

RULE

Australian Energy Market Commission

RULE DETERMINATION

NATIONAL ELECTRICITY AMENDMENT (APPLICATION OF COMPENSATION IN RELATION TO AEMO INTERVENTIONS) RULE 2019

PROPONENT

Australian Energy Market Operator (AEMO)

19 DECEMBER 2019

INQUIRIES

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Reference: ERC0282

CITATION

AEMC, Application of compensation in relation to AEMO interventions, Rule determination, 19 December 2019

ABOUT THE AEMC

The AEMC reports to the Council of Australian Governments (COAG) through the COAG Energy Council. We have two functions. We make and amend the national electricity, gas and energy retail rules and conduct independent reviews for the COAG Energy Council.

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SUMMARY

- 1 The Australian Energy Market Commission (AEMC or Commission) has made a final rule to narrow the circumstances in which affected participant compensation¹ is payable in connection with "AEMO intervention events".²
- 2 This follows a request from AEMO to change the National Electricity Rules (NER) so that affected participant compensation is only payable in connection with intervention events that trigger intervention pricing. The AEMO rule change request in turn actions a recommendation by the Commission in the final report of its *Investigation into intervention mechanisms in the NEM*.³
- 3 *The interventions framework*
- 4 The interventions framework in the National Electricity Rules (NER) provides the Australian Energy Market Operator (AEMO) with the tools to intervene in the market for reliability purposes (e.g. in the event of a breach of the reliability standard) or for power system security purposes (e.g. to maintain voltage).
- 5 Interventions are typically used as a last resort and include, for example, directing a generator to maintain system strength or using emergency reserves through the reliability and emergency reserve trader (RERT).
- 6 When AEMO intervenes in the market, two separate but related frameworks are triggered: one relates to "intervention pricing" and the other to compensation. Intervention pricing is designed to reduce market distortion by preserving scarcity price signals that would otherwise be muted as a result of the intervention. It is a transparent process that sends clear signals to the market, in terms of both operational and investment timescales.
- 7 By contrast, the compensation framework is designed to make sure that "directed participants" (those who have been directed to provide services) can recover their costs, and "affected participants" (those who are dispatched differently due to an intervention) are put in the position they would have been in but for the intervention. The compensation framework is not transparent and no data about compensation payments is made public unless there is a dispute with a value in excess of certain thresholds. The framework is not designed to send investment signals.
- 8 *Intervention pricing*
- 9 When AEMO intervenes in the market by issuing a direction or activating the RERT, it must determine whether intervention pricing should be implemented having regard to a provision

1 In this paper, the phrase "affected participant compensation" is used to encompass both compensation paid to affected participants, as defined in chapter 10 of the NER, and to market customers with respect to scheduled loads. Such market customers are compensated in a similar fashion to affected participants and are dealt with in the same clauses as affected participants.

2 "AEMO intervention event" is defined in chapter 10 of the NER as an event where the Australian Energy Market Operator (AEMO) intervenes in the market by issuing a direction in accordance with clause 4.8.9 or exercising the reliability and emergency reserve trader (RERT) in accordance with clause 3.20.

3 AEMC, *Investigation into intervention mechanisms in the NEM, Final report, 15 August 2019*.

known as the "regional reference node (RRN) test".⁴

10 When an intervention is for the purpose of obtaining energy or market ancillary services, intervention pricing is (with some exceptions) used to set prices across the NEM to preserve market scarcity signals that would have existed had the intervention not occurred. However, under changes made to the RRN test on 19 December 2019, where an intervention is to obtain some other service which is not market-traded (e.g. system strength, voltage control or inertia), intervention pricing will not apply as there is no relevant price signal to preserve.⁵

11 *The compensation framework*

12 Where AEMO issues a direction, compensation is payable to both "directed participants" and "affected participants".⁶ An affected participant is entitled to receive from, or required to pay to, AEMO an automatic compensation amount that puts it in the position that it would have been in had the intervention not occurred, providing the absolute value of this amount is greater than \$5,000 per intervention event.⁷

13 An affected participant may also submit a claim for additional compensation, or dispute its liability to repay revenue to AEMO if it considers that its entitlement or liability should be redetermined (again providing that the value of the claim is greater than \$5,000 per intervention event).⁸ The cost of both affected and directed participant compensation is recovered from market customers and, ultimately, consumers in the region that benefited from the intervention.

14 *The rule change request*

15 On 17 September 2019, AEMO submitted a rule change request to narrow the circumstances in which compensation is payable to participants affected by "AEMO intervention events". This request was in response to a recommendation by the Commission in the final report of its *Investigation into intervention mechanisms in the NEM* (hereafter called "Interventions investigation").⁹

16 At the time the rule change request was submitted, the NER required AEMO to pay compensation to participants affected by an intervention, regardless of whether or not intervention pricing was implemented in connection with that intervention. The AEMO rule change request sought to change this so that affected participant compensation would be payable only in connection with interventions that trigger intervention pricing.

4 The RRN is the location in each region at which spot prices are determined by the NEM dispatch engine (NEMDE) and by reference to which marginal loss factors are calculated. RRNs are typically located near the major load centre in each region - i.e. the capital city.

5 Changes to the RRN test were made by the *National Electricity Amendment (Application of the regional reference node test to the Reliability and Emergency Reserve Trader) Rule 2019 No. 11*. Prior to this rule change, the decision whether to implement intervention pricing in connection with such security-related interventions was made having regard to whether a direction issued to a plant at the RRN would have avoided the need for the direction actually issued. This wording has proved difficult to apply in practice and will not deliver consistent pricing outcomes across the NEM: see AEMC, *Application of the regional reference node test to the Reliability and Emergency Reserve Trader, Rule determination*, 19 December 2019.

6 Clauses 3.15.7 to 3.15.7B and 3.12.2(a)(1) respectively of the NER.

7 Clause 3.12.2(b) of the NER. On 19 December 2019, the Commission made a rule to amend this clause and related provisions so that the compensation threshold applies "per intervention event" where previously it applied "per trading interval": see *National Electricity Amendment (Threshold for participant compensation following market intervention) Rule 2019 No. 12*.

8 Clause 3.12.2(i) of the NER.

9 AEMC, *Investigation into intervention mechanisms in the NEM, Final report*, 15 August 2019.

- 17 The AEMC published a consultation paper on the rule change request on 24 October 2019. The Commission considered the rule change request to be non-controversial in accordance with section 96 of the National Electricity Law and, accordingly, progressed the request on an expedited basis. As a result, no draft determination was published. This final determination is informed by stakeholder submissions to the consultation paper and the Commission's analysis.
- 18 *Related rule changes*
- 19 The question of when it is appropriate to implement intervention pricing is the subject of another determination and final rule, published on the same day as this final determination.¹⁰ The final rule changes the criteria in the RRN test which determine when intervention pricing should be implemented. The revised RRN test means that, if AEMO intervenes in the market in response to a security issue such as inadequate system strength, intervention pricing will no longer apply.
- 20 Absent any changes to the rules regarding affected participant compensation, the revised RRN test would mean that - in the case of South Australian system strength directions, for example - intervention pricing would no longer apply but AEMO would still have an obligation to compensate participants affected by the direction.
- 21 AEMO stated in its rule change request that, if the rules on affected participant compensation remain unchanged, this would create an economic conflict and a practical problem. AEMO suggested that, if there is no economic justification for setting intervention prices when AEMO intervenes to secure a non-market service such as system strength, then there is also no justification for compensating affected participants during that intervention. AEMO also point out that costly new systems for calculating affected participant compensation during system strength directions would need to be set up if the above economic conflict is not resolved.
- 22 *Narrowing the circumstances when affected participant compensation is payable*
- 23 The Commission has determined to make the final rule as proposed by AEMO to narrow the circumstances in which compensation is payable in connection with AEMO intervention events. While affected participant compensation will remain payable in connection with interventions that trigger intervention pricing under the revised RRN test, it will no longer be payable in connection with interventions that do not trigger intervention pricing.
- 24 The final rule reflects an underlying principle of the national electricity market (NEM) that generators do not have a right to be dispatched. In addition, and as discussed in the *Interventions investigation* final report, the final rule seeks to increase consistency in relation to affected participant compensation as between directions and constraints. No compensation is payable to participants whose output is affected as a result of a constraint. This raises the question as to why participants whose dispatch targets change are optimised by NEMDE in the wake of an intervention should be entitled to compensation.

¹⁰ AEMC, *Application of the regional reference node test to the reliability and emergency reserve trader*, Rule determination, 19 December 2019.

- 25 The Commission also considers that, where an intervention responds to a security issue, the dispatch targets which are used to calculate affected participant compensation are not feasible. That is, they would never be realised in practice because they represent an insecure system which has prompted AEMO to intervene, consistent with its obligation to maintain system security. Accordingly, these dispatch targets are not a sound basis on which to calculate compensation for participants affected by the issuance of a security-related intervention.
- 26 The Commission also notes that participants have the capacity to optimise their position with respect to affected participant compensation at the expense of consumers. Analysis of payments to and from affected participants highlights that one participant has received more than 30 per cent of the total amount of automatically calculated compensation paid out by AEMO to affected participants in connection with South Australian system strength directions over the two years from April 2017 to April 2019. This participant is not located in South Australia and thus the amount of compensation it has received is not because it was the recipient of counteraction instructions (issued by AEMO to confine the impact of an intervention to a single region).
- 27 The Commission notes that requiring consumers to pay for both directed participant and affected participant compensation amounts to paying twice for the same energy, an outcome which is contrary to the NEO. This is because consumers pay for the additional energy provided by the directed participants (based on the 90th percentile price). They then pay again when they compensate other generators, located across the NEM, whose output is altered to offset the additional energy provided by the directed participants.
- 28 This is not considered justified in the context of security-related interventions and reinforces the Commission's view that the circumstances in which compensation is payable in connection with intervention events should be narrowed.
- 29 The Commission notes that the scale of affected participant compensation paid in connection with security-related interventions is a small proportion of the value of energy traded by affected participants. For the leading recipient of affected participant compensation, the value of the compensation received over the two years from April 2017 to April 2019 was 0.115 per cent of its total revenue over the period. In light of this, the Commission considers that the removal of affected participant compensation in connection with security related interventions will not have a significant adverse impact on market participants or potential investors, and that its removal is in the long term interests of consumers.
- 30 Affected participant compensation will, however, remain payable in connection with interventions that trigger intervention pricing. When AEMO intervenes due to a scarcity of energy or FCAS (circumstances which will trigger intervention pricing), prices will generally be high, enabling participants to earn substantial revenue (particularly if they operate for few hours per year).
- 31 Changing a participant's dispatch targets in such circumstances can be expected to have a more significant adverse impact on a participant's financial position. To offset this impact, affected participant compensation will continue to be payable. This, together with a related rule change regarding the \$5,000 compensation threshold, will make sure that such

participants are made "whole" and do not suffer loss as a result of an intervention event.¹¹

32 While consumers will be required to pay both directed participant compensation (or RERT costs) and affected participant compensation in such cases, this is considered acceptable given that such events are rare and that failure to keep participants whole in such circumstances could impact their financial position in a way that would not be in the long term interests of consumers. In light of this, the Commission considers that retaining affected participant compensation for events that trigger intervention pricing, and removing it for events which do not, strikes an appropriate balance that is in the long term interests of consumers.

33 *Implementation*

34 In its rule change request AEMO has asked that this rule change be implemented no later than the RRN test rule change request since aligning the implementation dates would avoid the need for AEMO to develop new systems to calculate affected participant compensation in respect of interventions which do not trigger intervention pricing.

35 The Commission has determined to commence this rule on the same date (20 December 2019) as the substantive provisions set out in Schedule 1 of the RRN test rule and the compensation threshold rule. This will facilitate a streamlined and efficient implementation process.

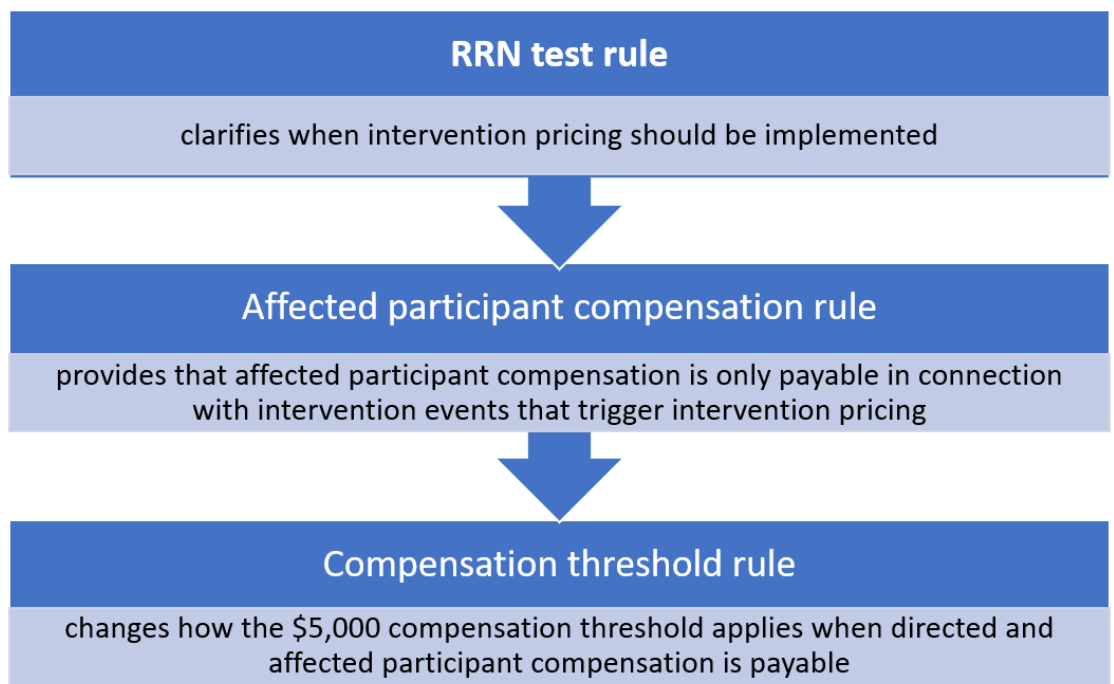
36 The final RRN test rule contains a transitional provision setting out that, if AEMO has issued a direction prior to the commencement date of Schedule 1 of the final rule, and that direction remains in effect on or after the commencement date, then, for so long as the direction remains in effect, old Chapter 3 (together with related definitions) will apply in respect of the AEMO intervention event corresponding with the direction. This means that the intervention pricing framework in Chapter 3 of the rules (as it stood immediately prior to commencement of Schedule 1 of the final rule) will apply to the AEMO intervention event corresponding with that direction for so long as that direction remains in effect.

37 The rules governing the application of compensation in relation to AEMO interventions and the threshold for participant compensation are also in Chapter 3 of the rules. As a result, the version of Chapter 3 in effect immediately prior to the commencement of Schedule 1 of the final RRN test rule will also apply to these matters in relation to the AEMO intervention event corresponding with the direction so long as that direction remains in effect.

38 The relationship between these three rules is set out below.

¹¹ The *National Electricity Amendment (Threshold for participant compensation following market intervention)*, Rule 2019 No. 12 amends clause 3.12.2(b) and (i).

Figure 1: Interaction between three related rules



Source: AEMC

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1 INTRODUCTION AND BACKGROUND

This chapter provides:

- a summary of, and background to, the rule change request,
- an overview of intervention pricing and affected participant compensation, and
- an overview of the Commission's *Investigation into intervention mechanisms in the NEM*.

1.1 Introduction

On 17 September 2019, AEMO submitted a rule change request to narrow the circumstances in which compensation is payable to participants affected by "AEMO intervention events" (comprising the RERT and directions). AEMO's rule change request (referred to in this determination as the "affected participant compensation rule change request") actioned a recommendation made by the Commission in the final report of its *Interventions investigation*.¹² In that report, the Commission recommended that AEMO submit a rule change request to narrow the circumstances in which compensation is payable to participants affected by an AEMO intervention event. This is the subject of this final determination.

AEMO's rule change request seeks to change the NER so that affected participants are only eligible for compensation in connection with intervention events that trigger intervention pricing under the "regional reference node test" (RRN test) as revised by the *National Electricity Amendment (Application of the regional reference node test to the Reliability and Emergency Reserve Trader) Rule 2019 No. 11*. The RRN test is the test used by AEMO to determine whether intervention pricing should be implemented in connection with an intervention event. The RRN test is set out in clause 3.9.3 of the NER and was revised by the above rule in response to another AEMO rule change request, referred to in this determination as the "RRN test rule change request".¹³

The AEMC published a consultation paper on the affected participant compensation rule change request on 24 October 2019. The Commission considered the rule change request to be non-controversial (in accordance with section 96 of the National Electricity Law) and, accordingly, progressed the request on an expedited basis. No objections to the expedited rule change process were received.

This final determination is informed by stakeholder submissions to the consultation paper and the Commission's analysis. The affected participant compensation final rule will commence on 20 December 2019 immediately after the RRN test rule and the compensation threshold rule.

The final RRN test rule contains a transitional provision setting out that, if AEMO has issued a direction prior to the commencement date of Schedule 1 of the final rule, and that direction remains in effect on or after the commencement date, then, for so long as the direction remains in effect, old Chapter 3 (together with related definitions) will apply in respect of the AEMO intervention event corresponding with the direction. This means that the intervention

¹² AEMC, *Investigation into intervention mechanisms in the NEM, Final Report*, 15 August 2019

¹³ AEMC, *Application of the regional reference node test to the reliability and emergency reserve trader, Rule determination*, 19 December 2019.

pricing framework in Chapter 3 of the rules (as it stood immediately prior to commencement of Schedule 1 of the final rule) will apply to the AEMO intervention event corresponding with that direction for so long as that direction remains in effect.

The rules governing the application of compensation in relation to AEMO interventions and the threshold for participant compensation are also in Chapter 3 of the rules. As a result, the version of Chapter 3 in effect immediately prior to the commencement of Schedule 1 of the final RRN test rule will also apply to these matters in relation to the AEMO intervention event corresponding with the direction so long as that direction remains in effect.

1.2 Background

The NER include pricing and compensation provisions that are triggered when AEMO intervenes in the market by issuing a direction or activating the RERT. These are outlined below and discussed in more detail in chapter 2.

Where AEMO intervenes in the market, compensation may (if it exceeds a \$5,000 per event threshold) be payable to affected participants and market customers with scheduled loads if such participants are dispatched differently as a result of the intervention.¹⁴ This compensation is designed to put participants in the position they would have been in but for the intervention.¹⁵

Affected participants are defined in chapter 10 of the NER as a scheduled generator or scheduled network service provider which:

- was not the subject of a direction but had its dispatched quantity affected by that direction
- had its dispatch quantity affected by the exercise of the RERT.

The definition of affected participants also includes "eligible persons", being settlement residue distribution (SRD) unit holders who are entitled to receive an amount from AEMO where there has been a change in flow of a directional interconnector.¹⁶

Market customers with scheduled loads are also entitled to compensation under clause 3.12.2 where their consumption of electricity was affected by the AEMO intervention event.

The term "affected participant" is used in this determination to encompass both affected participants, as defined in chapter 10 of the NER, and market customers with scheduled loads.

14 Clause 3.12.2 of the NER.

15 Compensation is also payable to participants who are directed by AEMO to provide services: clauses 3.15.7, 3.15.7A and 3.15.7B of the NER. However, such compensation is not relevant to this AEMO rule change or consultation paper.

16 A SRD unit is defined in chapter 10 of the NER as "a unit that represents a right for an eligible person to receive a portion of the net settlements residue under clause 3.6.5 allocated to a directional interconnector for the period specified in a SRD agreement entered into between that eligible person and AEMO in respect of that right". These units are auctioned off by AEMO as part of the process of managing inter regional settlement residues.

1.2.1 Intervention pricing

Intervention pricing is a practice intended to minimise market distortion when AEMO intervenes in the market. It does this by preserving price signals at the level which, in AEMO's reasonable opinion, would have applied had the intervention event not occurred.

When AEMO activates the RERT or issues a direction, it must decide whether to implement intervention pricing by applying the RRN test. As noted above, on 19 December 2019, the Commission published a final rule which amended the RRN test. The Commission determined to extend the RRN test so it encompasses the RERT in addition to directions (where previously the test applied only to directions).

The Commission also determined to revise the RRN test so that intervention pricing will only apply in circumstances where the intervention is to obtain a service that is traded in the market, meaning that there is a relevant price signal to preserve.¹⁷ Intervention pricing will not apply if the intervention is to obtain a service (e.g. system strength, voltage control or inertia) which is not traded in the market, meaning there is no relevant price signal to preserve.

In addition to putting downward pressure on wholesale energy prices, this change will remove the distortion that results from seeking to signal to the market a deficiency in one service (such as system strength) by changing the price of another service (energy).

If AEMO intervenes in the market and decides that the RRN test is met, intervention pricing will be used to determine prices for energy and market ancillary services in every dispatch interval (being five minutes in duration) impacted by the intervention.¹⁸ An AEMO intervention event may consist of many dispatch intervals and intervention pricing is applied across all these intervals.

Intervention pricing is implemented by running the NEM dispatch engine twice – once to determine dispatch targets (the "dispatch run" or "outturn run") and once to determine intervention prices for energy and market ancillary services (the "intervention pricing run" or "what-if run").

Generators and scheduled loads are dispatched in the wholesale market in accordance with the dispatch run but prices produced by that run are ignored for the purpose of setting prices. The dispatch run includes the actions taken as part of the AEMO intervention event – including the issuing of directions or the activation of the RERT.

Dispatch (and spot) prices are determined in accordance with the intervention pricing run, but dispatch targets produced by that run are ignored for system operation purposes. The dispatch levels determined in the intervention pricing run are combined with dispatch offers to calculate a clearing price that reflects the price that AEMO considers would have prevailed had the direction not been issued. This process sets the price at which the entire NEM clears (not just the region in which the intervention occurred). In this way, a direction in South Australia can impact prices in Queensland.

¹⁷ AEMC, *Application of the regional reference node test to the reliability and emergency reserve trader*, Rule determination, 19 December 2019.

¹⁸ Clause 3.8.21(a1) of the NER

1.2.2 Affected participant compensation

Where AEMO issues a direction, compensation is payable to both “directed participants” (those parties to whom the direction was issued) and “affected participants” (those parties who are affected by the direction – for example, a generator whose output was reduced to offset the provision of additional energy by a directed generator).¹⁹

Where AEMO activates the RERT, compensation is only payable to “affected participants” reflecting that, in relation to the RERT, there are no “directed participants”. Instead, the party providing services under the RERT is compensated pursuant to the relevant contractual arrangements.

Affected participants are those participants whose dispatch targets change as a result of a direction being issued or the RERT being activated. Such participants may be entitled to receive compensation from AEMO if they were dispatched less as a result of an intervention. Affected participants may also be required to repay money to AEMO in the event that they are dispatched more as a result of an intervention.

Compensation is calculated automatically and affected participants can seek additional compensation or dispute their liability to repay funds to AEMO.²⁰ The cost of compensating affected participants is passed through to market customers and thus consumers in the region that benefited from the intervention.²¹

Prior to the Commission making this final rule, affected participant compensation was payable regardless of whether intervention pricing was implemented. This was due to the interaction of clause 3.9.3(a) and clause 3.12.2 of the NER.

Clause 3.9.3(a) of the NER stated (prior to this final rule being made) that, in respect of a dispatch interval where an AEMO intervention event occurs, AEMO must declare that dispatch interval to be an “intervention price dispatch interval”. This was regardless of whether intervention pricing was implemented in connection with that intervention.

This phrase has been a source of confusion as it appears at first glance to refer to an interval in respect of which AEMO has implemented intervention pricing. However, the phrase as defined in chapter 10 of the NER meant “a dispatch interval declared by AEMO to be an intervention price dispatch interval in accordance with clause 3.9.3”. As such, that declaration was to be made in respect of all dispatch intervals when an AEMO intervention event occurred, regardless of the pricing approach adopted.

Clause 3.12.2 of the NER requires AEMO to calculate compensation for affected participants in respect of every intervention price trading interval (being a trading interval which includes an intervention price dispatch interval). This meant a potential compensation entitlement applied whenever an AEMO intervention event occurred in the NEM, irrespective of whether AEMO implemented intervention pricing.

¹⁹ Clauses 3.12.2(a)(1) and 3.15.7 to 3.15.7B of the NER

²⁰ Clause 3.12.2(f) of the NER.

²¹ Reducing the output of the largest generator will reduce the size of the largest contingency and thus reduce local demand for FCAS.

An example of this is provided by the security directions issued by AEMO to two Victorian generators (Newport and Mortlake) on 16 and 18 November 2018. While intervention pricing was not implemented in connection with these directions (which were needed to address voltage issues), dispatch outcomes did change as a result of them, as detailed in the market event report.²² AEMO advises that affected participant compensation was paid in connection with these interventions, consistent with the above provisions of the NER.

AEMO's rule change proposal seeks to change this outcome so that affected participant compensation is only payable in respect of interventions that trigger intervention pricing. As discussed in chapter 4, the final rule achieves this by changing the definition of "intervention price dispatch interval" so that it means an intervention dispatch interval in respect of which AEMO has set dispatch prices and ancillary service prices in accordance with clause 3.9.3(b) - in other words where intervention pricing was implemented. This both narrows the circumstances in which affected participant compensation is payable and, by aligning the plain English meaning of the phrase with its legal meaning, resolves past confusion about when affected participant compensation should be paid.

1.2.3

Investigation into intervention mechanisms in the NEM

In light of the growing number of directions being issued by AEMO to maintain system strength in South Australia, the AEMC is undertaking an investigation into intervention mechanisms and system strength in the NEM. As part of this investigation, the AEMC has considered whether changes to the interventions framework are warranted to support the power system in the most efficient manner possible, and at least cost to consumers.

A consultation paper on this investigation was published in April 2019 and, on 15 August 2019, the Commission published a final report on the intervention aspects of the investigation. The final report set out a number of recommendations to amend the intervention pricing and compensation frameworks. These included narrowing the circumstances when intervention pricing is implemented (by revising the RRN test), narrowing the circumstances when affected participant compensation is payable, and changing the \$5,000 compensation threshold so it applies per event rather than per trading interval.

A further report on system strength issues is scheduled to be published in early 2020.

In relation to intervention pricing, the *Interventions investigation* final report (and the RRN test draft determination published on the same day²³) concluded that intervention pricing should not be implemented in connection with interventions to obtain a non-market traded commodity (e.g. system strength). Reasons for this are set out below.

- When the reason for the intervention is to obtain a service for which there is no market price, there is no relevant price signal to preserve; in such cases, intervention pricing can cause rather than reduce market distortion. For example, using intervention pricing in

²² AEMO, *NEM Event - Directions 16-18 and 24-27 November 2018*, November 2019.

²³ The final determination for the RRN test reaches the same conclusions.

connection with system strength directions sends a scarcity signal about energy when energy is not scarce. This distorts signals to market participants and investors.

- In the case of security-related interventions, intervention pricing is calculated based on dispatch targets which are infeasible because AEMO would never allow such targets to be realised in practice (hence its decision to intervene in the market). This is not considered a sound basis on which to set the price at which the entire NEM clears.
- Intervention pricing puts upward pressure on wholesale energy prices and, ultimately, costs to consumers. This is not considered consistent with the national electricity objective (NEO).

In relation to affected participant compensation, the final report recommended that affected participant compensation no longer be payable in connection with intervention events that do not trigger intervention pricing. Reasons for this are set out below.

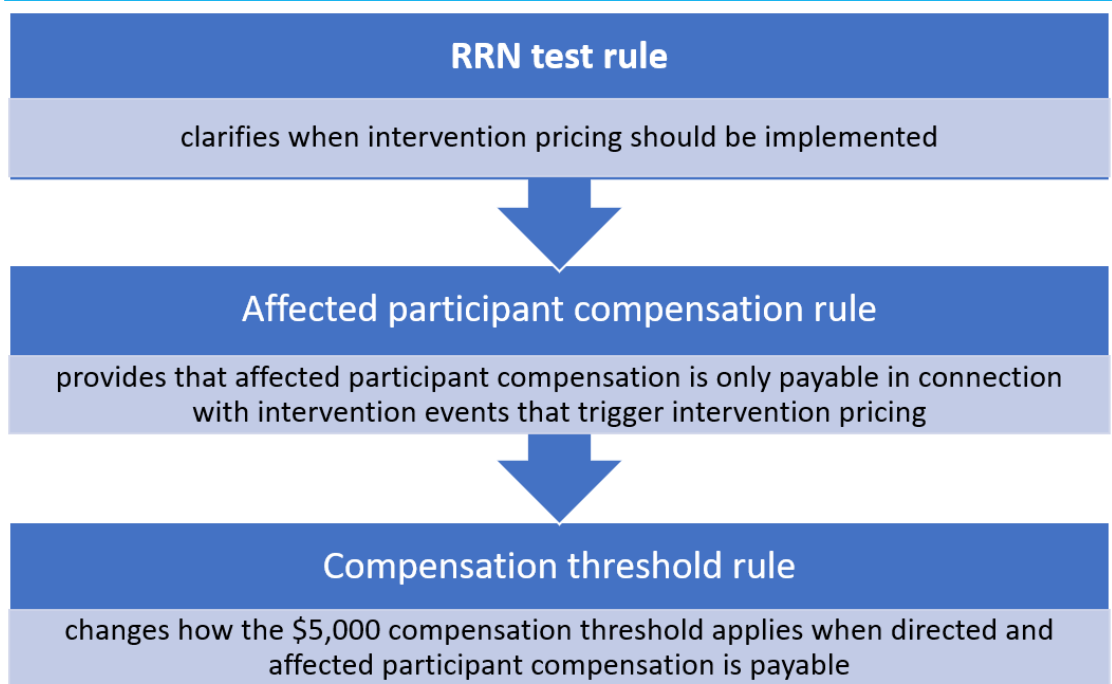
- No affected participant compensation is payable when system security is achieved through the use of constraints, so removing affected participant compensation for system security interventions will increase consistency and reduce costs to consumers,
- In the case of security-related interventions, affected participant compensation is calculated based on dispatch targets which are infeasible because AEMO would never allow such targets to be realised in practice (hence its decision to intervene in the market). This is not considered a sound basis on which to calculate affected participant compensation.
- Affected participant compensation is paid for by market customers and ultimately consumers in the region which benefited from the intervention. Analysis by the Commission of data provided by AEMO indicates that participants are able to optimise the amount of affected participant compensation they receive. To the extent this is occurring, this will further increase costs to consumers associated with affected participant compensation, contrary to the NEO.

As can be seen, the reasons in support of changing intervention pricing and affected participant compensation are similar but not identical.

The Commission published two draft determinations relating to the RRN test and the compensation threshold on 15 August 2019, together with the *Interventions investigation* final report. Final determinations for these rules were published on 19 December 2019, along with this determination.

The relationship between the three final rules can be seen below.

Figure 1.1: Relationship between three related rule changes



Source: AEMC

In addition to these rules, AEMO has submitted a number of other rule change requests to action the recommendations of the Intervention Pricing Working Group (IPWG²⁴) and the recommendations in the *Interventions investigation* final report.

Between September and November 2019, AEMO has also submitted the following six rule change requests relating to the interventions framework:

- Compensation for scheduled loads affected by interventions, received on 19 September 2019
- Affected participant compensation for FCAS losses, received on 19 September 2019
- Recovering affected participant compensation for RERT activation, received on 19 September 2019
- Compensation following directions for services other than energy and market ancillary services, received on 19 September 2019
- Removal of mandatory restrictions framework, received on 23 October 2019
- Removal of intervention hierarchy, received on 29 November 2019

²⁴ This group was established by AEMO to assist it with its 2017-18 review of intervention pricing. Meeting minutes are available at <https://www.aemo.com.au/Stakeholder-Consultation/Industry-forums-and-working-groups/Other-meetings/Intervention-Pricing-Working-Group>

Rule determination

Application of affected participant compensation
19 December 2019

Further information regarding these rule change requests can be found on the AEMC website.
See <https://www.aemc.gov.au/our-work/changing-energy-rules/rule-changes>

2 BACKGROUND TO THE RULE CHANGE REQUEST

This chapter provides further detail on affected participant compensation and the Commission's conclusions in the final report of the *Interventions investigation*.

2.1 When is affected participant compensation paid?

As noted earlier, affected participants are those parties (being scheduled generators or scheduled network service providers) whose dispatch targets have been affected as a result of an AEMO intervention event. The definition of affected participant also includes "eligible persons", being SRD unit holders who are entitled to receive an amount from AEMO where there has been a change in flow of a directional interconnector. As noted earlier, the term "affected participant" is used in this determination to encompass both affected participants, as defined in chapter 10 of the NER, and market customers with respect to scheduled loads.

Affected participants are entitled to receive from, or obliged to pay to, AEMO an amount that puts them in the position they would have been in but for the direction or RERT activation.²⁵ For example, if a generator generates less in the dispatch run (i.e. the "real world") than in the intervention pricing run (the counterfactual used for pricing purposes), they will be paid compensation by AEMO to put them in the position that they would have been in had the intervention event not occurred.

That is, they will be paid the difference between the amount they *would have* received based on their dispatch targets in the dispatch run (combined with the price from the intervention pricing run), and the amount they *have received* based on their dispatch targets in the intervention pricing run (again combined with the price from the intervention pricing run). The amount paid to the participant is net of the short run costs that the generator did not incur as a result of being dispatched less.²⁶ Thus, if a generator earned \$100,000 less as a result of being dispatched less, but did not incur costs of \$30,000, AEMO will only pay compensation in the amount of \$70,000.

By contrast, if a generator's output following an intervention is higher than it would have been had the intervention not occurred (i.e. it generates more in the dispatch run than in the intervention pricing run), it will be liable to pay an amount back to AEMO - being the additional revenue it earned, net of the additional short run costs it incurred. Thus, if a generator earned \$100,000 in additional revenue as a result of being dispatched more, but incurred costs of \$30,000 to generate that additional energy, it will only be required to repay \$70,000 to AEMO. (This is an important point to keep in mind given stakeholder concerns to ensure that affected participants do not incur loss.)

Prior to this rule being made, affected participants were (subject to certain thresholds) entitled to receive compensation if they were dispatched differently due to the intervention,

²⁵ Clause 3.12.2(a)(1) of the NER.

²⁶ Clause 3.12.2(j) of the NER.

regardless of whether intervention pricing was implemented in connection with that intervention.²⁷ As discussed in the preceding chapter, this point is of central importance to AEMO's rule change request and this final determination.

AEMO is required to notify affected participants of the estimated level at which they would have been dispatched had the intervention not occurred, and the trading amount they would have received had the intervention not occurred.²⁸ This additional amount is then incorporated into the participant's final statement for the relevant billing period: meaning the participant will be paid more by AEMO or will be required to refund money to AEMO.²⁹

Similarly, AEMO is required to notify eligible persons of the estimated level of flow in MW of all relevant directional interconnectors that would have occurred had the AEMO intervention event not occurred and, based on these flows, an amount equal to the estimated amount that person would have been entitled to receive had the AEMO intervention event not occurred, less the amount actually received.³⁰

To estimate these figures, AEMO uses two runs of the NEM dispatch engine, doing both a dispatch run and an intervention pricing run. Prior to this rule being made, this was done in order to calculate affected participant compensation even if intervention pricing was not implemented in connection with that intervention.

Compensation for market customers with scheduled loads is calculated in accordance with the formula set out in clause 3.12.2(a)(2). The quantum of compensation is determined having regard for the difference between the amount of electricity actually consumed by the scheduled load during the intervention and the amount of electricity which AEMO reasonably determines would have been consumed had the intervention not occurred.

While affected participant compensation is a "two way street" (meaning that affected participants may be required to pay money to AEMO, not just receive it), the same does not apply for market customers with scheduled load. If the above formula produces a negative figure, this is set to zero, meaning that the market customer is not liable to repay money to AEMO.³¹ While there are currently very few scheduled loads in the NEM, this may be expected to change as more utility scale storage systems enter the market (given that large-scale storage systems are currently required to register both as generators and market customers).³²

2.2 When should affected participant compensation be paid?

Unlike affected participants following an intervention, no compensation is payable in the event that participants' dispatch targets change as a result of constraints being imposed by

²⁷ Clause 3.9.3(a) and clause 3.12.2 of the NER.

²⁸ Clause 3.12.2(c) of the NER.

²⁹ Clause 3.12.2(d) of the NER.

³⁰ Clause 3.12.2(c)(2)

³¹ Clause 3.12.2(a)(2) of the NER.

³² The Commission has received a rule change request from AEMO seeking to integrate energy storage systems into the NER, including establishing a specific registration category for bidirectional resources. See: <https://www.aemc.gov.au/rule-changes/integrating-energy-storage-systems-nem>

the NEM dispatch engine. This raises the question of why participants affected by intervention events (as distinct from those participants who are directed to provide services) are treated differently to participants affected by constraints under the normal dispatch of the system.

Generators do not receive compensation for being constrained off as a result of a network or other constraint. For example, output from South Australian wind farms is constrained above certain levels and no compensation is payable.³³ This is in contrast to the situation where generators typically receive compensation when they are constrained off pursuant to a direction, or are affected (i.e. dispatched differently) due to a direction or RERT activation.

In South Australia, certain combinations of synchronous generators must be online in order to maintain minimum levels of system strength.³⁴ Where required unit combinations are not online or required units have indicated their intention to de-commit, AEMO uses directions to keep the system secure. However, had the goal of keeping the system secure been achieved by implementing constraints, or through compliance with the minimum system strength framework,³⁵ no affected participant compensation would be payable.

Under the minimum system strength framework, if a TNSP contracts with a generator to provide system strength services, the generator can be constrained on as required by AEMO under clause 5.20C.4 of the NER. As a result of delivering system strength services via a constraint rather than via a direction, no affected participant compensation is payable to other generators, scheduled loads or eligible persons (SRD unit holders) impacted as a result of the generator being constrained on.

Further, in at least one instance, no compensation was payable to a participant who was directed to reduce output in order to restore the power system to a secure state.³⁶ This raises questions about the appropriateness of paying compensation to affected participants when their output is reduced not as a result of a direction but due to NEM dispatch engine optimisation subsequent to a direction.

Indeed, if the NEM dispatch engine did not adjust dispatch targets in the wake of an intervention event, the result could be an insecure power system (as too much generation relative to demand can lead to frequency issues). As such, the NEM dispatch engine optimisation of dispatch targets is a necessary step to maintain system security.

33 In the third quarter of 2018, for example, 10 per cent of SA wind was spilled due to these constraints which bound 26 per cent of the time.

34 AEMO, *Transfer limit advice - system strength*, October 2019.

35 AEMC, *Rule Determination - National electricity amendment (Managing power system fault levels) Final Rule 2017*.

36 *Synergies, Final report on compensation related to directions that occurred on 1 December 2016*, June 2017.

2.3 Stakeholder responses to *Interventions investigation* consultation paper

The *Interventions investigation* consultation paper considered whether affected participant compensation should be retained, or whether it should only apply in certain circumstances (e.g. reliability events as distinct from security events).³⁷

Of the stakeholders who commented on this issue through submissions to the consultation paper, the majority supported the retention of affected participant compensation in its current form while others supported limiting the circumstances in which affected participant compensation is paid.

Those who supported retaining affected participant compensation in its current form stressed the importance of putting participants in the position they would have been in but for the intervention.

Those who supported limiting the circumstances in which affected participant compensation is payable considered that such compensation should not be payable in connection with security related interventions and should only be payable in connection with interventions to address scarcity of a market traded commodity.

TasNetworks submitted that:³⁸

TasNetworks notes that no compensation is paid to generators for generation curtailed due to a network or system security constraint. This is in line with current NER settings which provide generators with a right to negotiate a connection to the shared transmission network but no right to be dispatched. However, this is in stark contrast to the situation where generators can receive compensation from a system security direction. The only difference between the two being the degree to which a constraint can be represented in the NEMDE. TasNetworks does not consider this adequate justification for differential treatment. TasNetworks therefore suggests that no compensation should be payable for system security directions which would otherwise be satisfied by network security constraints but for NEMDE limitations.

This approach would improve consistency in security services provision and minimise operational costs to consumers. In turn, this would enhance investment signalling and support achievement of the NEO.

Similarly, Uniting Communities noted:³⁹

Compensation would not be payable if dispatch targets were to change as a result of AEMO imposing a constraint via the NEM dispatch engine (NEMDE). Uniting Communities supports changes to the compensation framework that eliminate, or at

³⁷ AEMC, *Investigation into intervention mechanisms and system strength in the NEM, Consultation paper*, April 2019.

³⁸ TasNetworks, Submission to the *Investigation into intervention mechanisms and system strength in the NEM, Consultation paper*, April 2019, p 6.

³⁹ Uniting Communities, Submission to the *Investigation into intervention mechanisms and system strength in the NEM, Consultation paper*, April 2019, p. 13.

least minimise costs to consumers where there is not a clear and transparent case that it is in the best interests of consumers for paying such compensation. We note that NEMDE optimises dispatch targets every day in order to keep the system secure.

2.4 Commission's views in the *Interventions investigation* final report

Informed by the stakeholder views outlined above, the Commission recommended in the *Interventions investigation* final report that affected participant compensation should no longer be payable in respect of intervention events for which intervention pricing does not apply.

When an intervention event occurs, the NEM dispatch engine will adjust dispatch targets such that they are set at levels which are productively and allocatively efficient.⁴⁰ As set out in the *Interventions investigation* final report, the Commission considered that there is no case to pay affected participant compensation except in those instances where there is scarcity of a market traded commodity. In such cases, affected participants may be constrained down at a time when they would otherwise receive high prices, reflecting a tight supply demand balance. In such cases, the final report therefore considered it appropriate to keep such participants "whole" by putting them in the position they would have been in but for the intervention.⁴¹

Accordingly, the *Interventions investigation* final report recommended that affected participant compensation be payable only when intervention pricing applies (i.e. when an intervention occurs in response to scarcity of a market traded commodity). For directions for system strength and other security services such as voltage control or inertia (i.e. where there is no scarcity of a market traded commodity), the Commission recommended that affected participant compensation should not in future be payable. This was because:

- no affected participant compensation is payable when system security is achieved through the use of constraints, so removing affected participant compensation for system security interventions will increase consistency as between intervention events and constraints, and reduce costs to consumers.
- where an intervention is in response to a security issue, affected participant compensation is calculated based on dispatch targets which are infeasible in the sense that they represent an insecure system which prompted AEMO to intervene in the market to change the generation mix. As such, it is not considered appropriate to compensate participants by reference to dispatch targets which would never be realised in practice.
- analysis in the final report suggested that participants are able to optimise the amount of affected participant compensation they receive, a practice that is not considered to be in the interests of consumers.⁴²

⁴⁰ This assumes that AEMO has not implemented "counteractions", which are manual rather than automatic changes to dispatch targets put in place by AEMO in order to limit the number of affected participants and impacts on interconnector flows. AEMO rarely uses counteractions in connection with SA system strength directions and the Commission has recommended that the counteraction requirement be removed, as discussed in section 5.3 of the final report.

⁴¹ AEMC, *Investigation into intervention mechanisms in the NEM, Final report*, 15 August 2019, p. 72.

⁴² *ibid.*

Each of these points is discussed further below, with the material below being drawn from the *Interventions investigation* final report.

2.4.1 Interventions v constraints

As noted above, no compensation is payable when constraints bind and affect the dispatch targets of market participants. The *Interventions investigation* final report noted the Commission's view that whether a security outcome is achieved by a constraint or a direction is not a sufficient basis on which to apply a different approach to compensation, and that removing affected participant compensation for security related interventions would improve consistency and reduce costs to consumers.⁴³

The similarity between constraints and directions is clearly illustrated in the market event report issued by AEMO following the direction issued to Mortlake Power Station on 1 December 2016. The direction was to desynchronise as the synchronisation of the power station had resulted in unanticipated impacts on interconnector flows.

The report of the event concluded by noting that the original constraint set was ineffective, hence a direction to Mortlake was needed in the circumstances that arose on 1 December 2016. To avoid the need to issue such directions in future, new constraints had been included in the NEM dispatch engine in order to constrain Mortlake's output to zero during transmission line outages.⁴⁴

While constraints can be difficult to formulate for all security issues (e.g. system strength) and certain constraints will not be effective when a generator has indicated it is unavailable, the above example demonstrates that directions and constraints can be used to achieve the same outcome, and underscores the case to increase consistency with respect to the compensation requirements that flow from the choice of tool.

2.4.2 Infeasible dispatch targets

As set out in the RRN test final determination, the Commission has determined that intervention pricing should not apply in circumstances where there is no economic rationale for it – that is, where there is no relevant market price signal to preserve (e.g. where the direction is for system strength, inertia or voltage control).⁴⁵

Further supporting this view is that, in the case of interventions to maintain system security, the intervention pricing run used by the NEM dispatch engine to determine the intervention price comprises a set of dispatch targets that together constitute an insecure system. This is because the counterfactual intervention pricing run consciously excludes the units that AEMO has directed into service to maintain system security. This is done so that the run can determine what the spot and ancillary service prices would have been had the intervention not occurred.

⁴³ *ibid.*

⁴⁴ AEMO, *NEM Event Report - Direction to Mortlake Generating Unit 12 - 1 December 2016*, November 2017, p. 14.

⁴⁵ AEMC, *Application of the regional reference node test to the reliability and emergency reserve trader*, Rule determination, 19 December 2019.

In practice, the combination of dispatch targets in the intervention pricing run, and the price determined as a function of them, would never be allowed to be realised (beyond 30 minutes) given AEMO's obligation to maintain system security. Accordingly, the Commission considers that this counterfactual is not a valid basis on which to determine the price at which the market clears when a system security intervention is in place, and nor does it provide a valid basis on which to calculate affected participant compensation in the same circumstances.

The situation is different when an intervention is to address a scarcity of energy. This is because the reliability standard in clause 3.9.3C of the NER reflects that the system is not expected to be "reliable" 100 per cent of the time. As such, the dispatch targets underpinning the intervention pricing run can be considered feasible even if they represent an "unreliable" system which has prompted AEMO to intervene.

2.4.3

Ability to optimise affected participant compensation

As noted above, analysis undertaken for the *Interventions investigation* final report suggests that participants are able to optimise the amount of affected participant compensation they receive.⁴⁶ This is because the intervention pricing run is a dynamic process which produces notional dispatch targets (for pricing purposes only) every five minutes, just like the dispatch run which is used to set actual dispatch targets for the market in the "real world". Intervention prices are published every five minutes and are automatically available to the market.

Dispatch targets in each run are set having regard for dispatch offers and bids. Given this, it is possible for a participant to optimise its position. When a generator's dispatch targets change due to an intervention and they recognise that they are an affected participant, the generator can optimise its bidding and hence its target in the pricing run in order to optimise its affected participant compensation.⁴⁷ The final report considered that bidding to optimise receipt of compensation is not in the interests of consumers.

In the period April 2017 to April 2019, a total of just under \$4.7m was paid out to a group of 25 participants who were at various times affected by system strength directions (i.e. dispatched differently).⁴⁸ This represents the amount automatically calculated by AEMO. In addition, AEMO paid out more than \$400,000 in additional compensation to two claimants in respect of five intervention events (giving a total affected participant compensation payout of \$5.1m).

During that two year period, payments to affected participants were made on 181 occasions. By contrast, a total of just over \$1m was repaid by affected participants to AEMO across 52

⁴⁶ AEMC, *Investigation into intervention mechanisms in the NEM, Final report*, 15 August 2019, p. 74.

⁴⁷ Where a participant is actually dispatched more as a result of the direction, it will need to repay additional revenue earned to AEMO, net of additional costs incurred. This occurs when a unit's dispatch targets in the dispatch run are higher than those in the intervention pricing run.

⁴⁸ AEMC analysis of data provided by AEMO.

occasions.⁴⁹ The net result is that just under \$4.1m was paid out to affected participants (taking into account both payments to and from affected participants) and recovered from South Australian market customers, and thus end consumers, via the “compensation recovery amount”.⁵⁰

While these sums are not large when considered in the context of the volume of energy traded in the NEM, it is nonetheless important to consider in relation to AEMO's rule change request whether affected participant compensation is warranted and appropriate in connection with system security directions. Market customers and consumers cannot manage the risk created by the requirement to pay affected participant compensation costs (in addition to directed participant compensation).

Of the automatically calculated compensation (total of ~\$4.7m), a significant proportion was paid to a group of three affected participants. The ratio of compensation paid by AEMO to this group compared with revenue repaid by them to AEMO was in excess of 9:1. By contrast, the ratio for other generators who received numerous payments was either around or somewhat below a ratio of 3:1.

Within this group of three, one participant has received more than 30 per cent of the total amount of automatically calculated compensation paid out by AEMO to affected participants. This participant received compensation on 43 occasions (representing 23 per cent of instances when AEMO paid compensation to affected participants) and only had to repay revenue to AEMO on two occasions. The quantum of its average payment across these 43 occasions was 40 per cent higher than the average of all payments made by AEMO to affected participants.

The analysis for the *Interventions investigation* indicates that a participant in South Australia was also a major recipient of affected participant compensation, underscoring concerns that some participants may be receiving both directed and affected participant compensation.⁵¹ This may (depending on the circumstances) constitute paying twice for the same energy, an issue that has implications for costs borne by consumers.⁵²

In the *Interventions investigation* final report, the Commission expressed concern that there is potential for participants to behave in a manner that is not in the best interests of consumers, and that affected participant compensation should not be paid where there is not a clear and transparent case for it. The final report noted that the 2000 Review of directions by NEMMCO and NECA recommended that “third parties whose market dispatch is affected by a direction should be compensated so that their financial position is *unaffected* by the direction” [emphasis added].⁵³

49 The fact that repayments to AEMO are smaller than payments by AEMO is not surprising. This is because, when AEMO directs on gas fired generators in South Australia, other scheduled generators across the NEM will typically be dispatched less, not more, than would have occurred but for the intervention.

50 This is the sum of money recovered from consumers in order to cover the cost of compensating directed participants, the net cost of compensating affected participants, and the cost of any independent experts retained to determine compensation claims.

51 AEMC, *Investigation into intervention mechanisms in the NEM, Final report*, 15 August 2019, p. 75. This participant was the recipient of AEMO counteraction instructions which helps account for the amount of affected participant compensation received.

52 The extent to which this is true is difficult to ascertain based on the data available to the Commission.

53 NEMMCO and NECA, *Power system directions in the National Electricity Market*, May 2000, p. i.

Having regard for the analysis described above, the *Interventions investigation* final report suggested that affected participant compensation is not achieving this objective: rather than simply shielding participants from losses arising from a direction to another party, as appears to have been intended, several participants are benefiting significantly from the payment of affected participant compensation. Thus, their financial position is positively “affected”, rather than kept neutral, and South Australian consumers are bearing the cost of this.

2.4.4

Summary

Given that affected participant compensation is not payable where constraints alter a participant's dispatch targets, and that dispatch targets in intervention pricing runs are both infeasible (for system security directions) and open to participant influence, the Commission was of the view in the *Interventions investigation* final report that affected participant compensation is not warranted in connection with system security interventions and nor is it in the interests of consumers. Accordingly, the final report recommended that affected participant compensation only be payable when an intervention triggers intervention pricing under the revised RRN test, and should not be payable when an intervention occurs in response to system security issues. This recommendation is the subject of AEMO's rule change request and this final determination.

While this change will reduce the amount of compensation paid to affected participants by AEMO, it will also reduce the liability of affected participants to repay funds to AEMO.

Where an intervention does trigger intervention pricing, the potential for affected participants to optimise their position with respect to compensation will in theory remain. However, two factors suggest the potential implications of such behaviour for consumers are limited in this instance:

- There have only been two reliability directions since 2010, with a combined duration of less than five hours. This reflects the incentive for participants to participate in the market and earn the spot price when the supply demand balance is tight.⁵⁴ In contrast, there has been significant use of directions for security reasons in the last two years. During 2018, system strength directions were in place for 30 per cent of the time on average. By contrast, the percentage of time that directions were in place in 2019 was significantly lower.⁵⁵
- During a reliability event, the extent to which other participants are “affected” (i.e. dispatched differently) due to the intervention is likely to be limited. This is because the supply demand balance in such instances is tight, and thus any change in dispatch targets is likely to be limited and/or shortlived.⁵⁶ A subsequent increase in demand would likely restore the dispatch targets of affected participants to (or close to) the level that

⁵⁴ In such instances this will be more attractive than receiving the 90th percentile price under direction. Directed participants providing energy and market ancillary services are compensated based on the 90th percentile price: clause 3.15.7 of the NER.

⁵⁵ While the RERT has been dispatched on four occasions in the last two years, limited affected participant compensation has been payable given the circumstances in which the RERT was dispatched (i.e. inadequate reserves or anticipated load shedding).

⁵⁶ For example, when AEMO directed Pelican Point into service to provide more headroom (meaning more units were online and able to increase output in response to rising demand) on two occasions in February and March 2017, other units were turned down to offset the impact of the direction.

applied before the intervention commenced. If demand did not increase as forecast, AEMO would need to cancel the intervention in accordance with its obligation to revoke interventions as soon as they are no longer required.

Accordingly, the potential impact on consumers of affected participants optimising their compensation position during reliability interventions⁵⁷ is limited. For this reason, the Commission considered in the *Interventions investigation* final report that – notwithstanding the theoretical potential for affected participants to optimise their position – it is appropriate for affected participants to be compensated during reliability interventions⁵⁸ so that they are “made whole” rather than losing revenue as a consequence of an intervention.⁵⁹

57 Meaning those interventions which trigger intervention pricing under the revised RRN test

58 *ibid.*

59 The issue of affected participant compensation touches on matters being progressed through the Commission's Coordination of Generation and Transmission Investment review. It is possible that future changes to access arrangements may require consideration of further changes to affected participant compensation.

3 AEMO'S RULE CHANGE REQUEST

3.1 The rule change request

On 17 September 2019, AEMO submitted a rule change request to action the Commission's *Interventions investigation* final report recommendation with respect to affected participant compensation. The request seeks to change the rules so that affected participant compensation is payable only in connection with intervention events that trigger intervention pricing.⁶⁰

AEMO's rule change request did not include a proposed rule.

3.2 Rationale for the rule change request

AEMO's rule change request noted that, at the time it submitted its rule change request, the NER provided that affected participant compensation is payable (subject to thresholds) whenever AEMO intervenes in the NEM, regardless of the reason for the intervention or whether intervention pricing applies. That is, the affected participant compensation framework is triggered by the presence of an intervention, not by the presence of intervention pricing. AEMO suggested that this creates both economic policy and practical problems, as outlined below.

AEMO referred in its rule change request to the draft determination on the RRN test rule change project (published on 15 August 2019). AEMO suggested that, if there is no justification for setting intervention prices when AEMO intervenes to secure a non-market service (as outlined in the then draft RRN test determination), then there is also no justification for compensating affected participants during that intervention.⁶¹

AEMO also stated that as the revised RRN test would remove intervention pricing when AEMO intervenes for a non-market service, there will be a large number of directions for which intervention prices will not be set. In the absence of intervention pricing run dispatch targets produced automatically by the NEM dispatch engine, AEMO would need a new source of counterfactual dispatch targets to calculate affected participant compensation.

AEMO noted that producing this new source of counterfactual dispatch targets would be a bespoke process that would only be used for a single purpose. AEMO stated that, even if a solution to the lack of intervention pricing run targets were only required temporarily, given the current volume of directions impacted any solution is still likely to be complicated, costly, and time-consuming to design and implement. AEMO noted it could take months simply to design and test any solution, and that this would necessitate a delay in the commencement of the RRN test rule.

60 AEMO, Application of compensation in relation to AEMO interventions, rule change request, 17 September, p. 2. Available at <https://www.aemc.gov.au/rule-changes/application-compensation-relation-aemo-interventions>

61 AEMO, Rule change request, p. 5.

3.3 Solution proposed in the rule change request

AEMO proposed that affected participants should be eligible for, or required to pay, compensation under clause 3.12.2 only when intervention pricing is used during an AEMO intervention event.

AEMO stated that, if this proposed rule is made, it would resolve the issues identified in the *Interventions investigation* final report, by making sure that affected participants only receive (or pay) compensation in respect of intervention events when intervention pricing has been applied. This would reduce compensation costs to consumers, particularly noting the large number of recent directions for system strength which, under the proposed change, would no longer trigger affected participant compensation. It would also reduce AEMO's administrative costs which are recovered through market fees and ultimately paid by consumers.

AEMO also requested that its proposed rule change regarding affected participant compensation be made in a time frame that aligns with the change to the RRN test rule, and with minimal delay to that rule.⁶² This would avoid AEMO having to waste resources developing a new source of intervention pricing run dispatch targets to calculate affected participant compensation.⁶³

3.4 The rule making process

On 24 October 2019, the Commission published a notice advising of its commencement of the rule making process and consultation in respect of the rule change request.⁶⁴ A consultation paper identifying specific issues for consultation was also published. Submissions closed on 21 November.

The Commission considered that the rule change request was a request for a non-controversial rule as defined in s.96 of the NEL. Accordingly, the Commission commenced an expedited rule change process, subject to any written requests not to do so. The closing date for receipt of written requests was 7 November.

No objections to the expedited rule change process were received. Accordingly, the rule change request was considered under an expedited process.⁶⁵

The Commission received 6 submissions in response to the consultation paper. Issues that are not discussed in the body of this determination have been summarised and responded to in Appendix A.

62 AEMO, Rule change request, p. 2.

63 *ibid*, p. 6.

64 This notice was published under s.95 of the National Electricity Law (NEL).

65 Section 96 of the NEL.

4 FINAL RULE DETERMINATION

4.1 The Commission's final rule determination

The Commission's final rule determination is to make the final rule as proposed by AEMO. The final rule establishes that affected participant compensation is only payable in connection with intervention events that trigger intervention pricing under the revised RRN test.

The Commission's reasons for making this final rule determination are set out in section 4.4.

This chapter outlines:

- the rule making test for changes to the NER
- the assessment framework for considering the rule change request
- the Commission's consideration of the final rule against the national electricity objective
- the Commission's summary of reasons and key features of the final rule
- .

Further information on the legal requirements for making this final rule determination is set out in Appendix B.

4.2 Rule making test

4.2.1 Achieving the NEO

Under the NEL the Commission may only make a rule if it is satisfied that the rule will, or is likely to, contribute to the achievement of the national electricity objective (NEO).⁶⁶ This is the decision making framework that the Commission must apply.

The NEO is:⁶⁷

to promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to:

- (a) price, quality, safety, reliability and security of supply of electricity; and
- (b) the reliability, safety and security of the national electricity system.

Given that compensation costs are recovered from market customers and thus consumers, the AEMC considers that the relevant aspect of the NEO for this rule change request is the promotion of the efficient operation and use of electricity services with respect to the price of electricity.

4.2.2 Making a differential rule

Under the Northern Territory legislation adopting the NEL, the Commission may make a differential rule if, having regard to any relevant MCE statement of policy principles, a

⁶⁶ Section 88 of the NEL.

⁶⁷ Section 7 of the NEL.

different rule will, or is likely to, better contribute to the achievement of the NEO than a uniform rule. A differential rule is a rule that:

- varies in its term as between:
 - the national electricity system, and
 - one or more, or all, of the local electricity systems, or
- does not have effect with respect to one or more of those systems

but is not a jurisdictional derogation, participant derogation or rule that has effect with respect to an adoptive jurisdiction for the purpose of s. 91(8) of the NEL.

As the rule relates to parts of the NER that currently do not apply in the Northern Territory, the Commission has not assessed the rule against the additional elements required by the Northern Territory legislation.⁶⁸

4.3 Assessment framework

The Commission has set out a number of principles to guide the assessment of the rule change request in addition to the NEO.

1. Equity: does the proposed approach strike a fair balance between the interests of affected participants and consumers?

The Commission has considered the implications of the rule change request for the position of affected participants and consumers, and sought to strike an appropriate balance between them. The Commission notes that, under current arrangements, generators in the NEM do not have a right to be dispatched. However affected participant compensation effectively treats participants as if they do have a right to be dispatched. The Commission concludes that the removal of affected participant compensation for interventions which do not trigger intervention pricing will reduce costs to consumers and is appropriate given that consumers effectively pay twice for the same energy when they are required to pay both directed and affected participant compensation (see further below in section 5.1). The interests of generators will be protected by retaining affected participant compensation in connection with intervention events which do trigger intervention pricing. Prices during such events are typically high and the Commission recognises that changing participants' dispatch targets during such periods can negatively impact their financial position.

2. Risk allocation: does the proposed approach appropriately allocate risk to those parties best able to manage them?

The Commission has considered whether the current affected participant compensation framework represents an appropriate allocation of risk, and whether and to what extent the proposed rule will impact this. Market customers and consumers cannot manage the risk created by the requirement to pay affected participant compensation costs (in

⁶⁸ From 1 July 2016, the NER, as amended from time to time, apply in the NT, subject to derogations set out in regulations made under the NT legislation adopting the NEL. Under those regulations, only certain parts of the NER have been adopted in the NT. (See the AEMC website for the NER that applies in the NT.) National Electricity (Northern Territory) (National Uniform Legislation) Act 2015.

addition to directed participant compensation). This highlights that affected participant compensation should not be paid where there is not a clear and transparent case for it. Preserving affected participant compensation for intervention events which trigger intervention pricing will mitigate the risks to market participants created by intervention events changing dispatch targets during high price periods.

3. Consistency: do the rules adopt a consistent approach to compensation with respect to mechanisms used by AEMO to ensure system security?

The Commission's final rule increases consistency between constraints and directions with respect to the secondary effects of intervention events on affected participants. As noted previously, no compensation is payable when a participant's dispatch targets change due to the application of constraints. Removing affected participant compensation for security related interventions increases consistency in this regard.

The Commission notes stakeholder comments (discussed in the next chapter) that constraints cannot be used to achieve system security when a generator has indicated it is unavailable or intends to de-commit. In such instances, directions are required. Stakeholders suggest that this invalidates the comparison between directions and constraints.

The Commission considers this criticism would be well founded if the intention was to change the compensation payable to those participants *directly* impacted by the intervention (i.e. directed participants). However, the scope of this rule change is to change the payment of compensation to those impacted *indirectly* by an intervention event. In this situation, the Commission considers that the comparison with constraints remains valid.

4.4 Summary of reasons and key features of final rule

The final rule made by the Commission is attached to and published with this final rule determination. The key features of the final rule are:

- A new Chapter 10 definition of "intervention dispatch interval" is used in clause 3.9.3(a). In respect of a dispatch interval where one or more AEMO intervention event(s) is in effect, AEMO must declare that dispatch interval to be an intervention dispatch interval.
- The Chapter 10 definition of "intervention price dispatch interval" has been amended to mean an intervention dispatch interval in respect of which AEMO has set dispatch prices and ancillary service prices in accordance with clause 3.9.3(b) – i.e. has implemented intervention pricing.
- The Chapter 10 definition of "intervention price trading interval" has been amended to mean a trading interval that includes one or more intervention price dispatch intervals. The definition is used in clause 3.12.2 in relation to when affected participant and market customer compensation is payable - i.e. in respect of each intervention price trading interval. Therefore, if intervention pricing is not implemented, the relevant trading interval will not be an intervention price trading interval and affected participant compensation will not apply.

- Minor changes to clauses 3.9.2, 3.9.3 and 3.12.2.
- The main provisions of the final rule will commence on 20 December 2019, immediately after the RRN test rule and will therefore amend the NER as amended by that rule.
- In addition, the *National Electricity Amendment (Five Minute Settlement) Rule 2017* (5MS Rule) will commence on 1 July 2021. The 5MS rule amends a number of the same clauses that are amended by the final rule, for example clause 3.9.3 of the NER and the Chapter 10 definitions that have been amended by the final rule. Therefore Schedule 2 of the final rule includes clauses to preserve the changes made in the final rule and the changes made by the RRN test rule post 1 July 2021. The clauses in Schedule 2 have also been updated to accept the changes made by the 5MS rule where appropriate, for example the replacement of dispatch price with spot price.
- The final rule also contains transitional provisions to address the issue of an AEMO intervention event that occurs prior to this rule commencing but which continues after the rule has commenced.

Having regard to the issues raised in the rule change request and during consultation, the Commission is satisfied that the final rule will, or is likely to, contribute to the achievement of the NEO for the following reasons:

- The final rule reflects an underlying principle of the NEM that generators do not have a right to be dispatched. In addition, and as discussed in the *Interventions investigation* final report, the final rule seeks to increase consistency in relation to affected participant compensation as between directions and constraints. No compensation is payable to participants whose output is affected as a result of a constraint. This raises the question as to why participants whose dispatch targets change are optimised by NEMDE in the wake of an intervention should be entitled to compensation.
- Where an intervention responds to a security issue, the dispatch targets which are used to calculate affected participant compensation are not feasible. That is, they would never be realised in practice because they represent an insecure system which has prompted AEMO to intervene, consistent with its obligation to maintain system security. Accordingly, these dispatch targets are not a sound basis on which to calculate compensation for participants affected by the issuance of a security-related intervention.
- Participants have the capacity to optimise their position with respect to affected participant compensation at the expense of consumers. Analysis of payments to and from affected participants highlights that one participant has received more than 30 per cent of the total amount of automatically calculated compensation paid out by AEMO to affected participants in connection with South Australian system strength directions over the two years from April 2017 to April 2019. This participant is not located in South Australia and thus the amount of compensation it has received is not because it was the recipient of counteraction instructions (issued by AEMO to confine the impact of an intervention to a single region).
- Requiring consumers to pay for both directed participant and affected participant compensation amounts to paying twice for the same energy, an outcome which is contrary to the NEO. This is because consumers pay for the additional energy provided by

the directed participants (based on the 90th percentile price). They then pay again when they compensate other generators, located across the NEM, whose output is altered to offset the additional energy provided by the directed participants. This is not considered justified in the context of security-related interventions and reinforces the Commission's view that the circumstances in which compensation is payable in connection with intervention events should be narrowed.

- The scale of affected participant compensation paid in connection with security-related interventions is a small proportion of the value of energy traded by affected participants. For the leading recipient of affected participant compensation, the value of the compensation received over the two years from April 2017 to April 2019 was 0.115 per cent of its total revenue over the period. In light of this, the removal of affected participant compensation in connection with security related interventions is not expected to have a significant adverse impact on market participants or potential investors.
- Affected participant compensation will, however, remain payable in connection with interventions that trigger intervention pricing. When AEMO intervenes due to a scarcity of energy or FCAS (circumstances which will trigger intervention pricing), prices will generally be high, enabling participants to earn substantial revenue (particularly if they operate for few hours a year).
- Changing a participant's dispatch targets in such circumstances can be expected to have a more significant adverse impact on a participant's financial position. To offset this impact, affected participant compensation will continue to be payable. This, together with a related rule change regarding the \$5,000 compensation threshold, will ensure that such participants are made "whole" and do not suffer loss as a result of an intervention event.⁶⁹
- While consumers will be required to pay both directed participant compensation (or RERT costs) and affected participant compensation in such cases, this is considered acceptable given that such events are rare and that failure to keep participants whole in such circumstances could impact their financial position in a way that would not be in the long term interests of consumers.

⁶⁹ The *National Electricity Amendment (Threshold for participant compensation following market intervention)*, Rule 2019 No 12 amends clause 3.12.2(b) and (i).

5 ISSUES RAISED AND COMMISSION'S CONCLUSIONS

This chapter details the issues raised by AEMO in their rule change request, alongside stakeholder submissions, and the Commission's analysis and conclusions pertaining to:

- When should affected participant compensation be paid?
- Practical problems with the rules.
- Implementation of the final rule.

5.1 When should affected participant compensation be paid?

5.1.1

AEMO's view

AEMO suggested that, if there is no justification for setting intervention prices when AEMO intervenes to secure a non-market service, then there is also no justification for compensating affected participants and relevant market customers (those with scheduled loads) during that intervention.⁷⁰

In support of this view, AEMO quoted the final report of the Commission's *Interventions investigation* which states:⁷¹

Given that affected participant compensation is not payable where constraints are used, and that dispatch targets in intervention pricing runs are both infeasible (for system security directions) and open to participant influence, the Commission considers that affected participant compensation is not warranted in connection with system security interventions and nor is it in the interests of consumers. Accordingly, the Commission recommends that affected participant compensation only be payable when an intervention triggers intervention pricing under the revised RRN test, and should not be payable when an intervention occurs in response to system security issues.

AEMO proposed that affected participants and relevant market customers should be eligible for, or required to pay, compensation under clause 3.12.2 only when intervention pricing is implemented during an AEMO intervention event.

AEMO stated that, if this proposed rule is made, it would resolve the issues identified in the *Interventions investigation* final report, by making sure that affected participants and relevant market customers only receive (or pay) compensation in respect of intervention events when intervention pricing has been applied. This would reduce compensation costs to consumers, particularly noting the large number of recent directions for system strength which, under the proposed change, would no longer trigger affected participant compensation. It would also reduce AEMO's administrative costs which are recovered through market fees and ultimately paid by consumers.

⁷⁰ AEMO, Rule change request, p. 5.

⁷¹ AEMC, *Investigation into intervention mechanisms in the NEM - final report*, 15 August 2019, p. 76.

5.1.2

Stakeholder views

Stakeholders had mixed views on AEMO's proposal to only pay affected participant compensation when intervention pricing is triggered under the revised RRN test. Specifically:

- three stakeholders did not support the proposed change (AGL, Snowy Hydro and ERM)
- three stakeholders did support the proposed change (Powershop, Engie and CS Energy)

Powershop supported changing the rules so that affected participant compensation remains payable in connection with intervention events which trigger intervention pricing, but is no longer payable in connection with interventions that do not trigger intervention pricing. Powershop considered the proposed solution will avoid situations where generators are unfairly disadvantaged as a consequence of directions.⁷²

CS Energy agreed that the proposal to narrow the circumstances when affected participant compensation is payable complements the removal of intervention pricing where the intervention is to obtain a service which is not traded in the market (per the RRN test rule). CS Energy states that compensation to affected participants, using the intervention price and dispatch method, would further distort market signals.⁷³

Engie supported the approach of narrowing the circumstances in which affected participant compensation is payable, and supported the proposal to align the timing of the final rule with rules relating to the RRN test and compensation thresholds. Engie also noted the importance of addressing the underlying cause of the increased reliance on interventions: "the direct solution to the underlying issue is to ensure that procurement mechanisms for example (markets, contracting) are in place for all the services that AEMO requires to maintain a secure system, such that those parties that can provide these services get appropriately rewarded for them".⁷⁴

AGL disagreed with the Commission's decision to remove intervention pricing in connection with interventions to obtain services that are not traded in the market.⁷⁵ AGL considered that the use of intervention pricing in such circumstances appropriately corrects market distortion, and that the intervention price is the more accurate representation of the energy price. Consistent with this, AGL did not agree that the circumstances in which affected participant compensation is payable should be narrowed.

72 Powershop, Submission to the consultation paper, pp 1-2. In a submission to a related rule change request (ERC0255, regarding the \$5,000 compensation threshold that applies to directed and affected participant compensation payments), Powershop noted that its views had shifted since making a submission to the April 2019 consultation paper for the *Intervention investigation*. In its earlier submission, Powershop supported a consistent approach to directed and affected participant compensation. However, in its later submission to the compensation threshold draft determination, Powershop noted that its views had changed and it recognised that it was not appropriate to pay affected participant compensation in connection with all interventions: Powershop, Submission to the compensation threshold rule draft determination, 26 September 2019, p. 2.

73 CS Energy, Submission to the consultation paper, p. 2.

74 Engie, Submission to the consultation paper, pp 1-2. The Commission notes that a framework was created in 2017 which requires transmission network service providers to contract with generators, or build network assets, if there is a declared shortfall of system strength. In the case of South Australia, ElectraNet opted not to proceed with generator contracting based on the high cost of that option. However, ElectraNet is in the process of procuring four synchronous condensers which will address the system strength shortfall.

75 AEMC, *Application of the regional reference node test to the reliability and emergency reserve trader*, Rule determination, 19 December 2019.

AGL also questioned whether the premise of the rule change request is valid as AGL has not been able to identify a situation in which affected participant compensation was payable in connection with an intervention that did not trigger intervention pricing. Given this, it suggested that there is no need for the rule change request.

In response to the Commission's view that limiting the payment of affected participant compensation will increase consistency between interventions and constraints, AGL noted that a constraint will not be effective to maintain adequate system strength if a generator has signalled it is not available to be constrained on by the dispatch process.

In response to the Commission's view that it is not appropriate to calculate affected participant compensation by reference to infeasible dispatch targets, AGL agreed that "the dispatch targets in the intervention pricing run would operationally risk system security" but considers that "the economic rationale behind the counterfactual must be considered alongside the operational result".⁷⁶ It also questioned the use of the term "infeasible" on the basis that AEMO reports do not use this term when describing instances when the system was not secure.

AGL stated that it would welcome analysis that shows that participants have actively optimised affected participant compensation through rebidding activities. AGL noted that whilst intervention prices are published every five minutes, generators are unlikely to know whether they will be eligible for compensation in most cases until after the trading interval has concluded due to the \$5,000 threshold per trading interval.

Finally, AGL urged the Commission to delay making final rules on interventions until it has completed its review of system strength frameworks, and that greater consideration is required as to the interplay between these reforms and those relating to the Coordination of Generation and Transmission Investment.⁷⁷

ERM Power did not support the proposed rule change. It considered that limiting the payment of affected participant compensation would, as with the more limited application of intervention pricing, result in unintended consequences (i.e. AEMO needing to issue additional directions) which would unnecessarily increase compensation costs. It also suggested that the original intent of affected participant compensation was to ensure that, when AEMO issues a direction, the distortionary impact on market dispatch outcomes was removed. ERM Power did not believe that this proposed rule change removed the distortionary impacts of directions.

ERM Power disagreed with the comparison drawn by the Commission between a generator's dispatch targets being impacted by a constraint and a generator's dispatch targets being impacted by NEMDE optimisation in the wake of an intervention. ERM Power noted that a constraint cannot constrain on a generator's output against the generator's de-commitment decision, so a direction is required.

⁷⁶ AGL, Submission to the consultation paper, p. 3.

⁷⁷ Further information regarding COGATI reforms is available here: <https://www.aemc.gov.au/market-reviews-advice/coordination-generation-and-transmission-investment-implementation-access-and>

ERM Power submitted that the proposed rule fails the assessment framework in the area of equity because the proposed approach does not strike a fair balance between the interests of affected participants and consumers. ERM Power considered that the Commission should give greater consideration to the fact that an affected participant is required to incur costs up to \$5,000 per trading interval before compensation for that trading interval is payable. Where the intervention event is lengthy, this could result in significant costs not being compensated.

ERM also considered it would be difficult in practice for an affected participant to optimise its position with respect to compensation. It expressed the view that given that dispatch outcomes change every 5 minutes, trying to achieve a compensation optimisation strategy would be at high risk of failure.

Snowy Hydro did not agree with the premise of AEMO's rule change request that removing intervention pricing when AEMO intervenes to secure a non-market service also requires that compensation should not be paid to affected participants during that intervention. Snowy Hydro considered that "any intervention by AEMO in the market is a distortion" and "it is critical that economic signals, through either intervention pricing or compensation for affected participants, are preserved as far as possible".⁷⁸

Snowy Hydro was concerned with "the long-term impacts of affected participant services not being compensated".⁷⁹ Snowy Hydro proposed that focusing on the methodology for compensation rather than narrowing the trigger would provide a more informed and desirable outcome.

It noted that providers of peaking services like Snowy Hydro have relatively small windows in which they are able to earn revenue to sustain their capital investment. If such participants are not compensated when they are affected by an intervention, they may undertake "less capital maintenance and investment, [and] AEMO would ultimately need to engage in further costly market interventions, such as the RERT".⁸⁰

Snowy Hydro stated that NEM participants are inherently vulnerable to AEMO interventions which create financial risks over which participants have no control. "From the impact on their financial contracts to additional dispatch risk for participants, this would lead to increased costs that market participants would need to pay for. Any change to the market should not make intervention easier."⁸¹

A table summarising stakeholder views is set out below.

Table 5.1: Stakeholder views on affected participant compensation

APPROACH	STAKEHOLDERS
Narrow circumstances in which AP compensation is payable	Powershop, Engie, CS Energy

⁷⁸ Snowy Hydro, Submission to the consultation paper, p. 1.

⁷⁹ *ibid.*

⁸⁰ *ibid.*, p. 2.

⁸¹ *ibid.*

APPROACH	STAKEHOLDERS
Retain AP compensation as is	AGL, ERM, Snowy Hydro

Source: AEMC

5.1.3

Commission's analysis and conclusions

The Commission has determined that affected participant compensation should continue to be payable with respect to intervention events that trigger intervention pricing but should not be payable in connection with intervention events that do not trigger intervention pricing. In this way, participants affected by an intervention occurring in a period when prices are typically high will be made "whole" financially through affected participant compensation.

Key issues raised by stakeholders are addressed in turn below.

Is the rule change needed at all?

AGL queries whether the rule change is needed at all, stating it has not been able to identify an instance when intervention pricing did not apply but affected participant compensation was paid nonetheless. As discussed in section 1.2.2, such an instance occurred when AEMO issued security related directions to two Victorian generators (Newport and Mortlake) on 16 and 18 November 2018.

While intervention pricing was not implemented in connection with these directions (which were needed to address voltage issues), dispatch outcomes did change as a result of them, as detailed in the market event report.⁸² AEMO advises that affected participant compensation was paid in connection with these interventions, consistent with the above provisions of the NER.

A key challenge in identifying such instances is the near total lack of publicly available information regarding the payment of affected participant compensation. As noted previously, data is only made public if there is a dispute which is large enough to necessitate the engagement of an independent expert. In its *Interventions investigation* final report, the Commission recommended that the AER submit a rule change request to increase the level of transparency regarding the payment of both directed and affected participant compensation.

Increasing consistency as between directions and constraints

The consultation paper noted that, when dispatch targets are affected by a constraint rather than as a result of an intervention, no compensation is payable. The paper suggested that narrowing the circumstances in which affected participant compensation is payable would increase consistency as between directions and constraints. In response, AGL and ERM queried whether this comment was valid, noting that a constraint cannot achieve system security if the generator which can provide the required service has indicated it is not available. In such cases, a direction will be required.

⁸² AEMO, *NEM Event - Directions 16-18 and 24-27 November 2018*, November 2019.

The Commission considers this criticism would be well founded if the intention was to change the compensation payable to those participants *directly* impacted by the intervention (i.e. directed participants). However, the scope of this rule change is to change the payment of compensation to those impacted *indirectly* by an intervention event - i.e. as a second order effect flowing from the intervention. In this situation, the Commission considers that the comparison remains valid between the impact of constraints on dispatch targets and the second order impact of interventions on the dispatch targets of affected participants.

It is also important to note that generators currently have no right to be dispatched in the NEM and the affected compensation framework is not aligned with this principle.

Are counterfactual dispatch targets "infeasible"?

AGL agrees with the Commission that "the dispatch targets in the intervention pricing run would operationally risk system security" but considers that "the economic rationale behind the counterfactual must be considered alongside the operational result". AGL also notes that AEMO reports do not use the term "infeasible" when describing instances when the power system has been secure.⁸³

The Commission has used the word "infeasible" in the course of describing an "ex ante" approach to determining both intervention pricing and affected participant compensation. This differs from an "ex post" report describing a system security incident that has already occurred. The Commission notes that, in the case of South Australian system strength directions, AEMO examines pre-dispatch data to identify whether sufficient units are online to satisfy one of the combinations set out in its Transfer Limits Advice.⁸⁴ If insufficient units have indicated their intention to operate, AEMO will seek a market response and then, if required, issue a direction to ensure that system security is maintained. In such a context, the Commission considers it appropriate to describe the dispatch targets used in the intervention pricing run as infeasible on the basis that AEMO acted to prevent them from being realised in practice.

The Commission notes the views of AGL but remains of the view that it is not appropriate to set prices or calculated compensation based on infeasible dispatch targets.

Concern regarding impact on market participants and on investment signals:

Stakeholders have expressed concern that removing affected participant compensation for security interventions will have adverse impacts on investment signals in the market and on the ability of market participants to earn revenue to sustain their capital investment (particularly peaking plants which only operate for a few hours per year). In response the Commission considers it important to highlight the distinct roles of the intervention pricing and compensation frameworks.

Interventions are generally used a last resort mechanism, consistent with the principle in clause 3.1.4(a)(1) of the NER that AEMO decision-making is to be minimised to allow market participants the greatest amount of commercial freedom to decide how they will operate in

⁸³ AGL, Submission to consultation paper, p. 3.

⁸⁴ AEMO, *Transfer limits advice - system strength*, October 2019.

the market. Intervention pricing is used to preserve market scarcity signals that would have existed had the intervention not occurred. This process is transparent and designed to send signals to market participants in real time, and to investors.

By contrast, the compensation framework is designed to ensure that participants who have been directed by AEMO to provide services are not "out-of-pocket". This framework also compensates affected participants to put them in the position that they would have been in but for the direction or RERT activation. Compensation to directed and affected participants is an opaque financial transfer that is designed to reduce the impact of the intervention but is not designed to preserve market scarcity prices or investment signals.

It is also important to keep in mind the scale of the affected participant compensation that has been paid in connection with security related interventions relative to the value of energy traded by affected participants. To that end, the Commission compared the value of the affected participant compensation paid over a two year period to the top three recipients of this compensation with their wholesale energy revenue over a similar two year period.⁸⁵

For the leading recipient, the value of affected participant compensation received as a percentage of its revenue over the period was 0.115 per cent; for the second highest recipient, the figure was 0.022 per cent and for the third highest recipient, the figure was 0.025 per cent. For the remaining affected participants, which received considerably less affected participant compensation than the top three recipients, these percentages could be even lower.

In light of this, the Commission considers that the removal of affected participant compensation in connection with security related interventions will not have a significant adverse impact on market participants or potential investors, and that its removal is in the long term of interests of consumers.

Will removing affected participant compensation result in additional directions?

ERM expressed concern that removing affected participant compensation will require AEMO to issue additional directions. This is an area where increased transparency would help inform the debate about what implications can be expected to flow from the removal of affected participant compensation.

Commission analysis of confidential data provided by AEMO shows that the majority of participants affected by South Australian system strength directions are located outside South Australia. This is because AEMO rarely uses counteraction instructions to confine the impact of the direction to South Australia. (AEMO does not counteract on wind farms and therefore can only issue counteractions when gas fired units in South Australia are operating above their minimum safe operating levels.)⁸⁶

85 Data on affected participant compensation provided by AEMO is over the period April 2017 to April 2019. This has been compared against annual wholesale market revenues obtained from 2018 and 2019 annual reports of each market participant and thus reflects financial years 2018 and 2019.

86 The *Interventions investigation* final report recommended that AEMO submit a rule change request to remove the current requirement on AEMO to issue counteraction instructions in order to minimise the number of affected participants and the impact on interconnector flows. The Commission considers that it would be preferable to allow NEMDE to optimise targets automatically on a least cost basis - rather than requiring AEMO to adjust targets manually with the objective of minimising impacts on interconnector flows etc.

Instead, when no counteraction instructions are issued, NEMDE optimises dispatch targets across the NEM automatically. To offset the impact on the system of the additional energy generated by the directed participant, NEMDE picks the most expensive generation increment in *any* region and turns it down. If that was insufficient to offset the direction, NEMDE would pick the next-most expensive generation increment in any region and turn that down, and so on.⁸⁷

The result of this is that most of the participants affected by South Australian system strength directions are large thermal plants located in regions of the NEM other than South Australia. Generally, a single direction will result in several generators being affected, meaning that the effect of the direction on other participants is spread more thinly. This reduces the risk that an affected participant will withdraw as a result of a significant change in dispatch targets. This situation differs from that which has prompted stakeholders to express concern that removing intervention pricing will cause spot prices in South Australia to fall, prompting synchronous generators to withdraw and requiring AEMO to issue additional directions.

Are participants optimising the quantum of compensation received?

AGL and ERM have questioned whether it is possible for affected participants to optimise the compensation they receive. While it is not possible to disclose confidential information, the Commission considers that the data it received from AEMO in confidence suggests this is the case.

The second highest recipient of affected participant compensation is a participant whose portfolio includes a South Australian generator. The use of counteraction instructions is a factor influencing the quantum of compensation paid to that participant. However, the participant which earns the most affected participant compensation is not being compensated in respect of generating units located in South Australia. As discussed in section 2.4.3, analysis by the Commission suggests that this participant is receiving a high share of the total compensation paid by virtue of its bidding strategy combined with the low short run marginal costs that are assumed to be incurred by this class of generator.

The Commission surmises that an affected participant could lower its bid capacity price band so that the generator is dispatched in the intervention pricing run but not in the real world dispatch run. Thus, it would be compensated for the difference between the dispatch targets in the two runs while preserving its fuel reserves for use at a later, more profitable time.

The Commission shares the concern expressed by Uniting Communities in its submission to the *Interventions investigation* consultation paper. They state:⁸⁸

We emphasise the importance of greater transparency in relation to the payment of any necessary compensation to affected participants. This is particularly important given that, unlike directed participants, there is potential for affected participants to

⁸⁷ While this is how NEMDE works in principle, AEMO advises that, in practice, there are many co-optimisations within NEMDE that complicate the process.

⁸⁸ Uniting Communities, Submission to the Investigation into intervention mechanisms and system strength in the NEM, Consultation paper, May 2019.

optimise their position with respect to compensation. In other words, there is potential for affected participants to behave in a manner that we do not consider to be in the best interests of consumers.

AGL also queried whether it would be possible for an affected participant to know, at the time of the intervention, whether their compensation would exceed the \$5,000 compensation threshold which - prior to the *National Electricity Amendment (Threshold for participant compensation following market intervention) Rule 2019* - applied per trading interval. The Commission considers that it would be possible for an affected participant to identify whether it was affected at a level that exceeded the threshold. This would involve multiplying the MW change in dispatch targets by the prevailing spot price. In any case, this point is now moot since the threshold has been changed so that it applies on a per event basis (in those instances when affected participant compensation remains payable).⁸⁹

Equity considerations

ERM expressed the view that the proposed rule change does not strike a fair balance between the interests of affected participants and consumers, and therefore failed the assessment framework in the area of equity. The Commission does not share this view for a number of reasons:

1. The final rule removes affected participant compensation in connection with interventions that do not trigger intervention pricing but the quantum of compensation payable in such instances is of relatively low value.
2. The final rule retains affected participant compensation in connection with interventions that do trigger intervention pricing and the quantum of compensation payable in connection with such events can be considerable. Another relevant consideration is that the *National Electricity Amendment (Threshold for participant compensation following market intervention) Rule 2019* changes the \$5,000 compensation threshold applicable to affected participant compensation so that it applies per event rather than per trading interval. This rule change helps ensure that affected participants do not incur loss in periods when such losses will have the most impact on their financial position.
3. Consumers effectively pay twice for the same energy when they are liable to cover the cost of both directed and affected participant compensation. This is because they cover the cost of compensating directed participants for providing additional energy to the system, and are then required to compensate other generators who are dispatched less in order to offset the effect of the direction. This can be seen as a form of "double dipping".⁹⁰ In addition, consumers bear the cost of higher energy prices as a result of intervention pricing (when it applies), and this higher price increases the value of compensation payable to affected participants.

⁸⁹ AEMC, *Threshold for participant compensation following market intervention, Rule determination*, 19 December 2019.

⁹⁰ ERM expressed concern about double dipping in its submission in response to the April 2019 consultation paper. In particular, ERM noted that, where a directed participant is also an affected participant, it is effectively paid twice for the same energy: ERM, Submission to the *Interventions investigation* consultation paper, May 2019.

4. Given that affected participant compensation is a "two way street", the removal of affected participant compensation in connection with interventions which do not trigger intervention pricing will benefit those participants which generate more as a result of an intervention. This is because they will no longer be required to repay to AEMO the additional revenue earned as a result of the intervention. The compensation framework is also designed to avoid under or over-compensation of participants and in this way helps to facilitate equitable outcomes.

These issues are explored further below.

Interventions which do not trigger intervention pricing = low value compensation

As discussed in section 2.4.3, the value of compensation paid out to affected participants in the period April 2017 to April 2019 was around \$2m pa and this period was characterised by an unprecedented use of interventions. Of this, around 63 per cent of the annual total was paid out to three participants. Across the other 22 participants affected by directions during this period, the annualised average quantum of affected participant compensation received was in the order of \$35,000. Compared with the value of the total volume of energy traded by these participants during this period, this amount is not significant, as noted above.

Interventions which do trigger intervention pricing = higher value compensation

By contrast, intervention events which trigger intervention pricing – while rare and of short duration – can entail more valuable affected participant compensation. This is because interventions that trigger intervention pricing usually occur when the supply demand balance is tight and spot prices are high.

This means participants have a natural incentive to participate in the market so they can earn the spot price (which will typically be higher than the 90th percentile price, being the compensation payable to directed participants: clause 3.15.7 of the NER). This in turn helps explain why there have only been two reliability directions (i.e. directions in response to a shortage of energy) in the past 10 years.

The first direction was issued to Pelican Point on 9 February 2017 and lasted just under four hours.⁹¹ Counteraction instructions were issued to three generators in South Australia and as such these generators would have been eligible to receive affected participant compensation if the \$5,000 per trading interval compensation threshold was met. Prices during this event varied widely but peaked at around \$9,500/MWh and were rarely below \$1,000/MWh.⁹² Such high prices will increase the value of affected participant compensation, since compensation is calculated by multiplying the difference in dispatch targets by the spot price.

A second reliability direction was issued to Pelican Point GT12 on 1 March 2017 and counteraction instructions were issued to Pelican Point GT11. Prices during this intervention were not high. The market event report for this intervention notes that "the intervention pricing constraint commenced in [dispatch interval] DI ending 1740 hrs which was as soon as practical after the directed unit (GT12) synchronised at 1732 hrs. However, ST18 tripped at

⁹¹ AEMO, *NEM Event - Direction to South Australia Generator - 9 February 2017*, July 2017.

⁹² AEMO, *ibid*, p. 15.

1742 hrs, and the intervention pricing constraint was revoked at DI ending 1805 hrs as ENGIE was unable to comply with the direction and had to reduce output to below original availability to restore ST18".⁹³

Two other direction events would trigger intervention pricing under the revised RRN test and thus create an entitlement to affected participant compensation. Both occurred on 1 December 2016 when South Australia was islanded due to the loss of the Heywood interconnector and insufficient frequency control ancillary services (FCAS) being available locally to maintain system security.

The RERT has been activated on four occasions since NEM start. These are set out below, together with the quantum of affected participant compensation paid.

Table 5.2: Interventions that will trigger intervention pricing under the revised RRN test

DATE	DURATION	AFFECTED PARTICIPANT COMPENSATION PAID
30 November 2017	6 hours	\$0
19 January 2018	6 hours	\$170,000
24 January 2019	< 7 hours	\$3m
25 January 2019	< 8 hours	\$237,000

Source: Data sourced from AEMO, *Activation of unscheduled reserves for Victoria - 30 November 2017*, May 2018; AEMO, *Activation of unscheduled reserves for Victoria and South Australia - 19 January 2018*, May 2018, p. 9; AEMO, *Load shedding in Victoria on 24 and 25 January 2019*, April 2019, p. 39.

Each of the RERT activations that has occurred to date meet the criteria for intervention pricing in the revised RRN test and so intervention pricing would still apply if interventions like these were to occur in future. This means that affected participant compensation would remain payable.

Double dipping

As noted above, consumers having to pay for both directed and affected participant compensation can be considered a form of double dipping: that is, consumers are effectively paying twice for the same volume of energy. As Uniting Communities noted in its submission to the April 2019 consultation paper:⁹⁴

In addition to compensating generators, it is deeply concerning that SA consumers are also bearing the cost of compensating scheduled generators across the NEM, whose dispatch targets are impacted as a result of system strength directions being issued in South Australia.

While the double dipping applies to all interventions (regardless of whether they trigger intervention pricing), the impact of this issue is more confined in connection with

⁹³ AEMO, *NEM Event – Direction to South Australia Generator – 1 March 2017*, January 2018, p. 12.

⁹⁴ Uniting Communities, Submission to the *Interventions investigation* consultation paper, May 2019.

interventions that trigger intervention pricing under the revised RRN test given that such interventions are rare and of short duration, as shown in table 5.2 above.

In addition, it is important to strike an appropriate balance between the interests of consumers and affected participants during interventions that trigger intervention pricing. As Snowy Hydro noted, providers of peaking services have relatively small windows in which they are able to earn revenue to sustain their capital investment.⁹⁵

If a participant is affected by an intervention during such periods, the Commission considers that it is reasonable to keep such participants “whole” through the payment of affected participant compensation, and that doing so is in the long term interests of consumers as it will support the ongoing viability of participants providing important services to the market. By contrast, removing affected participant compensation in connection with interventions which do not trigger intervention pricing is expected to have limited impact on participants’ financial position (as discussed earlier) but will deliver benefits to consumers through lower compensation costs.

Accordingly, the Commission considers that the approach in the final rule meets the equity principle in the assessment framework.

Will participants incur costs that are not compensated?

ERM considered that the Commission should give greater consideration to the fact that an affected participant is required to incur costs up to \$5,000 per trading interval before affected participant compensation for that trading interval is payable. Where the intervention event is lengthy, ERM expressed concern that this could result in significant costs not being compensated. The Commission notes that the compensation threshold to which ERM referred in its submission has been amended such that it will apply per event rather than per trading interval. This reduces the risk that participants will incur loss in the wake of an intervention.⁹⁶

The Commission also notes that the removal of affected participant compensation in connection with interventions which do not trigger intervention pricing will benefit those participants which generate more as a result of an intervention. This is because they will no longer be required to repay to AEMO the additional revenue they earned as a result of the intervention. For those interventions which do trigger intervention pricing (and in respect of which affected participant compensation remains payable), participants which generate more as a result of the intervention will still be required to repay additional revenue earned to AEMO. However, this amount is net of the additional costs incurred by the participant as a result of being dispatched more in the wake of the intervention. In this way, the compensation framework is designed to avoid a situation where affected participants incur loss.⁹⁷

Conversely, where an intervention event triggers intervention pricing and affected participant compensation therefore remains payable, participants which are dispatched less as a result of

⁹⁵ Snowy Hydro, Submission to the consultation paper, p. 2.

⁹⁶ *National Electricity Amendment (Threshold for participant compensation following market intervention) Rule 2019 No. 12.*

⁹⁷ Clause 3.12.2(j)(1) of the NER.

the intervention will be compensated by AEMO to make them whole. However, this amount is will be net of the costs avoided (or not incurred) as a result of being dispatched less.⁹⁸ Again, this element of the compensation framework is designed to make sure that affected participants are not over or under compensated and thus is an important factor in facilitating equitable outcomes.

Solving the underlying problem

AGL, CS Energy and Engie noted the importance of addressing the underlying issue that has prompted AEMO to issue an unprecedented number of directions – namely, declining levels of system strength due to a rapidly transitioning generation fleet. The Commission agrees that it is important to value security services in a way that is efficient and effective, having regard for the characteristics of each service.

As flagged in the *Interventions investigation* final report, the Commission is actively examining issues with the system strength framework that was created in 2017⁹⁹ and a further report on this work will be published in early 2020. The Commission does not consider that changes to the RRN test and affected participant compensation should be delayed until such time as the complex issues surrounding system strength are resolved.

5.2 Practical problems with the current rules

5.2.1 AEMO's view

AEMO notes in its rule change request that the NER require AEMO to calculate compensation for affected participants when AEMO intervenes in the NEM, regardless of whether intervention pricing is implemented.

However, as the RRN test rule has removed intervention pricing when AEMO intervenes in the market for a non-market traded service, there will be a large number of interventions for which intervention prices will not be calculated. In the absence of intervention pricing run dispatch targets produced automatically by the NEM dispatch engine, AEMO would need a new source of counterfactual dispatch targets to calculate affected participant compensation for these interventions.

AEMO has considered potential solutions to this problem and notes that these might involve:

- A production change that would trigger a third type of NEM dispatch engine run during interventions without intervention pricing. This run would attempt to simulate what would have happened without intervention.
- A real-time parallel process that would detect interventions without intervention pricing and automatically rerun the affected dispatch intervals. The reruns would attempt to simulate what would have happened without intervention. The results of this process would be used only in calculating affected participant compensation.

⁹⁸ *ibid.*

⁹⁹ National Electricity Amendment (Managing power system fault levels) Rule 2017 No. 10.

- A resource-intensive manual process that would rerun dispatch intervals containing intervention without intervention pricing. The reruns would attempt to simulate what would have happened without intervention.

AEMO notes that, in each case, this would be a bespoke process that would only be used for a single purpose. AEMO states that, even if a solution to the lack of intervention pricing run targets were only required temporarily, given the current volume of directions impacted any solution is still likely to be complicated, costly, and time-consuming to design and implement. AEMO notes it could take months simply to design and test any solution, and that this would necessitate a delay in the commencement of the RRN test rule.

To resolve this practical problem efficiently, AEMO has requested that its proposed rule change regarding affected participant compensation be made in a time frame that aligns with the change to the RRN test rule, and with minimal delay to that rule.¹⁰⁰ This will avoid AEMO having to waste resources developing a new source of intervention pricing run dispatch targets to calculate affected participant compensation.¹⁰¹

5.2.2

Stakeholder views

Stakeholders had mixed views on AEMO's request that the proposed rule change regarding affected participant compensation be made in a time frame that aligns with the change to the RRN test rule.

Engie considered it sensible to align the timing of the final rule with the related rules on application of the RRN test and on compensation thresholds.¹⁰²

Powershop acknowledged that failure to align the related rules could introduce significant unnecessary significant complexity and confusion into the market. It supported the proposed approach to co-ordinate these changes to avoid these complexities.¹⁰³

ERM suggested that AEMO could, with minor modifications to existing systems, undertake an intervention run to determine the dispatch distortion while maintaining the dispatch price outcome based on the dispatch or outturn run. ERM did not believe this would represent a significant cost impost for AEMO.¹⁰⁴

AGL stated that, to its knowledge, AEMO has never needed a set of counterfactual targets when intervention pricing was not triggered by an intervention. AGL's view was that counterfactual targets were not required when intervention pricing is not triggered.¹⁰⁵

100 AEMO, Rule change request, p. 2.

101 *ibid*, p. 6.

102 Engie, submission to consultation paper, p. 1.

103 MEA Group, submission to consultation paper, p. 2.

104 ERM, submission to consultation paper, p. 3 & 4.

105 AGL, submission to consultation paper, p. 2.

5.2.3 Commission's analysis and conclusions

The Commission has determined that this rule should commence at the same time as the RRN test rule and the compensation threshold rule. This will reduce implementation complexity for AEMO, confusion in the market and costs to consumers.

The Commission notes that, since the intervention pricing process is currently embedded within AEMO's market management system (MMS) it is difficult for it to be "switched off" and run in the background to calculate affected participant compensation. In response to the ERM suggestion that minor modifications could be made, AEMO has reiterated its view that it would be costly, complicated and time-consuming to implement the change to which ERM refers.

Counterfactual targets are needed in determining affected participant compensation as highlighted in AEMO's proposal. If AEMO were required to calculate affected participant compensation without NEMDE automatically producing counterfactual targets, it would be complicated and time-consuming. This would pose significant challenges for AEMO, noting that affected participant compensation needs to be calculated in accordance with timeframes set out in AEMO's intervention settlement timetable, and that interventions are currently occurring very frequently in South Australia.

5.3 Implementation

Schedule 1 of the final rule will commence on 20 December 2019 immediately after the *National Electricity Amendment (Application of the regional reference node test to the Reliability and Emergency Reserve Trader) Rule 2019* and will therefore amend the rules as amended by that rule. However, Schedule 1 will not apply immediately if a direction is in effect when the schedule commences.

This is because AEMO raised a concern with the AEMC about what would occur if it had issued a direction for a service for which a dispatch price or ancillary service price is not determined by the dispatch algorithm prior to the rule commencing, and this direction was still in effect post commencement. In this scenario, AEMO was concerned that it would be required to apply two different intervention pricing regimes to the same direction.

To address this concern, the final RRN test rule contains a transitional provision setting out that, if AEMO has issued a direction prior to the commencement date of Schedule 1 of the final RRN test rule, and that direction remains in effect on or after the commencement date, then, for so long as the direction remains in effect, old Chapter 3 (together with related definitions) will apply in respect of the AEMO intervention event corresponding with the direction. This means that the intervention pricing framework in Chapter 3 of the rules (as it stood immediately prior to commencement of Schedule 1 of the final RRN test rule) will apply to the AEMO intervention event corresponding with that direction for so long as that direction remains in effect.

The rules governing affected participant compensation and the threshold for participant compensation are also in Chapter 3 of the rules. As a result, the version of Chapter 3 in effect immediately prior to the commencement of Schedule 1 of the final RRN test rule will also

apply to these matters in relation to the AEMO intervention event corresponding with the direction so long as that direction remains in effect.

Finally, the *National Electricity Amendment (Five Minute Settlement) Rule 2017* (5MS Rule) will commence on 1 July 2021. The 5MS rule amends a number of the same clauses that are amended by the final rule, for example clause 3.9.3 of the NER and the Chapter 10 definitions that have been amended by the final rule. Therefore Schedule 2 of the final affected participant compensation rule (which will commence immediately after the *National Electricity Amendment (Application of the regional reference node test to the Reliability and Emergency Reserve Trader) Rule 2019*) includes clauses to preserve the changes made in the final rule and the changes made to the *National Electricity Amendment (Application of the regional reference node test to the Reliability and Emergency Reserve Trader) Rule 2019* post 1 July 2021. The clauses in Schedule 2 have also been updated to accept the changes made by the 5MS rule where appropriate, for example the replacement of *dispatch price* with *spot price*.

ABBREVIATIONS

AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
Commission	See AEMC
DI	Dispatch interval
FCAS	Frequency control ancillary services
IPWG	Intervention pricing working group
MCE	Ministerial Council on Energy
MLF	Marginal loss factors
NEL	National Electricity Law
NEM	National energy market
NEMDE	NEM dispatch engine
NEO	National electricity objective
RERT	Reliability and emergency reserve trader
RRN	Regional reference node
TNSP	Transmission network service provider

A SUMMARY OF OTHER ISSUES RAISED IN SUBMISSIONS

This appendix sets out the issues raised in submissions to the consultation paper that have not been addressed in the main body of this determination. The AEMC's response to each issue is also set out below.

Table A.1: Summary of other issues raised in submissions

STAKE-HOLDER	ISSUE	AEMC RESPONSE
Snowy Hydro	Any change to the market should not make intervention easier; rather, it should understand the impact of increasing the distortion on market participants. (p. 2)	The Commission does not share this concern, noting that the NER contain many requirements and principles governing the use of interventions. These include: the principle in clause 3.1.4 mentioned in section 5.1.3, the requirement to seek a market response and only intervene at the latest possible time, the requirement to minimise the cost of directions and to revoke directions as soon as they are no longer required (clause 4.8.9(b)), detailed reporting requirements etc.
Snowy Hydro	Snowy Hydro states that it disagrees with the premise of AEMO's rule change request (namely, that removing intervention pricing when AEMO intervenes to secure a non-market service also <i>requires</i> that compensation should not be paid to affected participants).	As discussed in section 1.2.3, the Commission's reasons in support of changing intervention pricing and affected participant compensation are similar but not identical. The Commission's view therefore differs somewhat from that of AEMO and Snowy Hydro.
Powershop	Powershop notes that the AEMC has determined to proceed on the basis that the proposed rule change is non-controversial. Although Powershop supports this approach in this case, it notes that merely because this rule change deals with a 'secondary process', it does not automatically follow that the rule change should be expedited. Powershop believe it is possible that changes to secondary processes	The Commission notes the views expressed by Powershop and Snowy Hydro. It will continue to apply section 96 of the NEL to determine the appropriate approach in each case, having regard to the circumstances in each case.

Rule determination

Application of affected participant compensation
19 December 2019

STAKE-HOLDER	ISSUE	AEMC RESPONSE
	<p>(such as compensation) could have a significant impact on the primary elements of the market, particularly if it impacts combined revenue expectations which impact investment decisions. In such cases, it requires an understanding of the likely changes to investor returns, to confirm that there would be no significant impact on the market.</p>	
Snowy Hydro	<p>Snowy Hydro does not agree with the Commission that AEMO's proposed rule change should be treated as a non-controversial rule change request under s96 of the National Electricity Law. The rationale for expediting the rule change appears to be one of convenience only, in order to align its commencement (if the rule is implemented) with the commencement of the final RRN rule. This is not a proper basis for expediting a rule change and is inconsistent with s96.</p>	
Powershop	<p>Powershop noted that the AEMC will need to consider (but presumably in the COGATI process and not this rule change) how these compensation and intervention principles will apply in a dynamic regional pricing environment. The RRN, and therefore the RRN test, will be less relevant if market solutions (i.e. changing dynamic prices behind a constraint) could solve issues which would currently fail the RRN test. This is a matter that needs to be addressed when, or if, the AEMC proceeds with the intended COGATI proposal and not as part of this rule change assessment. However, the possible impact of COGATI may be a matter that the AEMC considers when drafting this rule change, as it would be desirable if the drafting approach adopted could be maintained in a post-COGATI</p>	<p>The Commission will consider the implications of COGATI for intervention pricing and compensation through the COGATI process.</p>

Rule determination

Application of affected participant compensation
19 December 2019

STAKE-HOLDER	ISSUE	AEMC RESPONSE
	environment. (p. 4)	
AGL	AGL suggested that the question of when affected participant compensation should be payable was raised and answered in the Intervention Pricing Working Group (IPWG). AGL suggested that the IPWG's view was that when an AEMO direction, meeting the RRN test, injects energy into the market resulting in a distortion of price then compensation should be paid to affected participants. This directed energy often occurs when demand is low and wind output is high, resulting in low energy prices, which are typically below the operating costs of gas-powered generators.	<p>The Commission has reviewed the minutes of the 5 IPWG meetings and cannot find reference to any discussion as to the circumstances in which affected participant compensation should apply.</p> <p>The minutes do however show that the IPWG was of the view that, when additional energy is injected into the supply demand balance, intervention pricing should apply. This is a different question to whether affected participant compensation should also be payable.</p>

B LEGAL REQUIREMENTS UNDER THE NEL

This appendix sets out the relevant legal requirements under the NEL for the AEMC to make this final rule determination.

B.1 Final rule determination

In accordance with ss 102 and 103 of the NEL the Commission has made this final rule determination in relation to the rule proposed by AEMO.

The Commission's reasons for making this final rule determination are set out in section 4.4.

A copy of the final rule is attached to and published with this final rule determination. Its key features are described in chapter 4.

B.2 Power to make the rule

The Commission is satisfied that the final rule falls within the subject matter about which the Commission may make rules. The final rule falls within s. 34 of the NEL as it relates to operation of the national electricity market and the activities of persons (including Registered Participants) participating in the national electricity market or involved in the operation of the national electricity system.¹⁰⁶

B.3 Commission's considerations

In assessing the rule change request the Commission considered:

- it's powers under the NEL to make the rule
- the rule change request
- submissions received during first round consultation
- the Commission's analysis as to the ways in which the proposed rule will or is likely to, contribute to the NEO.

There is no relevant Ministerial Council on Energy (MCE) statement of policy principles for this rule change request.¹⁰⁷

The Commission may only make a rule that has effect with respect to an adoptive jurisdiction if satisfied that the proposed rule is compatible with the proper performance of Australian Energy Market Operator (AEMO)'s declared network functions.¹⁰⁸ The final rule is compatible with AEMO's declared network functions because it is unrelated to them and therefore it does not affect the performance of those functions.

¹⁰⁶ Section 34(1)(a)(i) NEL.

¹⁰⁷ Under s. 33 of the NEL the AEMC must have regard to any relevant MCE statement of policy principles in making a rule. The MCE is referenced in the AEMC's governing legislation and is a legally enduring body comprising the Federal, State and Territory Ministers responsible for energy. On 1 July 2011, the MCE was amalgamated with the Ministerial Council on Mineral and Petroleum Resources. The amalgamated council is now called the COAG Energy Council.

¹⁰⁸ Section 91(8) of the NEL.

B.4 Civil penalties

The Commission cannot create new civil penalty provisions. However, it may recommend to the COAG Energy Council that new or existing provisions of the NER be classified as civil penalty provisions.

The final rule does not amend any clauses that are currently classified as civil penalty provisions under the NEL or National Electricity (South Australia) Regulations. The Commission does not propose to recommend to the COAG Energy Council that any of the proposed amendments made by the final rule be classified as civil penalty provisions.

B.5 Conduct provisions

The Commission cannot create new conduct provisions. However, it may recommend to the COAG Energy Council that new or existing provisions of the NER be classified as conduct provisions.

The final rule does not amend any rules that are currently classified as conduct provisions under the NEL or National Electricity (South Australia) Regulations. The Commission does not propose to recommend to the COAG Energy Council that any of the proposed amendments made by the final rule be classified as conduct provisions.