AEMC

INFORMATION

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# Investigation into intervention mechanisms

## Final report

**The Australian Energy Market Commission has published a final report on its investigation into the regulatory frameworks that govern the use of interventions in the National Electricity Market, together with two draft determinations on related rule change requests. The report recommends a number of changes to the interventions framework that will reduce market distortion and costs to consumers while maintaining efficient price signals and incentives for investors when AEMO intervenes in the market. One of the key changes can be implemented through a rule change on intervention pricing that is already under way.**

## Background

A growing number of directions are being issued by AEMO to synchronous generators in South Australia to be on line to maintain adequate system strength. As at 31 July 2019, 267 system strength directions have been issued in the period since April 2017. While ElectraNet is currently procuring synchronous condensers to boost system strength in South Australia, these will not be commissioned until mid to late 2020. In the interim, AEMO will continue to issue directions to ensure that sufficient synchronous generators are operating in order to keep the power system secure.

When AEMO intervenes in the market in this way, it is required to compensate both market participants who were directed, and those affected by the direction. AEMO also implements "intervention pricing", a practice designed to minimise market distortion by preserving the price signals the market would have seen but for the intervention. The increased use of directions and intervention pricing in South Australia has important implications for wholesale prices, both in South Australia and across the NEM. It affects market signals to investors and the energy and compensation costs faced by consumers.

In addition to directions, the intervention framework includes the Reliability and Emergency Reserve Trader (RERT) and instructions. This "safety net" has always been available to AEMO as a last resort to keep the lights on but is not without costs and is not intended to be used to provide ongoing maintenance of power system security.

In its final report of the Reliability Frameworks Review in July 2018, the Commission recommended that the appropriateness of the interventions framework, and the cost implications of the compensation framework associated with it, be reviewed in light of the increased use of interventions. Consistent with that recommendation, the Commission published a consultation paper on 4 April 2019 which examined a range of issues related to interventions, as well as the system strength and inertia frameworks established in 2017. Finally, the paper initiated consultation on two intervention related rule change requests submitted by AEMO in December 2018.

## Investigation into intervention mechanisms

The Commission has now published a final report on the interventions aspect of the investigation. It recommends a number of changes to the framework and suggests a number of rule change requests be submitted to progress these. Rather than undertake a further round of consultation via a draft report on the investigation, the Commission considers it more efficient to conclude the investigation into intervention mechanisms and instead undertake more targeted consultation when relevant rule change requests are submitted. A report on the system strength aspect of the investigation will be published in October this year, and will be the subject of separate further consultation.

In conjunction with the final report on intervention mechanisms, the Commission has published two draft determinations on the rule change requests submitted by AEMO.

**Intervention pricing and the RRN test draft determination**

The "regional reference node test" (RRN test) is used by AEMO to determine whether to apply intervention pricing in connection with a direction. It essentially asks whether a direction to a plant at the RRN would have avoided the need for the direction actually issued. The test is unclear and has proved difficult to apply in practice.

The draft determination changes the wording of the test to clarify its meaning, and extends its application to encompass the RERT in addition to directions. Currently, intervention pricing is used each time the RERT is activated. The revised test will apply to both directions and the RERT, creating consistency as to the use of intervention pricing.

Importantly, the draft determination provides that intervention pricing should not apply in connection with interventions for services which are not traded in the market (e.g. system strength, inertia). In such cases, there is no relevant market price signal to preserve and using intervention pricing can cause rather than reduce market distortion. The new test will deliver clarity and consistency as to when intervention pricing should apply and avoid unnecessarily high prices when there is no economic rationale for intervention pricing.

**$5,000 compensation threshold draft determination**

The second draft determination relates to the $5,000 threshold which currently limits the compensation payable to affected participants (those dispatched differently due to a direction or RERT activation) and directed participants (those directed to provide services) who lodge a claim for additional compensation.  AEMO requested that the compensation threshold apply per intervention event rather than per trading interval, as currently. The Commission has determined to make this change in relation to directed participants but not in relation to affected participants. This is because the Final report recommends that eligibility for affected participant compensation be significantly narrowed, hence the Commission does not support increasing the compensation payable to affected participants by changing the threshold.

## Recommendation made in the final report

Together with the two draft determinations, the report examines a number of issues and recommends several changes to the interventions framework, as summarised below. As a package these rule changes, when implemented, will minimise the costs of interventions for consumers and minimise the distortions that the increased use intervention creates.

**Compensation for directed participants**

When a generator is directed to provide energy or market ancillary services, it is compensated based on the 90th percentile of spot prices over the past 12 months. This can incentivise generators to withdraw from the market and await direction when spot prices are lower than the 90th percentile price. The Commission considers there would be merit in a cost based approach and the final report recommends changing the basis on which directed participant compensation is calculated. This would remove any inefficient incentives and ensure that directed participants can recover their costs as the 90th percentile price changes over time.

**Compensation for affected participants**

Affected participants are those parties who are dispatched differently as a result of an intervention. For example, when gas fired generators are directed to operate, other generators will be dispatched less. Compensation is paid to or by affected participants to put them in the position they would have been in but for the intervention. The final report recommends that affected participants only be eligible for compensation where an intervention triggers intervention pricing in accordance with the revised RRN test. This reflects that no compensation is payable where the same outcome is achieved using constraints rather than an intervention, and that affected participants can optimise their position with respect to compensation at the expense of consumers.  Aligning the treatment of affected participants to the treatment of participants affected by constraints in the normal dispatch of the system, would reduce the cost to consumers of interventions.

### Hierarchy of intervention mechanisms

The National Electricity Rules (NER) outline a two level hierarchy for the use of intervention mechanisms. In times of supply scarcity, after dispatching all valid bids and offers, AEMO must use reasonable endeavours to first exercise the RERT and then, if necessary, issue either directions or instructions. The Commission considers that this prescriptive hierarchy may impose unnecessary costs and the final report recommends that it be replaced by a cost minimisation principle, enabling AEMO to use the intervention mechanism that will achieve the required outcome while minimising direct and indirect costs. This least cost approach to the use of intervention mechanisms would increase flexibility and reduce costs to consumers.

### Counteractions

When AEMO intervenes in the market, the NER require it to minimise the number of affected participants and the impact on interconnector flows. This is done via counteraction instructions which are designed to confine the impact of an intervention to a single region. This requirement can conflict with another requirement on AEMO - that of minimising the cost of interventions. To remove this tension, the final report recommends that the counteraction obligation be removed. This would allow the NEM dispatch engine to optimise dispatch targets automatically (at least cost) in the wake of an intervention.

### Pricing during RERT events

Some stakeholders have suggested that, when the RERT is activated, the spot price should automatically be set to the market price cap (MPC), as happens when load shedding occurs, rather than being set in accordance with intervention pricing as currently. The final report concludes that this change is not appropriate given that the RERT is not activated exclusively in scenarios where a supply shortfall would have occurred. Sometimes it is used to provide additional capacity to maintain reserves and, in some cases prevent load shedding. Further, setting prices at the MPC is not considered appropriate given that the RERT may involve pre-activation periods and minimum run times, meaning the RERT may be activated for longer than is in fact required. This could impose significant costs on consumers and, if the cumulative price threshold is triggered, lead to scarcity signals being muted at the time they are most needed. As such, no change to the current arrangements is recommended.

### Mandatory restrictions

Under state based legislation, jurisdictional governments can impose "mandatory restrictions" in the event of anticipated supply shortfalls. If this occurs, AEMO is to contract with generation capacity equivalent to the demand reduction estimated to result from the restrictions. If this capacity is needed, AEMO is to dispatch it at the MPC in order to preserve scarcity signals. These provisions have not been used since their inclusion in the NER in 2001. The Commission considers that they entail a high risk of unintended pricing outcomes - e.g. dispatching contracted capacity at the MPC risks tripping the cumulative price threshold, triggering an administered price period and discouraging demand response when it is most needed. As such, the final report recommends the provisions be removed so that, if restrictions are imposed, the market can operate as normal and participants can respond efficiently to price signals reflecting the actual supply demand balance. Removing these provisions removes the risk of unintended price outcomes, unnecessary costs to consumers, and unnecessary administrative costs to AEMO.

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