's endorsement. A standard retail supplier must impose tariffs and charges for or in relation to supplying electricity under a standard form customer supply contract in accordance with any relevant Determination of IPART under Division 5 of the *Electricity Supply Act 1995*.

Standard form customer supply contract means a contract entered into under Division 3 of Part 4 of the *Electricity Supply Act 1995*.

B Overview of the electricity market

This appendix provides an overview of the electricity supply chain, and the regulation of retail electricity in NSW, including what is regulated, how regulated retail prices are structured, and an interstate comparison of typical customer bills.

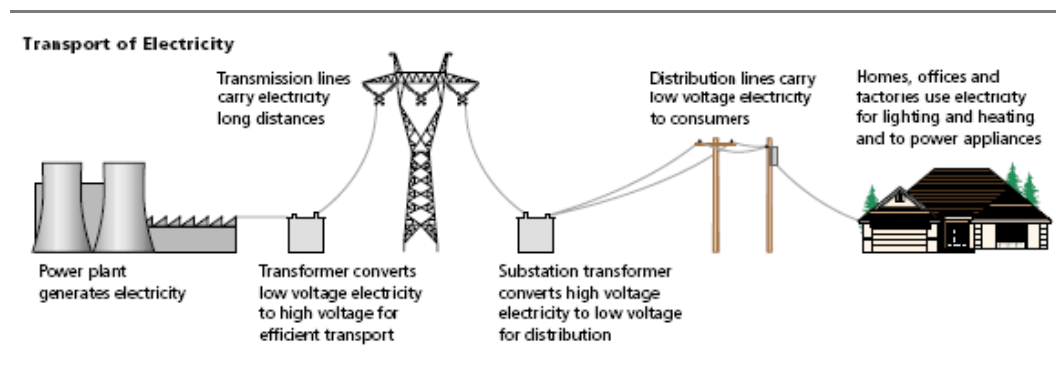
B.1 Structure of the electricity industry

Traditionally the electricity industry in NSW was made up of large vertically integrated companies that controlled most parts of the supply chain, including the generation, transportation and retail of electricity (see Figure B.1).

As part of the process of industry reform, these vertically integrated companies were broken into segments so that customers could benefit from competition in the areas that could be contestable – electricity generation and retail. Legislation was introduced to regulate the areas that relied on monopoly owned infrastructure – transmission and distribution (now regulated via the National Electricity Rules) – to ensure that access to necessary infrastructure was made available on reasonable terms and conditions.

Initially, parts of the retail market remained a monopoly and were regulated. However, over the past few years, the NSW Government has progressively introduced retail competition into the electricity market. Large consumption electricity customers have been able to choose their retailer since 1 July 1998. Competition, or contestability, for other customers was introduced in stages, with all customers able to choose their electricity retailer from 1 January 2002.

Figure B.1 The Electricity Supply Chain



Data source: NEMMCO, *An introduction to Australia's national electricity market*, June 2005.

The sections below provide an overview of each of these elements of the supply chain. This background information draws on the Australian Energy Regulator's report, *State of the Energy Market 2008*.

B.1.1 Generation and the wholesale electricity market

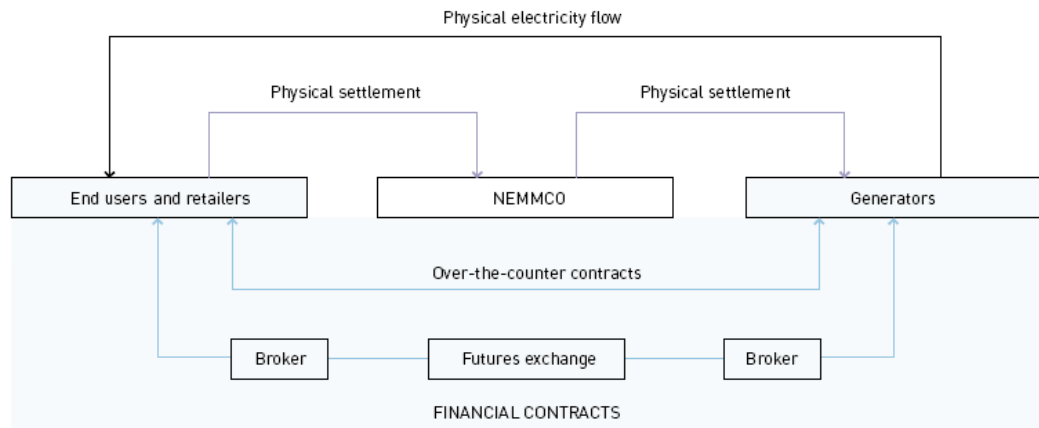
The supply of electricity begins with the generation in power stations, which are usually located near fuel sources.

Australia has about 244 large electricity generators, of which around 190 are in the National Electricity Market (NEM) jurisdictions in eastern and southern Australia.⁶⁵ Generators in the NEM sell electricity to retailers through wholesale market arrangements in which the dynamics of supply and demand determine prices and investment. The market, which is currently operated by NEMMCO, has no physical location, but is a virtual pool in which a central operator aggregates and dispatches supply bids to meet demand.

Spot price volatility in the NEM reflects fluctuating supply and demand conditions. The market is sensitive to changes in these conditions, which can occur over a short period. For example, electricity demand can rise swiftly on a hot day. Similarly, a generator or network outage can quickly increase regional spot prices. The sensitivity of the market to changing supply and demand conditions can result in considerable price volatility.

Spot price volatility in the NEM can cause significant price risk to market participants. Generators face a risk that low prices will affect their earnings, while retailers face a risk that prices may rise to levels that they cannot pass on to their customers. A common method by which market participants manage their exposure to price volatility is to enter into financial contracts that lock in firm prices for the electricity they intend to produce or buy in the future. Figure B.2 illustrates the relationship between the financial markets and the physical trading of electricity in the NEM.

⁶⁵ AER, *State of the Energy Market 2008*, p 56.

Figure B.2 Relationship between the NEM and financial markets

Data source: NEMMCO in AER, *State of the Energy Market 2008*, p 99.

B.1.2 Electricity transmission

Transmission networks transport electricity from generators to distribution networks, which in turn transport electricity to customers. In a few cases, large businesses such as aluminium smelters are directly connected to the transmission network.

In Australia there are transmission networks in each state and territory, with cross-border interconnectors that connect regions. The NEM in eastern and southern Australia provides a fully interconnected transmission network from Queensland through to NSW, the Australian Capital Territory, Victoria, South Australia and Tasmania.

TransGrid and EnergyAustralia operate as regulated transmission network service providers (TNSPs) in NSW and the ACT. The Australian Energy Regulator (AER) is responsible for the regulation of the revenues recovered by TransGrid and EnergyAustralia. The AER determines the maximum allowable revenue a TNSP can earn during a regulatory period of at least 5 years.

The AER's recent decision provided for increased transmission investment over the 2009/10 – 2013/14 period. The AER accepted the need for substantial capital works over the next five-year regulatory period beginning 1 July 2009 in order to augment the network and accommodate the growth in maximum demand for energy, replace ageing assets and improve network security and reliability.

B.1.3 Electricity distribution

Distribution networks move electricity from high voltage transmission networks to residential and business customers' premises. When electricity enters the low distribution network, it must be stepped down to lower voltages for safe use by customers.

In NSW, there are multiple electricity distribution networks, each of which has a monopoly government provider in a designated area. Like transmission networks, electricity distribution networks are capital intensive giving rise to a natural monopoly industry structure. In Australia, the distribution network service providers (DNSPs) are regulated under the National Electricity Law and National Electricity Rules (Electricity Rules) to manage the risk of monopoly pricing. On 1 January 2008, the AER became responsible for the economic regulation of electricity distribution following the transfer of functions from state and territory regulators.

In April 2009, the AER released its final decision for the distribution networks in NSW for the regulatory period 2009/10 to 2013/14. This decision provided for significant price increases to allow each of the NSW DNSPs to undertake necessary increases in capital works over the next regulatory period. Specifically, increases in capital works are needed to augment the networks to accommodate the growth in the maximum demand for energy, to replace aging assets and to improve network security and reliability.

B.1.4 Electricity retail

The retail market is the final link in the electricity supply chain. It provides the main interface between the electricity industry and customers, such as households and small businesses. Because retailers deal directly with consumers, the services they provide can significantly affect perceptions of the performance of the electricity industry.

Retailers buy electricity in the wholesale market and package it with transportation for sale to customers. Retail customers pay a single price for a bundled electricity product made up of wholesale electricity, transport through the transmission and distribution networks, and retail services. While retailers provide a convenient aggregation service for electricity consumers, they do not provide network services.

Full Retail Contestability (FRC) was introduced to NSW in 2002 allowing all customers to enter a supply contract with a retailer of choice. As at June 2008, there were 26 licensed retailers, of which 13 supplied residential and/or small business customers.

State government-owned retailers, EnergyAustralia, Integral Energy, and Country Energy are the major players in the retailer market and are endorsed as the Standard Retailers (or default suppliers). Standard Retailers must offer a regulated tariff to small retail customers in their supply areas. New entrants have acquired an

increasing number of small customers in NSW from the Standard Retailers; however this has not been even across all of the supply areas. The NSW government is currently in the process of marketing the Standard Retailers to the private sector.

B.2 Regulation of retail pricing in NSW

IPART is responsible for setting the regulated retail electricity prices charged by EnergyAustralia, Integral Energy and Country Energy to small retail customers on standard form customer contracts. IPART has been asked to continue to regulate retail prices for small retail customers (defined as customers that use less than 160MWh of electricity per year, equivalent to an annual bill of approximately \$35,000) who do not choose to enter the competitive electricity market by signing a negotiated contract.

IPART's 2010 Determination will apply to the regulated retail tariffs and charges levied by the three Standard Retailers in NSW: currently EnergyAustralia, Integral Energy and Country Energy. It will also apply to the purchasers of these businesses. The *Electricity Supply Act 1995* (the Act) requires Standard Retailers to make supply available on the tariffs and charges regulated by IPART. Standard Retailers and new entrant retailers may also offer customers competitive or negotiated contracts. These contracts are not regulated by IPART and the prices charged under them are negotiated between retailer and customer.

Price cap regulation was intended as a transitional measure during the development phase of competitive retail markets. To allow efficient signal for investment and consumption, government are moving towards removing retail price caps where effective competition can be demonstrated. The AEMC will conduct an independent review of the effectiveness of competition in NSW in 2011.⁶⁶ This review will include a non-binding recommendation to the Government regarding whether retail price regulation should be retained or removed in the future.

B.2.1 How regulated retail tariffs are structured

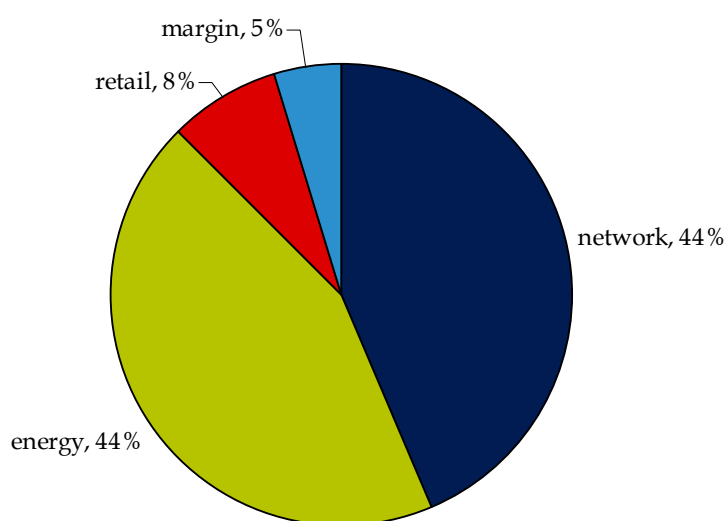
There are two main components of regulated retail electricity tariffs - network charges and retail charges. Network charges (N) are governed by the AER's 2009 network Determination and are passed through directly into the retail tariffs.⁶⁷ This review sets the retail component (R) of the charge. Within both components there are fixed (that do not vary with electricity usage) and variable charges (that depend on the amount of electricity used). A customer's total bill is the sum the network and retail components.

⁶⁶ NSW Government, *NSW Energy Reform Strategy: Defining an Industry Framework*, March 2009, p 4.

⁶⁷ The AER's 2009 distribution and transmission network Determinations apply from 1 July 2009 to 30 June 2014.

Figure B.3 shows the broad composition of regulated residential retail electricity tariffs. It shows that network charges (the 'N component') make up over 40 per cent of a customer's bill, and that wholesale costs account for the majority of the retail component (R) of the charge, and over 40 per cent of the overall customer bill.

Figure B.3 Composition of an average NSW residential electricity bill 2009/10



Note: This figure uses a simple average of a typical EnergyAustralia, Integral Energy and Country Energy bill. Figures may not add due to rounding.

Source: IPART.

B.2.2 Interstate comparison of electricity bills

From 1 July 2009, the NSW regulated prices increased significantly. Table B.1 shows the average percentage increases for each of the Standard Retailers.

Table B.1 Average NSW price increases from 1 July 2009

Retailer	Price Increase (%)
EnergyAustralia	22.5
Integral Energy	21.9
Country Energy	20.2

Source: IPART.

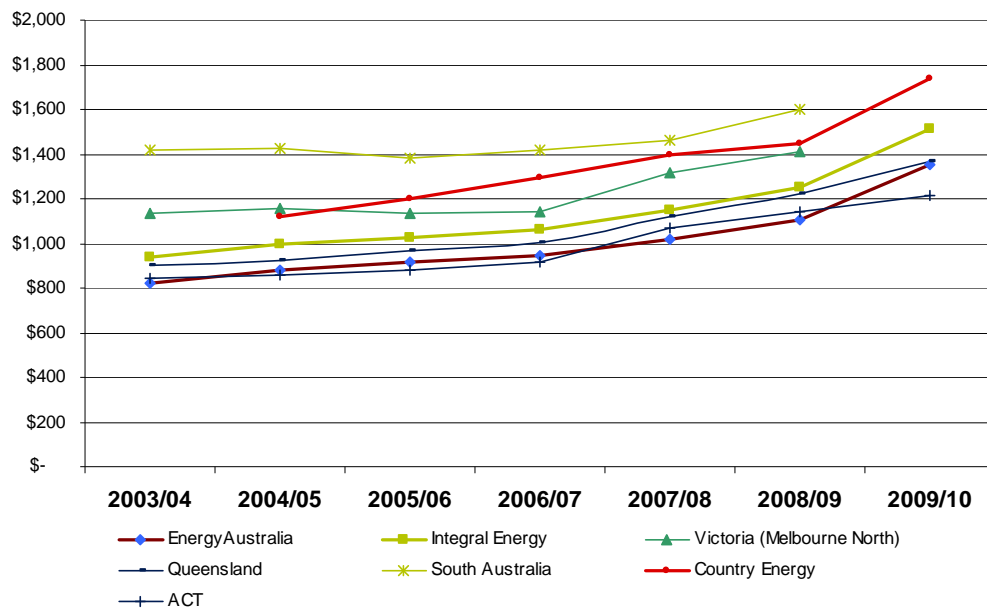
Figures B.4 and B.5 compare annual bills since 2003/04 for small retail customers on regulated tariffs in Queensland, Victoria, South Australia, the ACT and NSW.

For this purpose, two scenarios have been chosen:

- ▼ Small residential customers on a standard regulated tariff consuming 7,500kWh (no off peak).
- ▼ Small business customers consuming 30MWh on a standard regulated tariff.

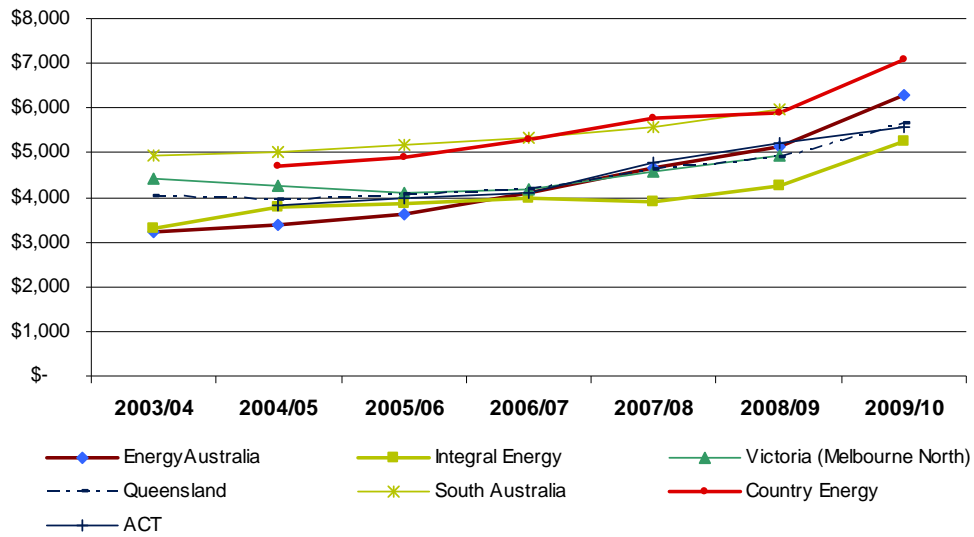
It should be noted that some of the differences in tariffs can be explained by differing network charges which vary between geographic areas.

Figure B.4 Interstate comparison of annual bills for residential customers on standard regulated residential tariffs – 7,500kWh without off-peak (\$ nominal)



Data source: IPART (regulated retail price submissions to IPART), ESCOSA, QCA, ICRC, and Victoria Government Gazettes.

Figure B.5 Interstate comparison of annual bills for business customers on standard regulated business tariffs – 30MWh without off-peak (\$ nominal)



Data source: IPART (regulated retail price submissions to IPART), ESCOSA, QCA, ICRC, and Victoria Government Gazettes.