ERM Power Limited
Level 3, 90 Collins Street
Melbourne VIC 3000
ABN 28 122 259 223

+61 3 9214 9333
ermpower.com.au

Monday, 6 August 2018

Mr Ori Agranat
Analyst Electricity Market Monitoring
Australian Energy Market Operator
GPO Box 200
Melbourne VIC 3001

Dear Mr Agranat

RE: Market Suspension Pricing Schedule Consultation

ERM Power Limited (ERM Power) welcomes the opportunity to respond to the Australian Energy Market Operator's (AEMO's) Market Suspension Pricing Schedule Consultation Issues Paper.

About ERM Power

ERM Power is an Australian energy company operating electricity sales, generation and energy solutions businesses. The Company has grown to become the second largest electricity provider to commercial businesses and industrials in Australia by load[1], with operations in every state and the Australian Capital Territory. A growing range of energy solutions products and services are being delivered, including lighting and energy efficiency software and data analytics, to the Company's existing and new customer base. ERM Power also sells electricity in several markets in the United States. The Company operates 497 megawatts of low emission, gas-fired peaking power stations in Western Australia and Queensland. www.ermpower.com.au

General comments

ERM Power supports AEMO's decision to review the current methodology for the calculation of the market suspension pricing schedule. Flowing from outcomes during the South Australian market suspension period in September and October 2016, AEMO's Market Suspension Working Group process identified a number of issues with the current methodology for the calculation of the market suspension pricing schedule. The Working Group recommended that these issues warranted further discussion and consultation to amend the current methodology. Whilst the Issues Paper includes some of the concerns raised, we recommend AEMO consider an additional meeting of the Market Suspension Working Group to discuss proposed options prior to issue of any Draft Determination.

Principles for pricing during market suspension

In the Issues Paper, AEMO outlines a number of principles for pricing that AEMO believes should apply during a market suspension event, in general, ERM Power supports the principles as outlined in the Issues Paper. In considering any amended methodology for calculation of the market suspension pricing schedule, we believe the revised methodology must maintain clear price signals for the efficient dispatch of generation or demand side response to reliably meet forecast consumer demand and maintain secure operation of the power system without the need for market intervention by AEMO.

[1] Based on ERM Power analysis of latest published financial information.

Review of AEMO's alternative methodology options

Averaging Horizon

AEMO has considered four alternative options as set out in the Issues paper to the current 28-day calculation period for the averaging horizon. ERM Power does not support any of the proposed options. We agree with AEMO's view that a period of shorter than 28 days could introduce abnormal volatility into the pricing schedule. The other three options proposed all result in calculation periods with significant temporal differences to the market suspension event which are unlikely to be representative of current market outcomes. In the case of the proposed 13-week period, the potential for a completely different pricing shape arises as the NEM moves between normal seasonal demand and pricing variations.

Option 4, which proposes the use of an averaging horizon based on three representative, same time of year weeks, in the most recent two years may have some merit. Particularly with regards to an extended period of market suspension where the current calculation methodology would result in level of 'feedback' to future weekly schedules. However, whilst this option could result in a reasonable estimate of the shape or distribution of prices across a day based on its same time of year characteristic, the magnitude of prices may be inconsistent when compared to current market outcomes. This inconsistency could be partially overcome by the introduction of a scaling factor to match the calculated historical average peak and off-peak pricing outcomes to align to current market conditions, however, this would require the introduction of an additional calculation factor and methodology for its calculation to the overall methodology.

Following consideration of possible alternatives, ERM Power believes that the current 28-day averaging horizon when matched with a change to the averaging resolution as set out below in this submission coupled with a reduction in the 14-day notification period as currently required by clause 3.14.5 (e) (3) of the National Electricity Rules (the Rules) to a period of at least one day will best meet AEMO's clause 3.14.5 (e) (1) obligation to prepare and update pricing schedules containing reasonable estimates of typical market prices during the periods to which the schedules relate.

We believe a change to the notification period is warranted to minimise as much as possible the introduction of any temporal differences to current market outcomes. The current methodology contains prices some 6 to 7 weeks historically distant to current market outcomes. We believe the methodology would be improved by minimising any temporal differences to current market outcomes where possible.

AEMO are currently implementing changes arising from recommendations from the Market Suspension Working Group which will introduce the automatic implementation of market suspension pricing to the normal market dispatch and pricing process during a period of Market Suspension where the market suspension pricing schedule has been invoked. The routine calculation and distribution to participants of the market suspension pricing schedule will also become an automated process as part of these changes. Therefore, we believe the current 14-day notification period is no longer required as participants will no longer need to implement a manual process to determine what the actual pricing outcomes will be during a period of Market Suspension were the market suspension pricing schedule has been invoked.

We acknowledge that maintaining the current 28-day calculation period will result in the potential for 'feedback' during any extended Market Suspension period; however, we believe this would be the case for any potential averaging horizon.

Averaging resolution

We support AEMO's view that the current Trading Interval based averaging resolution may introduce levels of volatility in the market suspension pricing schedule that could potentially result in frequent rebids by generators. In turn, this could result in difficulties in the management of security of the power system and reliable supply to consumers at a time of increased system stress leading to an increase in market intervention by AEMO.

AEMO has considered four alternative options to the current Trading Interval based averaging resolution. In considering the first three options, all introduce a much reduced level of price granularity which ERM Power believes would remove the required pricing signals for the efficient dispatch of varying numbers of units across the daily time horizon.

Normal operation of the market contains repeated consumption and dispatch profiles which exhibit seasonal and day type differences, in the future these dispatch profiles will be disrupted by the increasing penetration of output from solar farm generation which exhibit less of a random output profile than intermittent wind generation. We believe that any proposed modification to the methodology for calculation of the market suspension pricing schedule should cater for this eventuality and maintain sufficient granularity to ensure price signals are maintained to promote the efficient dispatch of generation and demand management.

The final option proposed by AEMO increases the averaging resolution to a Dispatch Interval basis which we believe would lead to increased price volatility and therefore increase difficulties in AEMO's management of security of the power system and reliable supply to consumers. We therefore submit that it should not be considered any further.

Taking into consideration the principles set out by AEMO in the Issues Paper, ERM Power proposes an alternative solution to segment each day into eight discrete pricing intervals of three hours duration, with three pricing intervals to apply overnight in the period 22:00 to 07:00, and five pricing intervals to apply during the period between 07:00 and 22:00.

The averaging horizon and resolution for the overnight periods would apply to all 7 days. A separate averaging horizon and resolution would apply to working weekdays and non-working weekdays. We have set this out for clarity in tabular form in Attachment 1.

We believe our proposed averaging resolution and timing of pricing intervals have a number of significant advantages because they:

- are of sufficient length to allow reasonable 'averaging' of price volatility to remove the current incentives for frequent generator rebidding whilst not resulting in a 'flattening' of the price signals necessary to promote efficient generator and demand management response;
- are suitable for both 30-minute and 5-minute settlement;
- align with daily market demand profiles to provide efficient signals to flexible demand responsive generating units to maintain reliable supply to consumers;
- align with the expected output profile of increased penetration of large scale solar PV farms and promote the timely commitment and decommitment of flexible generating units; and
- align with commonly traded contract definitions in the financial markets.

Treatment of outliers or non-normal price inputs

ERM Power does not support the removal or capping at $300 of normal price outliers from the market suspension pricing schedule calculation methodology. These prices form part of the normal price signals for the efficient dispatch of generation and demand management and therefore should be included in the calculation. We believe the proposed averaging resolution as set out in this submission will dampen the level of volatility in the current calculation methodology to that required only to maintain efficient price signals based on currently prevailing market conditions.

We however remained concerned by the potential for non-normal price outliers, particularly in the Frequency Control Ancillary Services (FCAS) markets as a result of market intervention by AEMO due to the invoking of 'local' FCAS requirements being included in the market suspension pricing schedule calculation methodology resulting in inefficient dispatch outcomes and the imposition of inefficient costs on participants and consumers.

During a period of Market Suspension, the normal co-optimisation of dispatch in the Energy and FCAS markets may be suspended. Generators, or load, that would otherwise be enabled and dispatched in the FCAS markets may be withheld by the use of generic constraints by the Market Operator to provide additional spinning reserve or other system security services. In circumstances where the market suspension pricing schedule contains prices based on the invoking of 'local' FCAS requirements, participants and consumers could incur unmanageable costs with no ability to receive the normal revenue stream or implement costs management strategies associated with such FCAS pricing events.

We propose that where a 'local' FCAS requirement has been invoked on a region in one or more FCAS markets which is normally priced at the 'global' FCAS price, that the "global" FCAS price(s) is substituted for the 'local' FCAS price(s) in the calculation of the market suspension pricing schedule for the affected FCAS market(s). This proposed change will ensure that non-normal FCAS pricing outcomes are not transposed to the market suspension pricing schedule as was the case during the South Australian Market Suspension event and that inefficient costs are not imposed on participants and consumers.

Conclusion

ERM Power supports AEMO's decision to review the current methodology for the calculation of the market suspension pricing schedule. We recommend AEMO consider an additional meeting of the Market Suspension Working Group to discuss proposed options prior to issue of any Draft Determination.

Our submission sets out options that vary from the options proposed in the Issues Paper which we believe will maintain the necessary prices signals to promote the efficient dispatch of generators and demand response during a period of Market Suspension where the market suspension pricing schedule is invoked whilst minimising the need for market intervention.

Please contact me if you would like to discuss this submission further.

Yours sincerely,

[signed]

David Guiver

Executive General Manager - Trading

07 3020 5137 – dguiver@ermpower.com.au

Attachment 1

Proposed Pricing Intervals

Trading Interval	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday & Public Holidays
22:30	Overnight Pricing Interval 1						
23:00							
23:30							
0:00							
0:30							
1:00							
1:30	Overnight Pricing Interval 2						
2:00							
2:30							
3:00							
3:30							
4:00							
4:30	Overnight Pricing Interval 3						
5:00							
5:30							
6:00							
6:30							
7:00							
7:30	Working Weekday Pricing Interval 1					Non-Working Weekday Pricing Interval 1	
8:00							
8:30							
9:00							
9:30							
10:00							
10:30	Working Weekday Pricing Interval 2					Non-Working Weekday Pricing Interval 2	
11:00							
11:30							
12:00							
12:30							
13:00							
13:30	Working Weekday Pricing Interval 3					Non-Working Weekday Pricing Interval 3	
14:00							
14:30							
15:00							
15:30							
16:00							
16:30	Working Weekday Pricing Interval 4					Non-Working Weekday Pricing Interval 4	
17:00							
17:30							
18:00							
18:30							
19:00							
19:30	Working Weekday Pricing Interval 5					Non-Working Weekday Pricing Interval 5	
20:00							
20:30							
21:00							
21:30							
22:00							