

Wholesale Electricity Market Rule Change Proposal Submission Form

RC_2014_06 Removal of Resource Plans and Dispatchable Loads

Submitted by

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

Background

When the Wholesale Electricity Market (WEM) was first implemented in 2006 one of the design features was to allow independent power producers to implement its bilateral contract position with no need for actively participating in the close to real time energy balancing within the market. Verve Energy was the sole provider of balancing services and the energy market was in effect a net pool where participants could use the Short Term Energy Market (STEM) to fine tune their portfolios in the day ahead market.

Market Participants had to submit a Resource Plan to the Independent Market Operator (IMO) to indicate how they were planning to acquit their contractual arrangements. The Resource Plan would typically show which generation units would be dispatched during the Trading Interval and the expected output of those generation units. The information from the Resource Plan was used by System Management for a number of purposes including developing the expected requirements on Verve Energy's balancing portfolio. The Resource Plans were also used by the IMO to inform capacity credit refund payments.

On 1 July 2012 the design of the WEM was updated with the introduction of a Balancing Market. With the changes the WEM effectively became a gross pool. All generators must bid their capacity into the Balancing Market and those units that are bid in at prices at or



below the market clearing price will be dispatched by System Management. The information from the Balancing Market has effectively made the role of Resource Plans redundant.

The current version of the Market Rules contain a Facility Class called "Dispatchable Loads". No facilities have to date been registered within this class.

Issues

1. With the introduction of the Balancing Market on 1 July 2012 the concept of Resource Plans has effectively become redundant. The role that Resource Plans used to perform within the WEM is now performed by the Balancing Market and the information flowing from the Balancing Market. Retaining Resource Plans within the Market Rules is considered inefficient as it imposes an additional burden (to submit Resource Plans) on Market Participants with no associated benefit.

Removing Resource Plans from the Market Rules will have some flow on effects as they are used for a number of secondary purposes, including:

- a) Informing System Management's planning,
- b) Preparing forecasts by System Management for Synergy and the IMO,
- c) Defining the Reserve Capacity Obligation for Market Participants and providing input in the calculation of the Net STEM Shortfall,
- d) Defining restrictions placed on Balancing Facilities,
- e) Specifying conditions under which System Management may refuse a Facility to synchronise or de-synchronise,
- f) Determining the baseline consumption for Dispatchable Loads.
- 2. There are considerable costs associated with maintaining and updating the IMO's systems to allow for the existence of Dispatchable Loads within the Market Rules. No Market Participant has chosen to utilise this Facility Class. There are therefore considerable costs being incurred for no benefit to any Market Participant.

The IMO has proposed to remove the concept of Resource Plans from the Market Rules (see below). A number of related issues have been identified as follows:

- 3. Currently, the period allowed for providing STEM submissions starts at 9.00am and ends on 9.50am on the Scheduling Day, being one day before the Trading Day. The 9.50am deadline is linked to the current requirement to publish the results of the STEM Auction ahead of the deadline for submitting Resource Plans at 11.00am. With the removal of Resource Plans it is no longer necessary to keep the window for submitting STEM submissions short.
- 4. There is also a current requirement on the IMO to provide Market Participants with certain parameters to assist in the STEM submission process, such as details of STEM submission already submitted by the Market Participant and accepted by the IMO.
- 5. Clauses 6.4.4 and 6.4.5 places an obligation on Market Participants to promptly access their STEM Auction results and another obligation on the IMO to follow up Market Participants that have not accessed their STEM Auction results.



- 6. Section 7.5 of the Market Rules places obligations on Market Participants in relation to providing System Management with facility Fuel Declarations as derived from STEM Submissions. System Management no longer utilise this information as it is now obtaining this information from the Balancing Merit Order (BMO)
- 7. Currently, the IMO is required to provide a forecast and final BMO and also a forecast and final Load Following Ancillary Services (LFAS) Merit Order. The process descried in the Market Rules to derive the forecast and final versions are similar but not identical. In practice, the IMO's IT systems are set up to apply exactly the same logic for deriving the forecast and the final version of these merit orders. The IMO considers that the Market Rules would be clearer if these inconsistencies were removed and the same logic applied to both the forecast and final version of these merit orders.
- 8. Clause 7.6A.5 of the Market Rules places an obligation on Synergy and System Management to meet once a month to review the procedures for scheduling and dispatch of the Balancing Portfolio. System Management and Synergy has expressed that there is no benefit from enforcing the monthly frequency of this meeting.
- 9. There is some ambiguity in relation to how available and unavailable capacity should be expressed within a Balancing Submission. Various clauses (e.g. 7A.2.9(a)(ii)) imply that the Balancing Submission must indicate the quantity of capacity that is unavailable. However, clause 7A.2.4 which details what must be contained in a Balancing Submission does not specify how to indicate unavailable capacity.
- 10. The IMO provides and continually updates the Forecast BMO for each Trading Interval within the Balancing Horizon and uses information from Balancing Submission to inform the forecasts. The accuracy of forecasting output from intermittent generators can vary significantly, but in general becomes more accurate closer to real time. Currently, intermittent generators can only update their Balancing Submissions until gate closure, which is two hours before the Trading Interval. The IMO's forecasting accuracy may be improved for forecasts produced between gate closure and real time if it were given access to further updates from intermittent generators.

Change Proposal

The IMO submitted Rule Change Proposal RC_2014_06 "Removal of Resource Plans and Dispatchable Loads" on 28 January 2015. The IMO proposed a number of changes to the Market Rules as follows:

- 1. The concept of Resource Plans to be removed from the Market Rules completely. The secondary impacts identified above in 1.a) f) to be dealt with as follows:
 - a) The Balancing Horizon will be extended from 6pm to 1pm. The IMO will then be able to provide System Management with a Forecast BMO shortly after 1pm on the Scheduling Day. This will provide System Management with similar information as what it currently receives via the Resource Plans around 1pm.
 - b) Remove the obligation on System Management to provide Synergy with forecast energy requirements for the Balancing Portfolio by 4pm on the Scheduling Day and provide the IMO with aggregate forecast output of all non-Balancing Portfolio Non-



Scheduled Generators. Also, remove the associated obligation on the IMO to publish the information relating to Non-Scheduled Generation forecast. Synergy has indicated that it does not require this information and the IMO considers forecast output by Non-Scheduled Generators to be available within the Balancing Forecasts currently published by the IMO.

- c) The IMO proposes to link the Reserve Capacity Obligations for Market Participants to their STEM submissions and avoid the current reference to Resource Plans. This is the approach that currently applies to Synergy. It does represent an additional obligation on Market Participants to make a STEM submission covering all of its available capacity in the Portfolio Supply Curve.
- d) The IMO proposes that the current restrictions that the IMO can place on Balancing Facilities that do not meet the Balancing Facility Requirements in relation to Resource Plan submissions should apply to Balancing Submissions by those facilities. Therefore, these Facilities will be required to bid certain quantities at the floor and cap prices in their Balancing Submissions. This will be implemented via an amendment to the Market Procedure "Balancing Facility Requirements".
- e) The IMO proposes to remove the reference to following a Resource Plan from the list of reasons for System Management to disallow synchronisation or desynchronisation. With the introduction of the Balancing Market generators now always receive Dispatch Instructions and the reference to Resource Plans is redundant and will be removed.
- f) The IMO proposes to remove the Facility Class Dispatchable Loads. There will therefore be no requirement to find a substitute for the Resource Plan for setting the consumption baseline for these facilities.
- 2. The IMO has proposed to remove the Facility Class Dispatchable Loads.
- 3. The IMO has proposed to extend the period for providing STEM submissions by one hour so that the window becomes 9am to 10.50am. The timeline for the STEM Auction will also be delayed by one hour.
- 4. The IMO has proposed to clarify in the Market Rules that the parameters provided to Market Participants under clause 6.3A.3 are updated immediately following acceptance of a STEM Submission.
- 5. The IMO has proposed to remove the obligation on Market Participants to access their STEM Results and the obligation on the IMO to follow up Market Participants that do not access this information.
- The IMO has proposed to remove all references to Fuel Declarations in section 7.5 of the Market Rules. This information will still need to be provided via the Balancing Submissions.
- 7. The IMO has proposed to amend the Market Rules to clarify and align the processes used to produce the forecast and final BMO and LFAS merit orders.



- 8. The IMO has proposed to remove the requirement on System Management and Synergy to meet monthly.
- 9. The IMO has proposed to clarify how available and unavailable capacity should be included in Balancing Submissions. The IMO has proposed that Balancing Submissions should specifically provide a declaration of any quantity that will be unavailable for dispatch. Furthermore, the IMO has also proposed that the Balancing Submission for each Facility must fully account for all the Sent Out Capacity of the Facility as being either unavailable, available or a combination of the two.
- 10. The IMO has proposed that Non-Scheduled Generators be allowed, but not required to amend their Balancing Submissions after gate closure to allow for as accurate and up to date forecasts of output from intermittent generators to be made available to the IMO so that the IMO can use as accurate as possible information when calculating the Forecast BMO for a Trading Interval.
- 11. The IMO has also proposed a number of other minor changes to the Market Rules, such as updates to some of the Glossary definitions.

Perth Energy's Views

Perth Energy supports the amendments proposed by the IMO.

The Balancing Market was introduced on 1 July 2012 and made significant changes to the way that generators in the WEM participate in the market. With the changes, all generators participate in the Balancing Market and must make their generation capacity available for dispatch in the Balancing Market. This new approach has removed the importance of Resource Plans in the market. Perth Energy agrees that the information provided by Market Participants' Resource Plans is generally available from their Balancing Submissions. We therefore consider it a logical step to remove the unnecessary duplication of having to provide the same information in Resource Plan submissions as is provided in Balancing Submissions.

With respect to the secondary impacts of removing Resource Plans, Perth Energy considers the IMO's proposed approaches to be practical and reasonable. With the proposed new approach of relying on the STEM submission for the calculation of the Reserve Capacity Obligation for all Market Participants we would prefer to see a solution that does not require participants to make a STEM submission. Ideally, it would be preferable to preserve the ability for Market Participants to opt out of the STEM submission process.

Should the proposed approach of mandating the use of STEM submissions in the new process go ahead we note that even though it may be common practice for all Market Participants at the moment to provide STEM submissions it would be desirable to somehow highlight the new importance of always providing a STEM submission as this will now also impact on capacity credit refunds.

Perth Energy also agrees with the IMO's proposal to remove the Facility Class Dispatchable Loads. This Facility Class has not been used by any Market Participant since market start in September 2006 and it is in our opinion inefficient to continue to incur costs for updating IT systems et cetera to accommodate a Facility Class that is not being used.



Perth Energy fully supports the proposed extension of time allowed for making STEM Submissions so that the window now closes an hour later at 10.50am. This will allow parties more time to make decisions to optimise their portfolios and also provides a more reasonable buffer of time to deal with any issues such as IT problems that may from time to time interfere with STEM Submissions.

Perth Energy supports the proposed changes to clarify that once STEM Submissions have been accepted by the IMO the STEM Submission is automatically taken into account in any calculations and forecasts that the IMO performs and therefore is fully reflected in any information that the IMO provides back to the Market Participant. We also fully support removing the requirement on Market Participants to access their STEM results and the obligation on the IMO to follow up with any Market Participants that have not accessed their results. With the additional time now allowed for the various processes, Market Participants should have ample time to process information and respond accordingly.

With regard to the proposal to remove references Fuel Declarations in section 7.5 of the Market Rules which deals with STEM Submissions, Perth Energy understands that this information was for the benefit of System Management and that they are now relying on the information on Fuel Declarations from Balancing Submissions rather than those provided in STEM Submissions. Perth Energy considers it unnecessary to provide this same information in two separate submissions (STEM Submission and Balancing Submission). We therefore support the proposal to remove the requirement for Fuel Declarations in STEM Submissions.

As the IMO is already applying the same process to derive the forecast and the final version of the BMO and the LFAS merit order we agree that the Market Rules should be amended to reflect current practice.

We also agree with the proposal to remove the requirement for Synergy and System Management to meet monthly. Compelling parties to meet without having any flexibility to cancel when not matters need to be discussed has no purpose and only serves to add overhead cost to those parties. Synergy and System Management should be allowed the flexibility to meet if and when required.

Perth Energy welcomes the proposed clarification with regards to how to reflect available and unavailable capacity in Balancing Submissions. Improved clarity of an important provision in the Market Rules, such as this, will improve transparency and hopefully lead to better information provision and with that more efficient decisions being made to the overall benefit of all Market Participants.

We also welcome the proposed changes to allow operators of intermittent generators to continue to update its Balancing Submission post gate closure to reflect any updates to its forecast output. Whilst we agree with the IMO's proposal to not mandate further updates from intermittent generators at this stage, it may be worth considering scenarios where intermittent generators should be compelled to update their Balancing Submission post gate closure. For example, if an intermittent generator suffered a Forced Outage close to real time and its most recent Balancing Submission was indicating a significant level of output, it would be of value to the IMO to receive an updated estimate of likely output to inform its forecast BMO for affected Trading Intervals.

Perth Energy has no specific comments for the remaining minor proposed changes.



Finally, Perth Energy would like to share some concerns related to the progress of this and other proposed Market Rule changes whilst the Energy Market Review (EMR) is still continuing. The Minister for Energy provided the market with an update on the progress and future direction of the EMR on 24 March 2015. Although some high level direction on the likely design of the market for the future was provided, significant uncertainty remains and is likely to remain for at least another year. This is particularly the case for the capacity market and the role of Synergy within the market. In this environment of uncertainty it is difficult to make a compelling case for spending significant sums of money on market rule changes that may prove to be short lived. Perth Energy would like to understand the likely cost of amending the IMO's and System Management's systems to accommodate the proposed changes before providing unqualified support for these proposed changes.

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

Subject to our concerns about the potential costs to implement this rule change proposal in the current state of uncertainty about the future of the WEM, Perth Energy considers the rule change proposal will improve efficiency and reduce costs by removing the now unnecessary process of providing Resource Plans and also remove unnecessary costs associated with accommodating an unused Facility Class. These changes will therefore likely improve the ability to achieve Market Objectives¹ (a) relating to efficiency and (d) relating to minimising long-term cost of electricity.

Perth Energy considers the transparency of the Market Rules will also be enhanced by a number of the proposed changes, such as the proposal to clarify how to reflect available and unavailable capacity in Balancing Submissions. This would serve to further promote efficiency, safety and reliability within the system and therefore promote achievement of Market Objective (a).

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 need to update some of its internal procedures and IT systems to accommodate the proposed changes. This is likely to require about 2 weeks for implementation and testing.

¹ (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.



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

Perth Energy will require about 2 weeks to implement necessary changes to its procedures and systems following a decision to implement this rule change.