

Wholesale Electricity Market Rule Change Proposal Submission Form

RC_2012_10 Limits to Early Entry Capacity Payments

Submitted by

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Submission

- Please provide your views on the proposal, including any objections or suggested revisions.**

Background

The Capacity Year runs from 1 October to 30 September. Market Participants must make their capacity available for the entire duration of this period or pay refunds for unavailability. Currently, new capacity that is about to enter service may enter as early as 1 June immediately prior to the start of the Capacity Year. New capacity that is fully commissioned before the start of the Capacity Year may start receiving capacity credit payments as early as 1 June.

The rules for early payment for newly commissioned capacity were amended to allow for the 1 June start of capacity payments in 2009 with the implementation of RC 2009 11 "Changing the Window of Entry into the Reserve Capacity Mechanism". Prior to the introduction of RC 2009 11 new capacity could enter the market between 1 August and 30 November. Payment for early entry of capacity credits was only available from 1 August.

RC 2009 11 was proposed by the Independent Market Operator (IMO) at a time when the system had a much tighter capacity supply compared to the situation today. The additional financial incentives that RC 2009 11 introduced for commissioning capacity as early as possible were promoted as:

- improving system security by providing more time for newly commissioned plant to iron out any early technical problems to ensure a high reliability and availability during operation in the first hot season after commissioning, and
- minimising long term costs of capacity provision by lowering the risk of having to run expensive tenders for supplementary capacity at short notice to cover for new capacity that failed to commission before the start of the hot season.

Early payment of capacity credits represents a cost to Market Customers. This cost was assessed as acceptable when assessing RC 2009 11 when balanced against the improved incentives for timely entry of new capacity and therefore positive impact on system security and reliability.

However, Synergy has identified that the financial incentive to encourage early entry is only required for conventional generation capacity. For other “technologies” that provide capacity credits, such as Demand Side Management (DSM) programmes, the capacity often already exists and no commissioning is necessary. The effect on system security of providing financial incentives to non-generation based capacity to be available early may therefore be limited as these providers do not typically have potential technical commissioning issues to sort out to guarantee the availability of their capacity credits

Change Proposal

Synergy submitted Rule Change Proposal RC_2012_10 “Limits to Early Entry Capacity Payments” on 14 June 2012.

Synergy has proposed to amend the Market Rules so that early payment for Capacity Credits in future only be available to commissioning (new Facilities) Scheduled and Non-Scheduled Generators. Under the proposal, Scheduled and Non-Scheduled Generators will continue to be able to receive capacity payments as early as 1 June immediately prior to the start of the first Capacity Year that the new capacity has been accredited for.

However, all other new capacity, including that provided by DSM programs, would only be eligible for capacity payments from the start of the Capacity Year on 1 October.

Perth Energy’s Views

Since the introduction of RC 2009 11 the South West Interconnected System (SWIS) has changed from having a very tight Capacity Credit supply to having a significant oversupply of Capacity Credits. This has been driven by Synergy’s underwriting of the entry of large baseload coal and combined cycle gas plant, peaking plant and wind farm within a short space of time and significant increase in DSM based capacity that is projected to be close to 10% of total Capacity Credits in 2013/14.

The entry of Synergy-underwritten capacity was designed to displace some of Verve’s oldest capacity under the original Vesting Contract that encouraged such displacement to improve system efficiency and lower costs. However, Verve has not decommissioned its displaced or scheduled-to-close capacity as planned following the Varanus Island incident that has caused some legitimate concern over potential capacity shortfall should another crisis occur.

The oversupply has been effected against the backdrop of a decline in capacity demand due to lower than IMO forecast electricity consumption in previous years.

DSM

There is no doubt the more controversial issue has been the treatment of DSM “capacity” in the Market Rules that ranks it equal to conventional generation capacity. While conventional capacity entry responds to capacity pricing signals as designed in the Rules, the application of conventional capacity pricing to DSM is misconceived and results in the wrong counting of the true level of capacity in the system,

The current excess capacity supply is therefore miscalculated by the extent of DSM loads that could be voluntarily curtailed or interrupted under short term system demand stress conditions. The inconsistency between certification Rules as applied to conventional capacity and those applied to DSM loads are being investigated by the IMO. The purpose of the investigation is to make DSM loads subject to the same dispatchability requirements on true generation capacity.

However, critically, it appears the IMO has not caught on to 1) the fundamental difference in nature between DSM loads and true generation capacity, and 2) the fact that there is no compelling reason for DSM to exist under current legislation or in the workings of the electricity industry.

First, generation capacity does not have an alternative value to the value that it can derive from supplying power to the SWIS. Once a power station is built it is a dead asset besides its value in providing capacity and energy to the SWIS. As it can only derive value from this activity the market can be absolutely certain that its owner will do everything to operate it to meet market demand, as long as operating it does not cause actual losses.

DSM loads on the other hand have an alternative value in the economic products that the loads exist for. If the products of the loads carry a higher economic value than the value derivable from the curtailment or interruption of the loads, then the loads will not be curtailed or interrupted. This was seen during the California crisis of 2000. The only way to make it less uncertain that the DSM loads will respond to system requirement when called is for System Management to be able to unilaterally curtail or interrupt those loads, for as long as conventional capacity can practically be operated to meet sustained emergency conditions, which is not the case currently.

Second, even if DSM loads could be curtailed or interrupted unilaterally by System Management for as long as system emergencies require them to be, this does not make DSM loads as valuable as generation capacity. Under system emergencies System Management already has all the statutory powers to shed loads. Under its Frequency Load Shedding policy System Management ranks customers in priority categories. Whether paid for curtailment or interruption or not, if a load is earmarked by System Management to be shed under system stress conditions then that load will be shed.

This means paying for some loads to be voluntarily shed the same value as generation capacity makes no sense and is discriminatory to all other loads. At the most, those voluntary loads should be paid a “thank you” voucher for helping System Management re-arrange its load shedding policy, something that should be between those loads and System

Management to work out. DSM, at the absolute best, could only be considered an ancillary service to System Management.

The most critical fact that the IMO seems to have completely missed is that the ultimate penalty imposed on a generation capacity investor is the full capital cost of that capacity. The ultimate penalty imposed on a DSM load aggregator is only the Capacity Credit refunds – that is, if the aggregator sticks around to pay them. A generation capacity owner who walks away from their obligations to the WEM will lose the power station. A DSM aggregator can walk away from their obligations with no skin left behind other than any deposit with IMO.

The current payment to DSM loads as generation capacity is so irrational it is akin to an unwitting sham foisted on all other loads in the SWIS that could be shed at any time under system stress conditions that do not get paid. It is a virulent cost to all SWIS consumers that should not be there in the first place.

Early Payment For New Capacity

Our view is that 1) there should be no payment to DSM capacity as generation capacity under any condition, and 2) there should be no early payment to new capacity, conventional or otherwise, under excess capacity conditions.

An oversupply of Capacity Credits does not impact financially on Market Participants that source their Capacity Credits via the market as the Capacity Credit price is automatically adjusted to take account of any oversupply (clause 4.29.1(c)). However, any payment for new Capacity Credits that enter prior to the start of the Capacity Year represents an additional cost that is borne by Market Customers. This additional cost can only be justified by the potential benefit to the market of having new capacity entering the system early and have extra time to iron out any technical problems in time to ensure a high level of availability during the first Hot Season in operation.

Perth Energy agrees with Synergy's assessment that there is little benefit in early availability of DSM based Capacity Credits. As stated, we would rather see DSM be classified an ancillary service whose price should be commercially determined between the DSM loads and their electricity supplier or System Management if either of the latter could see value in acquiring DSM loads. The IMO has no business in trying to secure DSM loads at all.

The IMO is there to ensure sufficient generation capacity dedicated to supplying the SWIS load. It does not have the expertise to make assessment of the commercial viability of certain loads offering themselves to be turned off according to commercial arrangements between them and third parties. If DSM loads are capable of turning themselves off under system stress then they should negotiate with their electricity supplier under bilateral contracts to do so, in which case the IMO would exclude them from the SWIS load that the IMO would need to secure supply for through the Capacity Credit price. Intervening in what should be the DSM loads' commercial arrangement with third party suppliers works against the interests of all other loads.

With regard to true generation capacity, Perth Energy considers that the benefits of providing financial incentives for generators to commission early continue to have positive impacts on long term system security. Generators normally have much higher risks of experiencing technical issues that may impact on performance in the early period after commissioning has

finished. Providing a financial incentive for early commissioning allows more time to sort these problems ahead of the start of the critical Hot Season and therefore will be of benefit to system security under normal conditions.

While Perth Energy supports the continued provision of an opportunity for generators to start earning Capacity Credit payments from 1 June to encourage early commissioning under balanced supply-demand conditions, we do not support early payments under excess capacity conditions.

Interpretation of Rules

Perth Energy understands there is some concern that the proposed amendments may be seen to be discriminating against certain technologies, such as DSM, and therefore may not be compatible with facilitating Market Objective (c)¹. Perth Energy notes that Synergy has obtained legal advice to support its position that the proposed amendments would be compatible with Market Objective (c).

We are of the firm view that DSM is not a “generation technology” and therefore such concerns are baseless.

Perth Energy considers Synergy’s proposal should be accepted for the long-term cost savings to the wider market that would flow from the amendments by avoiding costly DSM payments for no reason or unnecessary early Capacity Credit payments to any capacity under excess capacity conditions. This would significantly better facilitate achievement of Market Objective (d) through correct, accurate and timely signals of investment needs to the market.

Our strong recommendation is also for IMO and the Reserve Capacity Mechanism Working Group to prioritise the declassification of DSM loads as conventional capacity to improve the integrity of the WEM. It is critical that Reserve Capacity be correctly measured and unequivocally proven. Quasi Reserve Capacity concepts like DSM must not be allowed to contaminate the capacity market as they are destabilising the market and misrepresenting the true state of capacity supply.

2. Please provide an assessment whether the change will better facilitate the achievement of the Market Objectives.

¹ The objectives of the market are:

- (a) to promote the economically efficient, safe and reliable production and supply of electricity and electricity related services in the South West interconnected system;
- (b) to encourage competition among generators and retailers in the South West interconnected system, including by facilitating efficient entry of new competitors;
- (c) to avoid discrimination in that market against particular energy options and technologies, including sustainable energy options and technologies such as those that make use of renewable resources or that reduce overall greenhouse gas emissions;
- (d) to minimise the long-term cost of electricity supplied to customers from the South West interconnected system; and
- (e) to encourage the taking of measures to manage the amount of electricity used and when it is used.

Perth Energy considers the proposed changes would facilitate achievement of Market Objectives (c) and (d). In any event, any inconsistency that may be perceived with Market Objective (c) would be far outweighed by the positive benefit flowing from Market Objective (d).

Perth Energy has not identified any impacts on the remaining Market Objectives.

3. Please indicate if the proposed change will have any implications for your organisation (for example changes to your IT or business systems) and any costs involved in implementing these changes.

Perth Energy will not be impacted by the proposed changes.

4. Please indicate the time required for your organisation to implement the change, should it be accepted as proposed.

Perth Energy will not require any lead time to implement the proposed changes.