The challenges of balancing electricity retail prices
A speech for the Australian Energy & Utility Summit conference, 29 June 2012

Electricity — Speech
James Cox, CEO and Full Time Member, IPART
Thank you for inviting me to give the closing keynote address, which concludes interesting discussions about the future of the energy market in Australia.

1 Retail pricing

Electricity retailers play a buffering role between the supply and demand sides of the market. They buy wholesale electricity from generators through the national electricity market. They also pay significant charges to transport electricity along the transmission and distribution networks to their retail customers. In most cases, they sell electricity to these customers at a set bundled price. For retailers to be viable, this retail price must reflect the costs of managing these risks and cover their payments to generators and network businesses, as well as the costs of running their own business.

Since 2002, all customers in NSW have had the choice of licenced retail suppliers. However, small customers in NSW (those consuming less than 160 MWh a year) currently have the right to be on a regulated price. Those regulated prices are offered by a single retailer within a geographic area.

2 IPART’s role in regulating retail prices

IPART is the price regulator for electricity prices to small retail customers in NSW who have not entered into a market contract. These regulated prices apply only to customers of the Standard Retailer Suppliers in NSW. There are Integral Energy and Country Energy (owned by Origin Energy) and EnergyAustralia (owned by TRUenergy). Currently, around half the small customers in NSW remain on regulated prices.

We regulate prices under the Electricity Supply Act. This Act requires IPART to have regard to the effect of its determination on competition in the retail market and any matters set out in the terms of reference issued by the Minister.

Among other things, the terms of reference set out the period of time over which prices should be regulated. Our current terms of reference cover the period from 1 July 2010 to 30 June 2013.

Historically the terms of references provided by the NSW Minister to IPART have been relatively detailed. For example, they have provided guidance on how IPART should set the energy cost allowance and required us to pass-through network charges.

Unless the Minister issues a subsequent terms of reference, the NSW market will be unregulated from 1 July 2013.
3  IPART’s current approach to regulating retail prices

To set the regulated prices, we first establish a regulatory framework.

The regulatory framework can become more light-handed as the market becomes more competitive. We have ensured that the regulatory framework evolves as competition develops. Currently we allow the Standard Retailers to set their own prices within the constraints of a weighted average price cap. We set the weighted average price cap having regard to the costs faced by retailers.

We are confident that in the context of retail competition, the weighted average price cap gives Standard Retailers the incentive to set cost reflective prices at least for the metropolitan area. We supplement the weighted average price cap with other requirements. For example, the Standard Retailers are restricted from introducing new regulated prices (because we believe that price innovation should occur in market rather than regulated prices). Further, we have developed limits particular to Country Energy (given the large number of prices and lower level of competition in that market).

We recognise that retail prices comprise costs from the entire supply chain. Therefore, uncertainties throughout the supply chain flow into retail prices. To account for uncertainties, we provide for a range of mechanisms to update prices during the regulatory period.

First, we identified those elements of the retail price that were likely to be subject to volatility during the period. This is particularly true of the energy purchase cost allowance. We developed an annual update for this allowance. We also update the costs for green scheme obligations. During the 2010 to 2013 regulatory period there have been numerous changes to green schemes.

Additionally, we allowed for a cost pass through for changes in costs that result from changes to legislation or taxation. We have had to use this mechanism to account for updated obligations in relation to the small scale renewable energy target scheme.

We decided to lock-in elements of the retail price that were historically less volatile. These more stable costs include the retail operating costs and margin. By limiting the scope of the annual review, we provide certainty and limit the regulatory burden.

The terms of reference emphasise cost-reflective pricing and the encouragement of competition. We set the costs having regard to the requirements of the terms of reference. Sometimes these requirements introduce a degree of tension and we must exercise our judgement within the limits of the terms of reference to make the most appropriate decision.
The largest cost component that is recovered through the retail price is network charges, making up around half of the retail price. These network prices are regulated by the Australian Energy Regulator. The terms of reference required us to pass them directly into the retail price. We developed a framework that allows for regulated retail prices to reflect the approved network prices and both change on 1 July annually.

The next largest component in the retail price is the energy cost component. The terms of reference effectively require us to set this allowance as the greater of Long Run Marginal Cost (LRMC) or market based costs. Over the 2010 to 2013 period, the LRMC has been higher than market costs. This means that regulated electricity prices have been higher than the efficient cost of supply, based on market conditions. Retailers have argued that this ‘additional margin’ allows them to offer greater discounts in the market and has encouraged competition.

IPART has called for greater discretion in any future terms of reference in relation to setting the energy purchase cost allowance. We consider that this would enable us to better balance the interests of customers and retailers.

There is a range of green scheme obligations that are recovered through retail electricity prices. Mostly notably, the Federal Government has its Renewable Energy Target, which adds around $100 a year to a typical residential customer's bill. Additionally, on 1 July this year the carbon pricing mechanism will commence. It will add around $170 a year to a typical customer's bill. The NSW Energy Savings Scheme and the NSW Climate Change Fund Levy will together add around $50 a year to typical residential bills. The cumulative impact of green schemes has rapidly increased over the past few years.

We also estimate the operating costs of the retailer and determine an appropriate margin.

Once we have estimates for all the efficient costs faced by retailers, we then add them together to determine the average price change on an annual basis.

On 1 July 2012, prices will increase by an average of 18% across NSW. The carbon price will add around 9 percentage points to regulated retail prices, or around $170 a year to the typical bill for a residential customer. Network charges will add a further 8 percentage points to average prices across NSW. However, the network charges are increasing by different amounts between the different distribution areas on 1 July. As a result, customers in western Sydney and the Illawarra will face lower price increases than the rest of the state.

These large price increases come on top of increases of 17% in 2011 and 10% in 2010.

IPART remains concerned about the impact of these large price increases on customers, particularly low income customers who consume a large amount of electricity.
4 Evolving regulation

The Standing Committee on Energy and Resources has asked the Australian Energy Market Commission (AEMC) to commence its review of the competitiveness of the NSW market in the second half of 2012. It will provide advice to the NSW Government about whether to continue with price regulation.

We support the removal of price regulation in markets that are effectively competitive. We consider that retail competition offers the best guarantee to customers that retail prices will reflect the efficient costs of supplying them.

However, while retail regulation remains, it is important for regulators to facilitate the development of the market while protecting customers from abuses of market power.

In particular, regulatory frameworks should support the development of competition. Currently there is a range of approaches to retail price regulation in Australia.

Retail prices are no longer regulated in Victoria. Churn rates and reported retail margins have remained high in that state. We think that it would be useful to learn from the experiences in Victoria to aid a transition to deregulation should the Government decide to do this.

In South Australia, the regulator has developed a framework that sets the regulated price with reference to changes in market offers. This approach increases reliance on prices in the competitive market to set regulated retail prices and places responsibility on retailers to articulate the reason for changes in retail prices from year to year. We are watching the South Australian experience with interest.

However, in Queensland, the regulatory framework is more ‘heavy handed’ than in NSW. The regulator sets individual tariffs. This is not dissimilar to the approach IPART adopted in the early days of retail contestability in NSW as the market was developing. This framework is new for Queensland and we will watch it with interest, particularly how the competitive market develops in that state.

In summary, IPART’s framework for regulating retail electricity sits in the middle of other jurisdictions. We are keen to ensure that it continues to develop, supporting the competitive market and protecting customers, with an aim to remove retail price regulation at a suitable time. However, we also think that there is a key role for retailers in ensuring that the competitive market delivers good results for customers. For example, it is important that customers should have access to information to allow them to shop around for market offers that best suit their needs. While IPART provides a price comparison website to assist customers in comparing market offers, retailers should improve the quality of information that is available to customers. Experience in other jurisdictions suggests that customers find it difficult to
understand the often complex market offers, including how prices are likely to change over time.

Although we have the power to introduce a gas pricing order, we apply a light-handed form of regulation in gas retail pricing, where we agree a voluntary pricing arrangement with the Standard Retailers. We have found our voluntary arrangements to be an effective form of regulation.

5 Recommendations for actions to limit future price increases

Rising costs associated with networks and the cost of compliance with green schemes have been the main contributors to recent electricity price increases.

The slide illustrates the movement in retail bills for an average NSW residential customer over the past 5 years. It clearly demonstrates that the largest contributor to higher bills in NSW is network prices. A typical residential customer now pays over $650 extra a year for us of the network compared to 5 years ago. Network prices now cost the typical residential consumer over $1000 a year. The increases in other costs have been more modest.

Figure 5.1 Change in average NSW residential customer bills, 2007/08 to 2012/13 ($nominal)

![Figure 5.1 Change in average NSW residential customer bills, 2007/08 to 2012/13](image)

**Note:** Network charges include contributions towards the Climate Change Fund. The energy, carbon and green costs include losses. Typical bills calculated assuming consumption of 7MWh per year.

In IPART’s view, at least some of the rise in these costs is due to policy settings, which are making electricity prices higher than necessary.
We have made a range of recommendations, including recommendations relating to improving the productivity of distribution networks and reviewing green schemes with a view to rationalising or redesigning them.

We are pleased that governments have begun to implement many of our recommendations. For example:

- the NSW Government has initiated a review of reliability standards in NSW
- the Australian Energy Market Commission is reviewing economic regulation arrangements under the National Electricity Rules
- the Standing Committee on Energy and Resources has initiated an early review of the limited merits review provisions in the National Electricity and Gas Laws
- the NSW Government closed its Solar Bonus Scheme and will require retailers to contribute towards the scheme costs.

We will participate in these various reviews.

**Improving the productivity of distribution networks**

Over the last 5 years, the network cost component of retail electricity bills in NSW has increased by 72% in real terms. The largest increases have occurred over the last 3 years. This is largely due to significant increases in the network businesses’ operating and capital expenditures. These have not only led to higher electricity prices but also to a decline in the productivity of network businesses.

Increasing productivity is important for growing the economy of NSW, as well as for lowering the costs of providing energy to customers. It can also play a role in improving the affordability of electricity for vulnerable customers. IPART has identified a range of opportunities to increase network productivity.

**Improve the economic regulation of network businesses**

In IPART’s view, recent network cost increases are higher than necessary because certain aspects of the energy regulatory framework contribute to inefficient outcomes.

- Firstly, the regulatory arrangements constrain the ability of the Australian Energy Regulator (AER) to apply what it considers to be the best estimate of the network business’ efficient operating and capital costs.
- Secondly, the regulatory arrangements provide strong incentives for the network business to invest capital in the network, potentially beyond efficient levels. This is because the prescriptive requirements of the NER can lead to excessive returns.
Thirdly, these arrangements allow the network businesses to earn a return on all capital invested—regardless of its efficiency and prudence—by requiring the AER to roll all capital expenditure into the network businesses’ regulatory asset bases. This lack of discipline on expenditure is exacerbated by inadequate governance arrangements in NSW.

Finally, the arrangements provide opportunities for the network suppliers to appeal particular issues to the Australian Competition Tribunal with limited risk of an adverse finding.

The Australian Energy Regulator has made a Rule change proposal. We have outlined our concerns in detail in submissions to the Australian Energy Market Commission (AEMC) and the panel reviewing the limited merits review provisions under the National Electricity and Gas Laws. We will continue to participate in these reviews, arguing for improvements in the regulatory arrangements for energy.

**Strengthen governance arrangements for NSW electricity network suppliers to promote productivity improvements**

In 2010, we undertook a review of the performance of NSW State-owned corporations. We found that the productivity of the corporations has declined significantly over recent years. The biggest declines have been in the productivity of the electricity distribution networks.

Although the governance framework for the NSW state-owned corporations is based on sound principles, NSW has increasingly departed from these principles. There is now a significant gap between how the corporatisation principles were envisaged to apply and how they are being applied in practice.

This gap between principles and practice has had a number of aspects:

- **Firstly**, policy requirements have been imposed on the state owned corporations which have not always taken account of the effect on their business value and the efficiency of the broader economy.

- **Expectations of and accountability for state-owned corporations performance** have been poorly defined. This is due to lack of clarity about the relative priority of the various commercial and non-commercial requirements of state-owned corporations.

- **The emphasis on improving efficiency and productivity** has been reduced in recent years. In particular, we think that the capacity of NSW Treasury, acting on behalf shareholder ministers, to improve productivity and efficiency needs to be improved.
We think that action is needed to strengthen the governance arrangements for the NSW electricity network suppliers (and NSW state-owned corporations in general) to promote improvements in productivity. Such action is also timely, to help maximise the benefits from the announced merger of these businesses. Together with stronger incentives for efficient expenditure within the National Electricity Rules, this will help to ensure that declining network productivity does not result in further increases in electricity prices.

Adjusting network reliability standards

Network reliability standards prescribe the minimum levels of service the network businesses must provide. These standards are a key driver of network expenditure, particularly capital expenditure. It is important to keep in mind that higher standards mean higher electricity prices for all customers.

Currently, network reliability standards are determined by each jurisdiction and are typically set out in the licence conditions of the network businesses. They reflect judgements made by government (on behalf of the community) about the level of service the community expects and is willing to pay for.

Given the increasing importance of access to a safe and reliable supply of electricity, it is likely that the community’s expectations in relation to service provision are high and will increase over time. However, higher standards impose greater costs. Therefore in making judgements government needs to consider the trade-offs between:

- the benefits from higher standards in terms of reduced ‘blackouts’ and the benefits to the wider community from a more reliable supply of electricity, and
- the costs associated with these standards and the resulting impact on individuals in terms of affordability and the productivity and wealth of the community.

Government should also consult with electricity consumers – both business and residential customers – to understand the varying benefits they enjoy from a more reliable supply of electricity and the extent they would be willing to pay for these benefits through higher energy prices. We note that the AEMC has undertaken a survey of NSW customers to help it assess the costs and benefits of different reliability standards. In its draft report, the AEMC found that:

A relatively small reduction in reliability can lead to a large reduction in the investment required by electricity distribution networks.

The current NSW network reliability standards use a ‘deterministic’ approach. That is, in addition to setting out the required levels of service provision, they specify how the network businesses are required to plan their network. This is an ‘input-based’ approach – for example, the standards even include the level of redundancy that must be provided for in different parts of the network. In contrast, other jurisdictions use an ‘output based’ approach. That is, their standards specify the
performance levels or outputs the network suppliers are required to meet, such as the maximum number and duration of outages.

The AEMC engaged the Brattle Group to examine the approach to setting electricity distribution network reliability standards and outcomes in Australia, New Zealand, Great Britain, Italy, the Netherlands and the US. The Brattle Group found that:

Whilst the Australian approach to regulating distribution reliability is generally very much in line with other jurisdictions … NSW appears unique in applying input standards that are driving investment decisions.¹

We are concerned that NSW’s input-based approach does not necessarily allow the network businesses to deliver the specified network performance at least cost. It is important that any regulatory settings encourage reliability to be achieved at least cost to the community. The Brattle Group recommended to the AEMC that:

The framework for distribution reliability should focus on reliability performance, with requirements relating to network planning only used as a last resort.²

We agree with the Brattle Group and support specifying distribution network reliability standards on an output basis.

**Improving the cost effectiveness of green energy schemes**

Once the carbon pricing mechanism is operational, many of the existing carbon emission mitigation programs (green schemes) at the national, state and territory levels will need to be redesigned and some may become redundant.³ For example, the NSW Government has announced that it will close its GGAS scheme tomorrow.

We support the Commonwealth Government’s commitment to reviewing the current set of green schemes, and to removing or redesigning schemes that are not complementary to the carbon price. We have previously established a framework for reviewing NSW schemes for this purpose.

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³ As the Wilkins Report noted: “Currently, there are in excess of 200 relevant programs around Australia in the States and Territories. Many have the potential to interfere with an emissions trading scheme. The States and Territories, over a decade, filled the policy vacuum left by the Commonwealth Government.” Mr Roger Wilkins AO, *Strategic review of Australian Government Climate Change Programs*, 31 July 2008, p 2.
Given that reducing emissions in the electricity sector and the wider economy comes at a cost to electricity consumers, government budgets and ultimately economic growth, it is important that emission reduction is achieved in the most efficient and cost-effective way. We note that many existing green schemes have additional objectives, ranging from providing industry assistance through to addressing social hardship. We are concerned that many of these schemes may add unnecessary costs to energy bills without necessarily addressing a market failure that will not be addressed by the carbon pricing mechanism, and thus may create investment-distorting complexities in energy markets.

We are also particularly concerned about the Commonwealth Government’s Renewable Energy Target scheme, the costs of which have been a major driver of recent increases in electricity prices. The RET is not cost-effective, particularly the Small-scale Renewable Energy Scheme (or SRES). Rather, it promotes very expensive emissions abatement and relatively expensive renewable energy production, which has a considerable impact on retail electricity prices. In addition, we are concerned about a number of aspects of the RET and SRES:

- First, the distributional impacts of the RET, given it involves a significant transfer of costs from renewable generators to electricity customers. In our view, industry assistance is best provided transparently from government revenue, rather than through electricity prices, due to the regressive nature of higher electricity prices.

- Secondly, the administration of the RET, specifically the legislated timing of the release of the binding target.

- The Solar Credits Multiplier under the RET allows the creation of renewable energy certificates for ‘phantom’ renewable energy that is not produced. We consider that 1 certificate should represent 1 MWh of renewable energy generated. However, from 1 July 2012 with the Solar Credits Multiplier, 2 certificates can currently be created for every 1 MWh of small-scale solar electricity generated. The retailers then have an obligation to buy these ‘phantom’ certificates and pass on these costs to customers. This means that customers are paying for renewable energy that was not generated.

- The uncapped nature of the SRES means retailers will need to buy all certificates created and there is no limit on the number of certificates that can be created. In 2012, retailers will need to buy certificates for around 33.1% of the electricity sold in Australia, yet the scheme’s target is 20% by 2020.

- We question the inclusion of waste coal mine generators in the Large-scale Renewable Energy Scheme, which may not be consistent with its renewable energy objectives.

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4 CER aims to set the STP to clear the market of certificates.
The overall design of the RET means that the amount of electricity actually generated from renewable sources will be significantly lower than the amount customers are paying for. Specifically, while customers are paying for over 33% of electricity to be sourced from renewable technologies in 2012, the proportion of electricity actually being generated by renewable technologies under the mandatory schemes is likely to be around 10%. We welcome the review of the RET scheme that is scheduled to be completed by the end of 2012. We will participate in this review.

**Conclusion**

In conclusion, it is important for the regulatory framework to evolve with the competitiveness of the market. More importantly, while retail regulation exists, it is important that regulated prices recover the costs of supply to ensure that the Standard Retailers remain financially viable.

We have carefully analysed the costs of retailing and consider that the price increases reflect increasing costs. However, some of those costs arise due to inappropriate policy settings. We are keen to ensure that the electricity industry is working in the long term interests of customers.

Thank you.