

Determination of the Ancillary Service Margin_Peak and Margin_Off-Peak Parameters

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Economic Regulation Authority

WESTERN AUSTRALIA

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DETERMINATION

1. Pursuant to clause 3.13.3A of the *Wholesale Electricity Market Amending Rules (Market Rules)*, the Economic Regulation Authority (**Authority**) has determined the values for the Margin_Peak and Margin_Off-Peak parameters for the 2013/14 financial year to be 17 per cent and 27 per cent, respectively.

REASONS

Background

2. Under clause 3.13.3A of the Market Rules, the Authority must determine the values for the Margin_Peak and Margin_Off-Peak parameters for each financial year by 31 March, prior to the start of that financial year.
3. In making the determination, the Authority is required to undertake a public consultation process and take into account:
 - the Wholesale Market Objectives;¹ and
 - the proposal submitted by the Independent Market Operator (**IMO**).
4. The Market Rules set out the factors that the IMO must take into account in its proposal for the values of the Margin_Peak and Margin_Off-Peak parameters:²
 - the margin Verve Energy could reasonably have been expected to earn on energy sales foregone due to the supply of Spinning Reserve; and
 - the loss in efficiency of Verve Energy's Registered Facilities that could reasonably be expected due to the scheduling of those reserves by System Management.
5. On 30 November 2012, the IMO submitted to the Authority its proposed values for the Margin_Peak and Margin_Off-Peak parameters for the 2013/14 financial year, accompanied by a report prepared by its consultant Sinclair Knight Merz / McLennan Magasanik and Associates (**SKM MMA**). SKM MMA was engaged by the IMO to carry out an independent assessment and modelling of the margin values.
6. The IMO's submission is available on the Authority's website.³

¹ The Wholesale Market Objectives 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.

² The Margin_Peak and Margin_Off-Peak parameters are used in the Ancillary Service settlement calculations under clause 9.9.2 of the Market Rules for the compensation of costs incurred by Verve Energy, as the sole default provider of the Spinning Reserve Ancillary Service.

Public Consultation Process

7. In accordance with the requirements of the Market Rules, the Authority issued a notice on 19 December 2012, inviting public submissions on the IMO's proposal. The Authority also published an issues paper to assist interested parties in making submissions. The period for public submissions closed on 1 February 2013.
8. Submissions were received from Verve Energy and Community Electricity. The submissions are available on the Authority's website.

Assessment

9. The Authority has assessed the IMO's proposal against the factors set out in clause 3.13.3A of the Market Rules by taking into account:
 - the Wholesale Market Objectives;
 - whether the proposed values by the IMO reflect what Verve Energy could reasonably have been expected to earn on energy sales foregone and the loss in efficiency of Verve Energy's Registered Facilities due to the supply of the required Ancillary Services; and
 - issues raised in the public submissions.
10. The Authority has considered whether the proposed margin values are consistent with the Wholesale Market Objectives. The Authority notes that the calculations of the margin values are based on Verve Energy's facilities solely providing Spinning Reserve Ancillary Services. Although it reflects the current arrangements in the Wholesale Electricity Market, it may not produce an efficient outcome for the market as a whole.
11. The Authority is of the view that there is no strong reason to retain Verve Energy as the sole provider for Spinning Reserve Ancillary Service at this stage of market development. The Authority understands that the structure used for introducing a competitive market for Load Following Ancillary Service can be easily extended to the provision of Spinning Reserve Ancillary Service.
12. In the Authority's determination paper for the margin values for the 2011/12 financial year published on 31 March 2011, the Authority recommended that the IMO conduct a review of the methodology and the process applied in deriving the values, prior to the next annual proposal. This stemmed from responses from Market Participants in response to the Authority's issues paper on the proposed margin values for the 2011/12 financial year, which raised concerns that SKM MMA's methodology for forecasting the Availability Cost may over-compensate Verve Energy. The Authority was also concerned that the formula presented in SKM MMA's report for calculating the Availability Cost only takes into account the differential in Verve Energy's generation costs and generation volumes in providing the Ancillary Services, but not the differential in the system marginal price.⁴

³ See ERA web site, Independent Market Operator – Submission under clause 3.13.3A(a) (inclusive of an independent assessment by the consultant SKM MMA)
http://www.erawa.com.au/2/272/42/determination_of_the_imo_and_system_management_all.pm

⁴ This refers to the term that represents the impact of the price differential under the two scenarios, i.e. with and without Ancillary Services being provided by Verve Energy:

13. This methodology was not reviewed by the IMO in its proposals for the margin values for the 2012/13 financial year. SKM MMA modelled the margin values for the 2012/13 financial year based on the same methodology used in the previous reviews, with modifications only to account for the implementation of the new Balancing and Load Following Ancillary Service market and the expected carbon price resulting from the implementation of the Clear Energy Future scheme on 1 July 2012. SKM MMA also made adjustments to the modelling assumptions based on the outcomes of an analysis of modelled versus actual Marginal Cost Administered Prices and generation volumes for the 2010/11 financial year, and comments provided by stakeholders.
14. In its determination paper on the margin values for the 2012/13 financial year published on 22 June 2012,⁵ the Authority noted that its recommendation to conduct a full review of the methodology and the process applied in deriving the values, has not been sufficiently fulfilled by the IMO by merely modifying the assumptions.
15. In response to the Authority's concerns, the IMO conducted a review of the Availability Cost calculation formula applied by SKM MMA as part of its review for the margin values for the 2013/14 financial year. The IMO noted in its submission that the term that represents the impact of the differential in system marginal price under the two scenarios of with and without Ancillary Services being provided by Verve Energy was omitted by SKM MMA intentionally and that no change in system marginal price is assumed in determining the level of compensation required for Verve Energy to provide the required Spinning Reserve Ancillary Service. The IMO acknowledged that the inclusion of this term could either increase or decrease the Availability Cost in a given Trading Interval, depending on which system marginal price was larger in that Trading Interval.
16. The IMO considered that the term that was omitted does not reflect the real world outcomes for two reasons. Firstly, the 'without Spinning Reserve provision' scenario is not a real world scenario, since the South West Interconnected System would never be operated without Spinning Reserve.⁶ While the scenario provides a useful estimation of Verve Energy's costs, the system marginal price results are based on unrealistic assumptions and so are unlikely to be reflective of real market prices. Secondly, the IMO considered that changes in system marginal price would only be expected to have an impact over the comparatively small quantities generated above or below Verve Energy's Net Contract Position since most of the

(system marginal price without Ancillary Services provision

– system marginal price with Ancillary Services provision)

* Verve Energy's total generation volume without Ancillary Services provision

There are three possible outcomes in omitting this term:

1. no impact when the system margin prices under the two scenarios are the same;
2. under compensation to Verve Energy when the system marginal price without Ancillary Services provision is greater than the system marginal price with Ancillary Services provision; and
3. over compensation to Verve Energy when the system marginal price without Ancillary Services provision is lower than the system marginal price with Ancillary Services provision.

The Authority requested the IMO to review its methodology in order to provide the interested parties with a better understanding of the implications of its approach of omitting this term.

⁵ This timeline was extended to accommodate the implementation of the new Balancing and Load Following Ancillary Service market from 1 July 2012.

⁶ The Authority notes that the 'without Spinning Reserve' provided by Verve Energy can be modelled as either a system 'without Spinning Reserve' service by any parties or a system 'with Spinning Reserve' service provided by generators other than Verve Energy. The SKM MMA's modelling approach is based on a system 'without Spinning Reserve' service by any parties.

energy generated by Verve Energy is sold under bilateral contracts, and including the additional term would apply any price difference to all of Verve Energy's generation output. The IMO concluded that the additional term could overestimate the extent of the impact, and therefore retained its methodology that disregard the impact of the differential in the system marginal price in deriving the margin values for the 2013/14 financial year.

17. The Authority acknowledges the difficulties in further refining the modelling approach to take into account Verve Energy's bilateral contracts and to develop a more realistic scenario for the estimation of Verve Energy's costs and the system marginal price when Verve Energy is not the provider of the Spinning Reserve Ancillary Service.⁷
18. The IMO noted in its submission that it requested feedback, on a confidential basis, from eight large Market Generators on the key operating assumptions for their facilities, and five of the eight Market Generators provided feedback on their facility operating assumptions. The IMO and SKM MMA consulted directly with System Management regarding assumptions on network topography and Load Following response. The IMO noted that feedback provided by stakeholders was used by SKM MMA to update the input assumptions for the review of the values of the Margin_Peak and Margin_Off-Peak parameters for this Review Period.
19. The Authority notes that this issue regarding the methodology for calculating the Availability Cost was not raised again by Market Participants when the IMO invited submissions on SKM MMA's report on its key modelling assumptions and methodology for the margin values review for the 2012/13 and 2013/14 financial years. During the Authority's public consultation process for the determination of the margin values for the 2013/14 financial year, Community Electricity expresses its support that the proposed pricing by the IMO as being fit for purpose and in accordance with the Wholesale Market Objectives. Verve Energy makes no comment on the methodology in its submission but notes that, should the Margin_Peak and Margin_Off-Peak parameters materially change as a result of the public consultation process, it would be prudent of the Authority to either undertake a second round of public consultant or allow Verve Energy to consider and comment on the proposed changes, as any change to the proposed parameters has the ability to materially impact the payments that Verve Energy may receive for the provision of Spinning Reserve Ancillary Services.
20. The Authority is of the view that its recommendation in its 2011 determination on the margin values to conduct a full review of the methodology and the process applied in deriving the values has been reasonably fulfilled by the IMO.
21. The Authority is satisfied that in proposing the values, the IMO has taken into account:
 - the margin Verve Energy could reasonably have been expected to earn on energy sales forgone due to the supply of the required Ancillary Services; and
 - the loss in efficiency of Verve Energy Registered Facilities that System Management has scheduled to provide the required Ancillary Services that

⁷The Authority notes that determination of the margin values by the Authority may not be required in the future if the IMO develops a competitive market for Spinning Reserve Ancillary Service.

could reasonably be expected due to the scheduling of those reserves during Peak and Off-Peak Trading Intervals.

CONCLUSION

22. Based on the assessment discussed above, the Authority determines that the values of the Margin_Peak and Margin_Off-Peak parameters from 1 July 2013 to 30 June 2014 to be 17 per cent and 27 per cent, respectively.