

10th June 2020



Australian Energy Market Commission
via online submission: <https://www.aemc.gov.au/contact-us/lodge-submission>

Dear Sir/Madam

ERC0298: National Electricity Amendment (Delayed Implementation of Five Minute and Global Settlement) Rule 2020 - Consultation Paper

Arrow Energy Pty Ltd (Arrow) welcomes the opportunity to provide comments on, and more specifically, responses to the questions in the Australian Energy Market Commission's (AEMC) National Electricity Amendment (Delayed Implementation of Five Minute and Global Settlement) Rule 2020 - Consultation Paper.

About Arrow Energy

We explore and develop gas fields, produce and sell coal seam gas (CSG) and generate electricity. We have been safely and sustainably developing CSG in Queensland since 2000, supplying it commercially from the Bowen Basin since 2004 and the Surat Basin since 2006. Our Surat gas supplies Braemar, Braemar 2 and Daandine power stations and other power-generating customers; while our Bowen gas supplies Townsville Power Station and other industrial customers in North Queensland.

Arrow is the 100% owner and operator of the Braemar 2 Power Station (519MW) and has interests in the electricity sales from the Daandine (30MW) and Townsville (234MW) power stations. Each of these assets represents gas-fired generation, located in Queensland and dispatched into the National Electricity Market (NEM).

Overview

Arrow supports the Australian Energy Market Operator's (AEMO) proposal to delay the commencement of the National Electricity Amendment (Five minute settlement) Rule 2017 (5MS rule) and the National Electricity Amendment (Global settlement and market reconciliation) Rule 2018 (GS rule) by 12 months.

The gas industry is working and responding to the challenges posed by both the COVID19 pandemic and record low oil prices. Arrow views a delay of the 5MS rule as beneficial to industry and ultimately pricing outcomes for consumers, in allowing market participants to:

- Defer 5MS rule change readiness costs and maintain their financial stability;
- Support the reliability, safety and security of the national electricity system, by focusing available resource on core activities through H2 2020; and
- Efficiently undertake hedging and risk management activities for Financial Year 2021-22 through use of established, 30-minute settled contracts.



Arrow has provided responses to the National Electricity Amendment (Delayed Implementation of Five Minute and Global Settlement) Rule 2020 - Consultation Paper questions below.

Please do not hesitate to contact Arrow's Regulatory Advisor, Shane Murray on (07) 3012 4000 or via email shane.murray@arrowenergy.com.au should you wish to discuss any aspect of this submission further.

Yours sincerely,

A handwritten signature in black ink, appearing to be "Junzai Yu", written in a cursive style.

Junzai Yu
Chief Financial Officer

ATTACHMENT 1

STAKEHOLDER FEEDBACK TEMPLATE

The template below has been developed to enable stakeholders to provide their feedback on the questions posed in this paper and any other issues that they would like to provide feedback on. The AEMC encourages stakeholders to use this template to assist it to consider the views expressed by stakeholders on each issue. Stakeholders should not feel obliged to answer each question, but rather address those issues of particular interest or concern. Further context for the questions can be found in the consultation paper. Stakeholders are also encouraged to provide evidence to support claims where possible.

SUBMITTER DETAILS

ORGANISATION: Arrow Energy Pty Ltd

CONTACT NAME: Shane Murray

EMAIL: shane.murray@arrowenergy.com.au

PHONE: (07) 3012 4000

Stakeholder feedback

Delayed implementation of five minute and global settlement

14 May 2020

CHAPTER 4 – SECTION 4.1 – TIME PERIOD FOR DELAY

Question 1 – Time period for delay

<p>a) If a delay to the start date of 5MS is necessary, is a 12-month delay appropriate? Alternatively, please explain why another time period is preferable and, if applicable, the implications on cash flow and capacity? Would the rules need to commence at the start of a quarter to align with the contract market, or could 5ms commence mid-quarter? What would be the impact of a mid-quarter commencement?</p>	<p>Arrow feels strongly that a delay to the 5MS start date (delay) is necessary.</p> <p>The gas industry is working and responding to the challenges posed by both the COVID19 pandemic and record low oil prices. A delay allows industry and Arrow to combat these impacts by:</p> <ul style="list-style-type: none">• Deferring key readiness program activities and attributable costs from 2020 to 2021 and beyond<ul style="list-style-type: none">○ Deferring industry costs - Deferral of implementation by at least 12 months, would assist Arrow is deferring associated costs with the rule change. As noted by AEMC, this deferral will lead to short term cost savings to <i>“support better pricing outcomes for consumers”</i>○ Industry capacity - Deferral allows Arrow’s Energy Markets team to focus resources on core activities, managing deferred plant maintenance, summer readiness preparation and on-going business continuity response activities through H2 2020. Arrow views such refocusing as beneficial to <i>“the reliability, safety and security of the national electricity system”</i>○ It is Arrow’s opinion that shorter delays (less than 12 months) reduce the benefit potential, given:<ol style="list-style-type: none">1. Reduced ability to pause readiness work programs – limiting ability to defer costs;2. The potential for the start date or the lead-up to the start date to move into the inherently riskier, summer period (Q1 2022);3. Limited opportunity to tender for and negotiate with vendors; and4. Less time to explore plant reconfiguration options – Arrow sees this pursuit as a key benefit to the market, complementary to 5MS and supporting the Nation Energy Objective (“NEO”).• Supporting contracting markets<ul style="list-style-type: none">○ Contract market implications – Plant limitations restrict Arrow from trading certain instruments under 5MS. Arrow can, however, provide these products to market through the delay period (on a 30-minute settlement basis), which supports industry risk management activities and reduces the likelihood of added
---	---

Stakeholder feedback

Delayed implementation of five minute and global settlement

14 May 2020

costs¹. Additionally, Arrow is of the opinion that a delay improves liquidity through FY 2021-22 with the reversion to established cap contracts and supports fair value discovery for Q3-2022 products onwards, given the increased time from listing to delivery.

Arrow views a delay of at least 12 as appropriate.

- In April 2020 Arrow sanctioned commencement of the first phase of its Surat Gas Project (SGP) in southern Queensland. Construction is set to begin this year and so the revenue impact from COVID-19 aligns to a period of great expenditure for Arrow and its shareholders. Given, any deferment of cost will be extremely beneficial to supporting Arrow's established operations and forthcoming investment in Australia's energy future. Arrow views its Surat Gas Project development as complementary and supportive of the NEO.
- Consistent with Arrow's October 2017 submission in response to the Five-Minute Settlement (ERC0201) – Draft Rule Determination ("Previous Submission"), Arrow believes a delay supports the NEO in providing additional time for:
 1. Existing 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 5MS rule

In the context of the COVID-19 pandemic, Arrow is of the view that these points are more relevant now than ever. Managing subdued market conditions and maintaining business-as-usual activities has placed significant strain on available resources. Accordingly, this has presented additional challenges to Arrow's capacity to progress 5MS readiness.

¹ See section 4.2.2 *Open Cycle Gas Turbines – Natural Seller of Caps in Effect of 5 Minute Settlement on the Financial Market, Energy Edge* for additional supporting analysis. <https://www.aemc.gov.au/sites/default/files/content/9e286789-9686-4e49-8627-612fa9e3dfb0/AEMC-5-Minute-Settlement-Rule-Change-Mar-2017-FINAL-DELIVERED.PDF>

Stakeholder feedback

Delayed implementation of five minute and global settlement

14 May 2020

	<ul style="list-style-type: none">• Spot prices in QLD and NSW have decreased. QLD and NSW spot prices cleared ~30% and ~11% lower respectively in 2019 than in 2017 and forward markets suggest the same subdued pricing continues over the short-term (24 - 36 months)². Subdued spot market pricing:<ul style="list-style-type: none">○ Is indicative of fewer dispatch and settlement price anomalies – a key objective of 5MS; and○ Limits the need for new technology projects <p>Arrow's analysis identified further that only a relatively small volume of 'committed' projects³ are expected to enter the market through the delay window. Given these market factors, Arrow expects minimal to no impact to both the NEO and the realisation of the benefits of 5MS in delaying the start date.</p>
b) What is the appropriate date for the commencement of the 'soft' and 'hard' starts for global settlement? Should this be a linear move by the number of months of delay, or should the dates change to another timeframe?	Arrow does not retail electricity and so global settlement changes are not applicable to Arrow.
c) If there is a 12-month delay to the start date of 5MS and GS, is it still appropriate that all new and replacement meters (other than 4A) installed after 1 December 2018, and type 4A meters installed after 1 December 2019, be required to record and provide 5-minute data by 1 December 2022? If not, why and what time period would be appropriate?	Arrow does not retail electricity and so global settlement changes are not applicable to Arrow.

² Financial Year 2021-22 QLD and NSW strip swap contracts (the proposed delay period) have fallen ~31% and ~21% respectively over the past 12 months. Source: ASX settlement prices

³ Source: NEM Generation Information April 2020 - https://aemo.com.au/-/media/files/electricity/nem/planning_and_forecasting/generation_information/nem-generation-information-april-2020.xlsx?la=en. More specifically, only 33MW of Battery Storage is 'Committed'

Stakeholder feedback

Delayed implementation of five minute and global settlement

14 May 2020

d) If global settlement is delayed, by what date should AEMO prepare and publish the first report on unaccounted for energy required under cl 3.15B(a)?	Arrow does not retail electricity and so global settlement changes are not applicable to Arrow.
e) Cl 11.112.6 states that AEMO must make and publish the unaccounted for energy reporting guidelines required under new cl 3.15.5B(d) by 1 December 2022. What is the appropriate date for the publication of these reporting guidelines if there is a delay to global settlement?	Arrow does not retail electricity and so global settlement changes are not applicable to Arrow.

Stakeholder feedback

Delayed implementation of five minute and global settlement

14 May 2020

CHAPTER 4 – SECTION 4.2 – PARTICIPANT COSTS AND CAPACITY

Question 2 – Participant costs

<p>a) What is the expected impact of COVID-19 on participant cash flows? How material is this impact? How long are these cash flow impacts expected to last?</p>	<p>Confidential: Confidential information has been omitted for the purposes of section 24 of the Australian Energy Market Commission Establishment Act 2004 (SA) and sections 31 and 48 of the National Electricity Law.</p>
<p>b) For participants that are required to implement changes to IT systems and procedures for 5MS and GS, how would the proposed 12 month delay impact your implementation costs? Please quantify and provide evidence where possible. Any confidential cost information will be treated as confidential and redacted from submissions published on the AEMC's website.</p>	<p>Confidential: Confidential information has been omitted for the purposes of section 24 of the Australian Energy Market Commission Establishment Act 2004 (SA) and sections 31 and 48 of the National Electricity Law.</p>

⁴ Arrow's May month end, full year estimate compared to 2019 actuals

Stakeholder feedback

Delayed implementation of five minute and global settlement

14 May 2020

	<p>Confidential: Confidential information has been omitted for the purposes of section 24 of the Australian Energy Market Commission Establishment Act 2004 (SA) and sections 31 and 48 of the National Electricity Law.</p> <p>Arrow views all NEM participant cost savings as beneficial to <i>the long-term interests of electricity consumers</i>.</p>
<p>c) To what extent can additional market testing periods run by AEMO minimise costs associated with the delayed commencement of 5MS and GS? To what extent do participants rely on B2B data flows for 5MS and GS testing?</p>	<p>The quality and timeliness of data flows are crucial to the optimal operation of generation assets. The significant changes that 5MS necessitates, in a presently compressed timeframe, are placing operational pressures on already displaced operational resources. Going forward, in order to ensure that planned changes are implemented appropriately, additional market testing periods would provide the additional development time to deliver such change optimally and not at the expense of existing business operations. Arrow views robust change testing as paramount to supporting <i>the reliability, safety and security of the national electricity system</i>.</p>

Question 3 – Participant capacity

<p>a) To what extent has COVID-19 affected participants' ability to implement the necessary changes for 5MS and GS by 1 July 2021?</p>	<p>As noted in Q2 b), COVID-19 restrictions have, thus far, delayed system reconfiguration scoping activities by 3 months. Arrow is now targeting January 2021 for reconfiguration works to commence. The revised schedule encroaches on Arrow's busiest period of the year (Summer/Q1) and creates increased risk as a result of the diversion of critical resource.</p> <p>Arrow estimates reconfiguration activities and testing will require 5 to 6 months effort. As a precautionary measure to ensuring operational capability on 1st July 2021, Arrow's readiness project team is prioritising systems/applications in the event timelines slip further. This approach is not ideal as it jeopardises effective end-to-end testing and introduces significant risks to operations from the 'go-live' date. If similar risks are present across industry, Arrow is concerned this may compromise <i>the reliability and security of the NEM</i>.</p>
--	---

Stakeholder feedback

Delayed implementation of five minute and global settlement

14 May 2020

CHAPTER 4 – SECTION 4.3 – ELECTRICITY CONTRACT MARKET IMPLICATIONS

Question 4 – Electricity contract market

<p>a) To what extent have you purchased 5-minute cap products for FY 2021-22? What would the impact of a delay be to the value of those 5-minute cap products as risk management products for your business?</p>	<p>Confidential: Confidential information has been omitted for the purposes of section 24 of the Australian Energy Market Commission Establishment Act 2004 (SA) and sections 31 and 48 of the National Electricity Law.</p>
<p>b) Would a delay to commencement of 5MS impact swap, captions or any other financial hedging products trading for FY2021-22 and beyond? If so, how?</p>	<p>Arrow notes that fair value for all 5-minute contracts is difficult to gauge. The ASX has not yet listed 5-minute cap contracts and Arrow has observed low liquidity in the OTC market. Arrow believes that a delay will improve liquidity of FY 2021-22 products and, with a greater lead-time from listing to delivery, support fair value discovery for Q3-2022 products onwards (e.g. ~24 month before the first 5-minute cap commences delivery in place of ~12 months). Transparent pricing and liquid forward markets support efficient outcomes and in-turn the NEO.</p>

⁵ See section 4.1.1 Half hourly caps in Effect of 5 Minute Settlement on the Financial Market, Energy Edge for additional supporting analysis.

<https://www.aemc.gov.au/sites/default/files/content/9e286789-9686-4e49-8627-612fa9e3dfb0/AEMC-5-Minute-Settlement-Rule-Change-Mar-2017-FINAL-DELIVERED.PDF>

Stakeholder feedback

Delayed implementation of five minute and global settlement

14 May 2020

CHAPTER 4 – SECTION 4.4 – DELAYED BENEFITS

Question 5 – Delayed benefits

a) To what extent were investments that have been made, or are planned to be made, in technologies that are capable of responding to a five-minute price signal, dependent on the 5MS rule commencing on 1 July 2021, as opposed to other factors? What effect would a 12-month delay have on the expected return on investment for these assets? Please quantify and provide evidence, noting that submissions can be treated as confidential if requested, or confidential information can be redacted from submissions published on the AEMC's website.

Confidential: Confidential information has been omitted for the purposes of section 24 of the Australian Energy Market Commission Establishment Act 2004 (SA) and sections 31 and 48 of the National Electricity Law.

b) To what extent would a 12-month delay to the start of 5MS and/or GS delay the realisation of other benefits for individual participants and/or the industry as a whole? Please quantify and provide evidence, noting that submissions can be treated as confidential if requested, or confidential information can be redacted from submissions published on the AEMC's website.

Please refer to Arrow's response to Q1 a) - in particular, Arrow's analysis of committed new entrants and suppressed spot market price expectations.

Stakeholder feedback

Delayed implementation of five minute and global settlement

14 May 2020

CHAPTER 4 – SECTION 4.5 – IMPLICATIONS OF DELAY ON RULE DRAFTING, PROCEDURES AND DETERMINATIONS

Question 6 – Drafting and procedure implications of delay

a) Is there any feedback on the high-level description of a potential rule presented in Appendix A? Are there any other interactions with affected rules and schedules that have not been identified?	No response from Arrow.
b) Should AEMO, the AER and the IEC be required to review and if necessary, amend their relevant procedures to take into account a delay to five minute and global settlement?	Arrow supports a review of relevant procedures and changes necessary to maintain stable market operation and oversight.
c) In its rule change request, AEMO proposes that there should be no consultation on any changes to its procedures if those changes are solely related to a delay to five minute and global settlement. Are there any reasons that this could be an issue?	Arrow supports this approach in the interests of reducing associated delay costs.