

23 May 2019

Mr John Pierce  
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Australian Energy Market Commission  
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Dear Mr Pierce

### **Australian Energy Market Commission Short Term Forward Market rule change**

AEMO welcomes the opportunity to comment on the Australian Energy Market Commission's (AEMC) Short Term Forward Market (STFM) rule change consultation paper.

As outlined in our Rule Change Proposal, AEMO is supportive of a STFM.<sup>1</sup>

AEMO is the independent system and market operator and a not-for-profit legal entity. One of AEMO's objective is to rely on markets to support the operation of a secure, reliable, and cost-efficient power system. We consider a STFM will help us achieve this objective.

The case for a STFM has been made through the AEMC's Reliability Frameworks Review (RFR):

*"the Commission has concluded that a US style day-ahead market would not be suitable in the NEM in order to manage reliability outcomes. Instead, the Commission considers that there would be benefits to the introduction of a voluntary, contract-based short-term forward market, particularly for demand response."*<sup>2</sup>

The RFR was thorough in its examination of reliability frameworks and suggested a STFM over other forms of unit-commitment day-ahead markets. On this basis, AEMO submitted a Rule Change Proposal. If the STFM does not proceed, a gap in reliability frameworks may remain, suggesting that this issue should be re-examined.

The key points in our submission build on our Rule Change Proposal:

- A NEM STFM is expected to promote system security and reliability.
- The cost of an AEMO-operated STFM may be lower than comparable options.
- The STFM may benefit from referral to COAG EC given its ability to contribute to a broad range of policy objectives and the likely requirement for NEL changes.

These points are expanded on in response to the consultation paper's questions, provided at [Attachment A](#).

<sup>1</sup> AEMO Short Term Forward Market Rule Change Proposal, December 2018. Available at: [https://www.aemc.gov.au/sites/default/files/2018-12/Rule%20change%20request\\_6.pdf](https://www.aemc.gov.au/sites/default/files/2018-12/Rule%20change%20request_6.pdf).

<sup>2</sup> AEMC Reliability Frameworks Review Final Report, July 2018. Available at: [https://www.aemc.gov.au/sites/default/files/2018-07/Final%20report\\_0.pdf](https://www.aemc.gov.au/sites/default/files/2018-07/Final%20report_0.pdf).

### **A NEM short term forward market may promote system security and reliability**

An STFM may lead to improvements in system security and reliability as the price signal developed in the STFM may bring forward additional units of supply. For example:

- The STFM would be aligned with gas markets and provide a tool for gas-powered generators to manage spark spreads. This might lead to a more efficient response by gas-powered generation in relation to short-term changes in demand and price and increase unit availability in the spot market.
- Providing an option for uncontracted variable renewable (VRE) generation to become financially firm over week ahead time frames may support their participation in other areas of the NEM contract market. This would be expected to help existing and future VRE operators manage risk and maximise returns on investment.
- The STFM is intended to support demand side response which contributes to reliability and market efficiency. The STFM price signal may facilitate more efficient levels of spot market demand response, while the contracts provide a way for demand side participants to on-sell contract cover it no longer needs due to reduced consumption or buy additional cover to enhance long term contract positions.

### **The costs of an AEMO-operated STFM may be lower than comparable options**

The cost of developing and participating on an AEMO-operated STFM may be lower than other comparable platforms because AEMO will not seek to profit from the market and because it can draw on existing AEMO-operated gas trading platforms and NEM settlement and prudential systems to contain costs. Unlike other exchange traded platforms, an AEMO-operated STFM would allow STFM positions to contribute to elements of NEM prudential and settlement balances, which would assist participants in managing cash and collateral requirements.

Compared to OTC contract options, a standardised and anonymous trading platform reduces search, transaction and negotiation costs and the need to provide individual collateral for each contract. Reducing these steps and costs are of particular importance when trading in short-term contracts. Providing a STFM may open up an area of contract trading that was previously impractical on an OTC basis.

### **The STFM may benefit from referral to COAG EC**

As signalled in the Rule Change Proposal, National Electricity Law changes may be required to establish an AEMO-operated STFM. Given the STFM's ability to contribute to many key policy issues facing the NEM (mentioned above), it may benefit from consideration at COAG EC. COAG EC's support would be required to progress NEL changes and to assist in ASIC and Treasury's consideration of market license requirements.

AEMO looks forward to engaging further with the AEMC on this market development. If you would like to discuss the contents of this submission further, please do not hesitate to contact Kirsten Hall on 03 9609 8871.

Yours sincerely,



Peter Geers

**Chief Strategy and Markets Officer**

## STAKEHOLDER FEEDBACK TEMPLATE

### SUBMITTER DETAILS

ORGANISATION: Australian Energy Market Operator

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Question	Response
<b>QUESTION 1: CURRENT RISK MANAGEMENT FOR INTERMITTENT RENEWABLE GENERATORS</b>	
1a) How do VRE generators currently manage their spot price risk in the short term? Is there a preference for fully hedging around price and/or volume risk, or an actively managed risk model?	AEMO looks forward to hearing from participants on this question.
1b) Would a STFM assist VRE generators to manage their risk? If so, how (the expectation that short term contract prices will approach the spot price closer to the delivery period)? What benefits are there? What products should be listed?	<p>As wind forecasts improve closer to real time, uncontracted VRE generators may be in a position to offer contracts for sale in a STFM (unlike longer term contracts where wind forecasts may be less stable).</p> <p>For all participants, AEMO expects that the costs involved in searching for counterparts, agreeing contract specifications and arranging separate collateral for each short term bilateral trade may be reduced by a STFM.</p>

Question	Response
<b>QUESTION 2: CURRENT RISK MANAGEMENT FOR PEAKING GENERATION</b>	
<p>2a) Would the introduction of a STFM improve the risk management capability of a gas-powered generator? If so, how (in particular given the expectation that short-term contract prices will approach the spot price closer to the delivery period)? Are there any OTC products that currently exist that serve a similar purpose? What kind of products would be beneficial to be listed?</p>	<p>AEMO expects that gas-powered generators (GPG) may be able to use the STFM to align the value of short term gas contracts with their participation in the electricity spot market. Trading on the STFM may provide GPG with certainty about the price at which they can secure gas and the price they will receive for producing electricity. Being able to refine positions close to real time may also mean GPG are more confident in longer term contracting. These factors would be expected to increase GPG availability and utilization.</p> <p>The STFM may also provide efficiencies over OTC contracts as it reduces search and negotiation time and costs.</p>
<p>2b) Would the introduction of a STFM assist in optimising spark spreads for gas powered generators?</p>	<p>Being able to trade electricity contracts effectively over short timeframes would be expected to help GPG manage the difference between gas prices and expected electricity spot prices as the facilitated gas markets mostly offer near-term contracts.</p>
<p>2c) Are there any reasons the STFM would not be used by gas powered generators? Would the differential between expected value of selling a short term product and trading directly on the spot be sufficient to warrant the use of the short term product? How often and for what volume (proportion of a portfolio) would this assist?</p>	<p>AEMO looks forward to hearing from participants on this question.</p>
<b>QUESTION 3: CURRENT RISK MANAGEMENT FOR END USERS</b>	
<p>3a) How do end users currently manage their short term spot price risk? Are there any OTC products or financial products such as weather derivatives that are currently used to minimise short term risk?</p>	<p>AEMO looks forward to hearing from participants on this question.</p>
<p>3b) Would a STFM assist end users in managing risk? If so how, in particular given the expectation that</p>	<p>AEMO looks forward to hearing from participants on this question.</p>

Question	Response
short-term contract prices will approach the spot price closer to the delivery period? What products would be beneficial to be listed?	
3c) Would the introduction of a STFM be beneficial to demand response participants? If so, how? What would be the best way for a demand response participant to maximise benefits from the introduction of a STFM?	AEMO looks forward to hearing from participants on this question.
3d) What design elements should be considered in considering possible interactions between a STFM and wholesale demand response mechanism?	<p>The STFM and wholesale demand response mechanism should be coordinated to promote participation of wholesale demand response providers in the STFM. Aspects to monitor may include:</p> <ul style="list-style-type: none"> <li>• STFM participant AFSL requirements;</li> <li>• STFM participant NEM registration requirements; and</li> <li>• STFM product development.</li> </ul>
3e) Are there any benefits for introducing a STFM, outside those mentioned in this consultation paper?	<p>Operational forecasting - selling contracts in the period close to real time will usually mean the seller will want to be dispatched in order to defend the contract and will make efforts to ensure plant is available. This may improve participant availability forecasts in the days ahead of real time, which leads to greater efficiency in AEMO's operational planning.</p> <p>Reliability - if the STFM creates a price signal in the week to day ahead timeframe, this may bring forward additional units of generation and demand side response. This would be expected to increase available energy supplies compared to the status quo.</p> <p>System security –the STFM may provide a price signal to secure input fuels and offer into the spot market. When these generators also provide system security services, this may lead to improved system security.</p>

Question	Response
	<p>If the Retailer Reliability Obligation (RRO) is implemented and RRO instruments are issued by the AER, there will likely be an increased level of electricity contracting in the NEM. The STFM may be complementary to this in that it will provide a platform to adjust contract positions between T-1 and T. This may be required due to declining customer load or weather variances in the year following T-1, when contracts would have been submitted to the AER.</p>
<p><b>QUESTION 4: OPERATION OF A STFM</b></p>	
<p>4a) What are the comparative costs and benefits of AEMO operating a STFM versus a third-party? Should this assessment be made by market bodies or a market process (such as an auction)?</p>	<p>AEMO may be able to run a STFM with lower costs and higher benefits than third party providers because:</p> <ul style="list-style-type: none"> <li>• AEMO can draw operation and product design from existing gas market which AEMO runs; such as the Gas Supply Hub, Pipeline Capacity Trading and Gas Day Ahead Auction.</li> <li>• Many participants already have Trayport and NEM systems so there might be minimal 'set up' costs from a participant point of view.</li> <li>• Trade on the STFM could, to varying degrees, be integrated with NEM prudential and settlement systems, which may assist in collateral management.</li> <li>• AEMO is a not for profit organisation so would not be seeking to make a profit on transactions.</li> </ul>
<p>4b) If a third party were to operate the STFM, what level of incentive would be required, and who should pay?</p>	<p>Any incentive provided to a third-party would need to result in a lower overall cost as compared to an AEMO-operated STFM, for this to be in the interest of consumers.</p>
<p><b>QUESTION 5: MARKET PARTICIPANTS AND LIQUIDITY</b></p>	
<p>5a) Which parties should be allowed to participate in the STFM? What would be the impact on the benefits and costs of an STFM if only market participants (notably, generators and market customers) could participate in the market?</p>	<p>To promote liquidity and the inclusion of demand side response providers, it will be important to extend participation to as many participant types as practicable under subsequent market design choices.</p>

Question	Response
5b) What products should be offered on the market, additional to those previously suggested? What should be the process for adding/removing products?	AEMO suggests that the process of adding and removing products should not be set in the Rules due to the low impact on the National Electricity Objective and so that the STFM can quickly adjust to any changes in the type of products participants find useful.
<b>QUESTION 6: INTEGRATION OF STFM</b>	
6a) Will there be cost savings to participants by using AEMO's systems as opposed to a third party? If so, what systems should the STFM integrate into?	AEMO looks forward to hearing from participants on this point. However, AEMO expects that an AEMO-operated STFM could link participant STFM accounts to their prudential and settlement accounts to reduce circular cash flows.
6b) Under an AEMO-operated STFM, is there a specific prudential treatment that would be beneficial to participants? How would this differ to an ASX-operated STFM? How could the choice between prudentials in each market affect the participation in a STFM? Would options that allow leveraging of existing prudentials for use in the STFM increase the prudential risk or default risk that AEMO is managing?	<p>An AEMO-operated STFM prudential treatment could differ from an ASX-operated STFM in that:</p> <ul style="list-style-type: none"> <li>• Participants may be able to share elements of collateral between the NEM and STFM.</li> <li>• Being able to manage collateral between the NEM and STFM may encourage participation on the STFM.</li> </ul> <p>AEMO would design STFM prudential management so that it did not overly impact on the NEM prudential standard and framework.</p>
<b>QUESTION 7: IMPLEMENTATION COSTS</b>	
7a) What are the likely types of costs (and scale of those costs) incurred from the introduction, and operation of, the STFM proposed by AEMO (and other potential models)?	<p>The likely types of costs that may be involved in an AEMO-operated STFM are:</p> <ul style="list-style-type: none"> <li>• Market development – rule changes, procedures, exchange agreement, participant agreement, registration categories, participant training and support.</li> <li>• IT – adjustments to existing prudential, settlement, clearing IT processes.</li> <li>• Monitoring and supporting STFM trading (participant trading exposure).</li> </ul>
7b) Would the requirement to attain an AFSL be a significant barrier to operating in the STFM?	An AEMO-operated STFM would require review by ASIC and Treasury to determine license requirements for AEMO to run the market. STFM participants would also need to consider their own AFSL status.
7c) If the STFM were to be implemented, what other operational and implementation issues may arise?	If it was determined that AEMO should develop and operate a STFM, AEMO would want to work with industry bodies and participants to determine an appropriate start date and

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How much time is required for market bodies and participants to prepare for the introduction of an operational STFM?	approach to roll-out. The time required to develop a STFM will depend on the eventual market design and other processes occurring in the NEM such as five-minute settlement.
7d) Is the proposed assessment framework appropriate? Should any criteria be added or removed?	The STFM is essentially an additional tool in the NEM that could help the market transition to a market with more VRE generation and demand side response. The exhaustive nature of the Reliability Frameworks Review and the extent to which it sought to extinguish debate on other market changes such as US style day-ahead markets suggest that if an STFM does not go ahead, these broader debates should be re-opened.