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17th October 2017

Ben Noone
Senior Advisor
Australian Energy Market Commission
PO Box A2449
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Dear Mr Noone,

Five Minute Settlement (ERC0201) - Draft Rule Determination

Arrow Energy (Arrow) welcomes the opportunity to provide comments on the Australian Energy Market Commission's (AEMC) Draft Rule Determination concerning the proposed Five Minute Settlement rule change.

Overview

Arrow accepts the AEMC is implementing the 'Five Minute Settlement' rule irrespective of the concerns previously highlighted by market participants. Should the AEMC proceed as outlined in its Draft Rule Determination, Arrow recommends the proposed 'five minute settlement rule change' implementation timeframe be practical and in the best interests of market participants and electricity customers.

The AEMC states in its Draft Rule Determination that the preferred timeframe for transitioning to the new rule framework is three years and seven months, representing the shortest time that the Commission believes is possible to enable market participants to manage the significant implementation issues. Should this aggressive timeframe be pursued, the AEMC is potentially creating further energy security and supply risks in a market unprepared for such significant changes and uncertainty. Consideration should be given to the investment costs required in new technology by manufacturing, residential and other commercial customers to manage their electricity exposure. The AEMC should also consider the impacts of creating a two tiered system – where those who cannot afford batteries will be disadvantaged the most.

Arrow believes it would be more prudent for the transition period to represent a timeframe that is not based on the shortest time possible, but based on a timeframe that allows for the most effective, secure and reliable transition for all concerned.

Arrow recommends the implementation timeframe be extended to 2025 to allow appropriate time for:

1. Existing market participants to safely and effectively prepare for the rule change;
2. Legacy hedge contracts to expire;
3. New fast start technologies to integrate and prove reliable in the market; and
4. Accurate analysis of the 'five minute settlement rule'.

The above recommendations are explained as follows:

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1. Existing market participants to safely and effectively prepare for the rule change

Market participants, especially gas fired generators (GFGs) will need to make key strategic decisions in a tight time frame and implement significant facility upgrades at the very least to be sufficiently prepared to operate under the new rule. Implementing the 'five minute settlement rule change' prematurely presents a risk of disruption to the National Electricity Market (NEM). For instance, it will increase risks for GFGs and erode the economic incentive for GFGs to participate in the NEM. Ultimately this could lead to the untimely withdrawal of capacity specifically designed to service periods of high electricity demand, or at a minimum lead to higher spot and contract prices.

As outlined in Arrow's submission to the Directions paper, GFGs are not incentivised to react to five minute pricing from an offline state in a market settled on a five minute basis. It is for this reason Arrow does not agree with the AEMC's statement that a move to five minute settlement will cause no change in contracting levels. This statement appears to rely on an assumption that GFGs can respond from an offline state to full output within a five minute interval. A preferred outcome is to allow additional time for market participants to prepare for the rule change, and investigate opportunities to safely and efficiently modify assets to be able to respond more quickly to high price events. .

GFGs are uniquely capable of responding at relatively short notice, and operating for both short and extended periods of time. As such, GFGs generally provide a buffer against very high prices in the market. The Finkel Report lends support to the ongoing role of GFGs in the energy mix, suggesting GFGs will be necessary to provide critical dispatchable generation to maintain security and reliability in the short to medium term as the NEM transitions away from coal generation, and towards more renewables and storage technologies[1]. Arrow believes it is important the proposed 'five minute settlement rule change' allows market participants time to adapt and does not contribute to substantial negative outcomes for GFGs, .

The AEMC has noted that GFGs could consider running a flatter profile to mitigate the risks of five minute price exposure. This approach would result in an inefficient use of gas (not advisable in current gas market crisis), and GFG participants acting rationally are likely to reconsider the economic viability of using gas for NEM generation. Under the current proposed implementation of the 'five minute settlement rule change' Arrow is concerned reliable generation will withdraw from the market faster than new technologies are adopted. The proposed rule change would therefore worsen the existing energy crisis, increasing energy prices and threaten the reliability of supply.

2. Legacy hedge contracts to expire

Arrow understands that many existing contracts in the NEM extend beyond the short time frame indicated in the AEMC's Draft Determination. Other market participants including AFMA, ERM Power and Aurora have also expressed similar views, suggesting a large volume of legacy contract arrangements will be disrupted.[2] More time is needed to enable legacy contracts to expire, rather than artificially disrupting the contract market.

Negotiating new contracts could pose significant risks to market participants, potentially shifting existing contractual outcomes in favour of one party over another. This presents an unfair outcome, and does not acknowledge the strategic decisions made to date. Furthermore, the volume of existing contracts and the number of parties involved means renegotiations could take considerable time and cost to resolve.

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[1] Independent Review into the Future Security of the National Electricity Market, *Blueprint for the Future*, June 2017, page 107

[2] Australian Energy Market Commission, Draft Rule Determination, 5 September 2017, page 106

Arrow is concerned the AEMC views renegotiation of legacy contracts as a viable outcome and has not sufficiently acknowledged the implications that Government intervention will have on investor confidence, with the potential to damage Australia's transition to a secure energy future. An extended implementation timeframe would help alleviate these problems.

3. New fast start technologies to integrate and prove reliable in the market

Should the proposed rule change damage the viability of existing GFGs, the AEMC may require large volumes of fast start technologies to enter the market and demand side participation to increase rapidly, for the rule change to remain effective. Arrow is concerned the new technologies that this rule is designed to promote have not been thoroughly tested, proven or regulated in Australia. Allowing more time for the transition to five minute settlement would allow for more new technologies to join the NEM and prove their capabilities, as well as ensuring appropriate regulatory measures are in place to allow for effective coordination. The current market design is not a barrier to entry as new technologies are already joining the market under the existing settlement rules.

Arrow acknowledges the AEMO's recent changes to the requirements for storage facilities larger than 5MW to be treated as scheduled loads, bidding and providing visibility to other market participants in the wholesale market, believing this is a positive outcome.

The AEMC highlights the speed at which generation and energy storage commitments can be implemented, pointing to recent examples in South Australia. Arrow acknowledges the new generation and storage developments scheduled for South Australia in the near term, however some of these projects have been fast-tracked on the back of significant energy disruptions in the state, and include the support of governmental intervention. As such, some of these projects may not be reflective of the potential for other new developments going forward. It is questionable how much large scale capacity could practically be installed in the NEM within the next three years and seven months, particularly given the uncertainty surrounding the impact the proposed rule change will have on the market, which may deter some new investments until the practical outcomes of the rule change become more clear.

4. Appropriate time for accurate analysis of the 'five minute settlement rule

Arrow noted in its submission to the Directions paper that the AEMC's assumptions around thermal installations over the last 10 years were significantly understated. In fact, substantially more thermal generation has entered the NEM in recent years, with Arrow conservatively estimating more than 4,000MW of thermal generation commissioned since 2009[3]. Arrow has since received notification from the Commission acknowledging that the data was incorrect, however the same inaccurate data has been republished in the Draft Rule Determination (Figure 7.1 on page 124).

It is important to note that most of the NEM's newest thermal capacity is GFGs, with many more years of viable operational life remaining. It would be a highly uneconomic outcome for GFGs to be forced out of the NEM and replaced with new generation technology prematurely. The proposed rule change risks the financial viability of existing participants, particularly the young GFG fleet -

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[3] Arrow's calculation of new thermal generation entering the NEM since 2009 uses registered capacity MWs obtained from AEMO's Current Registration and Exemption List (see web link below), along with commissioning dates obtained from publicly available information. Thermal power stations commissioned since 2009 include: Colongra, Condamine, Uranquinty, Mortlake, Quarantine (expansion), Darling Downs, Braemar 2, Tallawarra and Tamar Valley.

https://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Participant-information/Current-participants/Current-registration-and-exemption-lists this could ultimately lead to higher electricity prices for consumers, promote greater price volatility and risk supply disruptions.

Arrow recommends the market would benefit from more time to consider how a significant investment in new technology and premature retirement of GFGs may be transferred to the end user, including whether electricity consumers will be faced with a significant increase in their electricity bills as a result of the write-down of existing assets and requirement for investment in substantial new capital.

Furthermore, little consideration has been given to residential, commercial and industrials customers whom are expected to make further investment into assets to manage their electricity exposure. Households that can afford to install batteries to participate in demand side management may benefit, while those who don't own their own home or can't afford batteries will be disadvantaged the most.

Conclusion

Appropriate time must be given to allow a smooth transition. Arrow strongly recommends the 'five minute settlement rule change' implementation timeframe is extended to 2025 in order to ensure that this rule change does not further destabilise the energy markets.

Please do not hesitate to contact Arrow's Government Relations Manager Michael Todd on 07 30124823 or via email michael.todd@arrowenergy.com.au should you wish to discuss any aspect of this correspondence further.

Yours sincerely,

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