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AEMC Ref: EPR0070

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Dear Ms Brady,

### **Investigation into Intervention Mechanisms and System Strength of the NEM Consultation Paper**

Meridian Energy Australia Pty Ltd and Powershop Australia Pty Ltd (MEA Group or Powershop) thanks the Australian Energy Market Commission (AEMC) for the opportunity to provide comments in response to the Investigation into Intervention Mechanisms and System Strength in the National Energy Market (NEM) Consultation paper (the Paper).

MEA Group is a vertically integrated generator and retailer focused entirely on renewable generation. We opened our portfolio of generation assets with the Mt Mercer and Mt Millar wind farms and in early 2018 acquired the Hume, Burrinjuck and Keepit hydroelectric power stations, further expanding our modes of generation. We have further supplemented our asset portfolio by entering into a number of power purchase agreements with other renewable generators, and through this investment in new generation we have continued to support Australia's transition to renewable energy.

Powershop is an innovative retailer committed to providing lower prices for customers and which recognises the benefits to customers in transitioning to a more distributed and renewable-based energy system. Over the last five years, Powershop has introduced a number of significant, innovative and customer-centric initiatives into the Victorian market, including the first mobile app that allows customers to monitor their usage, a peer-to-peer solar trading trial and a successful customer-led demand response program. Powershop has also been active in supporting community energy initiatives, including providing operational and market services for the community-owned Hepburn Wind Farm, supporting the Warburton hydro project, and funding a large range of community and social enterprise energy projects through our Your Community Energy program.

MEA Group believes that the intervention pricing framework is workable and equitable to all parties. However, we are concerned at the significant use of the framework to manage system strength issues in South Australia over the past three years. MEA Group believes further improvements and development of the framework are required to prevent a similar situation occurring within the NEM.

In order to improve, finalise and implement the system strength framework as soon as is reasonably practical, the industry should respond with a cohesive and coordinated planning mechanism (such as the Integrated System Plan (ISP)) which assists the market's transformation to accommodate more renewables. This approach should be managed by the relevant Transmission Network Service Provider (TNSP).

Please find below our responses to the questions raised in the Paper.

### QUESTION 1: ASSESSMENT PRINCIPLES

1. Do stakeholders agree with the Commission's proposed assessment principles?

MEA Group is satisfied with the proposed assessment principles. We would expect the allocation of risk assessment be more heavily weighted in the AEMC's assessment, to ensure the interests of consumers are adequately addressed.

2. Are there any other relevant principles that should be included in the assessment framework?

MEA Group believes the Flexibility principle should also assess any rule change request in the context of what a future NEM may resemble, as the market's transfer to renewable energy shifts into the 2020's and beyond.

### QUESTION 2: PRINCIPLES APPLICABLE TO THE INTERVENTION MECHANISMS

1. Are any changes to the intervention mechanism principles warranted?

MEA Group believes the principle of minimising costs to consumers of electricity should be consistent across each intervention mechanism. This would allow AEMO to identify a mechanism that best meets the National Electricity Objective (NEO), whilst addressing security or reliability issues that the mechanism aims to address. Our views on the hierarchy of intervention mechanisms are discussed below.

### QUESTION 3: HIERARCHY OF INTERVENTION MECHANISMS

1. What is the ideal hierarchy of intervention mechanisms, i.e. the order in which AEMO should use the RERT, directions and instructions to shed load?

MEA Group believes the following hierarchy of intervention mechanisms is appropriate, and would be the least distortionary for the market:

1. Apply binding constraints;
2. Issue directions;
3. Issue instructions;
4. Minimal load shedding;
5. Procurement of Reliability and Emergency Reserve Trader (RERT); and
6. Bulk load shedding.

We believe this hierarchy is appropriate on the basis that a small amount of load shedding should be acceptable in the context of the Reliability Standard, the trade-off between 'perfect reliability' and costs, and the potentially significant cost of procuring the RERT to avoid that small amount of load shedding. However, the RERT should be procured and activated ahead of bulk load shedding.

Our proposed hierarchy also aligns with the proposed changes to the definition of unserved energy, which may ultimately exclude any security-related directions from the definition, which would allow AEMO further scope to intervene without the threat of exceeding the unserved energy threshold as a result of that direction.

2. Should the current hierarchy of intervention mechanisms be changed so that the RERT is no longer preferred to directions?

The hierarchy of intervention frameworks should be reviewed because, in our opinion, the RERT fails to provide an accurate pricing signal for the development of further generation to avoid future scarcity. Notwithstanding that intervention pricing is applied when the RERT is activated, MEA Group's view is that during these periods of RERT activation (once all directions and instruction options have been exhausted) AEMO should set the price to the Market Price Cap (MPC). This would provide generators with a clear signal to invest in additional generation.

#### QUESTION 4: MANDATORY RESTRICTIONS

1. Should the mandatory restrictions framework be retained?

The mandatory restrictions framework is a significant intervention and should only be used in times of extreme forecast load shedding. The forecasts that underpin the intervention are inherently uncertain and have the potential to manifest in the MPC being applied for excessive periods. However, if AEMO and the relevant jurisdiction are unable to minimise bulk load shedding through directions, instructions, or the procurement of the RERT, then the mechanism should remain available to them.

Since AEMO can only accept restriction offers from scheduled generators and scheduled network providers (noting any loads must have been exhausted prior), the Paper should clarify how an energy storage system would participate in this framework parallel to the proposed changes to the energy storage system registration category. MEA Group encourages the AEMC to review the mandatory restriction framework in respect of the future success of energy storage systems.

2. Should the mandatory restrictions framework be amended in any way? For example would it be preferable to use intervention pricing (as used for the RERT and directions) as the means to preserve scarcity price signals rather than require AEMO to contract for capacity (which if dispatched is priced at the MPC) independently of the normal dispatch process?

We believe the RERT should be dispatched at the MPC because it provides generators a clear signal to invest, and we anticipate that it will lower costs to consumers in the longer term, consistent with the NEO. The costs associated with the RERT's activation are significant, so AEMO should ensure its use is minimised over time. Removing any directions relating to system security from the definition of unserved energy should result in more diligent future use by AEMO.

#### QUESTION 5: COUNTERACTIONS

1. Are the results of counteraction too difficult to predict?

Anecdotally, the results of counteractions can be difficult to predict in some cases in real time conditions. The number of constraints that contain references to directed or constrained generators makes it very difficult to predict the outcome accurately, and with an increasing number of generators this issue will only intensify.

2. Should the NER require AEMO to use counteractions in connection with AEMO intervention events, or is it preferable to allow NEMDE to optimise dispatch at least cost?

MEA Group believes that with the level of complexity associated with the implementation of counteractions, it would be prudent for the National Electricity Market Dispatch Engine (NEMDE) to optimise dispatch at least cost.

3. If counteractions remain, should AEMO still implement intervention pricing when it counteracts a direction?

MEA Group suggests implementing intervention pricing only in the event that the counteraction fails to appropriately offset or mitigate the original direction and avoid a significant divergence between the dispatch price run and the 'what if' pricing run.

#### QUESTION 6: ARE FURTHER CHANGES TO INTERVENTION PRICING WARRANTED?

1. Is there merit in making more fundamental changes to intervention pricing? For example should intervention pricing only apply in circumstances where there is scarcity of a market traded commodity? If not, what is the economic rationale for applying intervention pricing?

MEA Group does not support making any further fundamental changes to the intervention pricing framework because we believe the design of the intervention framework is sound. However, change and improvement is required in respect of the planning and action taken by the parties responsible for maintaining system strength in each region and jurisdiction. The AEMC and AEMO should focus on reducing the number of interventions that continue to be made, particularly in South Australia.

The AEMC established that the situation in South Australia, with so many directions needing to be issued by AEMO, occurred as a result of ElectraNet's reluctance to procure what appeared to be costly initiatives to remediate system strength from generators and instead opting to install synchronous condensers. This project has now slipped behind its original delivery schedule.

The AEMC and AEMO should use South Australia's situation to lead and deliver a strong implementation of the system strength remediation framework across the NEM. This could help ensure the industry avoids a similar situation, resulting in fewer interventions and intervention pricing thereby allowing the energy spot price to fall over time.

#### QUESTION 7: CHANGES TO THE RRN TEST

1. Do stakeholders consider that the RRN test should be extended to encompass the RERT?

MEA Group believes the Regional Reference Node (RRN) test should be extended to encompass the RERT, however we note that under this proposal – where the RERT is procured for a localised constraint – its procurement would not trigger intervention pricing.

2. Do stakeholders consider that the RRN should be clarified?

Noting the more recent directions in Victoria to address voltage control issues, and the lack of clarity as to whether these directions constituted the invocation of intervention pricing, we would suggest that the RRN test does need to be clarified. The issue relating to coincident directions at the RRN for localised conditions, and broader region wide system strength issues, does not appear to be considered under the current drafting of the rule.

3. If so, how is this achieved?

MEA Group is generally supportive of AEMO's proposed drafting of the RRN test. We note that our interpretation of the test is that plant at the RRN can be hypothetical plant where it involves a region without any physical load or generation at the RRN. However, some consideration of the appropriate way to treat coincident interventions should be considered.

#### QUESTION 8: COMPENSATION FOLLOWING INTERVENTION EVENTS

1. Should changes be made to the NER to increase clarity and consistency regarding the determination of compensation payments following AEMO intervention events?

MEA Group believes that where there is some ambiguity as to when and how intervention pricing payment/cost recovery exists, that the NER be amended so as to clarify this ambiguity.

2. Should the NER set out the basis for recovering affected participant compensation costs following RERT activations?

The NER should ensure that where costs are recovered from consumers, sufficient transparency is provided for all participants to be satisfied that the least cost means of ensuring a reliable and secure power system were adopted by AEMO, consistent with the Reliability Standard and the NEO. MEA Group notes that the RERT activation in January 2018 is responsible for \$103m of the \$267m of pool payments made under the intervention pricing framework in 2018.

#### QUESTION 9: TRANSPARENCY OF THE COMPENSATION PROCESS

1. Do you consider current arrangements to be appropriate, or might there be benefits in increasing the level of transparency surrounding the quantum of compensation costs paid to directed and affected participants?

MEA Group supports increased transparency in the RERT procurement and reporting process. Improved levels of transparency will also allow participants to accurately assess the costs associated with the RERT (see, for example, our response to Question 8 requesting clarity and consistency on compensation payments).

#### QUESTION 10: COMPENSATION FOR AFFECTED PARTICIPANTS

1. Should compensation be payable to affected participants? If so, why? If not, why not?

MEA Group believes that the NER effectively captures that an affected participant either receives compensation from AEMO or refunds AEMO amounts as determined by that event. In respect of the compensation that should apply, we believe a market participant should be compensated to the position they would have been in prior to the intervention occurring.

Our view also supports generators receiving compensation, but only on the basis that the direction was a genuine last resort option available to AEMO. As advised in our response, changes need to occur to ensure there are fewer interventions by industry, increasing reliance on the adoption and implementation of the minimum system strength framework. The responsibility for the provision of system strength needs to be clear for all participants and where those obligations are not met, those costs recovered from the TNSP.

2. Should there be any distinction in the NER between intervention events that respond to reliability events and those that respond to security events (noting that constraints may not be suitable to respond to reliability events but may be suitable substitutes in the case of system security events)?

We believe there should be a distinction. When a generator is constrained off for the purposes of maintaining power system security there is currently no compensation payable to that generator. The activation of the RERT, and its current position in AEMO's response hierarchy, should be reviewed noting the significant costs to consumers when the RERT is activated.

Part of the AEMC's analysis of the most recent 2018 directions issued by AEMO in South Australia should be to confirm that these directions were made after all options to constrain generators were exhausted and the directions were necessary to maintain security and/or to meet the Reliability Standard. If this was not the case, then this should become AEMO's focus to deliver the lowest possible cost for consumers.

3. Are there any other approaches that should be considered?

MEA Group has not considered alternative approaches as part of this submission.

#### QUESTION 11: QUANTUM OF COMPENSATION FOR DIRECTED PARTICIPANTS

1. Is the compensation framework for directed generators creating perverse incentives?

MEA Group cannot comment on the bidding behaviour of other generators in the NEM, however it is fair and reasonable to expect that generators receive some form of compensation when they are directed to synchronise with the grid. Noting AEMO's current rule change request for the compensation threshold to be amended to \$5,000, AEMO suggests that the bidding behaviour of some generators is influenced by the potentially lucrative incentives for generators to remove capacity from the market until such time as they are directed to resynchronise with the grid. To the extent this behaviour is occurring and increasing the cost of energy for consumers, we support changes to the framework to prevent such behaviour.

2. Is the use of the 90<sup>th</sup> percentile appropriate given the increasing penetration of variable renewable generation? Would another level of compensation be appropriate?

The 90<sup>th</sup> percentile has worked in the past as it provides a simple measure which is clear to all participants and balances generator compensation with customer costs. However, it is important that where generators are 'directed on' that they receive fair compensation for being dispatched at prices lower than they were prepared to offer.

There is debate that the 90<sup>th</sup> percentile approach fails to properly recognise the value of some limited participants' economic costs of being 'directed on'. For example, if a dispatchable hydro plant was being regularly 'directed on' to the extent that it no longer has sufficient energy storage to capture high priced market events, then the costs for that generator may be substantially higher, even approaching the MPC.

This is not an issue we have applied significant attention to, but there may be solutions to this dilemma. For example, the rule could express the compensation as a premium on the market price, establishing different

compensation levels for different technologies, or linking the compensation to some calculation based on the average of generator's bids across a time period.

It is possible that a failure to align compensation with the expected economic loss may lead to generators seeking increased risk premia for such events, leading to higher prices and/or the results biasing investment decisions in favour of particular generation technologies, which may not produce the best long term outcome for the market.

3. Would it be preferable to determine the quantum of compensation through a different means, such as estimated costs per participant?

MEA Group believe that although this is likely to lead to a more equitable outcome for consumers and market participants, we have not considered the complexities associated with such a change nor whether the costs associated with those complexities, or other issues arising from that change, would outweigh the benefits to consumers.

#### QUESTION 12: CHANGING THE COMPENSATION THRESHOLD

1. Should the \$5,000 threshold apply per trading interval, as currently, or per intervention event, as proposed by AEMO?

MEA Group is supportive of the proposal to change the threshold to apply per intervention event.

#### QUESTION 13: APPROACH TO SETTING SYSTEM STRENGTH REQUIREMENTS AND IDENTIFYING SHORTFALLS

1. Do stakeholders have any views about the approach adopted to date by AEMO to determine system strength requirements and identify potential shortfalls?

MEA Group is concerned at the significant quantum of directions that have occurred in South Australia over the past three years, which have generally been in response to system strength shortfalls. Adopting such a heavy reliance upon a framework that was intended as a means of last resort is a sub-optimal outcome for participants and consumers, and points to a requirement for a more coordinated planning approach which requires TNSPs, once directed to address the shortfall, to act in a timely and efficient manner.

2. Do stakeholders have any suggestions as to what, if any, changes to the current methodology warrant consideration?

With the annual review of the ISP now underway, we believe this consultation process is the most appropriate forum for identifying and addressing any potential changes to methodology. Capturing the learnings from the South Australian events prior to any impacts penetrating other jurisdictions of the NEM is critical to the future system strength framework.

3. How should AEMO identify shortfalls up to five years ahead, and what does this mean for the level of specificity than can be achieved as to what measures are required in response to the shortfall? For example, would there be merit in considering a staged approach whereby a preliminary notice is used to identify a projected shortfall in a timely way, followed by more detailed analysis as to the required response.

It is clear that the longer the duration of a forecast, the less accurate those forecasts will be. However, if AEMO can provide the market with improved levels of transparency, participants are more likely to address identified shortfalls before they develop into more significant issues. This approach is aligned to what the industry is adopting for the RRO.

4. Do stakeholders have any views about the impact of residential PV systems on system strength?

MEA Group is an active supporter of consumers utilising rooftop solar PV systems to participate in reducing the emissions intensity of our power system and help reduce their power bills. To the extent this technology creates system strength issues then industry should explore innovative measures to incorporate PV systems into a resilient power system rather than try to limit its market penetration.

#### QUESTION 14: INTERACTION BETWEEN SHORT AND LONG TERM SOLUTIONS

1. Do stakeholders have views on the interaction between the minimum system strength framework and the current arrangements of issuing directions?

MEA Group anticipates a return to a framework where directions are not relied upon, but rather applied only in exceptional circumstances. Acknowledging that the interaction between the framework and directions has delivered a secure and satisfactory grid, the attending high costs incurred by consumers supports the conclusion that this approach should not be considered the lowest cost solution over the medium and long term.

2. Are there potential interim solutions that could be implemented to effectively deal with system strength issues as they arise in NEM regions?

We have not considered other short term solutions as part of this submission.

#### QUESTION 15: DECLARING SHORTFALLS THAT VARY OVER TIME

1. Do stakeholders see any risks or benefits in AEMO declaring a shortfall that varies in magnitude over the year?

MEA Group would support the declaration of a profiled system strength shortfall on the basis that any system strength shortfall begins with a small number of instances, as opposed to a sudden and ongoing system strength shortfall.

2. Do stakeholders consider there to be any potential changes that could be made to the rules to enhance the flexibility of the current arrangements?

Based on the AEMC's advice the rules appear to provide sufficient flexibility for AEMO to provide a profiled shortfall on a per region basis.

#### QUESTION 16: TNSP MEETING THE SHORTFALL


1. Do stakeholders have feedback on potential changes that could be made to the minimum system strength framework in order to make it simpler or more cost-effective for the TNSP to address a system strength shortfall?

MEA Group has not reviewed the system strength framework sufficiently to offer a view in this respect. However, in general terms we would expect that once AEMO has made an assessment of a shortfall and directed a TNSP to remediate the issue, the TNSP should address the system strength shortfall on a least cost basis to consumers and market participants, taking into account the findings of the relevant ISP outcomes.

MEA Group notes the content of this consultation is both significant in the quantum of issues it seeks to address and the complexity of interactions between the various rule change requests. For these reasons we encourage the AEMC to comprehensively assess the costs and benefits associated with the proposed rule changes, and respond with an implementation program that grasps the rapidly evolving nature of the NEM.

If you have any queries or would like to discuss any aspect of this submission please do not hesitate to contact me.

Yours sincerely,



Ed McManus  
Chief Executive Officer  
Powershop Australia Pty Ltd  
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16 May 2019

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Dear Ms Brady

**Application of the Regional Reference Node Test to the Reliability and Emergency Reserve Trader**

Meridian Energy Australia Pty Ltd and Powershop Australia Pty Ltd (MEA Group or Powershop) thanks the Australian Energy Market Commission (AEMC) for the opportunity to provide comments in response to the proposed rule change regarding the Application of the Regional Reference Node (RRN) Test to the Reliability and Emergency Reserve Trader (the Proposed Rule Change) requested by the Australian Energy Market Operator (AEMO).

MEA Group is a vertically integrated generator and retailer focused entirely on renewable generation. We opened our portfolio of generation assets with the Mt Mercer and Mt Millar wind farms and in early 2018 acquired the Hume, Burrinjuck and Keepit hydroelectric power stations, further expanding our modes of generation. We have further supplemented our asset portfolio by entering into a number of power purchase agreements with other renewable generators, and through this investment in new generation we have continued to support Australia's transition to renewable energy.

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MEA Group is supportive of the Proposed Rule Change. Applying the RRN test to the RERT whenever it is activated by AEMO is a sensible approach, and helps to align the RERT with the other mechanisms available to AEMO under the intervention framework. Further detail in respect of MEA Group's support can be found in its submission on the Intervention Mechanisms and System Strength consultation paper previously released by the AEMC in 2019.

If you have any queries or would like to discuss any aspect of this submission please do not hesitate to contact me.

Yours sincerely,

Ed McManus  
Chief Executive Officer  
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16 May 2019

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Dear Ms Brady

**Threshold for participant compensation following market intervention - proposed rule change request**

Meridian Energy Australia Pty Ltd and Powershop Australia Pty Ltd (MEA Group or Powershop) thanks the Australian Energy Market Commission (AEMC) for the opportunity to provide comments in response to the proposed rule change regarding the threshold for participant compensation following market intervention (Proposed Rule Change) requested by the Australian Energy Market Operator (AEMO).

MEA Group is a vertically integrated generator and retailer focused entirely on renewable generation. We opened our portfolio of generation assets with the Mt Mercer and Mt Millar wind farms and in early 2018 acquired the Hume, Burrinjuck and Keepit hydroelectric power stations, further expanding our modes of generation. We have further supplemented our asset portfolio by entering into a number of power purchase agreements with other renewable generators, and through this investment in new generation we have continued to support Australia's transition to renewable energy.

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Noting the extensive stakeholder engagement and relatively non-controversial nature of the request, MEA Group supports the Proposed Rule Change. Our support is consistent with the MEA Group's submission on the Intervention Mechanisms and System Strength consultation paper released by the AEMC earlier in 2019. If you have any queries or would like to discuss any aspect of this submission please do not hesitate to contact me.

Yours sincerely,

Ed McManus  
Chief Executive Officer  
Powershop Australia Pty Ltd  
Meridian Energy Australia