



Submission:

**Economic Regulation Authority
2012 Wholesale Electricity Market
Report to the Minister for Energy**

December 2012

by the
Sustainable Energy Association of Australia
www.seaaus.com.au

Overview

The Sustainable Energy Association of Australia (SEA) is a peak business body for the sustainable energy industry and for enterprises supporting sustainable energy. SEA is a chamber of enterprises and actively advocates for substantive action on sustainable energy in all sectors of the economy across all regions of Australia. SEA promotes the development and adoption of sustainable energy technologies and services that minimise the use of energy through sustainable energy practices and maximise the use of energy from sustainable sources. SEA has a strong reputation for authoritative commentary on a broad range of issues around energy efficiency and sustainable energy.

SEA members have raised a number of issues in relation to the Economic Regulation Authority's (ERA) discussion paper and the impact of the capacity market on both renewable energy generation and energy efficiency measures. Further to this, our members have raised a number of general issues in relation to the report on the Wholesale Electricity Market (WEM).

Please note that we have only commented on the Discussion Points that we believe are the priority points for our membership.

Overall: About Excess Capacity

One of the core issues raised by SEA members was around the issue of excess capacity above the Reserve Capacity limits currently within the WEM. This excess capacity issue is not seen as a problem in the long term and many of our members believe there is a need for the ERA to accept that the market is 'lumpy' in terms of timing of investment and the phase out of older inefficient plant, especially in a market that is still evolving. SEA recognises that the behavior in the WEM is also changing – overall system demand is falling, but peak consumption periods are placing additional strain on the market.

One of the key challenges with the capacity market is that it deals with investment in long-life (30-year plus) assets, which often have a considerable lead time (two to four years) from financial close to completion. These assets do not conveniently fit within a three-year planning cycle, which means that additional capacity often arrives in large 'blocks' within the market. Therefore, there will always be a degree of excess capacity within the market, and there are many causes for this excess – the market should accept this as a reality. Equally, renewable energy assets coming to market now are smaller, more dynamic and can have shorter build times than traditional energy assets.

The issue of an increase in excess capacity is seen to come from a number of causes, not just a single source, and there is no single solution to the perception of this as a problem. SEA members have commented that the excess is caused by market factors including:

- Retention of inefficient and old plant. There is a lack of incentives and/or penalties to ensure the timely retirement of problematic units (discussed further below). SEA members see this as the largest issue in creating a capacity overhang by both non-state market participants and large energy users.
- A legacy structural issue in the market in which excess base load generation is available and there is limited need for additional mid-merit capacity in the market.
- A downward revision of demand forecasts by the IMO, which automatically creates excess.

- Incorporation of residential solar PV into the demand forecasts for the first time, which has contributed to the IMO's downwards revision.
- A significant political contribution to additional capacity creation, for example the re-commissioning of Muja A & B and the compulsory tendering of capacity by Synergy, which have created inefficiencies in the market due to government ownership of utilities.

SEA members see the purpose of the capacity market is to deal with highest system peaks, primarily the system peak in the evening in summer. However, there is a lack of incentives in the market to reduce peak consumption at this time, which would reduce the need for bringing additional capacity on line. The lack of viable alternatives to additional generation means that capacity will need to grow to meet the 'super-peak' periods in the future.

Discussion Point 1

Stakeholders are invited to comment on how the Market Rules may be improved so that the Reserve Capacity Auction provision can be utilized by the IMO for the procurement of any capacity shortfall in meeting the Reserve Capacity Requirement and whether the Bilateral Trade Declaration of capacity should be made as a binding commitment between Market Participants similar to the Bilateral Submission in the energy market of the WEM.

Currently the Capacity Auction mechanism is not required. A continuing excess of capacity in the market has meant that to date, the Capacity Auction mechanism remains untested. SEA sees it as preemptive to discuss changes to an Auction mechanism that has not been used. Further, in an efficient market, the mechanism will not be used because a deficit in required capacity for the market would indicate underinvestment in the market.

SEA members have expressed concern about capacity pricing using the Auction mechanism due to the dominant players (Verve and Synergy) effectively being able to set the price for capacity within the market. The ERA report suggests that there needs to be definitive bilateral agreement to sell capacity credits within the market. If this were the case, then there must be a concomitant obligation to buy this capacity and a minimum (safe haven) price for that purchase. This would prevent dominant market players from distorting the price and value for smaller market participants. However, should the market be more open (that is, through greater client contestability) the auction concerns would be diminished due to a reduced risk of a dominant market participant effectively setting the market price.

The Lantau model is considered by SEA members to be a potentially viable alternative to the auction mechanism in dealing with the market capacity pricing mechanism and either a shortfall or excess of capacity within the market. The Lantau model should be considered in the longer term as an alternative to replace the Auction mechanism and the current model for dealing with excess capacity and the subsequent capacity pricing.

Discussion Point 2

Stakeholders are invited to comment on whether there should be a limit set for the amount of Capacity Credits that the IMO can procure in excess of the Reserve Capacity Requirement and if so, on what basis this limit should be determined.

SEA members see that the introduction of a cap into the capacity market is a retrograde step and would act as a disincentive to move to a more open market. It would also block innovation within the market for alternative solutions in both renewable energy and energy efficiency. Limiting the potential for additional capacity would likely:

- Reduce incentives for future entrants, maintaining the current market paradigm of a small number of powerful government utilities;
- Maintain protection for incumbent market players against newer market entrants (until inefficient plant is retired);
- Reduce opportunities for new renewable energy projects and other services to enter the market; and
- Reduce opportunities for innovative mechanisms to improve market performance and allow a more mature and efficient market.

The consideration of such a cap is seen as anti-competitive and not in the long-term interests of either consumers or market participants.

Discussion Point 4

Stakeholders are invited to comment on Lantau's proposal for changing the Reserve Capacity Price calculation formula in the Market Rules.

SEA supports Lantau's proposal. Please see our response to Discussion Point for more detail.

Discussion Point 5

The Authority invites stakeholders to comment on the value provided by DSM under the current market design and the cost of DSM to the market. The Authority also invites stakeholders to comment on whether alternative treatments of DSM could provide a more cost effective way to the market for the efficient use of DSM.

Feedback from SEA members is that because DSM effectively achieves the same outcomes as generating additional energy, it should receive payments in line with that generation.

The most recent DSM events have been due to fuel (gas supply) problems and the outcomes achieved by DSM would not have been achieved by peaking plant relying on constrained fuel sources. For example, if gas supply was again significantly constrained, up to 330MW of gas peaking plant may not be available to match demand. In this scenario, DSM or higher cost, inefficient and polluting energy generation such as diesel would be the only alternatives.

One issue not raised by the ERA Report is the issue of peaking plant availability and use compared with DSM events. For a direct comparison of DSM versus peaking plant use and value, some mechanism of comparison needs to be made.

Another value for DSM that was raised by SEA members is that it provides additional benefits beyond the displacement of energy generation during peak periods – specifically, it also avoids generation that is also subject to transmission losses. Therefore, DSM provides a greater **effect** than generation as it avoids the average 5% line losses across the network – but there is currently no mechanism to capture these benefits for the market.

There is a suggestion that DSM should be of less value because limited calls upon it provide little benefit to any market participants. SEA disagrees with this position. DSM cannot be examined in isolation from whole mix of generation and its alternatives to deal with the system peak. However, DSM may be seen as disadvantageous for retailers who are not selling energy at times when it is at its most expensive and profitable for the retailers.

Another point raised by SEA members is that DSM may need further assessment as to what constitutes a fair return compared to capacity payments back to the market from electricity purchases. DSM appears to offer a cheaper outcome for the electricity market, a revised market structure may yield more DSM participants who have a low capital cost but a high cost to their business in respect of the opportunity costs for foregone operations and production. Furthermore, the customers that forego energy consumption as a part of DSM often are also adopters of energy efficiency technologies, and this would appear to be a good outcome for the structure of the electricity market.

A number of SEA members who are also large energy consumers raised the issues, barriers and incentives surrounding DSM vs. interruptible supply and suggested that the comparison also needs to be considered in any discussion about DSM. The key points raised were:

- DSM pays for supply interruption but customers who have an interruptible supply do not receive any compensation when supply is interrupted due to system constraints.
- Constrained supply areas need investment and interruptible supply is managed by System Management, not the market, but unlike DSM does not benefit consumers.
- Interruptible supply has the same effect as DSM but penalises business operations rather than acts as an incentive for them.
- Connection to an interruptible supply acts as a constraint on business investment but if credits were available to them (as is the case with DSM), supply interruptions would be more palatable. Currently businesses bear the costs for a disrupted supply.

SEA recognises that as part of the IMO working group on the Reserve Capacity mechanism, significant changes have been proposed by the group and are being accepted by DSM providers but have not yet been implemented. These include:

- Changing the availability of DSM by removing the existing cap.
- Lengthening the availability time in each day from 12pm to 6pm to 10am to 6pm.
- Lengthening the duration from four hours to six hours.
- Shortening the notification period for DSM to come online from four hours to two hours.

SEA believes these changes, which were raised within the IMO Working Group, need to be addressed before introducing any other potential changes to the value and operation of DSM within the market. Furthermore there are currently no realistic alternative suggestions to DSM capacity in the market and therefore it is not possible to comment on this at this time for an alternative model.

Discussion Point 8

Stakeholders are invited to comment on whether the current market design provides appropriate incentives for retirement of inefficient generating units.

The maintenance of old, inefficient and low availability generation capacity is seen by SEA as a major issue in creating the excess capacity within the market. These plants act as a barrier to the introduction of new and more efficient energy generation, in particular renewable energy projects. SEA's view is that the Market Rules and the Market Operator need to:

- Ensure that older, inefficient plants do not have incentives to remain within the market; and
- Ensure that there are sufficient incentives for new and competitive market entrants.

If a plant is in planned outage mode, Western Power System Management does not call on that plant to dispatch, and therefore it is not subject to penalties for non-dispatch. There is no incentive for older, low availability and inefficient plant to reduce their levels of planned outage as they are not subject to financial penalties or market refunds. Verve's Kwinana C plant is seen as the archetype of the problematic plant, with high planned outage levels that contribute to excess market capacity.

SEA recognises that there needs to be a limit on the amount of planned outages that is allowable for plant on the network. Similarly, the market rules need to be tightened up to prevent low availability plant distorting future investment in new plant and capacity. As such, the mechanism to encourage the retirement of obsolete plant needs to be improved by the IMO.

Discussion Point 10

Stakeholders are invited to comment on whether the current information regime under the Market Rules presents a potential barrier to entry and what, if any, improvements can be made in promoting more efficient market outcomes.

SEA has received feedback that there is a general degree of implicit knowledge within the market that is known by market participants but is often considered not 'transparent' by participants. This knowledge is effectively obscured by existing market conditions such as market contracts, in particular the vesting contract, which means that a significant part of the market is not transparent.

There is also a perceived need for additional information on interval metering for non-contestable portion of the market as this is essentially a 'black box' but impacts 50% of the energy market. Synergy is the only commercial market participant to have this market data.

The recent changes to the Synergy - Verve vesting contract have made the market opaque and the ongoing lack of commercial or full retail contestability maintains market opaqueness. Market participants perceive these information issues impact the longer-term adoption of both partial and full contestability. However it is recognised that in the situation where there is a transformation to a higher level of market contestability in the future, there are mechanisms required to prevent 'cherry-picking' of clients to maintain competitive tensions within the market.

Discussion Point 11

Stakeholders are invited to comment on how effective the IMO, System Management and the Authority have been in carrying out their respective functions in the WEM.

One issue raised with SEA is that the ERA is seen as pre-empting the IMO processes about reform of DSM and other mechanisms with this report to the Minister. This is seen as a concern by market participants because the IMO's process (which has suggested several changes to existing mechanisms within the market), are yet to be implemented, and the ERA report does not appropriately reflect all of the IMO working group discussions.

Overall, SEA agrees with its members that the IMO is doing a good job in its role as the market operator and that the public consultation processes before a decision is made are seen as valuable by the market to extend view points beyond those just in the working groups. However, the issue was raised that there are some concerns that the IMO acts as both a market operator and a regulator, which can potentially create a conflict or the potential for over-regulation of the market.

Sustainable Energy Association of Australia (SEA)

SEA promotes the development and adoption of sustainable energy technologies and services that minimise the use of energy through sustainable energy practices and maximise the use of energy from sustainable sources.

SEA 2030 Vision

‘On behalf of the people of Australia, the Association will vigorously promote the development and adoption of sustainable energy so that by the year 2030 more than 30% of Australia’s energy use in and across all states and territories is displaced by sustainable energy practices so that energy demand is more than 30% below that measured in the year 2000, and that more than 30% of energy use is derived from sustainable sources.’

About SEA

SEA is a chamber of businesses variously promoting, developing and/or adopting sustainable energy technologies and services that minimise the use of energy through sustainable energy practices and maximise the use of energy from sustainable sources.

SEA is building relationships with businesses that aspire to be more sustainable in their own energy use, are providing the commercial solution to climate change through their products and services, or indirectly through their actions adopting more sustainable energy practices in their own business. Many businesses are acting to support the development of the best policy outcomes for the industry by becoming SEA members.

The role of governments is to build frameworks of governance that establish clear market signals for change and growth, and allow Australia’s innovative businesses to respond and deliver market-based solutions. A key role of SEA is to offer policy options to governments building those frameworks.

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