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Australian Energy Market Operator
530 Collins Street
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To whom it may concern

Gas Market Parameters Review 2018- Draft Final Report

Meridian Energy Australia Pty Ltd and Powershop Australia Pty Ltd (*MEA Group*) refer to AEMO's Gas Market Parameters Review 2018 - Draft Final Report (*Draft Report*) and your request for comments on the draft recommendations.

MEA Group is the owner and operator of the Mt Mercer and Mt Millar Wind Farms as well as Powershop Australia, an innovative electricity and gas retailer committed to providing lower prices for consumers which recognizes the benefits for consumers of a transition to a more renewable-based and distributed energy system.

The modelling approach for the gas market parameter review was outlined in AEMO's scope of works document. The modelling for the review was to simulate and study market outcomes and participant risks against different market parameters. MEA Group is of the view that the 'worst case' market outcome for market participants in the DWGM has not been modelled, with market risk significantly understated from a 'days of lost profit equivalent' perspective.

In the Draft Report only one sequence of high priced periods has been simulated with VoLL being modelled over consecutive trading intervals until Cumulative Price Threshold (*CPT*) is reached. The DWGM CPT Review (2 July 2013) assessed a 'worst case' profile of events where price reaches VoLL for the first scheduling interval of each CPT event day until the threshold is reached, with subsequent (intra-day) prices equal to the assumed "normal price" on those particular days. This resulted in significantly higher days of loss of profit equivalent.

Whilst MEA Group believes that elements of the risk posed to retailers in Victoria are acknowledged in the report, there are areas of the review which should consider a wider range of price scenarios.

The simulations presented in the report approach the risk associated with VoLL prices such that 'the attainment of VoLL is typically sustained for a sufficient number of periods to breach the CPT. Once triggered, the APC limits prices to a lower upper limit than would otherwise apply under the administered pricing period ends.'[1] With VoLL approached in this manner the maximum amount of risk is not effectively captured due to the nature of the DWGM.

The requirement upon Market Participants (*MP*) to buy or sell their position at Beginning-of-Day (*BOD*) allows for a scenario to arise in which VoLL is reached on Day 1 (D1) BOD schedule, with subsequent schedules in D1 returning to a 'Non-VoLL' price. The following day, another extreme price event could occur at BOD in response to market dynamics in which the MP would be exposed to the extreme price for their balance of day position (i.e. the next 24 hours). This scenario increases the unhedged volume subject to the spot price compared to the simulations provided in the report.

MEA have calculated a maximum average price of $272/GJ over the course of a possible CPT event. This is based on the existing cumulative price threshold in the DWGM of $1800 and a 'normal price' of $7/GJ as per the Market Reform – Draft Report.

Scenario 1: CPT of $1800. Prices expressed as $/GJ.
35 Schedules per week with Market Participant Buying/Selling at BOD for Gas Days D1, D2 and D3.
Administered Price Cap of $40/GJ applied after Cumulative Price Threshold of $1800 is reached in the BOD schedule on D3.

Schedule	D1	D2	D3	D4	D5	D6	D7
BOD	800	800	144	40	40	40	40
10am	7	7	40	40	40	40	40
2pm	7	7	40	40	40	40	40
6pm	7	7	40	40	40	40	40
10pm	7	7	40	40	40	40	40

Table 1: High-Risk scenario with CPT=$1800.

Schedule	D1	D2	D3	D4	D5	D6	D7
BOD	800	1628	1800	APC	APC	APC	APC
10am	807	1635	APC	APC	APC	APC	APC
2pm	814	1642	APC	APC	APC	APC	APC
6pm	821	1649	APC	APC	APC	APC	APC
10pm	828	1656	APC	APC	APC	APC	APC

Table 2: Cumulative Price with CPT=$1800.

[1] Market Reform – Attachment 1 Gas Market Parameters Review 2018. Draft Final Report. Report to the Australian Energy Market Operator. 5 March 2018.

(Equation 1)

$$Average\ Price\ Scenario\ 1 = \frac{\frac{\$800}{GJ} * 5S + \frac{\$800}{GJ} * 5S + \frac{\$144}{GJ} * 5S + \frac{\$40}{GJ}(APC) * (35S - 15S)}{35S}$$

$$= \frac{\$272}{GJ}(3\ s.f.)$$

where S is used to denote Schedules.

Scenario 2: CPT of $1400. Prices expressed as $/GJ.
35 Schedules per week with Market Participant Buying/Selling at BOD for Gas Days D1 and D2.
Administered Price Cap of $40/GJ applied after Cumulative Price Threshold of $1400 is reached in the BOD schedule on D2.

Schedule	D1	D2	D3	D4	D5	D6	D7
BOD	800	572	40	40	40	40	40
10am	7	40	40	40	40	40	40
2pm	7	40	40	40	40	40	40
6pm	7	40	40	40	40	40	40
10pm	7	40	40	40	40	40	40

Table 3: High-Risk scenario with CPT=$1400.

Schedule	D1	D2	D3	D4	D5	D6	D7
BOD	800	1400	APC	APC	APC	APC	APC
10am	807	APC	APC	APC	APC	APC	APC
2pm	814	APC	APC	APC	APC	APC	APC
6pm	821	APC	APC	APC	APC	APC	APC
10pm	828	APC	APC	APC	APC	APC	APC

Table 4: Cumulative Price with CPT=$1400.

(Equation 2)

$$Average\ Price\ Scenario\ 2 = \frac{\frac{\$800}{GJ} * 5S + \frac{\$572}{GJ} * 5S + \frac{\$40}{GJ}(APC) * (35S - 10S)}{35S}$$

$$= \frac{\$225}{GJ}(3\ s.f.)$$

A summary of the 'worst case' market outcome against the Draft Report is shown below:

- Modelling in the Draft Report sustains consecutive VoLL over 2 price periods followed by APC for all other intervals, yielding a maximum average price across 35 schedules of $83.4/GJ.
- Modelling a sustained consecutive VoLL over 2 scheduling intervals, with one of these intervals being BOD, yields an average price of ~ $150/GJ. (See ERM's previous submission to the workshop.)

- Modelling VoLL prices concurrently therefore understates the worst-case scenario considerably, with market participants possibly having exposure to average prices of $272 (CPT $1800) or $225 (CPT $1400), as shown in equations (1) and (2) respectively, across the 35 schedules in any given cumulative pricing period.

The Draft Report has recommended a reduction of the CPT to $1400 to meet the 500 days of lost profit condition in all cases, where the current CPT fails to satisfy this criterion in 1.48% of simulated cases. This recommendation is designed with the aim of maximizing market-efficiency whilst also providing adequate protection to retailers. This protection to retailers considers a simulated simultaneous VoLL scenario in which the maximum average schedule price would be $83.4/GJ.

Ceteris paribus, a worst-case scenario would yield a lost profit potential somewhere in the region of 1,348 days, calculated proportionately on the ratio of maximum average prices between a possible scenario, presented in scenario 2, and the scenarios considered in the Draft Report.

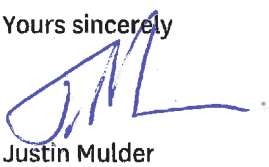
Inability to capture worst case scenario risks may inadvertently increase risk taken on by retailers and therefore an increased likelihood of insolvency and/or increase hedging costs which will lead to higher prices for consumers. MEA Group believe the simulations should take into consideration non-concurrent VoLL prices in a cumulative price period to more effectively capture the worst-case scenario as this may suggest a different arrangement of the market parameters. Modelling of non-concurrent extreme price periods is supported by the operational experience we have observed in the National Electricity Market when CPT has been reached.

In summary MEA Group believes:

- a Market Parameter Review of the DWGM needs to be undertaken reflecting a 'worst case' market outcome; and
- modelling needs to reflect VoLL at BOD on consecutive days with intraday prices assumed at normal levels.

If you wish to discuss any aspect of this submission further, please contact me at justin.mulder@medidianenergy.com.au or 03 8370 2142 or James Shead at james.shead@meridianenergy.com.au or 03 8370 2166.

Yours sincerely



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