



# Submission to the Position Paper on Reforms to the Reserve Capacity Mechanism

February 2016

## About CCI

CCI is the peak organisation representing business in Western Australia with a membership of about 9,000 businesses across all sectors of the economy. CCI aims to build a competitive and productive business environment in Western Australia by promoting free enterprise through advocacy and essential services that make it easier to do business. CCI's vision is for Western Australia to be a world-leading place to live and do business.

## Executive Summary

It is widely acknowledged that there is excess generation capacity in the South West Interconnected System (SWIS) resulting in higher costs for consumers than is necessary.

Reform is necessary and CCI supports the Electricity Market Review's intention to propose "reforms that will provide a means for capacity pricing to be determined through a market process, and for this pricing mechanism to be introduced in an orderly manner that reduces the current excessive cost to electricity consumers but avoids undue financial disruption of market participants".<sup>1</sup>

Reform arrangements should ensure that the transition to an auction is smooth and that existing levels of competition in the wholesale electricity market are preserved and improved on. This is of particular importance because of the State Government's decision not to restructure Synergy, forgoing the opportunity to enhance competition in the market.

Compared with the alternatives considered, the Position Paper proposes the adoption of a set of reforms to the capacity mechanism that would set a more rapid path to an auction, result in more severe decreases in capacity prices and have higher risks for the financial stability of market participants. Although the desire for a rapid transition to an auction is understandable — to bring forward reductions in the cost of excess capacity to electricity consumers — a number of factors are likely to limit the short-term efficiency gains from reform, and complicate the equity effects.

Together this suggests that the optimal transition to a capacity auction may be more gradual and slower than proposed. A more gradual transition may also be prudent given the other significant changes the Electricity Market Review is pursuing in parallel, such as facility bidding by Synergy, co-optimisation of Ancillary Services and changing over to a constrained market/network access model, which will impact all participants requiring additional investment in systems and development of new or changes to operating practices.

## Background

The Phase One Electricity Market Review concluded that wholesale energy costs (comprising energy and capacity costs) are substantially higher in the SWIS than any other distribution area in

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<sup>1</sup> Position Paper on Reforms to the Reserve Capacity Mechanism, p. 3.

Australia. The Review identified increasing costs of electricity generation as the major driver of electricity costs and that there are two reasons for this.

1. The dominance of state-owned Synergy in the wholesale and retail markets is leading to a lack of competitive market discipline to constrain prices charged to residential and small business customers.
2. The capacity plus energy design of the Wholesale Electricity Market (WEM) has led to electricity consumers paying a higher price for capacity than they needed to, as indicated by a high level of excess generation capacity over the Reserve Capacity Requirement.

The Review found that the current industry structure and the current market mechanisms cannot continue and made three major recommendations for reform.

1. Reduce the market dominance of Synergy to create a more competitive generation sector.
2. Introduce full retail contestability.
3. Reform the WEM mechanisms, particularly the Reserve Capacity Mechanism.

The Electricity Market Review identified the restructure of Synergy as a threshold issue in addressing problems in the electricity industry stating that “reform to the retail and wholesale electricity markets will only deliver benefits if reforms to industry structure are undertaken before wholesale and retail market changes are effected”.<sup>2</sup> The crux of the issue for the WEM is that without restructuring Synergy, other reforms to the WEM will not result in greater competition and downward pressure on prices.

Contrary to the Review’s recommendations, the State Government has decided that it will not structurally separate Synergy. This reduces the benefits that might accrue from other reforms that are to be progressed, including from reforms proposed for the Reserve Capacity Mechanism.

## **The Capacity Mechanism**

Notwithstanding the primacy of the need to restructure Synergy, it is widely acknowledged that difficulties with demand forecasts and appropriate disincentives to deter new capacity entry during times of excess have resulted in high capacity costs for consumers and excess capacity in the SWIS. In 2016-17, there will be 23 per cent more capacity than the reserve capacity requirement for that year.

The Reserve Capacity Mechanism in the SWIS is distinct from a capacity market. In the SWIS, the megawatt (MW) price paid for capacity is administratively determined using a formula set out in the market rules. An administratively-determined capacity price benefits from simplicity over market mechanisms but is unlikely to ever result in an efficient price for capacity. This is because administratively-determined prices are unable to respond dynamically to changes in the supply and demand for capacity, and as such do not provide accurate signals for investment.

There are a number of key issues with the Reserve Capacity Mechanism.

- The formula used to calculate the price paid for capacity is equal to 85 per cent of the long-run capital cost of a gas-fired peaking plant less an adjustment factor. The starting

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<sup>2</sup> Electricity Market Review Options Paper, p. 4.

discount rate (15 per cent) is arbitrarily determined, and may not reflect market conditions.

- All certified capacity receives the capacity price regardless of whether it is actually necessary. An adjustment factor reduces the price paid for capacity by one per cent for every one per cent of excess capacity above the reserve capacity requirement determined by the market operator, such that the total amount paid for capacity does not change to reflect changes in demand and supply.
- Auctions are only held when the market operator assesses that there is insufficient capacity to satisfy the reserve capacity requirement. Because to date the market has always had excess capacity, this is yet to occur and the capacity price has never been marked to market.

Although the administered nature of the Reserve Capacity Mechanism is a weakness, forecasts of peak demand that have exceeded actual peak demand by a wide margin have played a significant role in forming the current market circumstances — more than half of the excess capacity in 2016-17 is a result of a 560 MW reduction in the forecast requirement.

The Electricity Market Review estimated the cost of forecasting errors to be \$114 million per year on average, or a total of \$1.03 billion in the period 2007-08 to 2015-16.<sup>3</sup> The Economic Regulation Authority estimates the cost of excess capacity excluding forecasting errors to be much less, about \$35 million per year on average, or a total of \$279 million over the period 2007-08 to 2014-15.<sup>4</sup>

The Phase One Electricity Market Review concluded that significant reform is necessary to the WEM and recommended that the SWIS do away with the capacity+energy design of the WEM and adopt an energy only market by becoming an unconnected region of the National Electricity Market (NEM). The NEM option was recommended because it was considered low-risk and was projected to result in decreases in energy costs of 30 per cent, equivalent to savings of \$250 million a year.

The other option canvassed, the reformed WEM option, called for the continuation of the current WEM design but with a capacity auction. The reformed WEM option was not favoured because it was considered to be higher risk and would deliver fewer benefits — energy cost reductions of only 6 per cent or \$50 million per year.

Contrary to the Review's recommendations, the State Government elected to proceed with the higher risk, lower return reformed WEM option.

## The rule change process has been truncated

Given the significance of the proposed reforms to the Reserve Capacity Mechanism and the certainty of significant financial implications for market participants, it is important that a robust rule change process is undertaken.

The consultation process for the proposed reforms has been truncated to achieve ambitious timeframes relative to the usual rule change process. The Position Paper was released in

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<sup>3</sup> Electricity Market Review Discussion Paper.

<sup>4</sup> Economic Regulation Authority 2013, *2012 Wholesale Electricity Market Report for the Minister for Energy*, April, Table 2.

December 2015 with consultation running for roughly two months until late January 2016, but including the festive season when many people take annual leave. The transitional arrangements are then to be approved and in place by May 2016, just three months after the end of the consultation period.

The truncated consultation process for the current reform proposals contrasts with the 15 month rule change process undertaken in 2014-15 for the proposed changes to Reserve Capacity Price (RC\_2013\_20). That rule change process included the publication of a rule change notice and proposal (January 2014), first submission period (February 2014), publication of a draft rule change report (March 2014), second submission period (May 2014), call for further submissions (March 2015), further submission period (April 2015), and publication of a final rule change report (April 2015).

## The position paper proposes a rapid transition to a capacity auction

The Position Paper on Reforms to the Reserve Capacity Mechanism (the Position Paper) outlines a high level proposal for the adoption of a reserve capacity auction. The design of the auction is important, however, the most pressing issue is the transitional arrangements proposed to commence in May 2016 and which may be in place for several years.

As identified in the Position Paper, because of the current large excess of capacity in the SWIS, were a capacity auction to be introduced at present, the price for capacity would be very low — almost zero. Although this would reflect a market outcome and may be expected to benefit some consumers in the short term, it would also cause significant disruption to market participants which have invested in the market.

Although investment risk is often cited as a reason not to undertake reform, if such considerations were applied to regulation across the economy, productivity enhancing reforms to correct regulatory imbalances would almost never be implemented. However, in the case of the WEM, special consideration should be given to the effect changes to the capacity mechanism may have on competition — particularly in light of the State Government's decision not to restructure Synergy.

In this context, the Position Paper proposes transitional arrangements that would provide for a relatively rapid transition to an auction mechanism.

1. Retention of the existing administered price mechanism but with a steeper pricing curve of minus 5 (instead of minus 1) and increasing the capacity price cap to 110 per cent of the Maximum Reserve Capacity Price and to maintain that formula for the duration of the transition period.
2. Different treatment for demand side resources which would receive a lower capacity payment based on the expected value provided by this capacity under a forecast of expected dispatch with further payments if resources are dispatched in excess of expected dispatch.

The effect of these arrangements would be to significantly reduce the capacity payments made to generators and demand side resources. For generators, assuming 20 per cent of excess generation capacity, capacity prices are expected to decrease from \$120,000 to \$80,000 per MW, a reduction of one third, rising back to about \$120,000 if excess capacity decreases over

time to 5 per cent. Capacity payments for demand side resources would reduce considerably more, to \$14,000 per MW in 2016-17 rising only slightly to be \$16,000 in 2024-25.

Compared with the alternatives available and considered, for example those recommended by the IMO's Reserve Capacity Mechanism Working Group such as a minus 3.75 price adjustment slope, the Position Paper proposes the adoption of a set of reforms to the capacity mechanism that would set a more rapid path to an auction, result in more severe decreases in capacity prices and have higher risks for the financial stability of market participants.

## **The merits of the proposed price curve are not substantiated**

The Position Paper states that the proposed revised price curve slope of minus 5 for the whole transition period "is considered to provide a more sufficient price signal for [the] adjustment without undue instability, and also provides more price certainty given the uncertain timing of the trigger for the first auction".<sup>5</sup>

Contrary to this assertion, feedback to CCI from market participants is that the proposed price curve slope would have significant adverse financial implications for market participants including the potential for insolvencies.

To the extent that the transitional arrangements result in financial instability among market participants, they could result in the exit or consolidation of market participants and undermine competition in the WEM. The preservation of competition in the WEM is of particular importance given the State Government's decision not to restructure Synergy. In commenting on the need to sequence reforms in the electricity market, the Phase One Electricity Market Review warned:

*Many of the reforms considered by the Review are mutually dependent. The overall success of reforms arising from the Review is dependent on their sequencing.*

*Reducing the market dominance of Synergy is a threshold issue. Introducing new market mechanisms, such as the options considered in this Review, could be detrimental if the industry structure is not addressed first. Under the Reformed WEM option the higher price cap in the balancing pool and removal of constraints on Synergy's bidding would not lead to more competition and downward pressure on prices if Synergy remains in its present structure. Retention of Synergy as is could also see market power exerted in a capacity auction. If Synergy's generation portfolio is not restructured or divested then Synergy's participation in the auction should probably be regulated to ensure the market works effectively.<sup>6</sup>*

Since modelling of the likely supply response or the financial implications for incumbents has not been provided to substantiate the benefits of the proposed price curve over the alternatives, the relative merits of the proposed transitional price curve are not clear.

## **The proposed treatment of demand side resources raises equity issues**

There is general agreement among market participants that, in a well-functioning capacity market, demand side resources provide benefits through the displacement of peaking

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<sup>5</sup> Position Paper on Reforms to the Reserve Capacity Mechanism, p. 46.

<sup>6</sup> Electricity Market Review Options Paper, p. 110.

generation capacity which would otherwise only be required for very short periods of time during peak demand events. The contentious issue is how demand side resources should be procured.

Although there is some debate regarding the need to better harmonise generation and demand side capacity in the capacity mechanism, services that are comparable such as those provided by generators and demand side resources, should in principle receive similar prices in a market. The proposal to apply fundamentally different pricing mechanisms to different types of capacity raises significant equity issues.

Feedback received from market participants is that the transitional pricing arrangements proposed in the Position Paper would result in the complete exit of demand side resources from the capacity market.

The proposal to pay demand side resources significantly less than generators incorrectly presumes that either:

- significant reduction in demand side resource capacity in the transition will not have future implications for the electricity market; or
- the financial stability of providers of demand side resources will not be affected by significant loss of capacity payments or financial instability among these market participants is inconsequential.

The existence of inconsistent pricing mechanisms during the transition period could result in significant price and supply volatility in subsequent auctions, undermining the objective of the transitional arrangements. Such a situation could transpire if, as a result of the lower capacity price, a significant amount of demand side resources exited the capacity market, only to re-enter the market in the subsequent capacity auctions.

In addition, CCI has received feedback from its membership that the proposed transitional pricing arrangements would have material financial implications for some major energy users which have invested in WA's South West on the basis that they could take advantage of energy cost savings available as a result of participating in demand side management. The financial impact on some businesses may be so significant that it could undermine the viability of the business. Where demand side resource providers close facilities as a result of changes to the Reserve Capacity Mechanism, any reduction in the quantity of demand side capacity would be more than offset by a reduction in the Reserve Capacity Requirement, thereby negating any benefits in terms of reduced excess capacity.

## **The benefits of reform in the short term will be muted**

Although the desire for a rapid transition to an auction is understandable — to bring forward reductions in the cost of excess capacity to electricity consumers — a number of factors are likely to limit the short term efficiency gains from reform, and complicate the equity effects.

Together with the greater risks of a rapid transition to an auction outlined above, this suggests that the optimal transition to a capacity auction may be more gradual and slower than proposed. A more gradual transition may also be prudent given the other significant changes the Electricity Market Review is pursuing in parallel, such as facility bidding by Synergy, co-optimisation of Ancillary Services and changing over to a constrained market/network access model, which will

impact all participants requiring additional investment in systems and development of new or changes to operating practices.

## **Efficiency gains from reform in the short term are likely to be muted**

Policy makers, including the Electricity Market Review, frequently advocate economic reform in the long-term interests of consumers as this is a useful shorthand for identifying reforms that will enhance efficiency by lowering the total cost of a particular level of production or enhance equity by transferring economic rents to consumers.

However, with regard to reform of the capacity market, the efficiency gains from reform on the supply side are likely to be small in the short term. This is because the biggest costs of providing capacity, the cost of building generators, are largely fixed in the short term and so the efficiency gains (cost reductions) available from reform may be relatively small. As a consequence, some of the anticipated gains for consumers in the short term from a lower capacity price will actually reflect wealth transfers from capacity providers to consumers rather than efficiency gains per se.

On the demand side, the efficiency gains which might be expected to result from a lower capacity price, such as greater utilisation of the available capacity, may also be muted in the short-term by a number of factors.

- Consequential exits or consolidation of generators in the market could result in a reduction in competition in the WEM and higher prices for energy.
- Existing tariff structures for non-contestable customers do not include peak demand charges and so savings passed through to consumers will not result in more efficient utilisation of capacity by this customer group.
- Long-term fixed electricity supply contracts between market participants and contestable customers may mean savings are not passed through until existing contracts expire.

## **Equity implications of reform will also be complicated**

If reduced energy costs *are* passed on to consumers, the intended equity effects of the proposed reforms — the transfer of economic rents to consumers — are also likely to be complicated by a number of factors.

- Many large consumers of electricity (more than 500) are also providers of demand side resources and so reduced capacity costs will be offset by decreases in demand side resource capacity payments.
- There may be complicated flow-on welfare effects for the employees, shareholders, customers and suppliers of generators and demand side capacity providers that are financially impacted by the reforms.
- To the extent that Government chooses to use any capacity savings to reduce subsidies to Synergy rather than pass through savings to customers, Government finances rather than electricity customers would benefit.
- As identified in the Electricity Market Review Options Paper, “Full retail contestability is also an essential step in realising cost reductions for customers, without which cost savings in the wholesale market are very unlikely to be passed through to all classes of



customers”.<sup>7</sup> Although full retail contestability (FRC) forms part of the Government’s promised reform program, it would only be introduced after an election scheduled for March 2017. As State Labor has not announced its position on FRC, its introduction is not certain.

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<sup>7</sup> Electricity Market Review Options Paper, p. 110.