

Wholesale Electricity Market Rule Change Proposal Submission

RC_2019_05: Amending the Minimum STEM Price definition and determination

Submitted by

| | |
|------------------------|--|
| Name: | Jacinda Papps |
| Phone: | 0417 065 955 |
| Email: | Jacinda.Papps@alintaenergy.com.au |
| Organisation: | Alinta Energy |
| Address: | Level 18 Raine Square 300 Murray Street, Perth WA 6000 |
| Date submitted: | 18 December 2019 |

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.

Alinta Energy welcomes the opportunity to provide a submission to the Rule Change Panel on the Rule Change Proposal: RC_2019_05 Amending the Minimum STEM Price definition and determination.

The purpose of the Minimum STEM Price (MSP) is to prevent market instability by imposing a negative limit on the total potential volatility of market prices. The MSP bears on the clearing of supply and demand at times of low demand and excess generation.

The proposal is seeking to amend the definition of the MSP from the current definition of $-\$1,000/\text{MWh}$; review the MSP on an annual basis; and set the MSP to $-\$200/\text{MWh}$ until a new value is determined and approved through an annual review process.

Similarly to the factors in the National Electricity Rules¹ for amending the NEM market floor price, Alinta Energy supports reviewing the WEM MSP to:

- Ensure that it is set at a level which will allow the market to clear in most circumstances²; and

¹ Refer to clause 3.9.3A(h) of the NER.

² If the market floor price is not sufficiently low enough to allow generators with different cycling costs to differentiate themselves through their negative bids, a lower (more negative) market floor price would in theory, reduce distortion and enable the market to clear without intervention for a larger proportion of the time.

- not create substantial risks which threaten the overall stability and integrity of the market.

However, Alinta Energy does not support the proposed transitional approach of setting the MSP to $-\$200/\text{MWh}$ until a new value is determined because:

- there has been no modelling completed to show $-\$200/\text{MWh}$ will still meet the purpose of the MSP; and
- Alinta Energy does not consider a price of $-\$200/\text{MWh}$ will allow generators with different cycling costs to differentiate themselves through their negative bids. This will interfere with efficient dispatch outcomes by potentially leading to increasing intervals where the market does not clear and will require AEMO to intervene via the tie break methodology.

Review of MSP

Alinta Energy agrees that the MSP should be reviewed as the market has changed since the balancing mechanism was introduced, and it is important to ensure the MSP is effective and continues to serve its purpose. With several intermittent generators entering the market, the need for more flexible and responsive facilities is required. The MSP needs to reflect the value that different technologies³ bring to the market to keep it operating in a safe and reliable state.

However, in reviewing the MSP the following factors should be considered when contemplating altering the floor price:

- Has there been a significant change in the number and frequency of trading intervals where the market has been, or has approached, the level of the MSP?
- Has there been significant changes in the generation fleet, such that average generator cycling costs have changed significantly? For example - a significant change in the nature of the generation fleet such that the range of generator cycling costs had decreased could result from the retirement of ageing thermal units. Whereas growth in intermittent generation is likely to increase the frequency of cycling operations of thermal units. Repeated cycling of thermal units may cause deteriorations to plant and lead to increased cost per cycle for some units.

Transitional Approach

At times of low demand and excess generation, generators can differentiate themselves according to the value they place on being dispatched by bidding at negative price levels. This allows the market, through the value being placed on being dispatched, to determine which generators remain dispatched during periods of excess generation (to avoid cycling costs) and then what generators are constrained off to maintain demand/supply balance. The market floor price should be set a level so that it does not interfere with this efficient outcome.

Analysis completed by ROAM Consulting (now EY) in 2014, in the table below, shows the negative prices that would need to be reached for different generator classes such that these generators, from an economic standpoint, would prefer to cycle rather than pay the spot

³ For example, the incidence of negative prices and MSP events may serve as a signal to investors in new technologies, such as batteries, to enter and operate in the market (as identified by the Reliability Panel AEMC in its Reliability Standard and Settings Review 2018, Issues paper, pg. 81).

price for an hour. In 2018, the AEMC stated that the cycling costs will not have moved greatly from the values determined in 2014.⁴

| Cycling Class | Minimum MFP | Maximum MFP |
|-------------------------|-------------|-------------|
| Small sub-critical coal | -594 | -299 |
| Large sub-critical coal | -758 | -342 |
| Supercritical coal | -674 | -444 |
| CCGT | -240 | -81 |

Table 1: Market floor price requirement for 1 hour cycling⁵

Alinta Energy considers that using a fixed and arbitrary value of -\$200/MWh, as suggested in the proposal, may interfere with efficient dispatch outcomes and result in generators incurring a loss if the MSP is not negative enough to cover cycling costs.

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

Alinta Energy considers that the proposal to review the MSP would better facilitate the achievement of the Wholesale Market Objectives. A regular review of the MSP will ensure that it:

- provides efficient price signals while managing price risk (market objective (a));
- promotes efficient dispatch outcomes (market objective (a));
- provides signals for the investment of new technologies (market objective (b)); and
- allows for all technologies to recover their cycling costs (market objective (c)).

Alinta Energy does not consider that the proposal to arbitrarily fix the MSP to -\$200/MWh as a transitional measure would better facilitate the achievement of the Wholesale Market Objectives:

- Using a transitional price of -\$200/MWh may discriminate between generators if the price is not low enough for large coal units to cover their cycling costs. The MSP should be reviewed to ensure it is low enough to for all technologies to be able to recover their cycling costs (market objective (c)); and
- The transitional price may induce perverse outcomes as generators bidding at the MSP does not provide the most economical order of dispatch. AEMO may be required to dispatch Out of Merit to avoid a High-Risk State merely because the Balancing Price equals the MSP (market objective (a)).

⁴ Reliability Panel AEMC, Reliability Standard and Settings Review 2018, Modelling approach, Final report, pp. 37

⁵ Reliability Panel AEMC, Reliability Standard and Settings Review 2018, Modelling approach, Final report, pp. 147