



Australian Energy Market Commission

RULE DETERMINATION

NATIONAL ELECTRICITY AMENDMENT (AMENDING THE ADMINISTERED PRICE CAP) RULE 2022

PROPONENT

Alinta Energy

17 NOVEMBER 2022

RULE

INQUIRIES

Australian Energy Market Commission
GPO Box 2603
Sydney NSW 2000

E aemc@aemc.gov.au
T (02) 8296 7800

Reference: ERC0347

CITATION

AEMC, Amending the administered price cap, Rule determination, 17 November 2022

ABOUT THE AEMC

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

This work is copyright. The Copyright Act 1968 permits fair dealing for study, research, news reporting, criticism and review. Selected passages, tables or diagrams may be reproduced for such purposes provided acknowledgement of the source is included.

SUMMARY

The Commission has made a final rule on Amending the administered price cap (APC) in response to a rule change request received from Alinta Energy. The Commission considered the rule change to be urgent as it relates to a matter imminently prejudicing or threatening the effective operation of the wholesale exchange operated by AEMO and the safety, security and reliability of the national electricity system, and initiated the rule change request under an expedited process. The final rule is a transitional arrangement which changes the APC from \$300/MWh to \$600/MWh, from 1 December 2022 until the end of 30 June 2025. Any longer-term change to the setting would be made following the AEMC's consideration of the Reliability Panel's rule change request.

No change to the cumulative price threshold (CPT) is being made in this final rule.

The final rule is expected to reduce threats to NEM system security and reliability by facilitating the normal operation of the market during an administered price period (APP). This is also expected to improve cost outcomes for consumers.

The administered price cap (APC) is a tool to stabilise the market through periods of significant and extended volatility. It works by capping spot prices paid by market participants, and it is applied when volatile or high prices reach a cumulative price threshold defined by the rules. The APC should reduce risk and financial distress to market participants by limiting their spot exposure, and at the same time it should provide sufficient spot revenues for generators to cover their short-term costs and incentivise them to supply energy while the APC is in operation.

In 2022, due to international events and local fuel constraints, market fuel prices for peaking generators in the NEM have risen to unprecedented levels. This has caused some gas and liquid-fuelled generation to be more expensive to operate than the price allowed for under the existing level of the APC.

A transitional increase in the level of the APC from \$300 to \$600/MWh effective on and from 1 December 2022 will give the market more headroom to cover high fuel costs and to self-ration its limited energy supply. This will enable thermal generation, hydro and battery storage to operate in the market when it is needed most.

The level of the APC was a key factor in the suspension of the market in June 2022. Although there were other issues impacting security and reliability during that period, it is evident that the existing level of the APC is insufficient for its intended purposes. The level of the APC directly increased concerns regarding the security and reliability of the market.

The Commission's view is that the key benefit for market participants and consumers from raising the APC to a level sufficient for peaking generators to recover their costs, relates to improving security and reliability. The increase should enable generators to operate as normal during an APP helping to reduce the number of directions that constrain generators and limits efficient dispatch, and reduce the likelihood of market suspension and the

associated risks to security and reliability.

Minimising compensation costs from future APPs is also expected to improve cost outcomes for consumers.

The impact on the value of contract market instruments in future periods is expected to be minor. The operation of some generators, particularly those that offer cap contracts, may be impacted during future APPs if and when they occur. But these periods are expected to be rare, and the impact over time is not expected to be material. The higher APC is also intended to encourage more capacity to be available during an APP, acting to reduce prices and provide greater scope for pumped hydro and battery storage generators to take advantage of the greater price spread and operate in these periods. Nevertheless, some adjustments may be required from market participants to allow for the application of the new level of the APC during future APPs.

The Commission's primary consideration is the national electricity objective (NEO) and the extent to which the revised level of APC is more likely to better promote the long-term interests of consumers with respect to the price, quality, safety, security and reliability of electricity.

The Commission has considered stakeholder feedback in making its decision

The Commission undertook two rounds of consultation during the rule change process, the first following the publication of the consultation paper and the second following the publication of the directions paper.

Stakeholder feedback in support of making the rule has highlighted the benefits to security and reliability, noting the serious power system security risks when generation dispatch must be planned manually and implemented by directions. These stakeholders also noted that an increase in the level of the APC should lead to better outcomes for consumers by reducing the likelihood of another energy market suspension.

Stakeholder feedback opposing making key elements of the rule has pointed to potential increases in financial stress being placed on retailers and end users. The Commission has analysed the financial impact on retailers and end users and finds that the final rule is likely to minimise costs to retailers and end users through the minimisation of unhedgeable compensation costs. Where there are potential impacts on the cost of financial instruments going forward, the impacts are expected to be minor.

Stakeholders have also pointed to the impact on contract markets of a rapid change in the market price settings. The Commission has analysed the likely change in price outcomes in June's events if the higher level of APC had been applied and finds that the rare application of APP is unlikely to see a significant impact on existing contract positions. Furthermore, the APC should incentivise additional capacity to bid into the market during these periods.

We have also considered the final rule against the five assessment

criteria that are most relevant to this rule change request

Considering the NEO¹ and the issues raised in the rule change request, the Commission identified assessment criteria to assess the rule change against.

The final rule will help promote the NEO as it provides for the safer, more secure and more reliable operation of the market during APP by encouraging generators to remain available, supporting normal market dispatch, reducing the need for directions and minimising, as much as possible, the risk of future market suspension and threats to security and reliability.

The final rule, in providing for the ability of significant additional amounts of thermal and storage generation assets to operate as normal in the market during APP, will greatly facilitate the more efficient operation of the NEM in these periods.

The impacts of the rule on market participants in the wholesale spot market and the contract market are expected to be minor. APP events are rare, and even assuming the events of June 2022 were to be repeated, the impact on contract values, if fully factored in by the contract market in future periods, is likely to be small. Furthermore, the higher APC would provide greater incentives and opportunities for thermal generation, with costs higher than the \$300/MWh APC, and energy storage assets, utilising variable energy pricing outcomes, to operate as normal in the market. Together these would likely see more efficient spot price outcomes and lower contract prices as a result.

The impact on consumers is expected to be beneficial with compensation costs minimised in any future APPs, and any small increase in wholesale price or contract market outcomes that might occur, offset by the extent of retailer and end-user hedging of load.

By changing the level of the APC for a transitional period from 1 December 2022 until 30 June 2025, the rule maintains the level of the APC from the date of implementation until the Commission considers the rule changes containing the Reliability Panel's recommendations. Rule changes implementing the Reliability Panel's recommendations will apply new levels from 1 July 2025 until 30 June 2028. Subsequent reviews or rule changes would apply after 30 June 2028. This provides for predictability and stability in a key market setting over these time frames.

The final rule will introduce a temporary increase in the APC from \$300/MWh to \$600/MWh from 1 December 2022 until 30 June 2025

The final rule is a transitional rule that changes the APC from \$300/MWh to \$600/MWh, on and from 1 December 2022 until the end of 30 June 2025, following which, any change to the longer-term setting of the APC would be made following the AEMC's consideration of the Reliability Panel's rule change request.

The effectiveness of the operation of the rule will be examined through the Commission's subsequent consideration of the Reliability Panel's rule change request. This is likely to occur

¹ Section 88 of the NEL.

in the first half of 2023.

No change to the CPT is being made in this final rule.

The final rule will be effective from 1 December 2022

The final rule will be implemented in market operations by AEMO effective as of 1 December 2022 and apply in any Administered Pricing Period triggered from that time. It will be effective in market suspension pricing schedules from the billing period commencing 18 December 2022.²

² AEMO must publish the market suspension pricing schedules, to apply in the event that the market is suspended, at least 14 days prior to the first day to which the schedule relates (Clause 3.14.5(e)(3) of the NER). The first market suspension pricing schedule to be published following the commencement of the rule will be on 3 December 2022, for the billing period commencing 18 December 2022.

CONTENTS

1	Final rule determination	1
1.1	What does the final rule do?	1
1.2	How did stakeholder feedback shape the Commission's final determination?	1
1.3	Interactions with other reforms and processes related to the recent APP in June 2022	6
1.4	Issues to be considered through other processes	7
2	The final rule will contribute to the national electricity objective	11
2.1	Considering the final rule against the assessment criteria	12
2.2	The final rule is in the long term interests of consumers	13
2.3	The final rule promotes power system safety, security and reliability	14
2.4	The final rule promotes market efficiency	15
2.5	The final rule is expected to have a positive impact on the market	16
2.6	Predictability and stability	17
3	Elements of the final rule	18
3.1	The final rule increases the APC to \$600/MWh for an interim period	18
3.2	Transitional arrangements for the AEMC compensation guidelines	19
3.3	Implementing the final rule	19
	Abbreviations	20
	APPENDICES	
A	Rule making process	21
A.1	Alinta Energy's rule change request	21
A.2	Consultation process	21
B	Background and context	23
B.1	Recent issues with the application of the APC and operation of the CPT	23
B.2	Reliability standards and settings review	24
C	Analysis	26
C.1	Contract market impacts	26
C.2	Compensation framework and costs associated with June event	28
C.3	Retailer impact summary	30
D	Legal requirements under the NEL	33
D.1	Final rule determination	33
D.2	Power to make the rule	33
D.3	Commission's considerations	33
D.4	Making electricity rules in the Northern Territory	34
D.5	Civil penalties	34
D.6	Conduct provisions	35
D.7	Review of operation of the rule	35
E	Summary of other issues raised in submissions	36
	TABLES	
Table C.1:	Increase in hedge contract payouts across NEM jurisdictions	26
Table C.2:	Compensation costs associated with June event	29

Table C.3:	Retailer impact summary	30
Table C.4:	Retailer impact summary — break-even hedging levels	32
Table E.1:	Summary of other issues raised in submissions	36

FIGURES

Figure C.1:	Amount of time price changed if APC was \$600/MWh during June event (%)	27
Figure C.2:	Change in the PDC from changing the APC from \$300/MWh to \$600/MWh for FY2022	28

1 FINAL RULE DETERMINATION

This final determination is to make a final rule to increase the level of the APC from \$300/MWh to \$600/MWh effective on and from 1 December 2022 until the end of 30 June 2025. Following recent increases in fuel costs for generators in the NEM, some gas and liquid-fuelled generation is more expensive to operate than the price allowed for under the existing level of the APC. The rule will therefore improve the incentive for generators, storage and other market participants to participate normally in the market during an APP such that security and reliability are improved, and unhedgeable compensation costs are minimised if the APC is applied.

This chapter contains:

- An overview of the final rule — see section 1.1
- A summary of how stakeholder feedback has shaped the final rule — see section 1.2
- An overview of the interactions between this rule determination and other current and upcoming reforms — see section 1.3
- Issues to be considered through processes separate from this rule determination— see section 1.4

Further detail on the final rule can be found in chapter 3 below.

The Commission's assessment of this final rule determination against the national electricity objective is set out in chapter 2.

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

1.1 What does the final rule do?

The final rule made by the Commission is attached to and published with this final rule determination. The key feature of the final rule is a transitional rule to change the APC from \$300/MWh to \$600/MWh, on and from 1 December 2022 until the end of 30 June 2025.

1.2 How did stakeholder feedback shape the Commission's final determination?

The Commission invited formal stakeholder submissions through the publication of the consultation paper on 4 August 2022 and the directions paper on 29 September 2022. The rule-making process has also been informed by discussion with AEMO and other key industry stakeholders, and input from the public forum held by the AEMC on 16 August 2022. Further detail on the rule-making process is included in Appendix D.

1.2.1 What is the problem the rule change is trying to solve?

A majority of stakeholder submissions agreed with the proponent that the rule change addresses the threat to security and reliability posed by the current level of APC. AEMO, Shell, the Australian Energy Council (AEC) and the South Australian Government all pointed

to the key role the APC plays in the secure and reliable operation of the market during an APP.³

Some stakeholders expressed the view that the rule change does not address what they considered the root cause of the problems seen in the market in June 2022. They outline this as being issues with the operation of compensation mechanisms during this time. A number of stakeholders stated that a lack of clarity and simplicity in the application of the compensation mechanisms adversely affected the June 2022 events and that improvements in the approach to compensation would mean that the current APC was adequate. Enel X and the Energy Users Association of Australia (EUAA) considered that together, the APC and the compensation regimes ensure that all generators receive sufficient remuneration to cover their costs without affecting existing market arrangements such as cap contracts.⁴ Rather than change the APC, they state that the Commission should review and update the compensation processes to ensure all participants are clear on their application. In response to the issues raised by Enel X and EUAA, the Commission has considered the \$205m of compensation and contract payments claimed for which AEMO has received claims,⁵ the administered pricing compensation claims received by the AEMC which have not yet been assessed, and the potential impacts of a change in the APC on the contract market.

Pacific Energy noted that compensating a few expensive generators will be cheaper than those generators setting the marginal price for all generation in the NEM.⁶

In response to this feedback, the Commission recognises that the APC played a major role in shaping the June event, but other factors and solutions are also relevant. While the presence of other potential factors complicated the event, attending to those other issues does not alter the situation that the current level of the APC is insufficient for its intended purpose.

1.2.2

What is an appropriate level of APC?

Delta, the AEC, ECA, Shell Energy, Origin Energy and AEMO were in favour of increasing the APC to the level proposed by Alinta Energy in the rule change request. These stakeholders stated that to cover the Short Run Marginal Cost (SRMC) of most gas generators and protect the market, the APC must be raised to \$600/MWh and that this will, in turn, protect the security of the system and help to alleviate the risk of another market suspension.⁷

Some stakeholders highlighted that, unlike the CPT, the APC has never been indexed to inflation, and that if it had been indexed, the current level would potentially be close to the level proposed in the rule change request.⁸

3 Submissions to consultation paper: AEMO, p. 2; Shell, p. 1; AEC, p. 1; South Australian Government, p. 1.

4 Submissions to consultation paper: Enel X, pp. 1-3; EUAA, p. 3.

5 Note that the contract payments refer to Reliability and Emergency Reserve Trader contracts for activated demand response. The amount of compensation awarded may be less than the amount of compensation claimed. See [AEMO's June 2022 NEM Events: Compensation Update \(15 August 2022\)](#).

6 Pacific Energy Trading, submission to the consultation paper, p. 2.

7 Submissions to directions paper: Delta, p. 1; AEC p. 1; Shell, p. 1; Origin, p. 1; AEMO, p. 1.

8 Submissions to consultation paper: South Australian Government, p. 2; Arrow energy, p. 2; AGL, p. 3.

Snowy Hydro and Enel X agreed that a higher level might be appropriate, but they considered that any change to the APC should not occur for up to three years, to allow existing contract instruments and positions to end and allow the contract market to resettle.

The Australian Financial Markets Association (AFMA) supported the new level but noted that it should not, in their opinion, drop down to either the old level or another different level once the sunset period ends. AFMA also observed that a short implementation period for an increase to the APC would affect the financial market and that sellers of \$300 cap instruments would be most affected during rare APPs.⁹

Consumer groups such as the ECA supported the proposed change. Consumer groups such as the EUAA and PIAC noted that amending the APC may be appropriate, but in the absence of further modelling and given the potentially significant impact on consumers, they are unable to support the rule change.¹⁰

The interdependence of the gas and electricity market settings was raised by several stakeholders as a relevant consideration.¹¹ AEMO highlighted that market conditions leading up to and during June 2022 demonstrated that where the gas and electricity APCs are not aligned, participants have a financial incentive to either avoid buying gas and reduce the available capacity in the electricity market, or inflate demand for gas for power generation to sell into the electricity market. AEMO also highlighted that where only one market is operating at the APC, the inconsistency of the market value of the commodity will result in market distortions.¹²

AGL, Arrow and AEMO indicated that it may be appropriate to link the APC to some form of indexation.¹³ Indexation of the APC or development of a more complex dynamic APC has not been considered as part of this rule change and will be considered by the Reliability Panel in an upcoming review of the form of the reliability standard.

The Australian Aluminium Council and Blue Pacific Energy Trading do not agree the proposed rule change is an effective solution to the problem.¹⁴

In response to the positions presented by stakeholders, the Commission performed additional modelling on spot price outcomes by re-running the June 2022 events with a higher APC to estimate the potential impact on the contract market for both hedges and caps. While that modelling shows only small changes to the costs of contracts based on changes to the spot price, it does not simulate potential changes to dispatch as a result of changes to generator bidding behaviour or account for an additional 3,500-5,900 MW of capacity that would be expected to be able to recover its variable costs under the new APC.¹⁵

9 AFMA, submission to consultation paper, pp. 2-4.

10 EUAA, submission to directions paper, p. 1. PIAC, submission to consultation paper, p. 1.

11 Submissions to consultation paper: AEMO, p. 2; South Australian Government, p. 2; Australian Aluminium Council, p. 2.

12 AEMO, submission to consultation paper, p. 3.

13 Submissions to consultation paper: AGL, p. 3; Arrow, p. 2.

14 Submission to consultation paper: Australian Aluminium Council, p. 1; Blue Pacific Energy Trading, p. 3.

15 The figures of 3,500 MW and 5,900 MW of additional generation relate to capacity with SRMC values greater than \$300/MWh but less than \$600/MWh that should be able to recover these costs during an APP when the APC has been applied based on the analysis performed for, and reported in table 3.1 in the directions paper.

From the analysis and gas futures information that shows that gas prices are expected to remain high until 2025, the Commission considers that an APC of \$600/MWh is appropriate for an interim period. While this is higher than the \$500/MWh figure recommended by the Reliability Panel in the 2022 Reliability Standard and Settings Review (RSSR) to apply from 1 July 2025, it is justified over the period in which the final rule is being implemented due to the greater possibility of gas prices reaching, and for short periods potentially exceeding, the gas APC during the rule's operation.

1.2.3

Are any consequential changes required to the CPT?

Most stakeholders suggested that changes to the CPT in this rule change process are not necessary. Stakeholders did not see that the CPT was either the cause of the problems experienced with the market in June 2022, or materially linked to changes to the APC.¹⁶ However,

Delta stated that the cumulative price in regions that are exporting to a region already in APP should be amended.¹⁷

Delta and Shell both noted a need to change the calculation of the cumulative price and suggested changes or clarifications to the calculation of cumulative prices in regions exporting into a region where the APC applies.

They argue for a new clause 3.14.2(e)(3) that states when a region has its spot price scaled back and where an APP has not yet been declared, the price used for the calculation of the CPT "shall be the regional reference price" and not the dispatch price (as is presently used). This would mean that a region not in an APP, would have access to its full CPT, through settlement, prior to the APC being applied.¹⁸ Delta considered that the current arrangements dampen the investment signal intended by the Reliability Panel in exporting regions to regions under APC.¹⁹ Both Delta and Shell considered that none of the other regions would have entered an APP if their recommended change was adopted.

AEMO, however noted that changes to the calculation of the CPT are best left to the Reliability Panel and the formal rule change process.²⁰

The Commission in response to this feedback considered that temporary changes to the level of the APC do not necessitate changes to the level of the CPT at the current time.

The Commission has determined that the method for calculating the cumulative price, and any longer-term changes, are best considered in subsequent Reliability Panel reviews or the AEMC rule change process to consider and implement the Reliability Panel's recommendations.

16 Submissions to consultation paper: Shell, p. 2; Origin, pp. 3-4; Energy Australia, p. 2; AEMO, p. 6.

17 Delta Electricity, submission to consultation paper, p. 3.

18 Submissions to directions paper: Delta Electricity, p. 2; Shell, p. 2.

19 Delta Electricity, submission to directions paper, p. 1.

20 AEMO, submission to directions paper, p. 3.

1.2.4 What period should the change to the APC apply for?

Stakeholders were generally supportive of maintaining a new level of APC until the RSSR recommendations are implemented on 1 July 2025.²¹ Some stakeholders cautioned that a change to the level of APC implemented immediately may impact the contract market.²²

Engie, Enel X, Blue Pacific Energy Trading and Snowy Hydro questioned the timing of implementation. They did not support the rapid introduction of the new level, with Snowy noting the increase should occur from January 2025.²³

The AEC noted that it would be preferable that the new level were in place until the new levels recommended by the Reliability Panel are implemented as determined through a rule change process.²⁴ Origin also noted that it would be prudent to provide a minimum notice period of at least one month prior to the change taking effect to allow participants time to manage any disruption to existing contracts.²⁵

The Commission notes the impact on existing contracts and the potential for market participants to need to adjust their portfolio positions to allow for the new level of the APC. However, the Commission also notes the urgent nature of the rule change in addressing the threats to security and reliability posed by the current level of the APC. The Commission has assessed that any delay in the implementation of the rule would delay addressing these threats to security and reliability.

In response to this feedback and analysis of the drivers of a need for a higher APC, and their duration, as well as consideration of the Reliability Panel's recommendations and the timing of implementation of those recommendations and the need for predictability and stability in the market settings, the Commission has made a final rule to implement the revised level of APC on and from 1 December 2022 until the end of 30 June 2025.

1.2.5 The likely benefits and costs of the rule

Most stakeholders believe that the benefits to power system security and market stability achieved by amending the APC in line with the proposed rule change outweigh the costs.²⁶

Snowy Hydro and Blue Pacific Energy Trading argue for a phased implementation over an extended period to allow for a graduated impact on contract market participants to prevent significant potential damage to the financial position of cap sellers.²⁷ Some stakeholders believe that the benefits of the proposed changes do not outweigh the costs and that there will be disproportionate benefits to generators at the expense of higher costs to retailers and consumers.²⁸

21 Submissions to consultation paper: Origin, p. 3; AEMO, p. 6.

22 Submissions to consultation paper: Snowy Hydro, p. 2; Energy Australia, p. 3; Engie, p. 2.

23 Submissions to directions paper: Snowy Hydro, p. 1; Engie, p. 1. Submissions to the consultation paper: Enel X, p. 2; Blue Pacific Energy Trading; p. 4.

24 AEC, submission to directions paper, p. 1.

25 Origin, submission to directions paper, p. 1.

26 Submissions to consultation paper; AEMO, p. 2; AGL, p. 3; South Australian Government, p. 2; Delta Electricity, p. 2; Origin, p. 3; Shell Energy, p. 2; ECA, p. 3.

27 Snowy Hydro, submission to the consultation paper, p. 2.

28 Submissions to consultation paper: EUAA, p. 3; Enel X, p. 2; PIAC, p. 3; Blue Pacific Energy Trading, p. 4.

Snowy Hydro stated that they anticipate a \$100AUD million loss if the June 2022 event was repeated. Further, the Australian Aluminium Council states that the impact on large industrial users and consumers is negative due to the misalignment of the gas and electricity APC and because this rule change does not solve the problems that caused the June event.²⁹

The Commission's analysis indicates that the overall impact on the contract market from a higher APC should not be significant when considered in the context of wider wholesale market changes and increased fuel costs. Based on Commission analysis of the events which occurred during June 2022 prices during an APP are unlikely to be dominated by prices moving to the higher APC continuously. The Commission's analysis of the June 2022 event showed, all other things being equal, that prices would only reach the higher cap level a fraction of the time. Furthermore, the intention of a higher APC is to encourage generators to continue to participate in normal market dispatch during the APP and provide more effective price signals for battery and hydro storage operation. A significantly different market outcome may have occurred during the June 2022 event had the APC been sufficient to encourage generating capacity with variable operating costs greater than \$300/MWh and less than \$600/MWh and storage to participate.

The Commission considers that the key benefit for market participants and consumers relates to security and reliability by encouraging generators to operate as normal during an APP which helps to reduce the number of directions that constrain generators and limits efficient dispatch and reduces the likelihood of market suspension and the associated risks to security and reliability.

In relation to the impact on retailers and consumers of electricity, the Commission's analysis indicates that compensation costs from any future period of volatility are more likely to be minimised with the final rule in place. In the near term, retailers and consumers who are prudently hedged would see any higher prices incurred during APP, as a result of the application of a higher APC, insured by virtue of the contracts they have in place. In subsequent contracting time-frames, the impact of the proposed change on the cost of future contracts is expected to be minimal. Therefore, the Commission considers that the final rule will contribute to the achievement of the NEO.

1.3 Interactions with other reforms and processes related to the recent APP in June 2022

This rule change was initiated following the recent application of the APC in the APP from 12 to 15 June 2022, which sparked a range of actions from market bodies that have been considered, and may be impacted by, this rule change. This includes AEMO's management of the power system during APPs, the AEMC's administered pricing compensation process, and the Reliability Panel's upcoming rule change request from its 2022 RSSR.

²⁹ Snowy Hydro, submission to directions paper, p. 1.

1.3.1 **AEMO's management of the power system during administered price periods**

Increasing the APC to \$600/MWh temporarily will support AEMO in managing the power system during APPs which typically occur during unpredictable and extreme market circumstances. Significant volumes of capacity withdrew from the market during the June 2022 APP, prompting AEMO to direct generators outside the normal market dispatch process, the scale of which AEMO later determined made continued market operation impossible. This rule change intends to reduce the likelihood of significant capacity withdrawing during possible future APPs where fuel prices are high, thereby supporting AEMO in operating the market during extreme conditions and avoiding the need to declare a market suspension.

1.3.2 **The AEMC's administered pricing compensation process**

While the final rule will not change the administered pricing compensation claims that the AEMC is currently assessing, the rule aims to reduce such large-scale reliance on the compensation process. The existing level of the APC reduced incentives for a number of generators to continue supplying the market which led to significant numbers of compensation claims at a scale the AEMC had never received before. Prior to June 2022, there had only been one administered pricing compensation claim from Synergen Power in 2010.³⁰

1.3.3 **2022 Reliability Standard and Settings Review**

The Reliability Panel completed its 2022 RSSR on 1 September 2022 with a final recommendation to increase the APC to \$500/MWh for the review period from 1 July 2025 to 30 June 2028.³¹ While this rule change considers a more immediate timeframe and is independent of the Reliability Panel's recommendation, the AEMC will consider a separate rule change on the Reliability Panel's recommendation.³²

1.4 **Issues to be considered through other processes**

A number of additional issues were raised during this rule change process which, given their complexity, the Commission considers are more appropriately addressed in subsequent processes. This rule change was initiated as an urgent rule change request to resolve issues imminently prejudicing the safe, secure and reliable operation of the NEM.

These issues include:

- How potential changes to the gas APC are to be managed, where they occur, subsequent to the making of this rule.
- Whether changes should be made to the timing of gas APC reviews.
- Whether the APC should have annual indexation or a link to gas applied.
- Whether the regional override price used in the calculation of the cumulative price during an APP should be capped to allow the market to exit an APP.

³⁰ The AEMC's final compensation claim decision is [available here](#) on the AEMC website.

³¹ Reliability Panel, *2022 RSSR Final Report*, 1 September 2022, [available here](#) on the AEMC website.

³² See Appendix B for further information on the role of the Reliability Panel and its 2022 RSSR.

- Whether the calculation methodology for the cumulative price for a region exporting to another region already in an APP should be changed.

1.4.1 Implications of later changes to the gas APC

In submissions to the consultation paper, some stakeholders commented that the real issue at stake is the gas APC and that the gas APC should change. The Aluminium council stated that there is a mismatch in price caps, stating the APC itself is not a problem, the real issue is the availability of gas and gas price levels. The Australian Aluminium Council proposed an alternative solution to the rule change may be amending the gas APC from \$40/GJ to \$20/GJ.³³

Notwithstanding arguments for lower or revised gas market settings, the Commission notes that the level of the gas APC is outside the scope of this rule change proposal and is being considered as part of AEMO's current Gas Market Parameters Review. This review is expected to be completed in February 2023.³⁴ Any changes to the gas market parameters arising from AEMO's Gas Market Parameters Review for the STTM market will need to be considered by the AEMC through a rule change. Any changes to the gas parameters that bear on the electricity APC could be considered in that rule change.

1.4.2 Timing of gas APC reviews

In the 2022 RSSR final report, the Reliability Panel noted that several stakeholders in the review suggested changing the form of the APC from a fixed value to a dynamic mechanism in recognition of the link between gas and electricity prices. The Reliability Panel recommended that a follow-up review consider the form of the reliability standard and links with the gas APC to ensure it is addressed as the market continues to transition.

AEMO is required under the National Gas Rules to conduct a review of the gas APC in addition to other parameters, no later than 6 months after the completion of the reliability standards and settings review under clause 3.9.3A of the NER.³⁵

Sequential electricity reviews isolated from reviews into gas parameter settings may present problems where the market is undergoing significant changes and the respective settings are interdependent, particularly through a transitional period where gas generation is critical to outcomes in the NEM.

The Commission notes that the Reliability Panel is recommending a follow-up review to the 2022 RSSR and has indicated that such a review may include consideration of links with the gas APC.³⁶

33 Aluminium council, submission to consultation paper, p. 2.

34 AEMO Gas Market Parameter Review 2022. The review covers the DWGM and STTM and is being conducted under rule 492 of the National Gas Rules for the STTM parameters, in accordance with the standard consultative procedure detailed in rule 8 of the NGR. There is no rule requirement for the review of the DWGM market parameters, but AEMO has decided to review them in conjunction with the STTM market parameters review. A final decision is set for 16 February 2023.

35 Rule 492(1) of the National Gas Rules.

36 Final Report Reliability Panel, *Reliability Standard and Settings Review*, 1 September 2022.

1.4.3 Annual indexation of the APC

Stakeholders raised issues in relation to the indexation of the level of the APC longer-term and the interaction between electricity and gas settings. AGL stated that longer-term it may be appropriate for the APC to be linked to both inflation and fuel prices.³⁷ Arrow noted support for indexation of the APC to gas benchmarks such as the STTMs or DWGM, with a defined heat rate and a periodic review mechanism similar to the CPT and MPC.³⁸

The South Australian Government noted that while it is beyond the scope of this rule change, there is a need for a broader review of the interaction between the market settings. They contend that there is a need for a more flexible framework that allows the APC to be adjusted in the event of unforeseen or extreme market disruptions that would otherwise result in the market ceasing to operate as intended.³⁹

Considerations of the indexation of the APC to CPI, gas prices or any other basis for indexation is best considered by the Reliability Panel, given the complexity of any change involved, and the longer-term impact of such a change.

The Reliability Panel, in its final RSSR report in 2022, recommended that dynamic changes to the APC, for example, links between gas and electricity prices, be further considered in a follow-up review. This follow-up review would consider the issue in the context of a market in transition and if it determined that the form of the APC should change, then it would also ensure there is an appropriate period of adjustment.⁴⁰

1.4.4 Calculation and capping of the cumulative price during an APP

Stakeholders in response to the consultation paper raised the issue that the calculation of the cumulative price in each region may need to be reviewed.

AGL raised the issue in response to the consultation paper that it may be appropriate to cap the regional offer price during the APP to ensure the APP is not protracted.⁴¹

This issue concerns the ability of each region to exit its own APP, rather than the issue noted by Delta, that regions exporting into a region already in APP do not have access to the full CPT investment signal under the current arrangements.

Delta Electricity state that the calculation of the CPT should be amended. Delta notes that currently, AEMO uses dispatch prices and the Regional Override Price (ROP) to calculate the cumulative price. The ROP and the Regional Reference Price (RRP) are typically the same when the market is not under administered prices so dispatch and settled prices are not different under normal conditions. However, in a region not in an APP, but that is exporting to a region in which the APC is applied, the ROP is still used for dispatch, but the RRP is scaled

37 AGL, submission to consultation paper, p. 3.

38 Arrow, submission to consultation paper, p. 2.

39 South Australian Government, submission to consultation paper, p. 2.

40 Reliability Panel, 2022 Review of the reliability standard and settings, summary, p.vii.

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

down. So the exporting regions' CPT can be exceeded even though those higher prices causing the CPT to be exceeded have not been realised in settlement.⁴² This reduces the revenue that generators in the exporting region receive as the generators in that region only receive the scaled price rather than the price that may ultimately contribute to exceeding the CPT in that region. Delta notes that the rule change provides an opportunity to amend the rules to ensure a more efficient and equitable market design for calculating how the CPT is reached, regardless of whether other regions have already reached their CPT.

The Commission notes that both these suggested changes are best addressed in the ongoing work of the Reliability Panel and any work by the AEMC to consider the Reliability Panel's recommendations.

⁴² Delta Electricity, submission to consultation paper, p. 3.

2 THE FINAL RULE WILL CONTRIBUTE TO THE NATIONAL ELECTRICITY OBJECTIVE

This chapter explains why the Commission has made its final determination and the accompanying final rule. It outlines:

- why we must consider the NEO
- the assessment framework for this rule change and how the final rule meets the assessment criteria.

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).⁴³ This is the decision making framework that the Commission must apply.

The NEO is:⁴⁴

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.

See Appendix D for more detail on the legal requirements that relate to the Commission's decision.

RSSR Principles

The Commission has also considered the RSSR Guidelines which set out the principles, assumptions, and criteria with which the Reliability Panel must comply with when conducting its reviews. The general assessment principles include:

- allowing efficient price signals while managing price risk
- delivering a level of reliability consistent with the value placed on that reliability by customers
- providing a predictable and flexible regulatory framework.⁴⁵

When undertaking each review of the reliability standard and settings, the Reliability Panel is guided by the general assessment principles to meet the NEO. It is therefore relevant for the Commission to consider the principles set out in the RSSR Guidelines when making rules with respect to the reliability settings.

⁴³ Section 88 of the NEL.

⁴⁴ Section 7 of the NEL.

⁴⁵ Reliability Panel, *Review of the reliability standard and settings guidelines*, Final guidelines, 1 July 2021, p. 6.

There are also requirements in the NER that collectively relate to the assessment of the reliability standard and each of the settings.⁴⁶ When undertaking an assessment of the level of APC, the Reliability Panel considered the matters outlined in the NER and factors including but not limited to whether there had been any:

- Significant changes in the typical short-run marginal costs of generators in the NEM, and
- Any compensation claims since the last review.⁴⁷

2.1 Considering the final rule against the assessment criteria

In assessing Alinta's rule change request, the Commission must determine whether changes to the NER to address the level of the APC are likely to promote the NEO. The Commission assessed the rule change request using the following criteria:

- **Outcomes for consumers:** Will consumers face lower costs because of changes to the APC?
- **Safety, security and reliability:**
 - How would the rule change enable the reliable, secure and safe provision of energy at an efficient cost to consumers over the long term?
 - How would the rule promote efficient operation and use of, and investment in, generation facilities, load, storage, networks and other system service capability?
- **Market efficiency:**
 - **Productive efficiency:** does the rule change facilitate least-cost dispatch to meet demand?
 - **Allocative efficiency:** does the rule change enable prices that facilitate the allocation of electricity to its highest-valued uses?
 - **Dynamic efficiency:** does the rule change promote the long-term interest of consumers through incentives to meet demand as the market evolves and new technologies develop?
 - **Transparency:** Does the rule change provide market participants with transparency on prices during administered price periods?
 - **Risk allocation:** Does the rule change allocate risk to the parties that are best suited to manage risk using existing instruments?
 - **Incentives:** Does the rule change encourage operation and settlement where prices reflect SRMC of electricity generation?
- **Implementation:**
 - **Cost and complexity:** Will a change in the APC lead to ongoing or administrative costs to market participants, consumers and market bodies?
 - **Timing and uncertainty:** What are the interactions between this rule change and the next RSSR in 2025/26?

⁴⁶ Clause 3.9.A(e) of the NER.

⁴⁷ Reliability Panel, Review of the reliability standard and settings guidelines, Final guidelines, July 2021, pp. 4-9.

- **Impact analysis:** Which market participants will be affected by a change in the APC level?
- **Principles of good regulatory practice:**
 - **Predictability and stability:** how do the proposed changes provide the market with predictability and regulatory stability?

The rest of this section explains why the final rule better promotes the long-term interests of consumers when assessed against the above criteria.

2.2 The final rule is in the long term interests of consumers

AEMO is responsible for power system security in the NEM and must operate the power system in a secure operating state to the extent practicable and take all reasonable actions to return the power system to a secure state as soon as practical following a contingency event in accordance with the NER.⁴⁸ Increasing the APC is designed to encourage generators to continue to participate in the normal dispatch process which will facilitate optimal market dispatch and reduce the potential for constraints that may limit AEMO's ability to effectively manage security and reliability. This should enable the power system to remain in a secure operating state with consumers at less risk of being exposed to load shedding.

In relation to costs, retailers and consumers will benefit from a higher APC due to reductions in unhedgeable compensation costs. AEMO has determined that the market costs of directions alone are in the order of \$200 million AUD for the June 2022 event. The full extent of the compensation costs has not yet been determined. Appendix C.2 provides an explanation of the compensation that will need to be recovered from consumers from the events that occurred in June 2022.

Compensation costs will be passed through to consumers. A higher APC, to the extent that it avoids the need for administered pricing compensation, will avoid these costs. This saving needs to be assessed against any impact that might result from the higher level of the APC on potential spot price outcomes during an APP and contract markets. In general, a lower APC favours an under-hedged retailer whereas a higher APC favours a more prudently hedged retailer. Appendix C.3 shows the potential impact on a retailer of changing the APC from \$300/MWh to \$600/MWh and the level of hedging at which a retailer or consumer would be better off under a higher APC.

A higher APC should facilitate more cost-reflective bidding from generators. This should reduce costs for consumers compared to the scenario in which generators are directed to stay on at a lower APC and require compensation to recover their costs of operation. The total cost passed through to retailers should be lowered through efficient cost-based dispatch and reduced compensation costs.

Reductions in scarcity pricing may result from more thermal generation being available to operate during an APP, but also, assuming that more typical price volatility occurs from dispatch with fewer or no directions, from the greater opportunity for pumped hydro and

⁴⁸ Refer to AEMO's functions in section 49 of the National Electricity Law and the power system security principles and responsibilities in clauses 4.2.6, 4.3.1 and 4.3.2 of the NER.

battery storage to participate through their charge and discharge cycles. The Reliability Panel noted in its recent recommendation that an increased level of APC would improve opportunities for storage to participate during an APP.⁴⁹ Notably, in the June 2022 event, it has been reported that price signals for battery and pumped hydro to charge and discharge were largely absent.

2.3 The final rule promotes power system safety, security and reliability

The key benefit of increasing the APC relates to its impact on security and reliability. A higher APC is designed to encourage generators to continue to operate through normal market dispatch and allow spot prices to reach levels sufficient to cover the costs of generators using fuels for which prices have risen significantly or which may be scarce.

An APC that is set too low means it is not economic for some thermal generators, with variable costs above the APC, to bid and be dispatched into the market as the spot price they would receive for generating would be less than their costs. In recent APPs, many generators bid unavailable to avoid uneconomic dispatch, requiring AEMO to issue directions to these units. Directions are instructions from AEMO to generators to operate at particular levels of electricity output. When this occurs, the output of those generators is fixed by AEMO at a particular level rather than allowing the National Electricity Market Dispatch Engine (NEMDE) to optimise their dispatch using their bids and network and security constraints as would occur during normal dispatch.

Fixing the output of the generators that are needed but have bid unavailable increases the number of constraints in NEMDE and reduces the scope for optimisation for feasible and secure market outcomes. In some cases, the only feasible dispatch solution may require some constraints to be violated. A constraint violation may result in equipment exceeding its design limits or departing from the safe operating envelope. This increases the likelihood of the market operating outside of the safe operating envelope, threatening the security of the electricity system and increasing the likelihood of blackouts.

AEMO's submission to the consultation paper notes that relying on interventions to meet demand means that many of the automated dispatch and pre-dispatch processes cannot provide effective market signals, and the wholesale exchange cannot be effectively administered. AEMO states that this presents very real threats to the security and reliability of the power system.⁵⁰

Furthermore, while generators are not offering their capacity into the market through normal bidding processes NEMDE is likely to produce high pre-administration prices that keep the cumulative spot price above the CPT, thereby continuing the APP. AEMO's *NEM Market Suspension and Operational Challenges in June 2022* report noted:

That the underlying drivers of some generators' reduced market availability, linked to

⁴⁹ Final Report Reliability Panel, Reliability Standard and Settings Review, 1 September 2022.

⁵⁰ AEMO, Submission to the consultation paper, p. 2.

capped spot prices and high underlying costs, appeared unlikely to be resolved quickly. Critical energy shortages at a number of coal and gas fired generators, alongside additional directions for pumped hydro to ensure capacity was available for extended periods of peak demand, further complicated the formulation of directions. As the cumulative price in all mainland regions continued to rise due to extremely high underlying dispatch prices, there was no near-term prospect of exit from administered pricing.

Important features of the wider market processes such as the Projected Assessment of System Adequacy and pre-dispatch projections, which are integral to participants making well-informed market offers reflecting constraints such as limited fuel or water availability, and to AEMO in assessing reserves and reliability, were compromised by the extent of directions required and the fact these could not all be adequately represented in these projections well ahead of dispatch time. This in turn increased the level and complexity of directions required, reinforcing the original problem.

In essence dispatch was moving from being a market-based process — with directions only where needed to address specific issues — to a centralised volumetric scheduling exercise with market systems being increasingly used to implement this scheduling rather than determining least-cost economic dispatch and associated spot market prices as contemplated in the NER.

Consequently, AEMO determined that it was not practical to continue to operate central dispatch and determine spot prices due to dispatch prices in NEMDE being capped by the APC during the APP. AEMO subsequently suspended the market. The avoidance of this cycle of events is central to the assessment of the final rule.

2.4 The final rule promotes market efficiency

As noted in section 2.1.1 above, a higher level of the APC is expected to increase the incentives for generators to bid as normal into the market during the application of the APC in an APP because they would receive sufficient spot revenue to cover their variable costs without compensation. This change also has benefits to the market in relation to market efficiency.

By allowing more generators to bid as normal into the market during an APP, it facilitates the market finding the least cost solution to dispatch in real-time, rather than relying on the directions of AEMO, both to meet security and reliability requirements, and to facilitate the market finding the least cost solution to dispatch during an APP.

In the directions paper published for this rule change table 3.1 showed the amount of generation that would have SRMC above various levels of APC, assuming high fuel prices. This figure showed that a change in the level of the APC from \$300/MWh to \$600/MWh would increase the total capacity of generation for which the APC covers their fuel and variable operating costs by 3,500 to 5,900 MW, depending on whether June 2022 derated capacity or nameplate capacity is used.

This additional generation, in helping the market to settle as normal during an APP, will enhance the productive efficiency of the market, by allowing for market settlement of least cost dispatch to continue.

The directions paper published analysis showing the percentage of available capacity from which storage can charge. Figure 3.2 in the directions paper summarised the percentage of pumped hydro and BESS storage systems that could charge off thermal capacity at different levels of APC. The analysis showed that at a level of \$600/MWh, over 80% of pumped hydro and BESS systems could charge off thermal capacity. In contrast, less than 70% of BESS capacity can charge off thermal generation at the current level of the APC, and under 40% of pumped hydro storage can charge off thermal capacity at the current level.

This is an inefficient outcome, particularly in relation to periods of high volatility where storage assets are essential to keep the market operating at its lowest possible cost of operation.

It also hinders transparency, and the ability of generators to see the value other generators place on fuel, whether constrained or unconstrained in supply. Increasing the APC allows for greater transparency around the cost of generation and the value generators place on scarce fuel reserves.

The final rule, in providing for the ability of significant additional amounts of thermal and storage generation assets to operate as normal in the market during an APP, will greatly facilitate the more efficient operation of the NEM in these periods.

2.5 The final rule is expected to have a positive impact on the market

In terms of impacts on the market for electricity, the benefits of increasing the APC are expected to outweigh the costs, as consumers, retailers and other market participants benefit from improved security and reliability while the costs of procuring energy in the market are not expected to increase. As such, the Commission considers that increasing the APC is in the long term interests of consumers.

The overall impact on contract prices from a higher APC is expected to be minimal. Historical APP events are rare. Assuming the events of June 2022 were to recur in future when the final rule is in effect, the additional swap payout would increase by around \$2.22/MWh on average across the NEM, with prices capped at the higher level of \$600/MWh versus \$300/MWh. The impacts on caps would be less at approximately \$0.54/MWh. A further breakdown is provided in appendix C.1. These estimates using historical data are conservative because with a higher APC, generators would be expected to bid and operate differently given the relationship between their operating costs and the level of the APC would have changed.

Further, the contract market is unlikely to factor in a 100% probability of these high-price events recurring over forthcoming contract periods. These figures also do not allow for the impact of an additional 3,500-5,900 MW of generating capacity in the market during an APP where the APC is applied. The estimate is an upper bound on the extent of the pricing impact for an APP based on the June 2022 events.

As a result, we would expect little disruption to existing contract markets other than a minor adjustment to pricing expectations to account for the higher APC levels during APPs, subject to the participant's expectation of their future recurrence.

Snowy Hydro's submission to the directions paper noted that the financial impact on their business of higher cap payouts from an increased APC, if the June 2022 events were repeated, would expose them to a \$100M loss.⁵¹ This exposure, in Snowy Hydro's view, occurs because the higher level of APC no longer protects the seller of a \$300 cap as it allows prices to exceed \$300/MWh by up to \$300/MWh during the application of the APC in an APP.⁵²

The Commission notes that the positions of individual participants, and contracts offered into the market at any particular point in time, are not the primary consideration in assessing the impact of the rule and whether or not the rule will contribute to the achievement of the NEO. The Commission's primary consideration in assessing the impact of any rule is the long-term interests of consumers.

The \$100 million exposure put forward by Snowy Hydro would appear unlikely under a higher APC based on the Commission's analysis which indicates that around 50% of price outcomes, during June's events, do not change. Only around 18% of prices, during June's events, would increase by \$300/MWh as shown in appendix C.1.

The higher cap is intended to encourage significantly more generation (between 3,500 MW and 5,900 MW) to bid normally into market during an APP. Had generation not withdrawn and the higher APC was in place to allow the 3,500-5,900MW of peaking generation to recover its costs through normal dispatch during the June APP, it is likely that the spot price outcomes modelled using the June 2022 events would not have occurred.⁵³

2.6 Predictability and stability

The final rule is a transitional arrangement that increases the APC from \$300/MWh to \$600/MWh, on and from 1 December 2022 until the end of 30 June 2025. Any change to the setting longer-term would be made following the AEMC's consideration of the Reliability Panel's rule change request.

The Commission considers maintaining a constant APC from 1 December 2022 until 30 June 2025 after which the value determined by the Commission in the rule change process for the Reliability Panel's recommendation would apply for the period 1 July 2025 to 30 June 2028 provides continuity and avoids further wholesale and contract market disruption.⁵⁴

51 Snowy Hydro, submission to directions paper, p. 1.

52 Ibid.

53 The figures of 3,500 MW and 5,0900 MW of additional generation relate to capacity with SRMC values greater than \$300/MWh but less than \$600/MWh that should be able to recover these costs during an APP when the APC has been applied based on the analysis performed for, and reported in Table 3.1, the directions paper.

54 Ibid.

3 ELEMENTS OF THE FINAL RULE

This chapter provides more detail on the final rule. This chapter is divided into the following sections:

- Further details on the change the final rule is implementing and the consequential effects of the rule
- Transitional arrangements for the AEMC compensation guidelines
- Implementing the final rule.

3.1 The final rule increases the APC to \$600/MWh for an interim period

The final rule provides for a transitional arrangement which increases the APC from \$300/MWh to \$600/MWh, for an interim period on and from 1 December 2022 until the end of 30 June 2025.

The APC is defined in Chapter 10 of the NER as a price cap to apply to a regional reference price or ancillary service price as specified in clause 3.14.1. Clause 3.14.1(a) of the NER specifies that the administered price cap for each region is \$300/MWh. The effect of this final rule is that the APC will be \$600/MWh in each region, from 1 December 2022 until 30 June 2025.

The final rule also inserts a note in clause 3.14.1(a) and the definition of “administered price cap” in Chapter 10 from 1 December 2022 as a signpost to the relevant transitional provision. The final rule removes these notes on 1 July 2025 as the transitional arrangement will no longer have effect.

Under clause 3.14.1(b) of the NER, the administered floor price for each region to apply to spot prices is the negative value of the administered price cap. The final rule has the consequential effect that the administered floor price for each region is the negative of \$600/MWh, from 1 December 2022 until 30 June 2025.

Under section 3.14.2(d2), if within an APP an ancillary service price for any market ancillary service in the region of the APP exceeds the APC then AEMO must set that ancillary service price to the APC. The final rule has the consequential effect that the ancillary service price during an APP would be set at the level of the APC.

Transitional arrangements for the AEMC compensation guidelines

The AEMC’s compensation guidelines are developed and published by the AEMC under clause 3.14.6(e) of the NER to support the operation of clause 3.14.6. Clause 3.14.6 describes how compensation may be determined by the AEMC if a claim is made by an eligible party following the application of the APC or administered floor price.

As a result of the final rule, the compensation guidelines will need to be updated to reflect the APC of \$600/MWh. This will need to occur by 1 December 2022 to reflect the final rule.

As these changes to the compensation guidelines are minor, the AEMC is not required to undertake the transmission consultation procedures in making the amendments.⁵⁵

3.2 Transitional arrangements for the AEMC compensation guidelines

The AEMC's compensation guidelines are developed and published by the AEMC under clause 3.14.6(e) of the NER to support the operation of clause 3.14.6. Clause 3.14.6 describes how compensation may be determined by the AEMC if a claim is made by an eligible party following the application of the APC or administered floor price.

As a result of the final rule, the compensation guidelines will need to be updated to reflect the APC of \$600/MWh. This will need to occur by 1 December 2022 to reflect the final rule. As these changes to the compensation guidelines are minor, the AEMC is not required to undertake the transmission consultation procedures in making the amendments.⁵⁶

3.3 Implementing the final rule

The final rule commences on 1 December 2022, two weeks after the publication of this final determination.

If following 1 December 2022 the CPT is exceeded, the new \$600/MWh APC will apply.

Changes to the market suspension pricing schedule relating to the new APC will take longer to take effect.

The market suspension pricing schedule is developed in accordance with the market suspension pricing methodology published by AEMO. The market suspension pricing methodology currently provides that if a 30-minute price produced for the market suspension pricing schedules exceeds the amount of the APC as defined in clause 3.14.1(a) of the NER, the amount of the APC will instead apply for that 30-minute period.⁵⁷

The schedule is calculated over the 28-day period to the end of the NEM billing period (end of Saturday). It is then published by AEMO at least 14 days prior to the first day to which the schedule relates.⁵⁸ Therefore, the process for AEMO to incorporate the amount of the new APC in its market suspension pricing schedules will occur from 3 December 2022 but the market suspension pricing schedules reflecting the new APC would not apply until 18 December 2022 at the earliest.⁵⁹

The rule will remain in place until 30 June 2025, when any change to the longer-term setting of the APC will be made following the AEMC's consideration of the Reliability Panel's rule change request.

⁵⁵ Final rule, clause 11.155.3.

⁵⁶ Final rule, clause 11.155.3.

⁵⁷ See AEMO's Market Suspension Pricing Methodology version 2.2 dated 30 June 2022.

⁵⁸ Clause 3.14.5(e)(3) of the NER.

⁵⁹ This means that between 1 December and 18 December, if APP is applied the APC will be \$600/MWh but if the market is suspended during this period, the market suspension pricing schedules applied would not yet have incorporated the transitional level of APC.

ABBREVIATIONS

ACCC	Australian Competition and Consumer Commission
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AEC	Australian Energy Council
AER	Australian Energy Regulator
APC	Administered price cap
APP	Administered pricing period
ASX	Australian Securities Exchange
Commission	See AEMC
CPT	Cumulative price threshold
DWGM	Declared wholesale gas market
ECA	Energy Consumers Australia
EUAA	Energy Users Association of Australia
GSG	Gas supply guarantee
LNG	Liquefied natural gas
MCE	Ministerial Council on Energy
MPC	Market price cap
NEL	National Electricity Law
NEM	National electricity market
NEMDE	National electricity market dispatch engine
NEO	National electricity objective
NER	National electricity rules
PIAC	Public Interest Advocacy Centre
PDC	Price duration curve
RERT	Reliability and Emergency Reserve Trader
ROP	Regional override price
RRP	Regional reference price
RSSR	Reliability standards and settings review
SRMC	Short run marginal cost
STTM	Short term trading market

A RULE MAKING PROCESS

A.1 Alinta Energy's rule change request

On 1 July 2022, Alinta Energy submitted a rule change request to the AEMC.⁶⁰ The rule change request seeks to amend the APC to mitigate ongoing threats to the reliable operation of the NEM. The rule change proposes to increase the APC from \$300/MWh to \$600/MWh in every NEM region, with a sunset period of 12 months or a suitable period as determined by the AEMC.

The proposed amendment to the APC seeks to ensure normal market operation and settlement during the application of the APC in an APP, where prices are reflective of the SRMC of coal and gas generators buying fuels under today's market conditions and dispatch is based on least-cost. Alinta Energy requested that the AEMC consider the proposal as a request for an urgent rule under section 96(1) of the NEL.

A.2 Consultation process

On 4 August 2022, the Commission published a notice advising of its commencement of the rule-making process and consultation in respect of the rule change request. A consultation paper identifying specific issues for consultation was also published. Submissions closed on 1 September 2022.

The Commission received 24 submissions to the consultation paper containing differing views around the problem the rule change is seeking to address, the level of the APC, the level of the CPT, the time frame that any temporary change should apply and the impacts on market participants and consumers.

The Commission considered that the rule change request was a request for an urgent rule change as defined under section 96(1) 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 18 August 2022. The Commission received six written requests not to expedite the rule change request.⁶¹ The Commission considered the reasons outlined in the written requests submitted and determined that, in its opinion, the reasons given in the written requests were misconceived and lacking in substance.⁶² Accordingly, the rule change request continued to be assessed under the expedited rule-making process.⁶³

On 8 September 2022, the Commission extended the date for publication of a final determination until 17 November 2022 under s.107 of the NEL, due to the complexity of the issues raised by stakeholders in submissions to the consultation paper.

60 Alinta Energy, Rule change proposal - amendment to the administered price cap to mitigate the ongoing threat to the reliable operation of the market and system, rule change request, p. 2.

61 Submissions that objected to the expedited process are available on the AEMC project page. The responses published by the AEMC are also available on the project page here: <https://www.aemc.gov.au/rule-changes/amending-administered-price-cap>

62 Section 96(3) of the NEL

63 Section 96 of the NEL

To allow for more extensive stakeholder consultation, on 29 September 2022, the Commission published a directions paper that outlined the proposed policy changes for consultation. These proposed changes were:

- a temporary increase in the APC from \$300/MWh to \$600/MWh, to be implemented as soon as practicable and proposed to be in place until no later than 1 July 2025 when any change to the longer term setting of the APC would be made following the AEMC's consideration of the Reliability Panel's rule change request
- no temporary change to the CPT.

Submissions closed on 13 October 2022. The Commission received 10 submissions to the directions paper. The submissions to the directions paper have helped inform the final determination and have been responded to throughout this final determination.

B BACKGROUND AND CONTEXT

The NEM is designed to ensure customer demand can be continuously met with electricity from the cheapest energy sources within the capacity of the network while maintaining power system security. The price of electricity is normally determined for every 5-minute dispatch interval based on demand, generator offers and network capability.

However, in response to more extreme pricing events, the market activates safeguards to limit excessive systemic risk of financial failure, maintain incentives for participants to continue to operate normally and help return the market to more normal pricing outcomes.

The Reliability Panel forms part of the AEMC's institutional arrangements and has detailed functions and powers under the NEL and the NER.⁶⁴ It is responsible for, amongst other things, monitoring, reviewing, and reporting on the safety, security, and reliability of the national electricity system by reviewing and making recommendations on the appropriate market settings to ensure that the market adequately deals with extreme outcomes.

The Reliability Panel's Reliability Standards and Settings guidelines set out the approach and assumptions that the Reliability Panel uses when it conducts its reviews that provide information on the reliability regulatory framework which, with other factors, includes the form and the level of the Cumulative Price Threshold (CPT), and APC.⁶⁵ The guidelines set out the principles, assumptions and criteria that the Reliability Panel must comply with when conducting its Reliability Standard and Settings Review.

For definitions of the key terms and how the levels of the APC and CPT are set, please see section 2.2 of the consultation paper.

B.1 Recent issues with the application of the APC and operation of the CPT

The cost of key generator inputs including gas, coal and liquid fuel prices, have risen materially over the last 12 months driven by the conflict in Ukraine and local fuel shortages. The ACCC LNG netback benchmark price for gas in Australia increased to \$27.96/GJ in June, \$27.91/GJ in July and reached a high of \$66.99/GJ in October. The November 2022 forward price is trading now at \$44.32/GJ.⁶⁶ While historically gas prices have traded closer to \$10/GJ, global gas supply chain price increases have seen domestic gas prices close to and above the \$40/GJ gas APC in most regions.⁶⁷

⁶⁴ See section 38 of the NEL and rule 8.8 of the NER.

⁶⁵ The Reliability Panel standards and settings review guidelines are here <https://www.aemc.gov.au/market-reviews-advice/review-reliability-standard-and-settings-guidelines-0>.

⁶⁶ ACCC Netback Prices. The ACCC LNG netback price reflects the equivalent price in AUD/GJ that gas could be sold for on the international market, less the short-run costs of providing gas into international markets. As such, it establishes a clear link between domestic prices and international prices. Domestic spot gas prices tend, over time, to reflect changes in this key benchmark.

⁶⁷ Similar to the electricity market, the gas market also has safeguards including a cumulative price threshold and administrative price cap. The Gas APC is not linked to the Electricity APC and this rule change process is not considering changes to the gas APC. The value of the gas administrative price cap is currently \$40/GJ.

Similarly, export coal prices from Newcastle have increased to over \$400 USD/t in recent months, from historical levels at or below \$100 USD/t. This has impacted coal availability to domestic power generators. Extreme rain events in the eastern states have also reduced coal availability to domestic power generators, compounding domestic coal supply issues.

The increase in these fuel input costs has increased the cost of electricity production from coal, gas and liquid-fuelled generators and consequently led to higher wholesale electricity market prices. Other contributing factors to further price increases, changes in the expected generation merit order and reduced available capacity included:

- higher customer demand due to cooler than expected winter condition
- lower than average wind and solar output
- the volume of planned and unplanned outages of conventional thermal generators

In June 2022, the factors discussed above contributed to the CPT being exceeded in all regions of the NEM, except Tasmania. The APC was then applied in these regions of the NEM, however the level of the APC was lower than the cost of electricity generated from gas by some gas-powered generators, and some capacity was withdrawn. Subsequently, AEMO determined that it was impossible to operate the spot market in accordance with the market rules and suspended the market on 15 June 2022. The challenging conditions experienced in June 2022 led to a greater reliance on gas-powered generation and inventory reductions at the Iona gas storage facility in Victoria.⁶⁸ To address the increased demand for gas and its impact on Iona's storage inventory levels, AEMO activated the Gas Supply Guarantee (GSG) mechanism in July 2022 to secure additional gas supplies.⁶⁹ These events led to a significantly elevated risk to the reliability and security of the power system through periods where AEMO was required to issue increased market directions and eventually suspend the market. The application of the APC and subsequent market suspension also lead to costs that cannot be hedged by retailers, and which are ultimately recovered from consumers.

These costs include administered pricing compensation, Reliability and Emergency Reserve Trader (RERT), and compensation for directions and market suspension. As yet, no estimate of administered pricing compensation costs is available, however, the AEMC has received notice of intent to claim from 23 claimants in total.

B.2 Reliability standards and settings review

The Reliability Panel's 2022 Reliability Standards and Settings Review made a final recommendation to increase the APC from \$300/MWh to \$500/MWh for the review period of 1 July 2025 to 30 June 2028.⁷⁰ The recommendation will be submitted to the AEMC as a rule change request for consideration.

68 AEMO takes further steps to manage tight gas supplies, <https://aemo.com.au/newsroom/media-release/aemo-takes-furthersteps-to-manage-tight-gas-supplies>, 19 June 2022.

69 AEMO, Outcome of the Gas Supply Shortfall Event, http://nemweb.com.au/Reports/Current/Gas_Supply_Guarantee/Gas%20Supply%20Guarantee%20-%20Outcome%20Notice%20-%2019%20Juy%202022.pdf, 19 July 2022.

70 Reliability Panel, *2022 RSSR Final Report*, 1 September 2022, [available here](#) on the AEMC website.

The final recommendation was informed by the Reliability Panel's review requirements, analysis of issues made apparent by the recent administered price period in June 2022, and stakeholder feedback. In its analysis, the Reliability Panel also had regard to the greater financial burden a higher APC may have on retailers and consumers. On balance, the Reliability Panel considered that there was a material benefit to increasing the APC to reduce undue reliance on the compensation regime and reduce additional pass-through costs to consumers.

Two Reliability Panel members representing consumer groups did not support an increase of the APC to \$500/MWh. They considered that the cost to consumers of different settings under administered pricing is not yet known, and there may be other tools outside of the scope of the Reliability Panel's review that may better promote the interests of consumers.

The majority of the Reliability Panel considered that an increase to the APC was necessary to provide:

- robust outcomes to possible future high fuel price periods — while the high fuel costs in the recent APP are not typical, the Reliability Panel considered that they may be less rare in the future and increasing the APC to \$500/MWh should recover the SRMC of most generators in a range of credible scenarios, noting that the APC will likely be rarely imposed and generally in times of unpredictable and extreme circumstances
- avoidance of undue reliance on compensation scheme — in light of the recent APP where the AEMC indicated that 23 registered participants have submitted claims, the Reliability Panel considered that the increased APC will reduce reliance on the compensation process to a limited number of very high-cost generators during periods of unusually high fuel costs
- improved incentives for storage to participate during an APP — during the recent APP, the Reliability Panel heard reports that energy-limited units found the \$300/MWh APC did not sufficiently provide incentives to charge and discharge as normal, which resulted in sub-optimal utilisation without material intervention from AEMO
- enables better management of APP-related consumer costs — raising the APC reduces unhedgable compensation costs that are passed through to consumers but may increase retailer hedging costs. On balance, minimising the reliance on compensation claims reduces cost uncertainty for both retailers and consumers.

The Reliability Panel will submit a rule change request to the AEMC to consider the changes to apply between 1 July 2025 to 30 June 2028.

C

ANALYSIS

C.1

Contract market impacts

The values in Table A.1 below show the increase in the swap and cap contract payout in all NEM jurisdictions if the APC had been at \$600/MWh during the events in June 2022. During the market suspension period, the spot price was set in accordance with the market suspension pricing schedule (MSPS) published by AEMO.⁷¹ The MSPS has been developed in accordance with AEMO’s market suspension pricing methodology, which provides that if a 30-minute price produced for the market suspension pricing schedules exceeds the amount of the APC as defined in clause 3.14.1(a) of the NER, the amount of the APC will instead apply for that 30-minute period.⁷²

To determine the change in the hedge price, the model calculates the change in the time-weighted average price between what actually happened and the counterfactual, with the \$600/MWh APC as described above. This is calculated for the period in which the APC applied and the market suspension period. This is then translated into a change over a 12-month period. Similarly, the change in the cap price was determined by calculating the change in the average price for all prices that exceeded the current \$300/MWh APC over the period in which the APC applied and the market suspension period. Similarly, that is then translated into a change over a 12-month period. The results of this analysis are shown in Table C.1 below.

Table C.1: Increase in hedge contract payouts across NEM jurisdictions

REGION	NSW	QLD	SA	VIC	NEM MAIN-LAND
Increase in swap contract payout (249hrs over 1 year)	\$2.44	\$2.92	\$1.71	\$1.80	\$2.22
Increase in cap contract payout(249hrs over 1 year)	\$0.63	\$0.73	\$0.39	\$0.42	\$0.54

Source: AEMC analysis

Note: In the directions paper, the previous figures calculated for both swaps and caps were closer to \$1/MWh across both contract types. This figure was calculated only when the market was under an APP and all prices were scaled up to \$600/MWh when the price was at \$300/MWh. The new analysis examines all prices under the market suspension and APP, allowing prices to increase in accordance with the pre-capped prices above \$300/MWh, up to \$600/MWh where applicable.

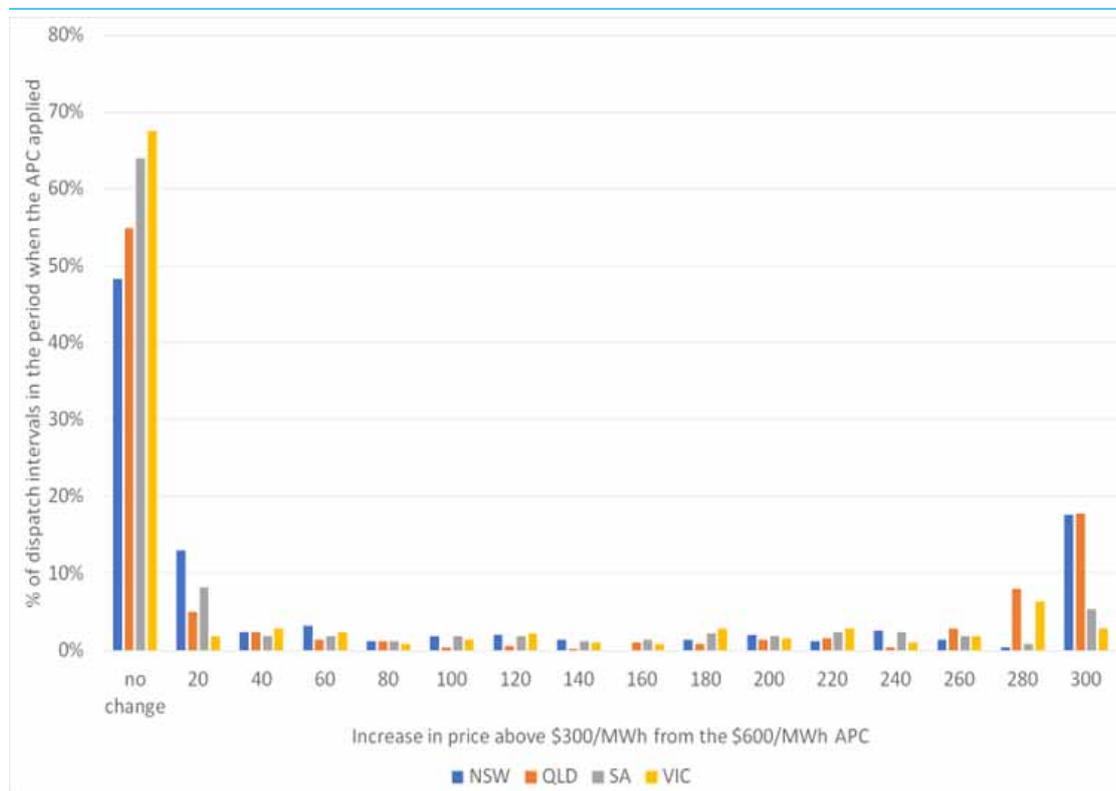
These figures were calculated by applying the higher APC to all prices in the APP and to the market suspension pricing schedule that applied during the market suspension. During the APP, the recalculation effectively determined if any scaling occurred from the APC Flag,

⁷¹ Clause 3.14.5 of the NER.

⁷² See AEMO’s Market Suspension Pricing Methodology version 2.2, 30 June 2022.

removed the original \$300/MWh cap, reapplied the higher \$600/MWh cap, and then reapplied any appropriate scaling where necessary. In some cases, where the pre-capped price was between \$300/MWh and \$600/MWh and the price was therefore not above the higher cap, the pre-capped price was applied. New MSPSs were also calculated so that they could be used to assess the impact of a higher APC on the second part of the June 2022 event. The new MSPS was calculated using the same methodology used by AEMO to determine the original schedules but with a higher \$600/MWh APC. A similar price/outcome effect was evident — not all prices were lifted to the new cap. A chart showing the distribution of price changes by the percentage of time over the June 2022 event is shown below in Figure C.1.

Figure C.1: Amount of time price changed if APC was \$600/MWh during June event (%)



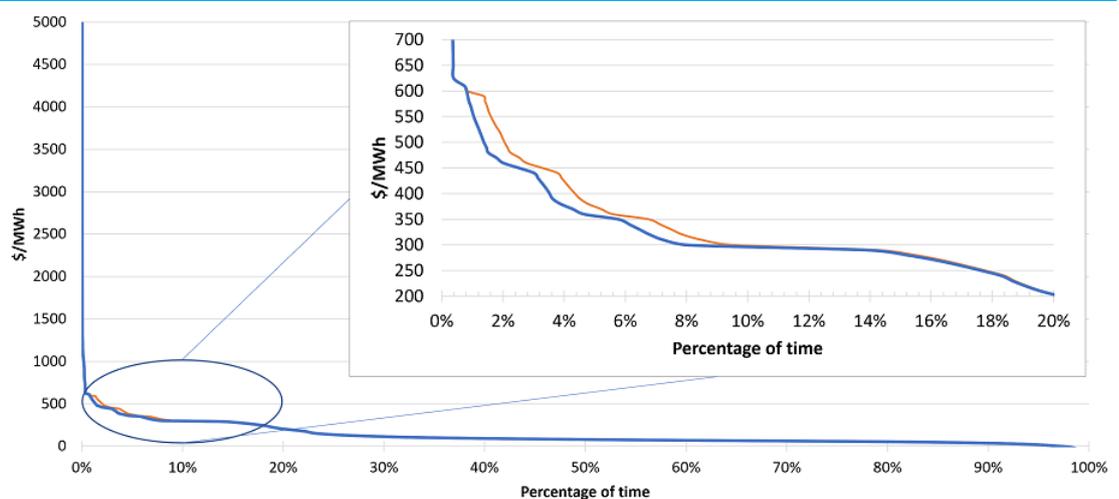
Source: AEMC analysis

To take another view of the impact of increasing the APC for the June 2022 event in the context of the full financial year, the analysis also considered the change in the 5-minute spot price duration curve (PDC). A price duration curve is a statistical representation of the cumulative frequency of prices greater than levels on the X Axis. It is read from left to right and describes the % of time prices are at or above a particular level. In Figure C.2 below, the blue line represents the actual PDC for the financial year 2021-2022. The orange line in Figure C.2. is the PDC for the same period but with the \$600/MWh APC price applied as described earlier. The chart shows that 97% of 5-minute spot prices are greater than \$0/MWh and similarly around 8% of prices are greater than \$300/MWh. That increases to

around 9% of prices are greater than \$300/MWh if the APC is increased to \$600/MWh. The orange and blue lines converge at \$600/MWh. As the change over the year is small, the inset chart focuses only on the 5-minute spot price range from \$200/MWh to \$700/MWh. This shows that overall the change to the 5-minute spot price duration curve for prices between \$300/MWh and \$600/MWh over a year changes by around 1%. Given typical 5-minute price volatility, a 1% change would have a significantly lower impact compared to changes in duration at the market price cap over \$15,000/MWh.

The results of this analysis should be treated with caution. This approach only recalculates price outcomes against the original dispatch, pre-capped prices, directions, constraints and scheduling arrangements. It is impossible to determine how market dispatch and pricing would have changed had fewer thermal generators withdrawn their capacity and subsequently received direction. Indeed, the objective of increasing the APC is to avoid threats to security and reliability by improving generator availability through better ensuring that the capped market price is sufficient to cover the anticipated costs of generators.

Figure C.2: Change in the PDC from changing the APC from \$300/MWh to \$600/MWh for FY2022



Source: AEMC analysis

C.2 Compensation framework and costs associated with June event

BOX 1: COMPENSATION FRAMEWORK

Reliability and Emergency Reserve Trader (RERT)

RERT allows AEMO to contract for reserves of generation or demand-side capacity that is not otherwise available to the market through any other arrangement. AEMO can activate RERT in the event that it determines that market participants are not expected to meet the reliability

standard and, where practicable, maintain power system security. While RERT is an intervention mechanism and not a compensation mechanism, the costs of RERT that applied during the June events are recovered from market customers and are therefore appropriately considered here.

Directions compensation

To maintain power system security or reliability, AEMO can issue directions to Registered Participants for one or more of the following services:¹

- Energy
- Market ancillary service
- Other service (for system security)

Directions may result in payment of compensation to directed Market Participants and other Market Participants directly impacted by resulting changes in dispatch outcomes.²

Administered pricing compensation

Compensation due to the application of an administered price cap is intended to allow generators and scheduled network service providers to recover their direct and opportunity costs of supplying energy and ancillary services to the market during APP. Compensation due to the application of the administered floor price is intended to allow market participants in respect of scheduled load to recover compensation for consuming energy during the APP.³

Suspension compensation

Compensation due to market suspension pricing schedule periods is intended to allow scheduled generators and ancillary service providers to recover the cost of supplying energy and ancillary services during market suspension pricing schedule periods.⁴

Note: 1. See clause 4.8.9 of the NER

Note: 2. See clauses 3.15.7 and 3.15.7A of the NER for compensation to directed participants and clause 3.12.2 of the NER for affected participant compensation. We note that AEMO's Compensation Update dated 15 August 2022 states that no claims were received for affected participant compensation.

Note: 3. See clause 3.14.6 of the NER

Note: 4. See clause 3.14.6 (b) of the NER

The table below shows a breakdown of estimated compensation costs associated with the June 2022 event:

Table C.2: Compensation costs associated with June event

CATEGORY	COSTS	TOTAL
RERT payments for activated demand response under RERT contracts	<ul style="list-style-type: none"> • \$80 million NEM wide recovered in July 2022 from weeks 25 and 26 in June. • Potential additional \$1.4 million from June to be recovered between November 2022 to January 2023, 	\$81.4 million

CATEGORY	COSTS	TOTAL
	subject to metering and performance adjustments.	
Directions compensation for directed participants for energy, ancillary services or other compensable services	<ul style="list-style-type: none"> \$2.1 million NEM wide recovered in July 2022. Additional claims of approximately \$16 million pending AEMO and independent expert determination 	\$18.1 million
Suspension compensation for eligible costs not covered by spot prices when set/affected by market suspension pricing schedule prices	<ul style="list-style-type: none"> \$7.2 million NEM wide recovered in July 2022. Additional claims of approximately \$98.4 million pending AEMO and independent expert determination 	\$105.6 million
Administered pricing compensation	The AEMC is currently assessing claims for administered pricing compensation. At this stage, there is no estimate for the total amount of administered pricing compensation. The AEMC has received a notice of intent to claim from 23 claimants in total.	Not available

Source: AEMO, June 2022 NEM Events: Compensation Update (15 August 2022) and AEMC analysis

C.3 Retailer impact summary

The table below illustrates the impact on a retailer assuming a notional load of 1,000 MW from changing the level of APC from \$300/MWh to \$600/MWh. The table shows the change in the impact of directions compensation costs and the change in the impact through price outcomes from the higher APC. It shows this for a completely unhedged retailer, and then for a fully hedged retailer. The figures reflect a conservative, or worst-case, view of the impact. The spot price during an APP is assumed to move to \$600/MWh all the time if the APC is applied. In practice, under a higher APC, the spot price might be expected to trade under the cap a greater proportion of the time.

Table C.3: Retailer impact summary

CATEGORY	INPUT/OUTPUT	UNITS	APC 300	APC 600
Spot market	Load	MW	1,000	1,000
Spot market	APC	\$/MWh	300	600
Spot market	Spot price*	\$/MWh	300	600
Spot market	Capacity under APC	MW	900	954

CATEGORY	INPUT/OUTPUT	UNITS	APC 300	APC 600
Spot market	Total pool purchase	\$	300,000	600,000
APC Directions	Generation	MW	100	46
APC Directions	Marginal generator	\$/MWh	750	750
APC Directions	Average cost	\$/MWh (average)	545	663
APC Directions	Total Compensation	\$	24,500	2,900
Contract	Hedge (swap)	MW	1,000	1,000
Contract	Hedge strike (swap)	\$/MWh	200	200
Contract	Hedge payout	\$ (negative is a benefit)	-100,000	-400,000
Unhedged retailer	Cost of load	\$	324,500	602,900
Unhedged retailer	Cost of load	\$/MWh	325	603
Unhedged retailer	Cost of load	\$/MWh benefit**	0	-278 (Net Cost)
Hedged retailer	Cost of load	\$	224,500	202,900
Hedged retailer	Cost of load	\$/MWh	225	203
Hedged retailer	Cost of load	\$/MWh benefit**	0	22 (Net Benefit)

Note: *The spot price would reflect the highest cost generator below the APC in this case

Note: **This is the benefit compared to \$300/MWh (Negative corresponds to a cost)

In this example, where the APC is \$300/MWh, 100 MW of generation requires directions compensation (shown as 100 MW of directions in the table above), or costs more than \$300/MWh to generate. The same supply costs are used for the higher level of APC. With a higher APC, less generation requires compensation, in this case only 46 MW (46 MW of directions above). As a result, compensation costs fall between the two cases.

In this example, all spot prices capped by the APC during the APP are now \$600/MWh versus \$300/MWh. Noting the other analysis presented here the Commission expects that not all spot prices will be capped at the higher APC, some will lie between the old \$300/MWh APC and the new \$600/MWh APC. The cost to the unhedged retailer increases with an increasing APC as a result. Spot prices increase from \$300/MWh to \$600/MWh, while the compensation costs, passed onto consumers, fall from \$25/MWh to \$3/MWh giving a net cost change from \$325/MWh to \$603/MWh.

For the hedged retailer, the hedge pays out against the spot price which is capped at the APC. As the APC increases, the hedge payout increases. The level of directions compensation also reduces with the higher APC, and in aggregate the resulting cost of load to the hedged retailer reduces. Based on these results, a lower APC favours an unhedged retailer whereas a high APC favours a prudently hedged retailer.

A key question is - at what level of hedging, would a retailer or consumer be better off under a higher APC? This level can change depending on the strike prices of the contract struck. But in the example below where the hedges are struck at a price of \$200/MWh, the retailer is better off versus the unhedged retailer with a lower APC, provided they have contracted 696 MW or 69.6% of their load. Assuming this strike price, this is the break-even hedging level where the retailer would be better off under the higher APC.

Table C.4: Retailer impact summary – break-even hedging levels

CATEGORY	INPUT/OUTPUT	UNITS	APC 300	APC 600
Spot market	Load	MW	1,000	1,000
Spot market	APC	\$/MWh	300	600
Spot market	Spot price*	\$/MWh	300	600
Spot market	Capacity under APC	MW	900	954
Spot market	Total pool purchase	\$	300,000	600,000
APC Directions	Generation	MW	100	46
APC Directions	Marginal generator	\$/MWh	750	750
APC Directions	Average cost	\$/MWh (average)	545	663
APC Directions	Total compensation	\$	24,500	2,900
Contract	Hedge (swap)	MW	n/a	696
Contract	Hedge strike (swap)	\$/MWh	n/a	200
Contract	Hedge payout	\$ (negative is a benefit)	n/a	-278,400
Unhedged retailer	Cost of load	\$	324,500	n/a
Unhedged retailer	Cost of load	\$/MWh	325	n/a
Unhedged retailer	Cost of load	\$/MWh benefit**	n/a	n/a
Hedged retailer	Cost of load	\$	n/a	324,500
Hedged retailer	Cost of load	\$/MWh	n/a	325
Hedged retailer	Cost of load	\$/MWh benefit**	n/a	n/a

Note: *The spot price would reflect the highest cost generator below the APC in this case

Note: **This is the benefit compared to \$300/MWh (Negative corresponds to a cost)

D 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.

D.1 Final rule determination

In accordance with s. 102 of the NEL the Commission has made this final rule determination in relation to the rule proposed by Alinta Energy.

The Commission's reasons for making this final rule determination are set out in section 2.

A copy of the final rule is attached to and published with this final rule determination. Its key features are described in section 3.

D.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 the operation of the national electricity market. Further, the final rule falls within the matters set out in Schedule 1 to the NEL as it relates to item 7, the setting of prices for electricity and services purchased through the wholesale exchange operated and administered by AEMO because the APC applies during an APP to cap the amount of the spot price.

D.3 Commission's considerations

In assessing the rule change request the Commission considered:

- its powers under the NEL to make the rule
- the rule change request
- submissions received during first round consultation and second 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.⁷³

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.⁷⁴ The final rule is compatible with AEMO's declared network functions because it does not affect those functions.

⁷³ 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. In December 2013, the amalgamated council became known as the COAG Energy Council. In May 2020, the Energy National Cabinet Reform Committee and the Energy Ministers' Meeting were established to replace the former COAG Energy Council.

⁷⁴ Section 91(8) of the NEL.

D.4 Making electricity rules in the Northern Territory

Test for scope of “national electricity system” in the NEO

Under the NT Act, the Commission must regard the reference in the NEO to the “national electricity system” as a reference to whichever of the following the Commission considers appropriate in the circumstances having regard to the nature, scope or operation of the proposed rule:⁷⁵

- (a) the national electricity system
- (b) one or more, or all, of the local electricity systems⁷⁶
- (c) all of the electricity systems referred to above.

Test for differential rule

Under the NT Act, the Commission may make a differential rule if it is satisfied that, having regard to any relevant MCE statement of policy principles, a differential rule will, or is likely to, better contribute to the achievement of the NEO than a uniform rule.⁷⁷ A differential rule is a rule that:

- varies in its term as between:
 - the national electricity systems, 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.⁷⁸

D.5 Civil penalties

The Commission cannot create new civil penalty provisions. However, it may recommend to the Energy Ministers’ Meeting 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

⁷⁵ Clause 14A of Schedule 1 to the NT Act, inserting section 88(2a) into the NEL as it applies in the Northern Territory.

⁷⁶ These are specified Northern Territory systems, listed in schedule 2 of the NT Act.

⁷⁷ Clause 14B of Schedule 1 to the NT Act, inserting section 88AA into the NEL as it applies in the Northern Territory.

⁷⁸ 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*).

Commission does not propose to recommend to the Energy Ministers' Meeting that any of the proposed amendments made by the final rule be classified as civil penalty provisions.

D.6 Conduct provisions

The Commission cannot create new conduct provisions. However, it may recommend to the Energy Ministers' Meeting that new or existing provisions of the NEL 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 Energy Ministers' Meeting that any of the proposed amendments made by the final rule be classified as conduct provisions.

D.7 Review of operation of the rule

The final rule does not require the Commission to conduct a formal review of the operation of the rule. The Commission may however self-initiate a review of the operation of the rule at any time if it considers such a review would be appropriate, pursuant to section 45 of the NEL.

E SUMMARY OF OTHER ISSUES RAISED IN SUBMISSIONS

This appendix sets out issues raised in response to the directions paper and consultation paper on this rule change request and the AEMC's response. If an issue raised in a submission has been discussed in the main body of this document or the directions paper, it has not been included in this table.

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

STAKEHOLDER	ISSUE	AEMC RESPONSE
AGL, submission to consultation paper, p.2.	<p>Inflation, fuel cost increases, and any other factors increasing the cost of generation may cause the APC to become too low. The rule change does not address the issue that AEMO may still need to suspend the market to ensure the APP can be closed.</p> <p>AGL further notes that the rule change doesn't address the potential issue that regional override prices may still be greater than the APC thereby keeping the market under an APP for an extended period.</p>	The Commission notes that further changes to the method of calculating cumulative prices during an APP are best considered through the work of the Reliability Panel.
Energy Australia, submission to consultation paper, p.1.	Raising the APC is needed but other changes may be required around the monitoring and management of fuel limits. Some such changes are contemplated in the 12 August communique from energy ministers, including winter readiness assessments and other functions for AEMO.	The Commission notes that these additional changes are outside the scope of the rule change.