



SIMCOA OPERATIONS

**Submission on Draft Recommendations Report
Improving Reserve Capacity Pricing Signals – a proposed
capacity pricing model.**

Executive Summary

Simcoa's business prosperity is heavily dependant upon the net cost of power supplied to its operations. In this respect the recent changes to the payment received for the provision of DSM services as a result of the Electricity Market Review, had significant adverse effects on Simcoa's operations.

The changes proposed for the Reserve Capacity pricing, whereby DSM will be remunerated at the same rate as generators are welcomed as they address a large portion of the disparity between the monies received for DSM service provision and the monies paid by the consumer for the Reserve Capacity Mechanism and its administration.

In so far as the proposed changes to the pricing curve are being administratively maintained so as to lessen the impact on generation resources and investors, or that there is the option to lock-in rates for a five year period for new generation services. Simcoa does not support this delaying of the pass through of the lessening of the impact of the changes. By doing so, it extends the period that the full cost of Reserve Capacity is borne by the customer base (end users) through the cost of recovery of Reserve Capacity Payments, placing an additional impost on the viability of businesses within the SWIS. No such consideration was applied to the reduction of capacity payments for DSM providers in the Electricity Market Reforms.

Similarly, the further proposal to impose a 25% security bond on expected annual capacity payments is seen as unwarranted and an overly onerous burden on businesses. Given that the consumers of electricity are already burdened with the full cost for the provision of reserve capacity without receiving the benefit of increased reliability the Reserve Capacity Mechanism is designed to deliver.

Simcoa further believes there is a fundamental problem with imposition of penalties and/or refunds for a DSM provider being already off-line. DSM is the opposite of generation, and therefore the analogous position to a generator generating when despatched for Reserve Capacity, is that a DSM service does not reduce its load when despatched. If it is already on reduced demand then the net effect on system load is the same and market payments are reduced due to less reserve capacity having to be despatched for a reduced duration.

Transparency in the market is paramount and random testing obligations should be applied unilaterally across both DSM and Generators alike. Similarly all providers of Reserve capacity should be visible to the operator in real time so as ensure contracted capacity is despatched when requested.

Given that DSM providers never see the benefit of the reliability that the Reserve Capacity Mechanism is designed to deliver, as they will be despatched, Simcoa propose that DSM providers be exempted from the impost of costs associated with the Reserve Capacity Mechanism through an exemption or credit for the portion of the Individual Reserve Capacity Requirement.

To reduce the doubling up of administration and to increase transparency, the possibility of larger DSM loads contracting directly with the Market Operator should be considered.

From a community and economic perspective, the payment to an otherwise productive and profitable entity to switch off in times of high demand makes a lot more sense than the payment for a resource to sit idle and tie up capital and investment resources waiting to be despatched.

Introduction

Simcoa has been providing Demand Side Management (**DSM**) services to the Western Australian Electricity Market for more than 15 years – before the inception of the Wholesale Electricity Market (**WEM**) in its current form. Simcoa has done so to endeavour to minimise its net cost of electricity to its process, and to remain competitive in the international arena, where many of its competitors enjoy significantly lower electricity costs.

Electricity represents a large portion (approximately 30%) of Simcoa's total operating costs.

Without adequate return for the DSM and other Ancillary Services Simcoa provides, Simcoa's tariff, with associated pass through market and network charges, would make Simcoa's net tariff one of the highest amongst western world silicon producers.

Simcoa was not in a position to make a submission to the April 2018 release of the consultation paper by the Public Utilities Office, and takes this opportunity to provide feedback on the proposed Capacity Pricing Model, and also on the Reserve Capacity Mechanism and the role of DSM services in the Reserve Capacity Market as a whole.

Disparity between DSM Payments and Reserve Capacity Costs

As an electricity consumer in the WEM, Simcoa's cost of Reserve Capacity obligations currently represent up to 30% of Simcoa's electricity costs. Despite offering more than 90% of its load as a DSM resource, Simcoa receives less than 10% of the Reserve Capacity payment for the DSM services it provides to the WEM. Simcoa's flat load profile and high availability of Simcoa's load makes it an ideal provider of DSM.

Simcoa undertook its latest expansion (3rd Furnace) on the basis that the net cost of electricity to its 3rd Furnace would remain at a competitive level through returns from participating in the Reserve Capacity Market, by offering the entire furnace load as DSM capacity. This was at a time when DSM payments offset approximately 75% of reserve capacity charges. Changes to the DSM Capacity Payments as part of the Electricity Market Review (**EMR**) has changed the situation significantly. Simcoa has incurred a direct hit to its bottom line of several millions of dollars. This is the extent that if Simcoa were to operate only the 3rd Furnace in isolation, the operation would, in all probability, not be economic. Simcoa received no consideration or transitional arrangements to enable it to manage this change to the WEM Rules. Accordingly, Simcoa has little appetite for entertaining transitional measures to protect the interests of generators and their investors. Simcoa's primary concern is the sustainable reduction of the overall cost of electricity to its operations as much and soon as possible.

In this respect, the proposal to return the DSM Capacity Payment to the same level that generators receive is welcomed, and it is not before time. The value of reserve capacity to the market is the same, irrespective of how it is sourced. Reserve capacity sourced through DSM is perhaps of even greater value and economically sensible than reserve generation capacity. As mentioned above, Simcoa has, and continues to be, significantly negatively impacted by the EMR amendments to returns to DSM providers. Despite the fact that most parties tend to agree that the DSM capacity Simcoa provides is valuable to the operation of the network, it is currently not valued by the market. Simcoa is the only remaining DSM participant. Conversely, the Reserve Capacity cost imposed on Simcoa through meeting their retailers Individual Reserve Capacity Requirements imposed by the Reserve Capacity Mechanism has altered little with the EMR outcomes.

DSM participants, as providers of reserve capacity, currently add to the reliability of the network. However, because they will be despatched in the event of Reserve Capacity being required, they do not see the benefit of the network reliability the Reserve Capacity Mechanism is intended to provide. DSM providers are, in effect, opting out of the reliability obligation provided for by the Reserve Capacity Mechanism for the amount of Reserve Capacity offered – **Simcoa's lights will not remain "on"**. Despite this, DSM providers remain liable for the full cost of Reserve Capacity payments as a consumer. Currently, in return for the reliability they offer to the market, they only receive a token payment under the payment regime. Whilst the payment component of this imbalance is to be largely addressed by the proposed changes to the DSM Capacity rate, a large impost remains on the respective organisation in the proposed security bond, taxation management, testing obligations and system management and reporting obligations.

It should be kept in mind that the fundamental purpose of a business, like Simcoa's, is actually to remain on-line and producing. The fact that a business is off-line means it is already incurring penalties for lost production. It is unreasonable to expect that a business would stay off-line for any longer than required. By contrast, a generator must be on-line to provide network generation capacity and to generate normal income.

In the case of a generator, the Reserve Capacity availability payment is compensation for resources which could be potentially on-line and generating power and income, but are not incurring the operational costs. When despatched they receive payment for the power they generate at the market rate.

For a DSM provider however, the despatch payment is compensation for impost the fixed costs, capital costs and lost profit it incurs when off-line and not producing; the cost of holding stock in reserve to meet contractual obligations in the event of being despatched; increased costs due to a reduction in demand, etc. Reserve Capacity availability payments for a DSM participant should compensate for not only for the cost of administration and for testing of capacity as required by the rules, but also for the loss of the reliability guarantee it is giving up as a DSM provider. This is effectively the consumer's portion of the Individual Reserve Capacity costs incurred by their retailer. Not only is this the cost of the provision of reserve capacity payments, but all of the associated Market Operator and Network costs associated with the management, administration and testing of capacity offered. Clearly the current payments are grossly inadequate to cover these. The proposed payments structure, while reducing the impost does not fully compensate for the sum of the additional costs incurred.

As an alternative to the complicated regime proposed for DSM providers, where the operation of the electricity market is not their primary business, and based on the fact that they do not receive the reliability provided for by the Reserve Capacity market, rather than receiving a payment for DSM availability, DSM providers should receive an exemption from their portion of the retailers IRCR for the DSM capacity they provide to the market – thereby only being liable for the payment of any shortfall in IRCR between the power they consume and the DSM capacity they provide.

Security Deposit Unreasonable

The notion of a 25% security deposit with respect to annual capacity payments for DSM participants is unreasonably onerous. This is particularly the case when DSM providers are at this time also paying for the Reserve Capacity service they provide.

Further, given that its application is not intended to be applied consistently across all reserve capacity providers – only DSM and new Reserve Capacity generation will be liable – the requirement is both protectionist and uncompetitive. It can only be seen as a deterrent or impediment to all potential DSM providers and new Reserve Generation Capacity entering the market, thereby keeping pricing under the new regime high for the existing Reserve Capacity participants.

Given the financial impact a DSM provider already faces with the liability to pay for their share of their retailer's Individual Reserve Capacity Requirement (for which they receive no reliability guarantee), the imposition of yet another cost is unreasonable.

Availability Definition and Application of Penalties

It must be remembered that whilst both DSM and generation can provide Reserve Capacity, DSM is the opposite of generation – that is, the provision of DSM requires a load to be switched off, as opposed to generation which requires a source to be switched on. The mindset of policy makers to date however appears to treat DSM as an alternative form of generation.

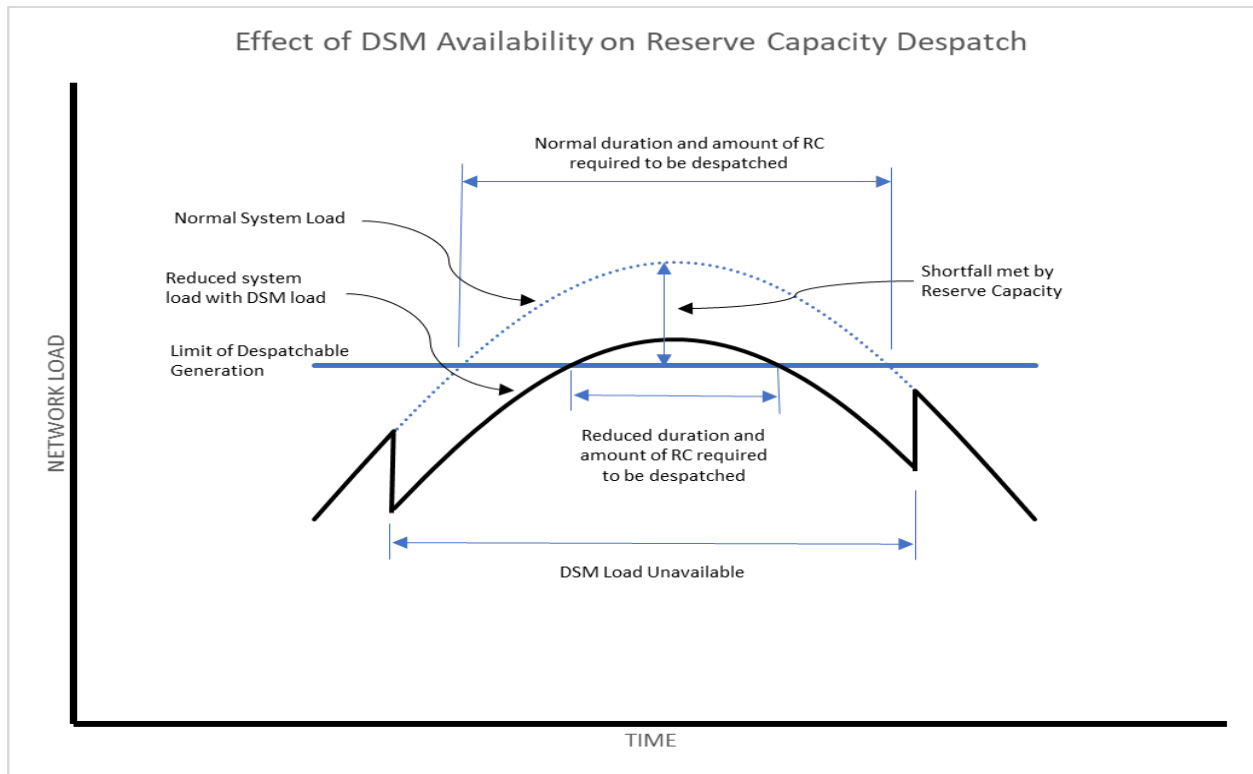
Therefore, the mentality that seems to have been adopted is that a load is deemed unavailable to provide DSM if it is 'off', whereas it is actually unavailable to provide DSM if the load is 'on' and does not comply with a despatch order and turn 'off'. This is analogous to a Reserve Capacity Generator which does not switch 'on' when despatched. If the DSM load is already 'off' due to maintenance or other interruption, when it would normally have been expected to be 'on', then the total requirement and duration for which additional Reserve Capacity is required has already been reduced – and at no cost to the network operator.

The application of penalties based on whether the load is available or not is, in Simcoa's opinion, misguided. They should not be based on availability of the load being 'on', but rather on unavailability or unwillingness to reduce load when despatched. To test this capability, Simcoa supports the random testing of capability and willingness to provide capacity at any time of year during the hours the capacity is offered – without warning – and with a 2-hour despatch notification – so as to simulate the real-world situation. But this must be applied to both generators and DSM loads. What mechanism exists and is actually tested to determine whether a Reserve Capacity Generator declaring that their load is available, is actually available? The Market Rules allow for testing but no, or few, actual tests appear to be performed.

It could be argued that DSM must have some objective measure to gauge its ability to deliver the contracted DSM when requested. That mechanism already exists in the Relative Demand assessment currently performed by AEMO which looks at the load of the associated NMI, not only for the network's 200 top sent-out load hours for the year as per the market rules, but for every trading interval over the year, so as to determine the likely level of load available to be despatched.

Ultimately, DSM should only be liable for refund payment should it not despatch when required or if it fails the testing regime. If it is unavailable to be curtailed when despatched due to the fact that it is already off-line, the result is the same in terms of the network load if it were available to be curtailed. The reduction in the amount of despatch required due to it being off-line is reduced as the

level of dispatchable load is not reached as early. Granted, if a resource is off-line when it was asked to be despatched, it should not receive despatch payments. It also should not be able to return to service until it has been deemed to have met its obligation for despatch or until the DSM event has passed. Simcoa welcomes discussion on this point to achieve a workable outcome.



Contribution to Network Congestion Reduction

DSM providers reduce the transmission required on a given network when despatched, as opposed to Reserve Capacity generation which increases congestion. This is at a time when all despatchable power is already in service and the network will in all likelihood be suffering from potential congestion issues. As DSM capacity reduces the total load on the system at peak times when despatched, DSM providers reduce the probability of network congestion.

To ascertain what resources are available on a particular part of the network, it is imperative that the network operator have visibility of which DSM and Generation loads are available to be despatched at any time. As such, Simcoa supports the requirement that DSM and Generation resources must be equipped with real time telemetry of their loads of the System Operator.

Other Considerations

Minimum size so as to be manageable. Larger DSM loads (>10MW) should be able to contract directly with the Market Operator, requiring them to become registered as a Market Participant.

Suitable load profile to make DSM likely to be available when required – which with the increasing use of renewable power, particularly solar, has moved the network peak load intervals to outside the period of when normal "daytime only" businesses are able to offer the service.

It is Simcoa's position that DSM loads provide a better investment for the economy as a whole. When a DSM resource is not providing reserve capacity services, it will be on-line and productive, thereby providing meaningful employment and income for the community and generating economic activity. By contrast, an idle generation resource provides generation side Reserve Capacity and nothing else. Working capital, electrical reticulation capacity and reserve capacity funds, which could otherwise be used to provide economic activity and employment, are otherwise being diverted towards non-productive generation capacity.

Simcoa understands there is a proposal from certain areas of the market to create a new form of capacity – or more correctly - an attempt to re-badge consumer load as a form of generation. If, for instance that form of load was available to provide capacity and be despatched along with other forms of generation during the normal operation of the market. this load is a completely different product to DSM and as this load is despatched similarly as with any other form of generation, it should receive the appropriate remuneration based on the Balancing price or STEM pricing applicable at the time of despatch. This is very different from DSM and will not be offered by Simcoa, as it is Simcoa's business model to remain on-line and in production. The DSM service offered by Simcoa is not of a form which would fit this definition. Any bilateral supply agreements would also need to be considered, along with its management – what is normal operation, etc. This form of packaging is not the concern of Simcoa and is not the subject of this discussion.