



**Energy Transformation
Taskforce**

Proposals for changes to Market Power Mitigation Mechanisms

Consultation Paper

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It is provided to assist in understanding the proposed design of market power mitigation mechanisms in the new Wholesale Electricity Market (WEM).

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1. Introduction

1.1 Energy Transformation Strategy

The power system is experiencing a major and rapid transformation due to changes to the mix of grid-connected large-scale generation technologies, consumer demand patterns, and growth in the penetration of Distributed Energy Resources (DER), including solar PV and battery storage systems. Because of this transformation, the traditional market systems, standards, obligations and frameworks that have underpinned the operation of the Wholesale Electricity Market (WEM) have become unsustainable.

The State Government's Energy Transformation Taskforce (Taskforce) is implementing significant improvements to the WEM to address current and emerging power system security risks and provide appropriate market incentives. This is occurring through the State Government's Energy Transformation Strategy (Strategy).

A fundamental aim of the new market design is the establishment of appropriate market and regulatory frameworks to encourage investment in new technology types that will be needed to address power system challenges in a rapidly evolving WEM. Fast-responding technologies, including storage and flexible gas generation, will be increasingly required to maintain power system security as penetration of intermittent generation grows to higher levels. Ensuring market and regulatory frameworks enable participation of these facilities and provide appropriate compensation for their services is essential.

Market frameworks must also be designed to enable efficient entry and exit of participants, which will facilitate competition and put a downward pressure on the long-term cost of electricity to consumers.

The Taskforce has established the design of the new WEM through the new WEM Amending Rules gazetted in December 2020. Major components of the new WEM include:

- Establishment of Essential System Services (ESS) markets
- 5-minute dispatch intervals
- Move to a zero gate closure period
- Security constrained economic dispatch
- Synergy facility bidding
- Co-optimisation between energy and ESS
- Retention of the STEM
- Abolition of constrained-off payments
- Enhancement of the registration framework to remove entry barriers to new technologies and to increase flexibility
- Changes to the Reserve Capacity Mechanism to recognise network constraints in the capacity credit allocation process with the introduction of a Network Access Quantity regime to promote investment certainty and provide location signals for new entrant capacity.

- Establishment of a Supplementary Essential System Services Mechanism (SESSM) which can be triggered and overseen by the ERA if it observes and demonstrates inefficient market outcomes in any of the ESS real time markets.

Given these very fundamental changes to the market design and arrangements it is timely to undertake a holistic assessment of appropriate market power mitigation mechanisms in the new WEM. The need to balance demand and supply in real time gives rise to potential market power abuse in virtually all developed electricity markets. Hence, market power mitigation is a core element of energy market design. An effective market power mitigation regime should protect customers from industry participants extracting abnormal profits whilst supporting investment by allowing recovery of legitimate efficient costs.

The Taskforce has undertaken a review of the current market power mitigation measures in the WEM, primarily based on short run marginal cost (SRMC) bidding. The Taskforce considers that the current arrangements are deficient and significant enhancements are required to achieve a fit for purpose market power mitigation regime in the new WEM.

This Consultation Paper outlines the preliminary thinking of the Taskforce on this matter which will be further informed by stakeholder submissions.

The Taskforce has commissioned a Report prepared by Sapere Research Group and Robinson Bowmaker Paul to assist this work. This Consultation Paper should be read together with the Consultants' Report which provides more detailed explanation of aspects of a possible new market power mitigation regime.

1.2 The case for change

The existing market power mitigation mechanism in the WEM is largely reactive, based on ex-post investigations into the exercise of market power and the compliance with SRMC offer rules. The Taskforce considers this regime has a number of deficiencies. In particular, it does not provide Market Participants and potential investors with sufficient clarity and guidance on what is acceptable conduct.

Ex-post investigations are generally expensive and time-consuming, require the regulator to prove malintent on the part of the market participant, do not remedy adverse market outcomes in a timely manner, and add to regulatory uncertainty.

Additionally, concerns in relation to the unclear definition and ambiguous interpretation of market power and SRMC persist in relation to the existing framework.

In 2020, Energy Policy WA sought feedback from the sector on a Directions Report – Clarifying Short Run Marginal Cost and market offer requirements in the Wholesale Electricity Market. The Directions Report proposed amendments to clarify the SRMC related provisions in the WEM Rules. While the Report made recommendations for improvements, Energy Policy WA recognised that these would be interim measures pending a more fulsome review of market power mitigation by the Taskforce in the context of the new WEM. The Energy Policy WA Directions Paper has been considered by the Taskforce as part of this broader review and is superseded by this Consultation Paper.

Deficiencies in the existing market power mitigation regime include:
Current market power mitigation mechanisms are largely reactive (ex-post) rather than pro-active (ex-ante)
The nature of the ex-post regime leads to regulatory uncertainty
Ex-post investigations are complex, resource intensive and time-consuming
There are lengthy delays between the regulator detecting inappropriate behaviours and remedies being delivered
The adverse outcomes for other market participants and consumers may persist for extended periods before the behaviour is remedied
The requirement for the ERA to refer findings to the Electricity Review Board has restricted the ERA's ability to be transparent about the content and progress of market power investigations
Limited transparency and availability of timely information make compliance with the regime challenging
Market participants lack clarity regarding their trading conduct obligations
There are no direct obligations on market participants to ensure compliance and report breaches

The WEM remains a highly concentrated market and is expected to remain so in the short to medium term, necessitating measures to adequately mitigate market power exercise. Several features of the new market will improve overall transparency and efficiency, however the opportunities for exercise of market power are also increased.

The design of the new WEM will enable supply of electricity at the lowest economic cost through security constrained economic dispatch. Gate-closure for all Market Participants will be reduced to zero (15 minutes for the first six months) to enable Market Participants to amend their offers to factor the latest information about power system conditions in their offers. This provides for efficient dispatch outcomes but can also increase the opportunities for exercise of market power.

In the short term, there will be a misalignment between the five-minute Dispatch Interval and the 30-minute Settlement Interval until 1 October 2025, which will increase opportunities for disorderly bidding as market participants try to cover any expected under-compensation from the time-weighted average settlement price.

The introduction of a constrained network access framework also means that occurrences of locational or transient market power may increase in a way that increases the opportunities for a market participant to earn economic rents when operating behind a constraint.

Synergy will now offer its facilities into the market individually, rather than the current portfolio approach. Although this improves the ability of other market participants to scrutinise Synergy's trading behaviour and adjust their positions accordingly, it also increases the potential for market power exercise.

The Taskforce considers that the SESSM will be a useful instrument to deter the exercise of market power in the ESS markets. If the ERA triggers the SESSM, it can require SESSM submissions from

specific Market Participants, allowing it to examine the operating costs of facilities participating in ESS markets to assure itself that market power is or is not being exercised in a way that raises the ESS market price above its economically efficient level. If a new entrant can provide services at a lower cost than existing facilities, it may receive a SESSM award that contributes towards its fixed costs. Hence the presence of the SESSM provides a credible threat of new entry to temper market power exercise by incumbents. However, there could be considerable time between identifying undesirable market outcomes and the entry of a new SESSM Facility, so there is potential for inefficient market outcomes in the interim.

The combination of the new market design creating new opportunities for exercise of market power and the deficiencies of the current market power measures warrants a comprehensive review of market power mitigation in the WEM.

1.3 Scope

The purpose of the review by the Taskforce was to consider:

- the effectiveness and proportionality of existing market power mitigation mechanisms in the WEM and propose their retention and/or improvement; and
- whether additional market power mitigation mechanisms are required, and if so, how these should be designed.

This project did not include a review of the Electricity Generation and Retail Corporation Regulatory Scheme, which places obligations on Synergy to manage its vertically integrated business, including requirements for ring-fencing and transfer pricing.

As noted above, the Taskforce has engaged expert consultants – Sapere Research Group and Robinson Bowmaker Paul, to assist this work by critically evaluating the market power mitigation mechanisms in the WEM and make recommendations to enhance effectiveness and operability.

The consultants' report is provided with this Taskforce Consultation Paper as **Attachment 1**. The consultant's report outlines various issues with the current regime and proposed approaches to address them. This Consultation Paper outlines the policy objectives and market context in which market power mitigation mechanisms are to be designed and the current thinking of the Taskforce on a high-level design for the new WEM.

1.4 Stakeholder consultation

Industry feedback is invited on this Consultation Paper and the consultants' report. The consultation period closes at **5:00pm WST on Wednesday 28 April 2021**. Late submissions may not be considered.

Feedback can be submitted on the design for market power mitigation mechanisms proposed by the Taskforce for the new WEM in any of the following ways:

- Email your written submission to energytransformation@energy.wa.gov.au
- Contact energytransformation@energy.wa.gov.au to arrange a one-on-one discussion.
- Post your written submission to Energy Policy WA at Locked Bag 11, Cloisters Square, WA 6850
- Attend the Transformation Design and Operation Working Group (TDOWG) meeting on 19 April 2021 (contact energytransformation@energy.wa.gov.au to register).

In the interests of transparency and to promote informed discussion, submissions will be made publicly available on www.energy.wa.gov.au unless requested otherwise. Accordingly, stakeholders should clearly specify if the information they provide is confidential and, where possible, should separate confidential information from non-confidential information. Persons making any claim for confidentiality should familiarise themselves with the provisions of the *Freedom of Information Act 1992* (Western Australia), which imposes obligations on Energy Policy WA in respect to the release of documents.

1.5 Next steps

The Taskforce will consider the high-level market power mitigation framework, taking into account stakeholder feedback, prior to its dissolution on Friday 21 May 2021.

Detailed development of the design and amending WEM Rules will be released by Energy Policy WA for further consultation with the sector in the second half of 2021. Implementation and transitional matters will be considered as part of this further consultation by Energy Policy WA.

The Economic Regulation Authority (ERA) will need to undertake implementation activities in 2021 and 2022 in preparation for the new market power mitigation arrangements to commence for 1 October 2022 (or a different date as transitional arrangements require).

2. Approach

The new WEM is structured to enable recovery of generator costs through the Reserve Capacity Mechanism (RCM), the energy market (including bilateral contracts, the Short Term Energy Market and the real time energy market) and the Essential System Service (ESS) markets.

The RCM remains the primary mechanism to signal scarcity of supply and compensate capacity providers based on the marginal cost of the most efficient peaking generation technology with a linear adjustment for excess or shortage of capacity. Facilities that receive capacity credits have obligations to present that capacity into the Short Term Energy Market (STEM) and the real-time energy market. They can expect to recover their efficient operating costs through their bilateral contracts as well as STEM and real-time energy market revenues.

With the addition of the ESS markets, capable facilities can also compete to earn ESS revenue and the SESSM is intended to signal scarcity for ESS. A participant in the SESSM may receive a SESSM award that contributes towards its fixed costs, which will provide additional incentive for investment in ESS-capable facilities.

The WEM is a highly concentrated market, with a handful of large suppliers and purchasers, and market power is likely to be present in the WEM on a consistent and ongoing basis. As a result, competitive forces between market participants cannot be solely relied upon to deliver efficient market outcomes at all times. An effective suite of market power mitigation measures remains necessary.

The ongoing transformation of the energy sector and the rapid penetration of very low marginal cost resources in the energy market requires a carefully calibrated market power mitigation framework that does not constrain the recovery of efficient costs by providers, while protecting consumers from extraction of abnormal profits by market participants with market power.

The Taskforce does not consider the current market power mitigation regime is fit for purpose in a dynamically evolving electricity market and that the deficiencies listed in Section 1.2 (and discussed in more detail in the Consultants' Report) need to be addressed.

In particular, the Taskforce considers that the ex-post nature of the current market power mitigation regime is a major deficiency. The current lack of guidance on what is acceptable bidding behaviour has given rise to uncertainty around what costs should be legitimately recoverable under the SRMC bidding requirement and there appears to be general support for more guidance on offer construction. It is likely the current approach will be increasingly tested by the transformation; with increasing penetration of low marginal cost generation in the energy market and consequent need for a variety of essential energy services to support the security of the power system.

Further, ex-post investigation of potential breaches is proving expensive and time-consuming, requires the regulator to prove malintent on the part of the market participant, does not remedy adverse market outcomes in a timely manner, and adds to regulatory uncertainty. The limited guidance on how the regulator will detect market power exercise ex-post, may also discourage efficient competitive market activity in real-time.

The Taskforce has endorsed the following principles for the review of the market power mitigation mechanism.

The market power mitigation framework should:

- **be calibrated to ensure it doesn't constrain the recovery of efficient costs by energy producers while protecting consumers from the extraction of abnormal profits by Market Participants with market power**
- **provide ex-ante regulatory certainty to promote efficient market operation while reducing the need for ex-post investigation and litigation processes**
- **ensure the regulatory effort is proportionate to the cost and the risk being managed so that benefits of improved competition outweigh the regulatory costs**
- **recognise the need for ongoing review to ensure the mechanisms remain balanced and responsive to changing power system conditions and market dynamics and do not overly constrain efficient market conduct**

3. Proposed high level design

This section summarises the current thinking of the Taskforce on a proposed high-level design of the market power mitigation mechanisms in the new WEM.

The proposed changes have the following objectives and high-level design components:

- **Reduce reliance on ex-post investigations.** The proposed changes are aimed at improving regulatory certainty and seek to address some of the disadvantages with the current reliance on a small number of lengthy and costly ex-post investigations. This includes providing guidance as to acceptable and unacceptable trading conduct, and imposing ex-ante obligations on market participants to monitor and report on their own trading practices.
- **Adopt an objective measure of market power.** It is proposed that a simple market power test is applied to the STEM, and real time energy and ESS markets. This would ensure that market power mitigation obligations and market surveillance focus only on the participants that meet a threshold defined by that test. This is intended to address the current lack of definition of “market power” in the rules.

A three-part market power test is proposed, incorporating:

- *Ex-ante:* Determining the presence of market power through a “pivotal supplier test”.
 - This would ensure that market power mitigation obligations and market power surveillance are focused on the participants that meet a threshold defined by the test. For the threshold to be met, AEMO must dispatch one or more facilities of a Market Participant (“pivotal supplier”) otherwise demand cannot be met. A pivotal supplier test could potentially be automated in the AEMO’s surveillance systems and applied to the STEM, and real time energy and ESS markets.
 - The ERA would need to establish thresholds (e.g. incidence of offers meeting the pivotal supplier test over a set period) which, if met, would trigger certain market power mitigation obligations and market power surveillance by the ERA.
- *Ex-post:* Considering whether the participant is operating within the safe trading envelope; and
- *Ex-post:* Assessing how the market power exercise has affected market outcomes (“an effects test”). The objective is that the market power mitigation regime would be more concerned with avoiding the effects of the improper exercise of market power, and less concerned with the intent of participants.

- **Provide guidance on what constitutes unacceptable exercise of market power.** The aim is to provide guidance on what constitutes unacceptable exercise of market power. It is proposed to define this as trading conduct that raises prices (and margins) above levels that would have arisen in the absence of market power being exercised.

It is proposed to include **trading conduct obligations for market participants** in the WEM Rules and guidelines provided by the ERA, which:

- Build on ‘good faith’ offer obligations, which already exist in the WEM Rules, with additional guidance from ERA on what constitutes acceptable trading conduct;
- Provide that market submissions must be consistent with submissions that would have been made in the absence of market power, rather than directly requiring offers to be at SRMC as currently required by the WEM Rules; and
- Require participants with market power to have internal controls to support self-monitoring and prevention of potential market power exercise and to retain records to support the rationale for their offers.

- **Remove uncertain concepts from the rules.** There have been repeated calls by participants to define SRMC, which is one of the key market power mitigation requirements in the rules. It is proposed to replace the present SRMC offer rules with a requirement to make offers consistent with those that the participant would have made in the absence of market power. The objective is to avoid narrow interpretations of the SRMC rules, for example that the marginal cost is extremely short run. On this interpretation, the SRMC offer rule can be breached based on a handful of trading intervals or even a single trading interval taken in isolation.

It is proposed that the WEM Rules require the ERA to provide **offer construction guidelines** that set out how the ERA expects a participant would construct its offers. The WEM Rules will provide clarity on the types of costs that could be included in offers, while the ERA’s offer construction guidelines will be required to include examples of efficient variable costs and how they would be incorporated in different situations. For example, the ERA will be required to provide clarity on how it will consider efficient long-term fuel contracts when considering fuel costs. These requirements are intended to ensure that when participants have market power their offers reflect SRMC.

With respect to the ESS markets, the potential for the **ERA to publish its internal pricing benchmarks**, which once approached or exceeded would prompt the ERA to require AEMO to trigger the SESSM process, to provide additional transparency and certainty to participants.

- **Identify a ‘safe trading’ envelope.** This combines trading conduct obligations in the WEM Rules together with ex-ante offer construction guidelines and trading conduct guidelines, provided by the ERA.

It is proposed to introduce a **concept of safe trading envelope** that identifies acceptable trading activity for participants with market power, encompassing the above trading conduct obligations and offer construction guidelines. There will also be trading conduct guidelines, which would include a series of examples of conduct that is acceptable or not acceptable. Thresholds for defining unacceptable conduct would focus on the extraction of material super-normal profits via trading behaviour.

- **Provide participants with an opportunity to ensure their conduct is compliant.** It is proposed to provide market participants with an opportunity to engage with the ERA to clarify whether their trading conduct is compliant. This could, for example, include market participants providing information on input costs.

It is proposed to provide an opportunity for market participants with market power to voluntarily seek **pre-approval of some offer parameters** (including, for example, their internal market power mitigation controls or their fuel costs) by the ERA. Once a voluntary agreement is struck it is binding on both parties.

- **Set energy and ESS price limits as a backstop mechanism.** The objective is that price limits are high enough so that all participants can recover their efficient variable costs and the process for setting them employs a mechanism that reduces the effort and frequency of adjustment.

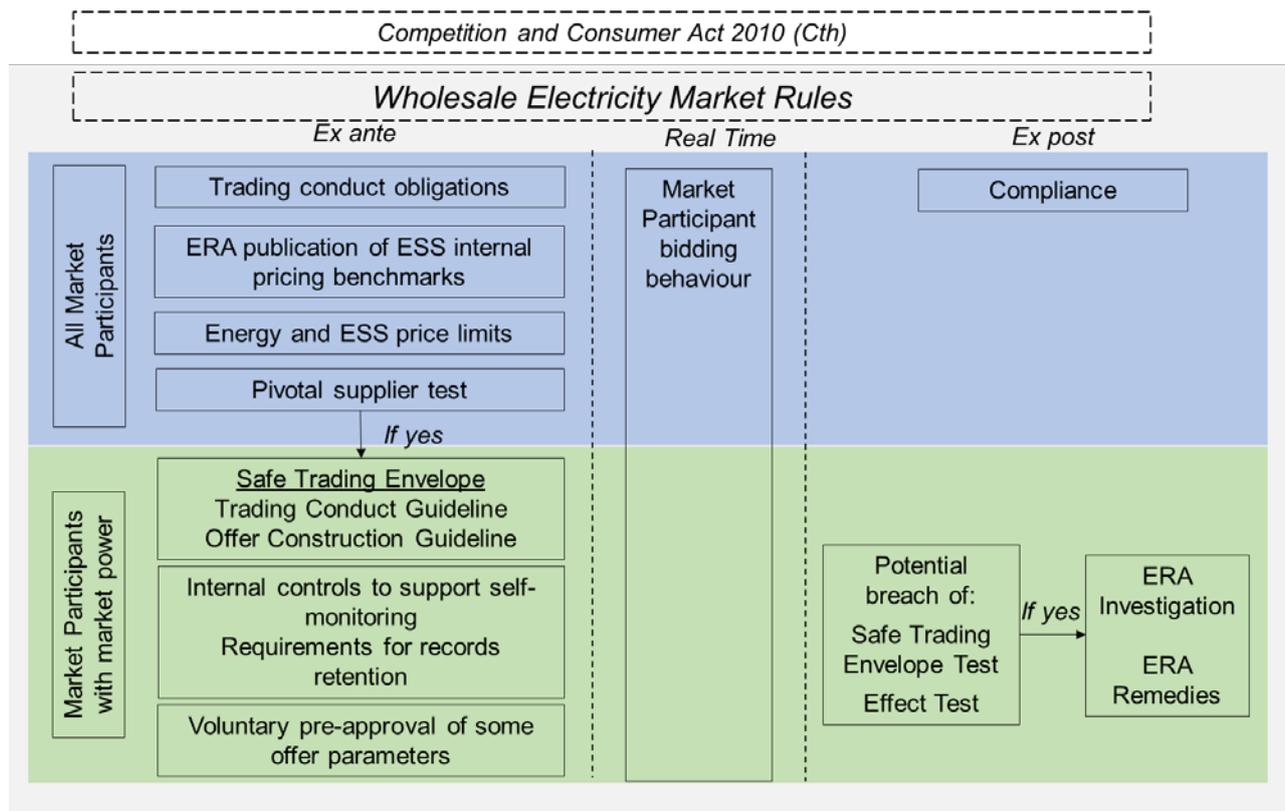
It is proposed to set energy and ESS price limits as a backstop mechanism, including:

- The ERA will outline in a WEM Procedure how it will calculate a single energy price cap. This method must reflect that scarcity price signalling is the role of the RCM rather than the energy market. The ERA will set and review the energy price limit every three years based on the highest cost in the fleet. The process for setting the energy price floor will be unchanged.
- The ERA will also set ESS price limits every three years. Despite the SESSM, ESS price limits are needed to mitigate exposure to extreme prices as competitive alternatives may need time to bring to market. The ESS price limits could be based on the higher of either: (i) the energy price cap less the energy price floor – which represents the maximum opportunity cost at times of high energy demand; or (ii) the potential costs not recovered in the energy market when running at minimum generation in order to provide ESS. The ESS price floor will remain at zero as currently gazetted.
- A ten per cent margin will be added to the energy and ESS price limits and then rounded up to the nearest one hundred dollars.
- Market Participants can submit costs to the ERA as evidence price caps or floors should be amended.

- As part of the detailed design of the market power mitigation mechanism, what remedies should be available to the ERA to incentivise compliant behaviour would need to be considered.¹
- The Taskforce considers a periodic review of the effectiveness and efficiency of the above components should be undertaken by the Coordinator of Energy to ensure they remain fit-for-purpose and continue to balance the need for recovery of efficient costs while protecting consumers from inefficient market outcomes.

¹ In April 2020, the Taskforce endorsed the monitoring and compliance framework, as outlined in the Information Paper - <https://www.wa.gov.au/sites/default/files/2020-05/Information%20Paper%20-%20Monitoring%20and%20Compliance%20Framework%20in%20the%20Wholesale%20Electricity%20Market.pdf>

The proposed mechanisms are described at a high-level in the diagram below. More detail is outlined in Attachment 1 – Consultant’s report.



- In 2019, the Commonwealth Government introduced Part XICA of the Competition and Consumer Act 2010 to prohibit certain conduct relating to electricity markets, including electricity spot markets. In its Guidelines, explaining the general approach it will take in investigating alleged contraventions of Part XICA, the ACCC states that its view is that Part XICA currently only has limited potential application in Western Australia and that its approach to enforcement and compliance will be focused on conduct arising in the National Electricity Market (NEM).²

² See paragraph 1.6 of ACCC 2020 Guidelines on Part XICA-Prohibited conduct in the energy market - [https://www.accc.gov.au/system/files/Electricity Markets - PEMM - Final Guidelines.pdf](https://www.accc.gov.au/system/files/Electricity%20Markets%20-%20PEMM%20-%20Final%20Guidelines.pdf)

For the proposed regime to operate effectively, the following roles and responsibilities would need to be performed:

Roles and responsibilities in the proposed Market Power Mitigation Framework

ERA:

- Develop offer construction guidelines that set out how it expects a participant would construct its offers (ex-ante)
- Develop guidelines regarding trading conduct obligations to indicate to market participants what is safe and not safe trading conduct (ex-ante)
- Modify the ERA WEM Procedure; *Monitoring Protocol* to reflect the adoption of the three- part market power test, and to articulate the application of an effects test
- Establish and review thresholds which, if exceeded by a facility, would trigger certain market power mitigation obligations and market power surveillance by the ERA (ex-ante)
- Assess, on request by a market participant, whether an aspect of its trading conduct is compliant (ex-ante)
- With respect to the ESS markets, publish its internal pricing benchmarks, which once approached or exceeded would prompt the ERA to require AEMO to trigger the SESSM process (ex-ante)
- Set and review energy and ESS price limits as a backstop mechanism (ex-ante)
- Consider whether the participant is operating within the safe trading envelope (ex-post)
- Assess how the market power exercise has affected market outcomes (ex-post)
- Apply remedies to participants, who have breached their obligations (ex-post)

Market Participants:

- Comply with their trading conduct obligations and offer construction guidelines issued by the ERA (ex-ante)
- Ensure trading activity is within the safe trading envelope (ex-ante)
- If determined by the ERA to have market power, develop internal controls to support self-monitoring and prevention of potential market power exercise (ex-ante)
- If determined by the ERA to have market power, retain records to support the rationale for their offers (ex-ante)
- Monitor and report on their own trading practices (ex-ante)
- Engage, on a voluntary basis, with the ERA to clarify whether their trading conduct is compliant (ex-ante)
- Assist and provide information to the ERA in any investigations (ex-post)

AEMO:

- Automate a pivotal supplier test in the AEMO's surveillance systems and applying it to the STEM, real time energy and ESS markets, providing periodically the results of the test to the ERA

Coordinator of Energy:

- Periodically reviewing the effectiveness and efficiency of the market power mitigation mechanisms to ensure they remain fit-for-purpose and continue to balance the need for recovery of efficient costs while protecting consumers from inefficient market outcomes