

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

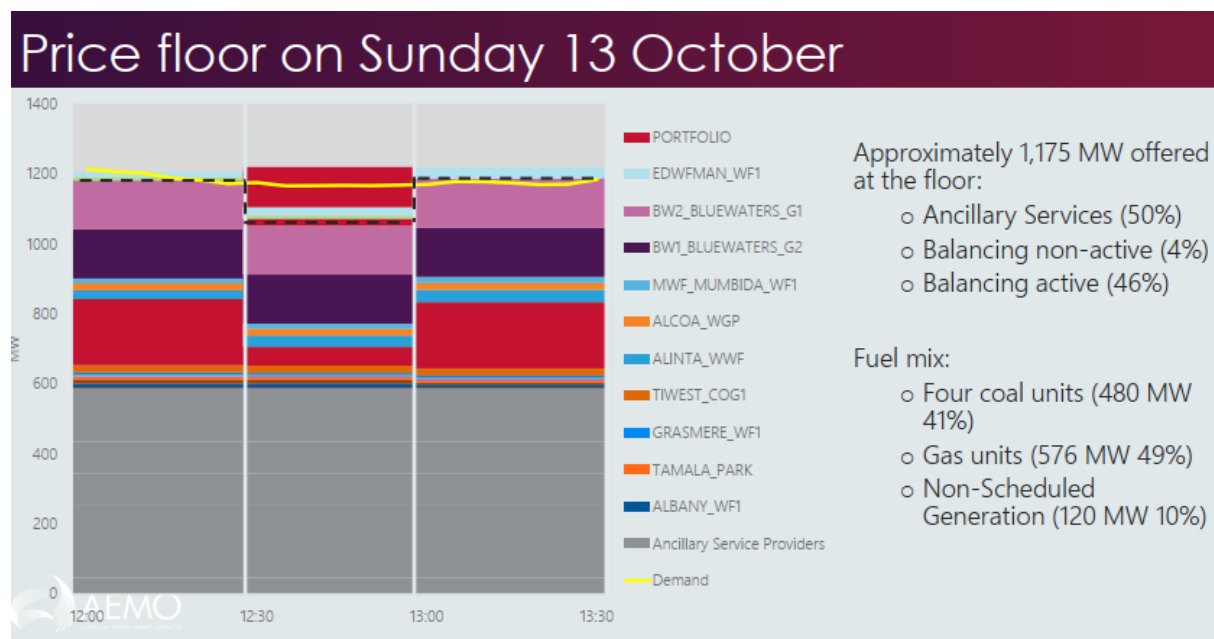
1. Please provide your views on the proposal, including any objections or suggested revisions.

NewGen Power Kwinana (NPK) agrees that the minimum STEM price in its current state is unfit for purpose. The price of -\$1,000 is arbitrary and does not reflect any generators operational expectation of de-commitment costs and therefore has led to perverse market bidding behavior. Instead of being a price that reflects immediate de-commitment costs for a generator, it is being used as a point at which one reasonably expects demand to never hit and therefore somewhere to bid in order to guarantee generation.

The WEM price bands were originally set with the minimum STEM price equal to negative 1 multiplied by the Maximum STEM price, which set a proportionate collar on prices. This was amended in the 2012 market reform with the arbitrary -\$1000 selected with no apparent logic other than an alignment to the NEM.

Due to the extended balancing gate closure horizon (to be addressed with RC_2017_02) in the WEM, forecasting error also presents a challenge for Generators with regards to the price floor. This error inhibits the ability for Generators to respond to minimum STEM price events. Forecasting errors such as what occurred on the 13th of October 2019, are likely to continue due to the prevalence of unscheduled generation such as wind and solar PV. This inhibits the

ability for generators to react to prices.



The above slide from AEMO illustrates that there was approximately 50% of generation at the floor covering ancillary service providers. Whilst ESS development is continuing via current market reform, the interim risk that these generators are exposed to is disproportionate to the revenue earned from Energy and Ancillary Services. If the minimum STEM price is not addressed and the expectation that minimum STEM price events are going to increase in frequency, this risk would be expected to be reflected in Ancillary Services behaviors. This could present a risk that insufficient Ancillary Services are available on the network leading to reliability issues for the WEM.

Considering the expected increased frequency of negative price events, NPK agrees that an interim price should be set at a level where no further bids are captured in the minimum STEM price tranche. This will eliminate the comparatively disproportionate risk of prices hitting minimum STEM price while maintaining similar market generation outcomes. From assessment of historical Balancing bids, there appears to be a large gap between $-\$200/\text{MWh}$ and the price floor. Therefore amending the minimum STEM price to an interim level that is marginally below the last bids at $-\$200/\text{MWh}$, say $-\$235/\text{MWh}$ which is the maximum STEM price multiplied by -1 , will not change dispatch outcomes but will more proportionally apply risk to committed Generators at the minimum STEM price..

As a broader, logic backed fix, there should be a process to determine actual de-commitment costs that includes expectations of a minimum down time. Similarly, it cannot be expected that a thermal power plant would be required to de-commit and then re-commit from one interval to the next. NPK proposes that a permanent way to solve this would be to utilise a minimum STEM price and an alternate minimum STEM price, aligning it to maximum pricing methodology when determining the energy price limits for the WEM. Similar to the philosophy applied to alternate maximum STEM price (which considers higher fuel costs for generation), facilities with a higher cost to cycle a plant, or are committed for Ancillary Services, would be able to bid at such a level. This would lead to more efficient overall market outcomes by limiting the exposure of committed Generators that are restricted in their ability to cycle or are providing Ancillary Services to the economic alternative of de-commitment.

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

The proposed changes, in any form, will better facilitate the Wholesale Market Objective (c).

c) Minimise the long-term cost of electricity supplied to customers from the SWIS

- Establishing a minimum STEM price which reflects the costs associated with the de-commitment of Generators will reduce the significant price risk associated with providing Ancillary Services and energy during low demand periods. The reduction in perceived risk should minimise the long-term cost of electricity supplied to customers through lower risk premiums offered in Generators Ancillary Services Offers and Balancing Submissions.

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.

Negligible.

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

Negligible.
