

Wholesale Electricity Market Rule Change Proposal Submission

RC_2019_05

Amending the Minimum STEM Price definition and determination

Submitted by

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Submissions on Rule Change Proposals can be sent by:

Email to: support@rcpwa.com.au

Post to: Rule Change Panel
Attn: Executive Officer
C/o Economic Regulation Authority
PO Box 8469
PERTH BC WA 6849

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

Synergy is seeking to:

- amend the definition of the Minimum STEM Price from -\$1,000/MWh to a value based on AEMO's estimate of the highest price that would induce all generators absent of non-market-related externalities to decommit;
- expand the annual review process for the Maximum STEM Price and Alternative Maximum STEM Price to cover the Minimum STEM Price; and
- set the Minimum STEM Price to -\$200/MWh until a new value is determined and approved through the expanded annual review process.

Synergy's Rule Change Proposal is put forward on the basis Synergy contends that the displacement of high-cost, scheduled generation by low-cost, intermittent, renewable generation will soon and frequently result in "excessive and unacceptable financial loss for Market Generators that have generating plant in service at times of low scheduled load and/or

are obliged to have generating plant in service for no other reason than to provide Ancillary Services.”¹

Perth Energy has three fundamental issues with this assertion:

1. Prices reaching the floor does not indicate there is a problem with the determination of the Minimum STEM Price

Synergy has portrayed the problem as Market Generators incurring what it describes as “excessive and unacceptable financial loss[es]”. While Synergy may consider this to be the case, Perth Energy highlights that Market Customers including Synergy, Synergy’s customers and WA electricity consumers more broadly, benefitted from these negative prices. The fact that a small number of instances of negative STEM prices have been (and continue to be) offset by cost savings to customers, indicates that the market remains in a reasonable state of equilibrium, and the current market pricing mechanisms are functioning adequately.

We consider Synergy has not identified a problem with the price floor itself, but has instead identified an issue with bidding behavior amongst those Market Generators bidding at the price floor.

The price floor and ceiling are asymmetric in the WEM. This asymmetry is intentional. While the Maximum STEM Price is set by AEMO and approved by the ERA, the Minimum STEM Price is hard-coded into the WEM Rules. This is because, as the Reliability Panel stated, and Synergy has subsequently quoted:

“[It] prevents market instability by imposing a negative limit on market prices in any trading interval, while allowing the market to clear during low demand periods.”²

We consider the current price of -\$1,000 is achieving this objective.

2. The current Minimum STEM Price of -\$1,000 meets the requirements of a price floor, and any arbitrary alternative is unlikely to

Synergy states that the Minimum STEM price should be set at:

“[a price] that is low enough (but no lower) than the price at which the generator with the greatest cost to decommit, or turn off, would be financially better off to incur the cost of shutting down its plant, rather than remaining in service and delivering at negative prices. In other words, it should represent the price just sufficient to induce all generators absent of non-market-related externalities to decommit.”³

The proposed solution of an immediate price increase to -\$200 implies Synergy considers the current price floor is too low.

Perth Energy agrees with the Reliability Panel’s definition, as quoted by Synergy, that the market floor price “should be set at a level that does not interfere with generators being able to differentiate themselves according to the value they place on being

¹ Page 2, Rule Change Proposal RC_2019_05: Amending the Minimum STEM Price definition and determination, available at: https://www.erawa.com.au/rule-change-panel/market-rule-changes/rule-change-rc_2019_05.

² Page 3, *ibid.*

³ Page 5, *ibid.*

dispatched by bidding at negative prices during periods of excess generation.”⁴

We consider that while it may be more accurate to annually determine a Minimum STEM Price as the value placed on being dispatched, it is not the price floor⁵, but rather the bidding behavior of Market Generators that should change.

Moreover, Perth Energy has considered Synergy’s transitional price of -\$200 and does not consider this would allow Market Generators sufficient ability to differentiate themselves. We highlight that, to meet the requirements of an effective price floor, and using a method such as that proposed by Synergy could decrease the price floor below -\$1,000, rather than increase it to -\$200 as proposed to be the transitional price by Synergy. This would be counter to Synergy’s intention.

Perth Energy highlights that, to reflect the price sufficient to induce all generators absent of non-market-related externalities to decommit, the Minimum STEM Price would be set as the cost of the shut-down of the largest, most inflexible coal Facility over the number Trading Intervals it would need to be shut-down for the indication from generators at MAC was that this price would be lower than -\$1,000. The opportunity cost to Synergy at maintaining minimum output at a floor price of -\$1,000 would in these circumstances create a delta that makes the opportunity cost of shut-down, and warm re-start greater than the losses incurred - exactly what the floor price is designed to do.

Moreover, to deliver more symmetrical, administered bidding energy price limits as proposed by Synergy, the solution would also likely result in the establishment of more than one price floor to account for differences in Facility characteristics.

We therefore consider introducing an alternative transitional fixed and arbitrary price floor, such as proposed by Synergy, is an unnecessary and counter-productive administrative change. Introducing an alternative price floor in the longer-term would potentially provide no more or less benefit to Market Generators and is only likely to reduce the benefits of low-cost energy to WA consumers in the short-term.

Moreover, we highlight that the fundamental structure of the various mechanisms in the WEM will inevitably change with the delivery of the Energy Transformation Strategy. Any such determination mechanism and associated administered review process should therefore be considered more holistically as part of the reform process.

We recommend the current price floor of -\$1,000 remains until such time a price floor can be calculated that more accurately reflects the value of being dispatched under the new market arrangements.

3. The provision of energy and Ancillary Services are currently conflated, and while we agree they should be decoupled, it is clear this cannot be done effectively ahead of the delivery of the Energy Transformation Strategy

Synergy highlights the provision of Ancillary Services as one of the reasons a Facility may be required to remain available during periods of negative pricing, and therefore incurring financial losses. This only occurs where a Market Generator is not adequately compensated for those services provided.

⁴ Reliability Panel AEMC 2018, Final Report: Reliability standard and settings review 2018, Reference: REL0064, April 30, page 36.

⁵ Which, using such a method, could decrease below -\$1,000, rather than increase to -\$200 as proposed by Synergy, thereby increasing the potential financial losses.

Perth Energy does not have a view on the appropriateness of the compensation provided to Synergy for its Ancillary Services. However, we believe that the provision of energy and Ancillary Services should be decoupled to ensure each is adequately accounted for, and maintain that this should be addressed as a priority. We appreciate this will be most effectively addressed through the Energy Transformation Strategy, which is expected to deliver a cooptimised energy and ancillary services market and dispatch engine, and do not consider it can be effectively achieved ahead of that schedule.

It is for these reasons Perth Energy considers the Rule Change Proposal should not be progressed further at this stage.

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

There is merit in determining a more accurate market price floor. However, Perth Energy cannot support the progression of the Rule Change Proposal, as we do not consider it minimises the long-term cost of electricity supplied to customers from the South West interconnected system on the following basis:

- There is limited evidence of the impact of the likelihood or consequence of the purported “excessive and unacceptable financial losses” caused to Market Generators more broadly, or Synergy specifically.
- Any evidence of financial losses provided should also be considered against the benefits of the low cost periods (adjusted to account for the likelihood and consequence of this risk) to retailers, and ultimately WA energy consumers.
- The proposed changes will require the support of a cost benefit assessment underpinned by extensive market modelling, which would need to be undertaken by an expert consulting firm before being progressed. The cost of this is unlikely to be outweighed by the benefits achieved in the one or two years that the proposed changes will be in place before being superseded.
- The ongoing determination of the Minimum STEM Price (or prices) as part of the Energy Price Limits Review undertaken by the ERA will increase the cost of the annual and five-yearly review processes, thereby increasing the cost of the ongoing administration of the market for Market Participants and ultimately WA energy consumers.
- The impending new cooptimised energy and ancillary services market and dispatch engine to be delivered as part of the Energy Transformation Strategy will reduce any benefits and the required pay back period to one or two years at the most.

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.

The proposed changes would increase the administrative burden on Perth Energy in relation to:

- resourcing required to consider the annual and five-yearly review of an additional administered price (or prices) as part of the Energy Price Limits Review; and
 - IT system and process changes associated with the need to (at least annually) change the Minimum STEM Price (or prices).
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4. Please indicate the time required for your organisation to implement the change, should it be accepted as proposed.

Perth Energy would need three months' notice to update the necessary systems and processes to ensure it remained compliant with a revised Minimum STEM Price (or prices).
