

Electricity Prices Select Committee Secretariat

As part of the committee's deliberations the attached report prepared by the Chamber of Commerce and Industry may be of interest. This report, *Secure, affordable and efficient electricity for business in Western Australia*, provides an overview of the Western Australian electricity market, some challenges and policy proposals.

While acknowledging that the deadline for submissions has passed, this report may provide some useful information on the electricity market in Western Australia. In some respects the pressures on electricity prices in Western Australia are similar to those in the eastern states – rising network costs, renewable energy schemes and the carbon price. However, in many other respects Western Australia is in a unique position because of its isolated electricity market (there are no connections to other states). The State Government still determines the price of electricity for residential and small business consumers, whereas in the majority of states either the market or an independent regulator plays this role. Electricity tariffs also continue to be set at a level below the cost of supply for these consumers who have no choice of supplier.

I hope the attached report might help to ensure the select committee's deliberations are able to consider electricity prices across the varying states and territories in Australia.

Should you have any questions about this document, please do not hesitate to contact me.

Many thanks

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Secure, affordable and efficient electricity  
for business in Western Australia.

**September 2012**



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## Executive summary

A secure, affordable and efficient supply of electricity is vital for business in Western Australia. CCI believes that an open, transparent and competitive market is the best means of achieving this by facilitating investment in efficient electricity generation, driving efficiency and innovation through retail choice and incentivising energy efficiency.

In WA, the reform process that was initiated with the disaggregation of Western Power in 2006 has achieved some important successes:

- incentivising over \$2 billion of private investment in electricity generation, almost doubling the previous capacity;
- achieving greater security of supply largely because of private investment in generation; and
- enabling medium and large size businesses to choose their electricity retailer and benefit from low electricity prices.

But for the benefits of electricity reform to flow to small business and to residential consumers the reform process needs to continue. The Strategic Energy Initiative: Energy 2031 sets out a framework for broader energy policy. This now needs to be followed with a timeline for specific reform initiatives.

Electricity reform should form a first priority and particularly extending the reform process to retail electricity by making regulated electricity tariffs cost-reflective and ultimately introducing full retail contestability.

A further priority should also be the ongoing and incremental reform of the electricity market, to address excess capacity, improve governance and implement important gas market reforms. Furthermore, subsidies - currently valued at over \$2 billion between 2012-13 and 2015-16 - should only be provided to vulnerable consumers, and the \$180 million Tariff Equalisation Contribution (TEC) should be abolished in favour of a direct subsidy from general revenue.

These issues should form the first priorities for the Minister for Energy's newly created Roundtable on Energy and the Working Group on Electricity Reform. Within the framework of Energy 2031 this paper sets out a challenging agenda for electricity reform that CCI believes is necessary to deliver a more secure, affordable and efficient electricity sector.





## Next steps for electricity reform

CCI believes the following steps will help WA continue along the path of energy reform and ultimately help to ensure we achieve the goals set out in Energy 2031.

1. Empower the Ministerial Roundtable on Energy and the Electricity Sector Working Group to review and develop actions to improve the functioning of the electricity market and minimise costs. This should focus on:
  - achieving cost-reflectivity in electricity tariffs in the near future;
  - developing full retail contestability; and
  - continuing the evolution of the electricity market with a focus on governance.
2. To assist in a move to cost-reflectivity for electricity tariffs, appoint an independent regulator to determine electricity tariff increases.
3. Expand the use of time of use tariffs and smart meter technology.
4. Initiate an independent review of full retail contestability as required by the Electricity Corporations Act 2005. This should be undertaken with a view to introducing full retail contestability to enable the benefits of choice to flow to small business consumers, while maintaining regulated but cost-reflective tariffs as a consumer protection in the short term.
5. Support the ongoing review of the reserve capacity mechanism.
6. Implement the commitment in the Council of Australian Governments (COAG) to rationalise carbon reduction and energy efficiency schemes that are not complementary to the carbon price and actively encourage the Federal Government to phase out the Renewable Energy Targets.
7. Support the implementation of the gas statement of opportunities and bulletin board, and investigate further options to develop greater transparency and liquidity in domestic gas markets.
8. Provide all support for vulnerable and needy residential consumers directly through the new Cost of Living Assistance payment and remove all generic subsidies.
9. Transition the Tariff Equalisation Contribution to a direct Community Service Obligation payment to Horizon Power out of general revenue.

Over time, the implementation of these steps will make clear that an electricity sector driven by competition and private investment is more efficient and delivers better outcomes for consumers. Therefore, the role for Government should in the longer term be limited to a regulatory role, rather than being directly involved in electricity production and supply.

## Introduction

Electricity, along with other forms of energy, provides a key input to economic and social activities and to growth over the long term. At the same time it is a major cost for businesses of all sizes and across a range of industry sectors.

To ensure that WA can continue to grow and make the most of the opportunities that lie ahead, it is vital for local business to have secure access to an affordable and efficient supply of electricity. CCI has consistently argued that this is best achieved through increasingly open, transparent and competitive markets, and ultimately deregulation and privatisation of Government-owned electricity assets.

This paper sets out how continuing towards a more competitive electricity market will deliver better outcomes for energy users and proposes short term actions for the Government to take.

With the majority of the State's non-residential consumers of electricity in Perth and the area served by the South West Interconnected System (SWIS)<sup>1</sup>, this area will form the focus of this paper.<sup>2</sup>

## Objectives for the electricity market

Ultimately, the electricity market aims to provide a secure supply of electricity at affordable prices. But these objectives can be conflicting. Necessary investments to ensure a secure supply of electricity can increase costs for consumers in the short term. Conversely, low electricity prices for consumers can discourage new investments in generating capacity.

A competitive and efficient market is the best means of achieving a balance between these goals.

Competition to generate electricity and provide capacity ensures that our sources of electricity are the most cost effective for our needs. Competition helps generating businesses choose between fuel sources and encourages investment in the most efficient technologies. This ultimately puts downward pressure on wholesale prices and also provides incentives for generators to invest in capacity to meet demand.

Retail competition encourages generators to be more efficient and in turn drives down the prices paid by consumers. In a deregulated and competitive market, retailers compete for customers on the basis of price, which delivers better outcomes for consumers. Retailers procure electricity from generators and must be free to seek out the cheapest most efficient providers, thus encouraging generators to maximise their efficiency to secure their contracts with retailers. Without retail competition there is only a limited incentive for retailers to seek out the cheapest possible electricity to provide to consumers.

## Electricity market reform in WA

The benefits of a competitive market were recognised by previous State Governments which embarked on a significant and long term reform process. The reform sought to drive efficiency gains and deliver net benefits to gas and electricity consumers, by increasing competition in the market.<sup>3</sup> At the same time, reform sought to increase security of electricity supply and address looming shortfalls by incentivising private sector investment.

For the electricity sector, the process began with the disaggregation of Western Power, which was enacted in 2005. This saw the generating, networks, retail and regional arms of the Government owned Electricity Corporation broken up to form Verve Energy, Western Power, Synergy and Horizon Power respectively.

At around the same time, the Wholesale Electricity Market (WEM) as it now exists was established. At the wholesale end of the supply chain, the WEM includes markets for long term capacity to ensure longer term security of supply, and for electricity to be traded on a short term basis.

However, at the other end of the supply chain, competition was only partially introduced in the retail electricity market. Only consumers who use more the 50MWh per year – mostly medium to large businesses – are allowed to choose their electricity retailer. Residential and small business consumers remain on regulated tariffs that are below the cost of producing electricity and can not access the competitive market. But with prices rising 45 per cent for small businesses since 2009, this approach has delayed necessary price rises causing more pain for businesses and residential consumers than would have been the case in a competitive market.

Since the initial reforms, the electricity transmission and distribution network in the SWIS have been owned and operated by Western Power, with charges regulated by the Economic Regulation Authority.

More recently we have seen the creation of the Public Utilities Office and the release of Energy 2031, which makes clear that maximising private sector participation and providing choice for consumers are still necessary to complete the reform process.

**Table 1: Regulated and Contestable Tariffs**

Customer		Pricing Options
Not Contestable	<50MWh/a	<ul style="list-style-type: none"> <li>Regulated tariff with Synergy</li> </ul>
Contestable	50–160 MWh/a	<ul style="list-style-type: none"> <li>Regulated tariff with Synergy (Synergy must offer the tariffs if requested by the customer); or</li> <li>Contestable contracts negotiated with any retailer.</li> </ul>
	>160 MWh/a	<ul style="list-style-type: none"> <li>Regulated tariff with Synergy (for any grandfathered customers only, Synergy is not required to offer tariffs to customers &gt;160 MWh/a); or</li> <li>Contestable contracts negotiated with any retailer.</li> </ul>

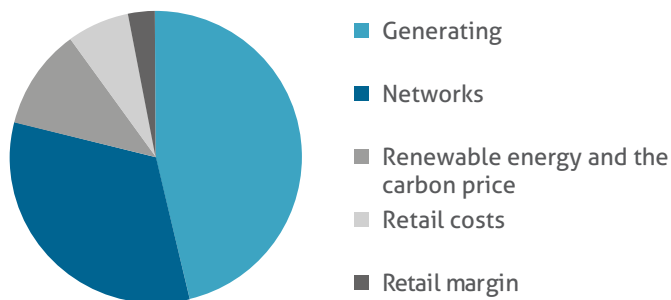
## Drivers of electricity costs in WA

The cost of electricity is driven by a range of factors with network investment to meet growing peak demand and fuel costs (generating) being the key drivers of price increases in recent years. Since 1 July 2012, the carbon price has also added to electricity costs.

Since 2009, regulated tariffs for small businesses (L1 Tariff, see Appendix 1) have increased by around 45 per cent and are forecast to increase by a further 20 per cent over the next three years.<sup>4</sup> However, these increases follow a period in which tariffs for small business did not increase at all since 1991-92.<sup>5</sup> If the 45 per cent tariff increase for small businesses was recalculated as an annual average over the past 20 years, it would equate to a compound rate of 1.9 per cent per annum. Gradual increases of these amounts not only demonstrate that electricity prices have not increased significantly over the past two decades, but also that if spread over the entire period they would have been far more manageable for business.

More recently, network charges have formed an important component of price rises, increasing by an average of 16.3 per cent per year between 2007-08 and 2011-12.<sup>6</sup> The Economic Regulation Authority (ERA) is expected to release its determination for network charges for the period 2012-13 to 2016-17 in September 2012. While not yet finalised, this process is expected to reduce some of the pressures seen in recent years. Furthermore, within network charges the Tariff Equalisation Contribution (TEC), which is a cross-subsidy which funds uniform tariffs across Western Australia (further details below), have more than doubled from \$69.7 million in 2006-07 to \$180 million in 2011-12.<sup>7</sup>

**Figure 1: Electricity cost components - Components of electricity costs in the SWIS**



Source: Economic Regulation Authority (2012) Inquiry into the Efficiency of Synergy's Costs and Electricity Tariffs: Final Report, 4 July 2012



# Benefits of the electricity reform process

Deregulated and competitive electricity markets are now the norm in Australia and globally, and widely acknowledged as producing better outcomes for consumers. WA, in its reform process, was able to learn from many of these experiences and adjust the market rules to our unique circumstances. This has resulted in many mechanisms, including for capacity and demand side management, that are highly regarded and are being considered in other markets.

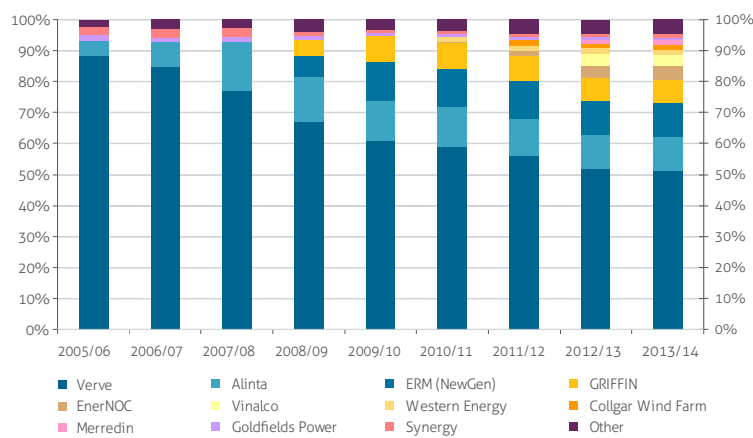
The reform process has created a number of clear benefits in the SWIS in terms of improved security, affordability and efficiency.

Research by the independent ERA makes clear that the reform process has benefited electricity consumers.<sup>8</sup>

The creation of the WEM has seen over \$2 billion of private funds invested in new generation capacity since 2006. This represents almost all of the new capacity added since disaggregation (which increased from around 3,000MW to 5,493MW) and a significant reduction in Verve Energy's market share to around 50 per cent. Much of this new capacity is in the form of cheaper and more efficient plant and demand side management (DSM), ultimately benefitting consumers. DSM has helped reduce the need for new capacity and has helped to lower peak demand pressures. Furthermore, new capacity and DSM has contributed to security of supply - with an excess supply driving cheaper wholesale prices for contestable consumers.

Retail competition has created benefits for a limited number of consumers. Around 20,000 customers, 9,000 businesses, now have access to contestable retail electricity services. This represents only 8.8 per cent of business customers in the SWIS but around two thirds of total energy use.

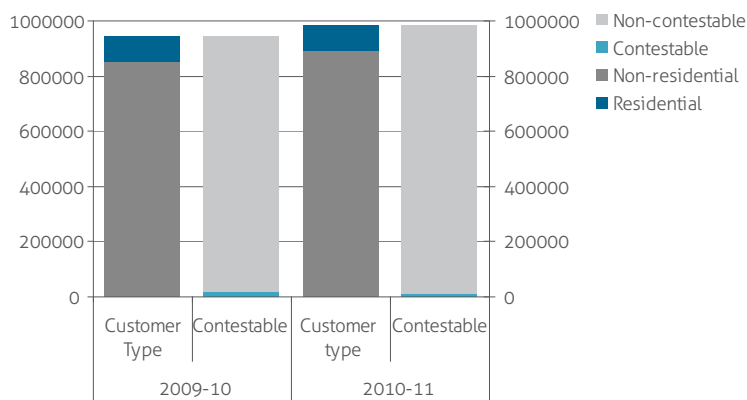
**Figure 2: Share of capacity: per cent per generator**



Source: Independent Market Operator 2012 Statement of Opportunities

CCI is aware of many businesses which have benefitted from retail competition. Electricity contracts are up to 20 per cent below regulated tariff rates for some customers, but not all eligible businesses have taken advantage of contestability, with many still not aware of their right to choose. However, the majority of businesses remain tied to regulated tariff rates.

**Figure 3: Electricity consumers: residential and non-residential, contestable and non-contestable**



Source: ERA (2012) 2010/11 Annual Performance Report: Electricity Retailers, March 2012

## Ongoing issues in the electricity market

While there have been some benefits to date in the reform of the SWIS electricity market, it is clear that a number of issues remain that continue to prevent electricity consumers from achieving the full benefits of reform. The issues outlined below should form immediate priorities for the Minister for Energy's newly created Roundtable on Energy and the Working Group on Electricity Reform.

### **Cost reflectivity**

In WA, the State Government still determines the price of electricity for residential and small business consumers. The State Government continues to set electricity prices below the costs of generating, distributing and supplying electricity. WA is the only State in Australia where electricity prices are set by Government and not by markets or an independent regulator<sup>9</sup> and is believed to be one of the only jurisdictions in the developed world where Government plays this role.

The ERA estimates tariffs need to increase on average by 21 per cent to reach cost-reflective levels in 2012-13.<sup>10</sup> The shortfall is funded through tariff adjustment payment of \$371 million in 2012-13 to cover the gap between electricity prices paid by customers relative to the cost of providing it. The shortfall will amount to almost \$2 billion over the next four years, which the Government provides in the form of an operating subsidy from tax revenues.

This prevents price signals from effectively flowing through to consumers, meaning there is little incentive to reduce demand when electricity is more expensive to produce and deliver to consumers.

Prices are further distorted by efforts to cross subsidise electricity for regional consumers (Horizon Power customers) through the Tariff Equalisation Charge (TEC) in the SWIS. As discussed in more detail below, by replacing the TEC with a direct subsidy from State revenue to Horizon Power, electricity consumers could be saved additional cost increases of around 7.2 per cent.<sup>11</sup>

Governments of all persuasions and over long periods of time have been unwilling to pass on even small price increases to consumers reflecting inflation. This eventually created a burden too large to carry for the Government and necessitated the recent large increases.

In a competitive environment consumers would have greater long term certainty and would see only incremental price increases. In order to depoliticise the transition to cost reflective tariffs it is recommended the Government appoint an independent regulator to determine electricity tariffs. An independent regulator would not be subject to the whims of day-to-day politics and be more likely to evenly distribute increases over a longer period of time.

This would not prevent the Government from providing support for vulnerable consumers. As discussed below, by holding retail tariffs below cost, the WA Government is currently subsidising all electricity customers, not just those in need. Direct subsidies to vulnerable groups would more effectively target those in need.

Furthermore, the Government should expand the use of time of use tariffs and smart meter technology, so that electricity prices more accurately reflect costs at times of high and low demand and allow customers to access cheaper electricity at times of low demand. This could come with significant costs, but would benefit consumers and help reduce growing demands on the electricity network and would be a more productive use of Government funding.



### Market power and retail contestability

The Government owned retailer and generator, Synergy and Verve Energy, remain dominant in their respective markets.

- Verve Energy holds more than 50 per cent of capacity in the SWIS.<sup>12</sup>
- Synergy accounts for more than 70 per cent of the total retail electricity market and 50 per cent of contestable business consumers.<sup>13, 14</sup>

This market dominance is of concern to many in industry amid talk by the WA Government for the two entities to be merged. While there are encouraging signs that the merger proposal is no longer a priority for Government, greater long term certainty for investors would be achieved if the proposal was ruled out once and for all. An entity with significant market power in both generation and retail would cement and even potentially increase the role of Government in the electricity sector. To continue to meet growing demand WA needs private sector investment and the efficiency driven by retail competition.

Additionally, if the State is to provide the capital necessary for new power station development significant funds would be diverted from other essential Government services.

As noted above, retail contestability has benefitted many businesses over the 50MWh threshold, while still providing the protection of a regulated tariff. It has enabled some of these larger businesses to benefit from the low wholesale prices that result from excess capacity (see more on this issue immediately below). Taking the same approach to smaller consumers, that is temporarily maintaining the protection provided by regulated tariffs, while opening the market to contestability could provide similar benefits to small business and household consumers. Some electricity retailers suggest they can already provide lower rates than regulated tariffs.

As a first step, the Government should initiate an independent review of retail contestability as required by the Electricity Corporations Act 2005. The Act mandates such a review be commenced as soon as practicable after three years of the Act coming into force. But despite seven years having passed since the Act came into force, this review has not commenced or has not been made available to the public. Such a review should be undertaken with a view to introducing full retail contestability to enable the benefits of choice to flow to small business consumers, while maintaining regulated but cost-reflective tariffs as a consumer protection for the short term. Alongside retail competition, Government should also enable dual fuel (electricity and gas) offerings to small business and residential consumers.

### Excess capacity...for now

Because of the capacity market in the SWIS, electricity prices reflect the costs of ensuring WA has sufficient capacity to meet electricity demand during peak times. In recent years the market rules and the lumpy nature of capacity investment has resulted in excess capacity beyond what is required to meet forecast peak demand.

This has three principle effects:

- through the capacity market consumers are effectively paying for more electricity generating capacity than is currently required;
- conversely, excess capacity has at times driven down the price of electricity in the short-term wholesale market, enabling contestable customers to secure lower energy prices than might otherwise be the case; and
- current excess capacity reduces the incentives to invest in new generation.

While there is currently excess capacity, since the WEM began there have been no instances of forced curtailment of electricity supply. The capacity market can therefore be seen to be achieving its goal to encourage security of supply.

Improving the capacity market does not require a fundamental change in policy approach. Rather it requires incremental changes to the market rules. The Independent Market Operator (IMO) is currently undertaking a review to consider how the reserve capacity mechanism can be improved. This includes consideration of the process through which capacity payments are allocated, changes to lower the capacity price in response to excess capacity, and the role of demand side management (DSM).

This review will provide an important basis on which to consider how to further improve the functioning of the market.

In addition, excess capacity may also be partly driven by the recent proliferation of renewable energy, being driven by the federal Government's Renewable Energy Target as discussed further below.

Finally, while there is currently excess capacity, it is important to note that future demand is forecast to grow significantly. Peak demand is expected to grow by three per cent annually to 2022-23, and broader energy demand by 2.3 per cent.<sup>15</sup> We need to adjust the market rules to ensure future demand is met most efficiently, rather than consider major changes to the structure of the market. DSM will have an important role to play to help reduce the need for significant new generation capacity.

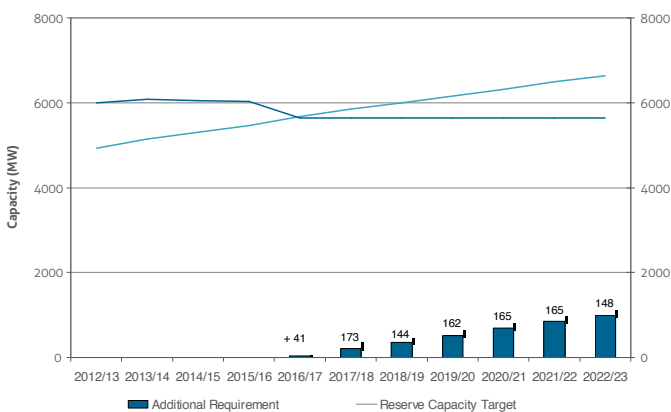
The Government should support the ongoing review of the reserve capacity mechanism as a means of ensuring the capacity market does not impose excessive costs on consumers while ensuring security of supply.

### Carbon and renewables

Various carbon and renewable energy schemes are also placing pressure on electricity costs in the SWIS. The ERA estimates that the Federal Government's policy to place a price on CO<sub>2</sub> emissions which commenced on 1 July 2012, will contribute about eight per cent of the 21 per cent average increase needed for regulated retail electricity tariffs to achieve cost reflective levels.<sup>16</sup> For an average customer in WA this should equate to around two cents per kWh.

In addition to the impost of the carbon price, the federal renewable energy targets (RETs) are an expensive and economically inefficient means of reducing greenhouse gas emissions.<sup>17, 18</sup> The RETs limit business choices for reducing greenhouse gas emissions but do not encourage any additional abatement and are far more expensive than a carbon price alone. At the same time they impose additional costs on electricity networks to meet the intermittent nature of supplies as renewable technologies are not well aligned with peak demand (the wind blows mostly at night when less electricity is used). Investment in these technologies therefore requires investment in base load capacity to meet expected peak demand.

Figure 4: Future capacity requirements in the SWIS



Source: Independent Market Operator (2011) Statement of Opportunities, June 2012

At the State level, environmental approval conditions on greenhouse gas management also limit the options for emissions reductions in some industries, effectively increasing costs for no additional benefit to the climate. These reductions could be more efficiently achieved through carbon pricing alone.

In this light, the State Government should implement its commitment in the Council of Australian Governments (COAG) to rationalise carbon reduction and energy efficiency schemes that are not complementary to the carbon price. As part of this process it should also actively encourage the Federal Government to phase out the Renewable Energy Targets.

There are also ongoing concerns highlighted by the ERA about the intermittent nature of renewable technologies and the costs imposed on the SWIS electricity network. Renewable technologies could displace base load power at low demand times, potentially leading to inefficient shut downs of base load capacity. Various changes, including the introduction of a competitive balancing market, have been put in place which should help the market better respond to renewable energy technologies.

### **Security of supply**

It is important to acknowledge that the electricity sector is intricately tied with the broader energy sector. While this paper is focused on electricity, developments in commodity markets for gas, coal and oil have a big impact on the electricity sector and the security of electricity supply.

Growing demand for energy exports, liquefied natural gas (LNG) in particular, has created pressures in the domestic market, driving up the price of electricity and shifting investment incentives. However, increasing LNG and gas prices, and changes to regulations, have also driven investment in domestic gas processing, including Apache's new plant at Devil Creek and BHP Billiton's Macedon Gas project, and in exploration for unconventional sources of gas.

To better facilitate the availability of gas to domestic users including electricity generators, the Government should continue efforts to improve transparency about the availability and price of gas, and ultimately to increase the liquidity of the domestic market. In particular, the Government should support the ongoing implementation of gas market reforms, including the gas bulletin board

and gas statement of opportunities. In addition, the Government should support a review of the feasibility of a short-term gas trading market in WA.

It is vital that the private sector be able to respond to market signals about commodity prices, and supply and demand for electricity. This will help ensure investment is made in a broad portfolio of energy technologies to ensure that WA has a secure supply of electricity in response to future uncertainty.

### **Ongoing market reform**

Given the electricity market has been operating for six years, it is vital that the Government understand its performance and consider incremental reforms required to meet future needs. The Government should empower the newly created Ministerial Roundtable on Energy and the Working Group on Electricity Reform to review and develop actions to improve the functioning of the electricity market and minimise costs. This should focus on:

- achieving cost-reflectivity in electricity tariffs in the near future;
- developing full retail contestability; and
- continuing the evolution of the electricity market with a focus on governance.

In addition, a range of issues require attention from Government and industry including improving access to electricity networks and potentially expanding the North West Interconnected System.

CCI believes that overall reforms should continue to support the role of the private sector in all facets of the electricity market from generation to retail. This should ultimately be with a view to minimising Government's role and the privatisation of Government owned energy assets.

# Subsidies and support for low income groups

CCI understands that vulnerable groups in our community need support to ensure they are able to access electricity. This support is an important role for Government.

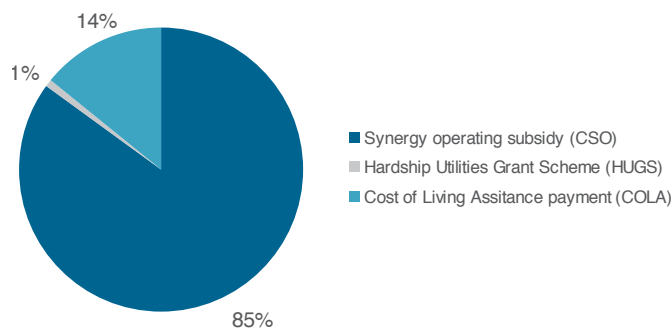
However, because of the shortfall between electricity tariffs and the costs of providing electricity, Government continues to subsidise electricity tariffs for the vast majority of residential and small business consumers. Between 2012-13 and 2015-16 this will total \$2 billion. Of this, only 15 per cent is targeted at vulnerable consumers and low income groups.

The establishment of the Cost of Living Assistance (CoLA) payment is a strong step towards providing direct subsidies based on need. In the future, the Government should aim to provide all support for vulnerable and needy residential consumers

directly through the CoLA payment and remove all generic subsidies. Cost-reflective pricing and greater retail contestability are necessary initial steps to achieving these goals.

Furthermore, the Tariff Equalisation Contribution (TEC), which seeks to make tariffs uniform across WA, adds further to electricity costs. The TEC is paid by all SWIS consumers in the form of additional network charges and will add an estimated 7.2 per cent to electricity tariffs in 2012-13. The TEC should be transitioned to a direct Community Service Obligation payment to Horizon Power, as occurs for water utilities. This would directly help consumers and businesses save money.

**Figure 5: Operating subsidies and support payments for electricity consumers**



Source: Department of Treasury (2012) 2012-13 Budget – Budget Paper No.3 Economic and Fiscal Outlook, May 2012



# Appendix A

## WA Regulated Electricity Tariff Rates 2011-12

Tariff	Description	Rate c/kWh
Non-contestable		
A1	Residential	22.34
B1	Residential water heating	14.25
C1	Non-profit organisations	22.26
D1	Charitable residential	18.79
K1	Mixed commercial and residential	23.75
L1	Low voltage supply (<50MWh, most small businesses)	24.02
R1	Time-of-use tariff (<50MWh)	17.37
W1	Traffic lights	22.91
Z1	Street lights	36.50
UMS	Unmetered supply	22.91
Contestable		
L3	Low voltage supply (>50MWh)	29.04
M1	General supply (high voltage)	25.21
R3	Time-of-use tariff (>50MWh)	23.25
S1	Low/med voltage time-of-use	19.33
T1	High voltage time-of-use	18.56
<b>Average across all tariffs</b>		<b>22.93</b>

## References

<sup>1</sup>Economic Regulation Authority (2012)  
2010/11 Annual Performance Report Energy Retailers, ERA March 2012

<sup>2</sup>The SWIS serves most of WA's south west corner, incorporating Perth, north to Geraldton, east to Kalgoorlie and most of the South West. Areas outside the SWIS are predominantly served by Horizon Power and because of relative isolation and low density need to be considered

<sup>3</sup>Electricity Reform Task Force (2002)  
Electricity Reform in Western Australia: 'A Framework for the Future', Government of Western Australia

<sup>4</sup>Department of Treasury (2012)  
2012-13 Budget – Budget Paper No.3 Economic and Fiscal Outlook, May 2012

<sup>5</sup>Public Utilities Office (2012) Electricity Pricing, <http://www.finance.wa.gov.au/cms/content.aspx?id=15096>, Department of Finance, accessed 19 June 2012

<sup>6</sup>Western Power (2011) Access Arrangement Information for 1 July 2012 to 30 June 2017, September 2011

<sup>7</sup>Economic Regulation Authority (2012) Inquiry into the Efficiency of Synergy's Costs and Electricity Tariffs: Final Report, 4 July 2012

<sup>8</sup>Economic Regulation Authority (2012)  
2011 Annual Wholesale Electricity Market Report for the Minister for Energy, 5 April 2012

<sup>9</sup>The Northern Territory government also sets electricity prices.

<sup>10</sup>Economic Regulation Authority (2012)  
Inquiry into the Efficiency of Synergy's Costs and Electricity Tariffs: Final Report, 4 July 2012

<sup>11</sup>Economic Regulation Authority (2012)  
Inquiry into the Efficiency of Synergy's Costs and Electricity Tariffs: Final Report, 4 July 2012

<sup>12</sup>Economic Regulation Authority (2012)  
Inquiry into the Efficiency of Synergy's Costs and Electricity Tariffs: Final Report, 4 July 2012

<sup>13</sup>Economic Regulation Authority (2012)  
Inquiry into the Efficiency of Synergy's Costs and Electricity Tariffs: Final Report, 4 July 2012

<sup>14</sup>Synergy (2011) Annual Report 10/11

<sup>15</sup>Independent Market Operator (2011) Statement of Opportunities, June 2012

<sup>16</sup>Economic Regulation Authority (2012)  
2011 Annual Wholesale Electricity Market Report for the Minister for Energy, 5 April 2012

<sup>17</sup>Economic Regulation Authority (2012) 2011 Annual Wholesale Electricity Market Report for the Minister for Energy, 5 April 2012

<sup>18</sup>Productivity Commission (2011)  
Carbon Emission Policies in Key Economies, Productivity Commission, May 2011

<sup>19</sup>Economic Regulation Authority (2012)  
Inquiry into the Efficiency of Synergy's Costs and Electricity Tariffs: Final Report, 4 July 2012



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