

Perth Airport Ptd Ltd | Response to Position Paper on Reforms to the Reserve Capacity Mechanism

Perth Airport Pty Ltd (PAPL) is a major commercial consumer of electricity and gas in Western Australia. PAPL has a peak electrical demand exceeding 25MW, supplying its airport terminals and a large number of commercial premises on its site.

PAPL makes this submission in response to the Position Paper, to assist the Public Utilities Office in its consideration of improvements to the mechanism for the provision of reserve capacity in the SWIS.

Capacity charges currently represent approximately 25% of PAPL's total electricity cost. In our experience retailers treat these as quasi-regulated charges being a pass through of IMO reserve capacity pricing. Whilst PAPL has welcomed recent falls in capacity charges from the high levels of 2012/13 and 2013/14, the associated volatility in pricing experienced has presented difficulties.

PAPL previously supported changes to the Reserve Capacity Mechanism (RCM) aimed at reducing costs and improving flexibility for larger customers, including moving to a rolling auction mechanism for procuring reserve capacity with caps on both volume and price, placing more responsibility on market participants to procure capacity, removing DSM from the RCM, and making new large block loads, not the IMO, responsible for provision of initial project capacity credits.

Introduction and the Need for Reform

We commend the PUO for setting out a thorough case for reform of the current administered RCM in the section of the paper titled "Need for Reform". The paper states (p3) that the fundamental problem of the current RCM is that electricity consumers are paying a large cost for excess capacity which delivers little or no value in delivering on the target reliability.¹ The fact is however, that electricity customers are paying exactly what the Government's IMO body has determined they should pay.

The real problem is that the current IMO administered RCM target and price have not been responsive enough to discourage excess certification and over-investment by suppliers. As a result, it can be argued that consumers have not benefitted from potentially lower capacity prices that may have been achieved with a more market responsive mechanism.

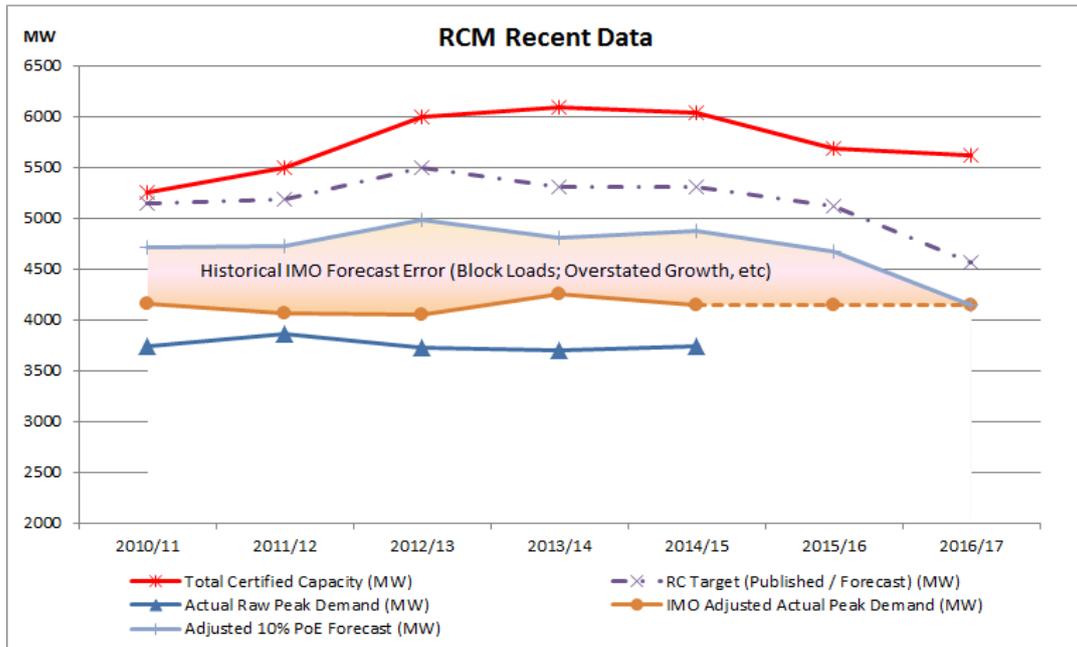
One issue we consider is missing from the Position Paper is that there is no consideration of the forecast process for setting the reserve capacity target requirement. This is a key element of the current system and also flows into the proposed auction process. In our view the process of determining the RC target requirement (including the Capacity Reliability Requirement) is a critical part of any proposed RCM reforms.

One of the largest contributors to the excesses of the current administered system has been the protracted failure of the IMO to accurately forecast demand requirement (using the methodology that it has applied), and the resultant consistently high RC targets. A review of past data shows that a major contributor to the current excess has been IMO forecasting errors (over-optimistic growth rates, large block loads, etc), and consistently large "temperature" adjustments of raw peak data.

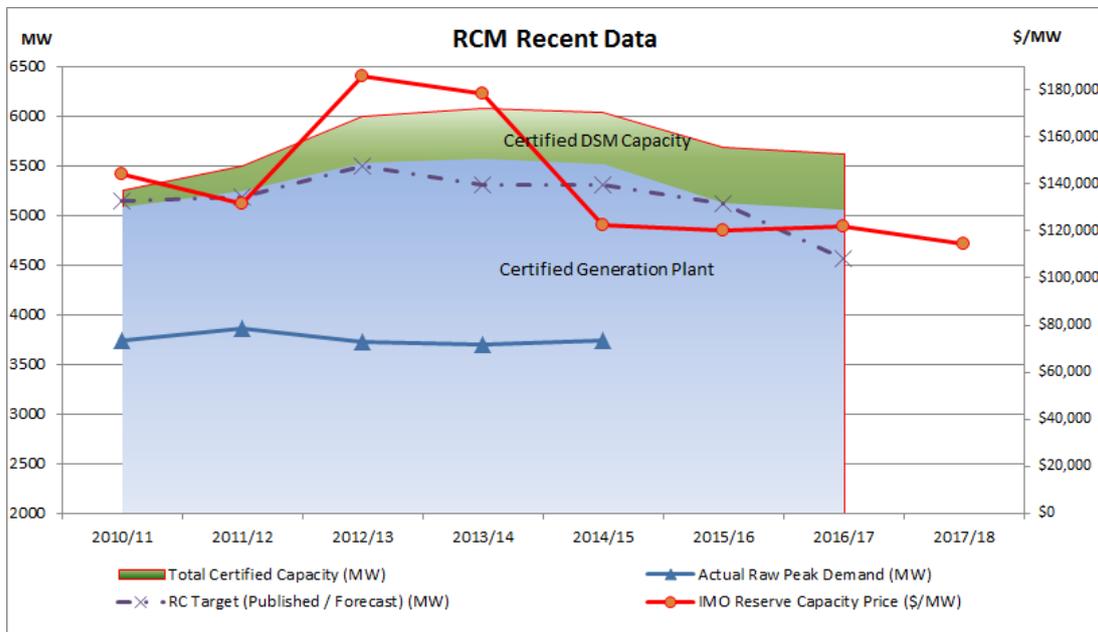
It is only in the most recent 2016/17 forecast that the IMO has substantially lowered the forecast target requirement. This target is now approx. 1000MW (or 20%) lower than that published just four years ago for the 2012/13 year. Perhaps a case of closing the gate after the horse has bolted.

The recent 2016/17 system forecast and target appears to have largely removed the above factors, and in doing so, has exposed the underlying high (23%) excess of actual certified capacity.

¹ The paper states (p6) that the cost of excess capacity in 2016/17 will be around \$116M and this will be borne by customers.



The Position Paper comments (p6) on the large amount of Demand Side Management (DSM) capacity that has been encouraged into the market (560MW was certified in 2016/17) and the reasons for this. Whilst DSM does provide some customers with the opportunity to reduce capacity charges, our view is that the current level of DSM delivers no real value in the SWIS meeting its target reliability in the current circumstances. We find it difficult to believe that any customer DSM response will be required with the current level of excess capacity supply. This would also appear to be a major selling point for DSM providers.



DSM was encouraged by the excessive targets and prices in 2012/13 and 2013/14 RC years with the result that certified DSM capacity grew more than 110% over these two years. The fact that certified DSM has continued to grow some 10% over the following three year period 2013/14 to 2016/17 despite a 32% fall in RC price and a 14% fall in the RC target, is evidence in our view that DSM is a different capacity service with vastly different supply cost drivers to installed generation capacity.

We concur that DSM is a major contributor to the current RCM excess and this needs to be corrected and we support the Position Paper in this regard (at least during the Interim period). Our position is that DSM should be removed from the reserve capacity mechanism as a supply resource. We believe that

DSM has a role to play as a demand resource and should be a tool for retailers and customers to employ to manage their own requirements, not a monetised supply product in the RCM.

Reform Objectives and Principles

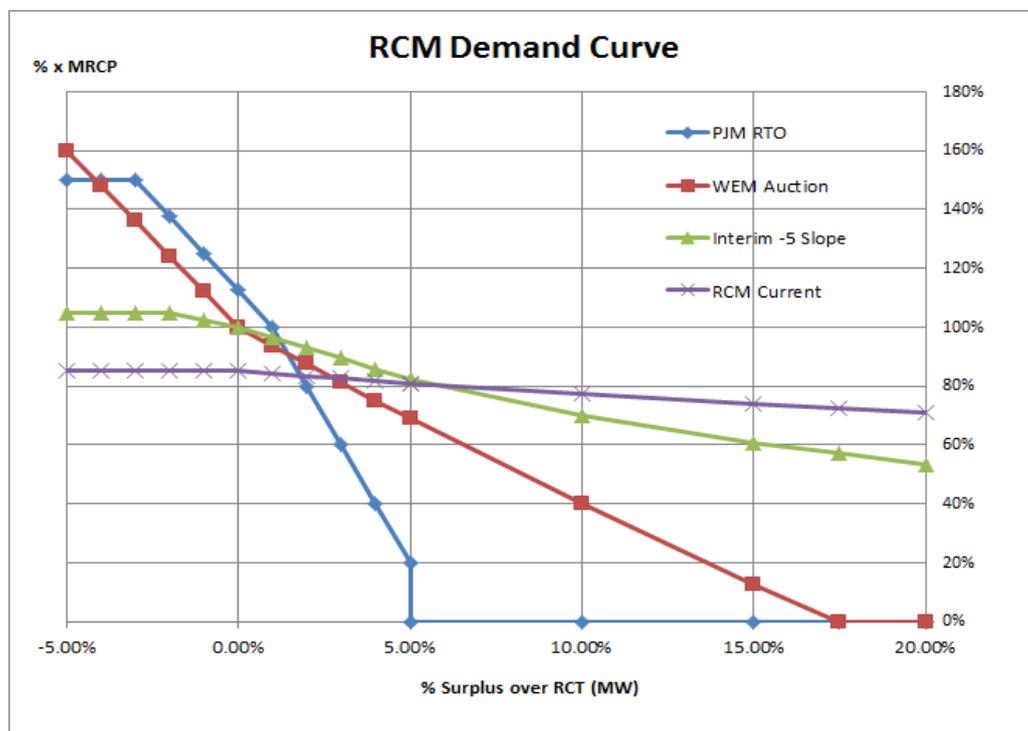
In our view the stated reform objectives (p9) although well-meaning are less important than setting the objectives for the RCM's operation within the WEM. In our view this is simply that the RCM is structured in a manner that aims to ensure sustainable resource adequacy in the WEM over time. The RCM should incentivise the least cost delivery of system reserve capacity that is sufficiently priced to maintain a viable level of net revenue for suppliers.

Proposed Reforms to the Reserve Capacity Mechanism

We support the basic proposed reform which is to implement a rolling three year capacity auction as a means for capacity pricing to be determined through a more market oriented process.

The Position Paper acknowledges that it has drawn heavily on the design of the PJM Reliability Pricing Model in advancing a proposed design for the WEM capacity auction. In general we support the proposed auction design parameters noting that the PJM capacity market has its share of issues with a 20+% reserve margin, DSM at around 10% of total capacity, however tellingly with capacity pricing in the order of approx. 20% of the equivalent of WEM's MCAP. Residual net income from energy dispatch may play a more prominent role for reserve capacity in the PJM than in the WEM.

The figure below provides an indicative contrast of the proposed capacity demand curve (pricing vs quantity) that has been discussed in the paper. Clearly the current RCM pricing method is much less responsive to both scarcity and surplus capacity levels. The proposed WEM auction parameters in the paper appear to represent a reasonable fit for the relatively small WEM market.



Our comments on the specific auction design characteristics are limited to market power mitigation measures that will be critical to ensure competitive outcomes in the small WA market, dominated by Synergy. We have serious concerns as to whether these measures are practically achievable in the WEM under its current structure and believe that the PUO needs to do more in determining the effectiveness of appropriate measures than its stated "a full suite of measures will not be determined until after the design is finalised".

The Position Paper recommends the auction be introduced following a period of administered transitional arrangements which will aim to bring the “capacity market” back into a reasonable balance of supply and demand. The introduction of the auction would be triggered by a forecast of 5-6% of excess capacity or alternatively by a fixed deadline introduction date if not already triggered.

Our view is that the transitional arrangement is simply an extension of the current administered arrangement and subject to substantial errors and uncertainty. Without some unplanned early retirement of Government owned plant the surplus levels of capacity may not reduce to the proposed trigger level until the mid 2020's. In our view this is simply drawing out the need for a correction with customers paying unnecessarily for non-value adding surplus reserve capacity.

In our view the PUO needs to take a position that supports better outcomes for WEM customers, who have been required to make excessive payments in the past. We believe that lower but sustainable capacity prices need to be delivered. We consider that the following arrangement provides a simpler, more market oriented, and lower risk approach to achieving sustainable outcomes:

- (i) The proposed auction process should be introduced when all design aspects have been satisfactorily resolved and at the earliest fixed date, with DSM removed as a certified capacity supply resource. The first auction date should be fixed at say mid 2017 for delivery in the 2019/20 RC year.
- (ii) This first auction should also include a process for capacity delivery in the RC years 2017/18 and 2018/19, with a declining minimum auction RC price floor included to address concerns regarding financial viability/stability of existing reserve capacity providers. This floor could be set at say 50% of MRCP declining to say 30% of MRCP in 2019/20, and then removed.
- (iii) Implicit in points (i) and (ii) is that RC targets are established for the three relevant capacity years from 2017/18 to 2019/20.
- (iv) DSM becomes a demand side resource only from 2017/18 onwards. Customers who participate with retailers will see a bill reduction as a result, and retailers will see a reduction in IRCR obligations. A review of DSM being reclassified from a demand resource to a supply resource should take place within 5 years of the initial RCM auction date.

Complementary Reforms

Harmonisation of Demand Side Management

Under the current design, DSM resources are offered as a supply resource, and compete directly with offers from generating plant resources as if they were equivalent services. In our view the basic concept of DSM is that it provides a market option to customers that want to reduce market payments for capacity, and/or retailers who want to reduce their IRCR obligations.

As a result we see little value in the attempt at harmonising generation and DSM services at this point in time. The proposals outlined have merit should DSM be reconsidered as a supply resource at a future point. We also consider that a more rigorous approach to certification and validation of claimed DSM resources is needed, and considerably stronger incentives for non-delivery of performance. This should mitigate against providers seeking to arbitrage returns from the capacity market against non-delivery.

Reforms to Capacity Availability

We concur with the general direction of the proposed Dynamic Refund proposal, in that performance incentives should encourage generation plant to be available during periods of lowered system reserve capacity. Likewise the RCM should not be incentivising poor planned outage performance and the IMO measures proposed to correct this should be implemented.

We support the proposal for refunds to be paid to available generators rather than returned to retailers as a sensible measure over the longer term, and consistent with the introduction of more competitive pricing.

The Transition Period

The Interim Transitional arrangements proposed in our view have a number of shortcomings, namely:

- The – 5 Slope pricing proposed still supports an RC price of approx. 60% of MRCP over the period from RC 2017/18, with surplus generation capacity estimated at around 16%². It is doubtful that this level will result in any marked response by generation owners (eg. early retirement of ageing / uneconomic plant). We note the existing RCM mechanism produces a similar, perhaps 10% higher pricing outcome.
- The RC target for generation plant only (being forecast system RC target less DSM) may be quite volatile in this period depending on the uptake or not of DSM. Whilst proposed certification changes may reduce the volume, providers may seek to add additional resources to make up the difference, or customers may fall away due to the substantial fall in value.

The two-part pricing scheme proposed in the Position Paper to be administered by the IMO is complex and effectively maintains an administered arrangement for DSM capacity that is still largely removed from competitive market influences. Retails are better placed to manage such commercial arrangements. It is based on a three year forward forecast of dispatch requirements which will inevitably be incorrect. The transitional pricing arrangements for DSM in whatever form ultimately agreed may not have the desired impact on resource levels. Ultimately the proposal requires that DSM be re-admitted to the auction process with a corresponding possibility of restarting the cycle of encouraging excess capacity and/or depressing reserve capacity pricing for generation suppliers below sustainable levels.

We consider that the transitional arrangement proposed is simply an extension of the current administered arrangement and as such is subject to substantial errors and uncertainty. The intention to provide a “glide-path” to the introduction of an auction system that supports suppliers of excess capacity rather than customers is misguided.

Further information

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² based on IMO SOO forecasts, assuming no additional retirement of generation plant, and the PUO estimate that DSM post Interim rules is certified at 220MW less