

28 January 2015

Mr John Pierce
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Australian Energy Market Commission
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By online submission

Dear Mr Pierce

Options paper – bidding in good faith

AEMO appreciates the opportunity to respond to the AEMC's options paper released for consultation on bidding in good faith, published on 18 December 2014.

The current rebidding provisions of the National Electricity Rules enable flexible and responsive participation in the market. AEMO considers this desirable for efficient market operation and system security. However, AEMO acknowledges that this flexibility opens up the opportunity for bidding to be used in ways described in the options paper and the accompanying reports.

The attached submission summarises AEMO's response to the paper.

Yours sincerely



Peter Geers
Executive General Manager Markets

Attachments: AEMO Submission in response to AEMC Options paper – bidding in good faith

AEMO Submission in response to AEMC options paper – bidding in good faith

1. General comments

Operational decisions by generators in the organised wholesale market are based on a range of technical, commercial and structural factors, the detail of which is often not transparent to the market and system operator, nor to third-parties. Examples that are relevant to the operational flexibility and responsiveness of generators include the internal business processes of trading organisations, the capabilities of the physical assets, features in bilateral contracts, operations in related markets or industries (such as gas and water), and technological and process innovation. For this reason, AEMO prefers the market design to enable market participants with the greatest possible flexibility and responsiveness. To do otherwise may impose constraints that distort efficient market operation and cause detriment to the security of the power system.

At the same time, AEMO understands the issues created by significant late changes in offer structure that:

- Reduce confidence in AEMO's predispatch information which is unable to anticipate the changes.
- Limit competitive response from alternatives that require a finite notice period.

These conflicting issues will be challenging to reconcile. Broad gate-closure mechanisms prohibit many rebids that assist market efficiency and competition. It is difficult to design a gate filter which approves only those rebids deemed to have beneficial characteristics.

AEMO's market reports frequently cite late rebids as a contributor to unforecast market events, but the pattern is associated with a handful of generating facilities across the NEM. If a gate-closure approach is to be contemplated, AEMO prefers it does not impact the efficient operation of the majority of facilities that do not contribute to these events.

2. Role of rebidding in short-term dispatch

The options paper discusses the benefits of rebidding in terms of participants responding to short-term price signals. However, there are a number of operational issues that are effectively managed through rebids. These include:

- For participants in general, plant failures and other incidents involve risks that can be managed by rebidding. The current provisions allow a range of physical risk management strategies by participants, including by third party service providers.
- For steam turbines that are mid-merit in the dispatch, the unit commitment decisions of a participant may need to adapt to dynamic changes in a 0-2 day outlook for the market, including weather, the supply-demand balance, competitor behaviour, contract and related market operations, and other factors. The marginal cost of these decisions, especially if based on avoided start-up or shut down costs, can be very high and volatile, warranting the ability to rebid in a timely fashion to update the technical and commercial offer constraints of the generator.
- Plant status can be subject to changes and delays at any time, flexibility in rebidding is required to accurately reflect the latest information on plant status.

- For peaking plant that are subject to the dispatch inflexibility profile¹, unit commitment decisions are made through the central dispatch process. This process is imperfect and relies on rebidding to allow participants to manage a risk of being dispatched as a result of a fleeting price spike, and to manage minimum loading issues and undesirable shutdowns after the end of the profile.
- For ancillary service providers, some practical implementation issues relating to co-optimisation of the energy and ancillary services markets rely on rebidding to manage these issues.²

For these reasons, AEMO prefers the market design to provide participants with the maximum possible scope for the timely adjustment of market bids/offers.

3. Materiality

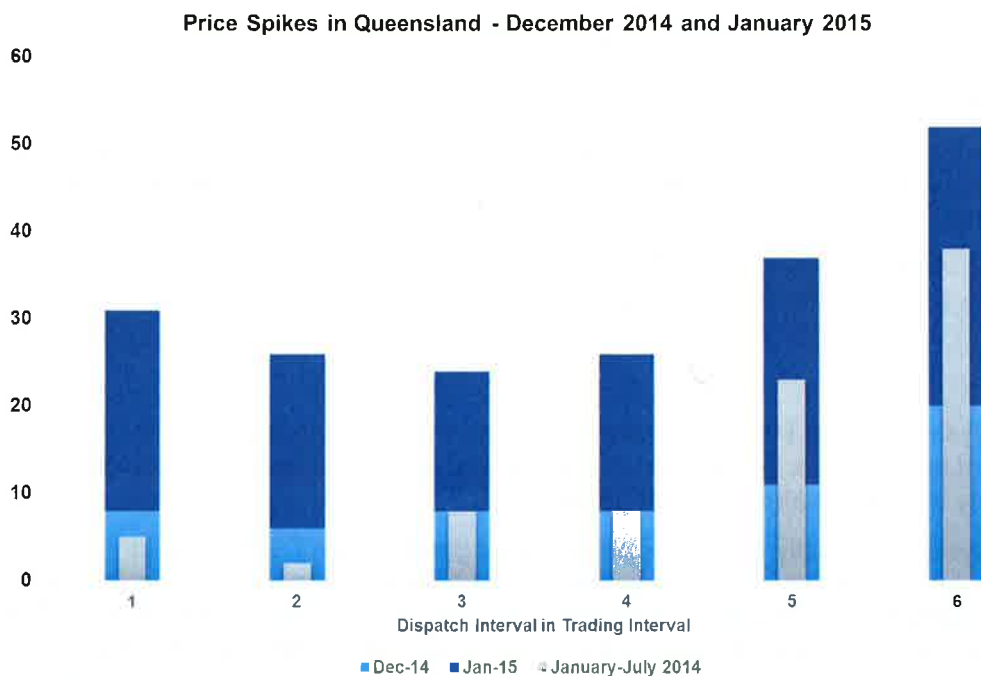
AEMO notes analysis provided in the consultants' reports on rebidding activity and relationship to pool price spikes. AEMO has also observed a steady increase in rebidding activity, particularly in Queensland in recent years.

The AEMC's analysis specifically examines price spikes greater than \$300/MWh in Queensland from January to July 2014. In summer 2014/15, the incidence of price spikes in Queensland this summer is much higher than last year (196 price spikes in December 2014 and January 2015 compared to 84 from January 2014 to July 2014). Although the frequency of price spikes in the sixth dispatch interval have continued to increase and be more frequent than those in other dispatch intervals, it has not been as dominant this summer as it was in early 2014. This is shown in Figure 1.

¹ Refer clause 3.8.19. Commonly called "fast-start inflexibility profile" that allows a minimum load profile to be specified by a participant for units that can start and reach a specified minimum load within 30 minutes, and specifies four times corresponding to start time, time to ramp to minimum load, minimum operating time and time to shutdown from minimum load, the total of which must be less than 60 minutes. Once the profile is complete, the unit is subject to normal dispatch instructions based on offers from the participant.

² This is referred to units being "trapped" and "stranded" by the FCAS trapezium, which is the model that describes the relationship between energy and ancillary service capability for a generating unit.

Figure 1 Queensland Price Spikes Summer 2014/15 compared to January-July 2014



AEMO has identified that many of these price spikes are also associated with rebidding in Queensland.³

4. Behavioural Statement of Conduct

AEMO notes the AEMC's discussion and consideration of the three options, which AEMO understands to be additional to the proposed rule.

AEMO does not consider that the options identified for a behavioural statement of conduct would address the issues as effectively as the proponent's original proposal.

Option 1 is inconsistent with the concerns raised in the rule change proposal. In spite of submissions to the contrary, AEMO agrees with the proponent that there are sufficient difficulties with enforcing the current rule and this issue should be addressed through a rule change.

While Option 2 simplifies the requirements, AEMO notes the AEMC's analysis that the option may be difficult to apply in practice and enforce.

Option 3 covers a range of options that borrow from provisions in other legislations that do not appear to translate well to the NEM. AEMO agrees that the concepts of "artificial price" and "market manipulation" used in the Corporations Act would be difficult to apply in the context of the NEM. The NEM relies on the energy price to signal a large range of operational and investment signals, which AEMO understands results in volatility on a larger scale than other markets contemplated by the Corporations Act.

³ See for example <http://www.aemo.com.au/Electricity/Resources/Reports-and-Documents/Pricing-Event-Reports/January-2015>

Other approaches identified in the options paper may be more enforceable but risk penalising legitimate actions by participants with potentially adverse impacts on market efficiency and secure system operation.

In the absence of any other more preferable approaches, AEMO concludes the original proposed rule is the most likely approach to succeed.

5. Restrictions on rebidding close to dispatch

5.1. Options identified in the paper

Consistent with AEMO's general comments above, AEMO would not be in favour of a general restriction on rebidding close to dispatch. If the AEMC determines to put in place a gate closure mechanism, options D and E would be the most likely to achieve the AEMC's objectives, while maintaining existing benefits from the current flexible bidding arrangements.

Options A and B are essentially the same, removing all flexibility from the current arrangements except where safety of personnel or plant are involved.

By limiting rebids to plant within a participant's portfolio, Option C restricts the ability of third parties to provide services to the market to provide substitute generation capacity. AEMO considers this would reduce the market's ability to manage risk outside the existing portfolio. If Option C was adopted, participants might manage this by having higher levels of spare capacity, either through over investment or vertical integration.

5.2. Targeted restrictions

As noted previously, the incidence of late rebidding events cited in our market reports repeatedly arise from a handful of facilities. The paper's options would restrict all rebidding, the majority of which have no history of contributing to the events of concern. It would be unfortunate if the efficient operation of the entire market was impaired in order to constrain the behavior of a small minority.

From a technical perspective, it would be straightforward to implement any of the options described towards specific generating stations.

AEMO is aware of a range of approaches being used in energy markets overseas. These are used in different contexts to the NEM's objectives, regulatory environment and energy-only design. A thorough and careful analysis would be required to determine application to Australia and its regulatory environment. AEMO has not attempted such an analysis as it would be more appropriate for it to be carried out in a policy context if the option was to be considered further.

6. Implementation

AEMO anticipates that options that impose restrictions on rebidding may require changes to AEMO's bidding systems. This would require a lead time of around 18 months to implement. AEMO's general practice is to commence design work to implement changes after the AEMC makes a draft determination. AEMO would also prefer, where possible, that any such changes be coordinated with other changes being considered.⁴

⁴ For example, the generator ramp rates and dispatch inflexibility in bidding is also likely to require changes to the bidding systems.

Alternatively, options that rely on self-compliance and regulation by the AER do not require any changes to systems and could be implemented without delay. This is supported by the NEM's high level of transparency where all rebidding information is published shortly after the event.

AEMO confirms discussions with the AEMC that the possible timing of restrictions on rebids described in the options paper can be implemented, the only differences being in the complexity of the implementation. AEMO would be able to implement a flexible approach to rebidding restrictions, allowing either NEM-wide or targeted restrictions using similar software design.

AEMO also confirms that the central dispatch process has mechanisms to manage disturbances that are not reflected in bids and offers. The central dispatch process uses measured output as a launching point for each scheduled generating unit in each dispatch interval. The largest likely error under such conditions would be equal to the ramp rate being offered by the unit and that this would be managed using market ancillary services.