Australian Energy Market Commission

AEMC
Australian Energy Market Commission

RULE

Consultation paper

Calculating the cumulative price

National Electricity Rule amendments 2026

Proponents
Delta Electricity (ERC0356)
Snowy Hydro (ERC0374)

16 October 2025

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About the AEMC

The AEMC reports to the energy ministers. We have two functions. We make and amend the national electricity, gas and energy retail rules and conduct independent reviews for the energy ministers.

Acknowledgement of Country

The AEMC acknowledges and shows respect for the Traditional Custodians of the many different lands across Australia on which we live and work. The AEMC office is located on the land of the Gadigal people of the Eora nation. We pay respect to all Elders past and present, and to the enduring connection of Aboriginal and Torres Strait Islander peoples to Country.

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Summary

1 The Australian Energy Market Commission (AEMC) has received two rule change requests that relate to the calculation of the cumulative price in specific periods of market stress.

2 Delta Electricity submitted a rule change request to the AEMC on 2 February 2023, proposing an amendment to the National Electricity Rules (NER) relating to the methodology for calculating when one or more regions have reached the cumulative price threshold (CPT).[1]

3 Snowy Hydro submitted a rule change request to the AEMC on 28 August 2023, proposing an amendment to the NER to suspend the calculation of the cumulative price when the administered scheduled pricing is used.[2]

4 Both rule change requests argue for changes to the calculation of the cumulative price in specific situations, to better align it with the original policy intent of the market setting.

5 The AEMC has commenced its consideration of the requests, and this consultation paper is the first stage.

6 We are seeking your feedback on how we propose to assess the requests to determine if they will promote the long-term interests of consumers.

We are seeking your views on Delta Electricity and Snowy Hydro's characterisation of the issues

7 Both rule change requests were submitted following the market event that occurred in winter 2022, which saw multiple regions exceed their cumulative price thresholds, enter into administered pricing, and the Australian Energy Market Operator (AEMO) ultimately suspend the market.

8 When a region is not under administered prices but is exporting electricity to a region that is under administered prices, the settled price that is received by the generator is lower than the dispatch price. This is because the dispatch price is capped at the administered price cap and then scaled down.[3]

9 Delta Electricity considers that this is an issue because it creates the outcome where a region's CPT is reached based on higher dispatch prices, whilst lower prices are received by generators in settlement.[4] Delta Electricity considers that this approach to how the cumulative price is calculated is unintended, and it does not provide the correct market signal when multiple regions are under an administered price cap (APC).[5]

10 Snowy Hydro raised concerns about the interaction between market suspension and administered pricing, based on observations in the 2022 market suspension event. Snowy Hydro suggests that if the market suspension is in place long enough and the market suspension pricing schedule (MSPS) is used, it results in the cumulative spot prices being below, or well below, the CPT when the MSPS is removed.[6] This can occur despite the market conditions that initially caused the breach of the CPT persisting. This can lead to the immediate resumption of extreme spot prices,

1 Delta Electricity, Rule change request, p. 1.
2 Snowy Hydro, Rule change request, p. 3.
3 Delta Electricity, Rule change request, p. 4.
4 Delta Electricity, Rule change request, p. 4.
5 Delta Electricity, Rule change request, p. 4.
6 Snowy Hydro, Rule change request, p. 3.

undermining the protection that the CPT was designed to provide.[7]

11 The AEMC is seeking stakeholder views on the materiality of the issues raised by both Delta Electricity and Snowy Hydro. This is also because events of market stress may increase in the future due to increasing electricity demand, higher variable renewable energy (VRE) penetration, and increased frequency and severity of extreme weather events as a result of climate change.

12 See further details in Chapter 2 for Delta Electricity and Chapter 4 for Snowy Hydro.

Both rule change requests propose changes to how the cumulative price is calculated to address respective issues

13 Both rule change requests propose amendments to the NER to address the respective issues.

14 Delta Electricity proposes that received prices, instead of dispatch prices, should be used to calculate when the CPT is reached in a region.[8] Once the CPT is reached in a region, Delta Electricity suggests that the dispatch price should be used to monitor the cumulative price.[9]

15 Snowy Hydro proposes that administered prices set in accordance with AEMO's MSPS be excluded from the calculation of cumulative price in the spot market and frequency control ancillary service (FCAS) market for electricity.[10]

16 The AEMC is seeking your feedback on whether the proposed solutions by both Delta Electricity and Snowy Hydro would address the issues each of them have raised in their rule change requests. The AEMC is also seeking feedback about whether the proposals in each rule change could interact and wehther this could lead to unintended consequences.

17 See further details in Chapter 3 for Delta Electricity and Chapter 5 for Snowy Hydro.

We consider that there are four assessment criteria that are most relevant to this rule change request

18 Considering the national electricity objective (NEO)[11] and the issues raised in both of the rule change requests, the Commission proposes to assess the rule change requests against four assessment criteria.

19 Please provide feedback on our proposal to assess the request against:

- **Outcomes for consumers — incentives:** The administered pricing arrangements should function as they are intended during times of market volatility to achieve better price outcomes for consumers in the long term.
- **Safety, security and reliability — outcomes and services:** The administered pricing arrangements should interact with the market price settings to facilitate efficient investment to achieve the reliability standard.
- **Principles of market efficiency — concepts of efficiency, incentives and risk allocation:** The administered pricing arrangements should work as intended, incentivise efficient investment, and allocate risks appropriately.

7 Snowy Hydro, Rule change request, p. 3.
8 Delta Electricity, Rule change request, p. 5.
9 Delta Electricity, Rule change request, p. 5.
10 Snowy Hydro, Rule change request, p. 4.
11 Section 7 of the National Electricity Law (NEL).

- **Principles of good regulatory practice — predictability, stability, simplicity and transparency:** The market arrangements should be predictable, stable, simple and transparent such that they work as intended and stakeholders are able to understand and act accordingly in their operational and investment decisions.

Submissions are due by 20 November 2025 with other engagement opportunities to follow

20 There are multiple options to provide your feedback throughout the rule change process.

21 Written submissions responding to this consultation paper must be lodged with the Commission by 20 November 2025 via the Commission's website, www.aemc.gov.au.

22 There are other opportunities for you to engage with us. See the section of this paper about "How to make a submission" for further instructions and contact details for the project leader.

Full list of consultation questions

Question 1: Is the use of settled prices when one region is in administered pricing, a problem?

Do you consider that the issue raised by Delta Electricity is an inconsistency in how cumulative price is calculated? If so, do you consider the issue is an unintended consequence of the existing way that cumulative price is calculated when multiple regions are in administered pricing?

Do you think that it is also a problem for the FCAS market?

Does this issue affect you or those you represent in any way? If so, how?

Question 2: Is there a material problem or evidence of an emerging one?

Do you consider that the issue raised by Delta Electricity is a material?

If so, do you consider that the problem will have a more significant impact in the future if it is not addressed (either in the spot market, FCAS, or both)?

Question 3: Will the proposed solution address the issue raised by the Delta Electricity?

What do you consider success would look like if the issue identified by the Delta Electricity was solved?

Question 4: What are your views of the costs and benefits of the proposed solution?

What do you consider will be the benefits and costs of Delta Electricity's proposed solution?

If there are costs, will these be one-off implementation costs or ongoing? Do these costs fall across both AEMO and participants or with just one party?

Is there anything the Commission could do in designing the rule that would help to minimise the costs and maximise the benefits?

Question 5: Do you agree with the implementation approach?

Do you consider that the proposed changes to the rules will solve the problem(s) raised or are there other factors that would have a greater impact?

Question 6: Are there alternative solutions that would be preferable?

Can you share any alternative solutions that you think would be preferable and more aligned with the long-term interests of consumers?

Are there alternative solutions that sit outside of the energy rules such as industry or jurisdictional initiatives that would more successfully address the issue?

Question 7: Is the calculation of the cumulative price during an administered pricing period a problem?

Is the 'premature' ending of an administered pricing period an unintended consequence of the way that the cumulative price is calculated during administered pricing?

Do you think that it is also a problem for the FCAS market?

Do you think it provides inadequate protection to consumers and participants against the immediate resumption of high spot prices?

Does this issue affect you or those you represent in any way, if so how?

Question 8: Is there a material problem or evidence of an emerging one?

Do you consider that the issue raised by Snowy Hydro is material?

If so, do you consider that the problem will have a more significant impact in the future if it is not addressed (either in the spot market, FCAS market, or both)?

Question 9: Will the proposed solution address the issue raised by the Snowy Hydro?

What do you consider success would look like if the issue identified by Snowy Hydro was solved?

Question 10: What are your views of the costs and benefits of the proposed solution?

What do you consider will be the benefits and costs of the proposed solution?

If there are costs, will these be one-off or ongoing?

Is there anything the Commission could do in designing the rule that would help to minimise the costs and maximise the benefits?

Question 11: Will the proposed solution address the issue raised by the Snowy Hydro?

Do you consider that the proposed changes to the rules will solve the problem(s) raised or are there other factors that would have a greater impact?

Question 12: Are there any alternative solutions that would be preferable?

Can you share any alternative solutions that you think would be preferable and more aligned with the long-term interests of consumers?

Are there alternative solutions that sit outside of the energy rules such as industry or jurisdictional initiatives that would more successfully address the issue?

Question 13: What are your views on the interaction between both rule changes?

Do you consider that the proposed rule changes could interact to cause unintended consequences?

If so, what would they be, and how would you mitigate them?

Question 14: Assessment framework

Do you agree with the proposed assessment criteria?

Are there additional criteria that the Commission should consider or criteria included here that are not relevant?

How to make a submission

We encourage you to make a submission

Stakeholders can help shape the solutions by participating in the rule change process. Engaging with stakeholders helps us understand the potential impacts of our decisions and, in so doing, contributes to well-informed, high quality rule changes.

We have included questions in each chapter to guide feedback, and the full list of questions is above. However, you are welcome to provide feedback on any additional matters that may assist the Commission in making its decision.

How to make a written submission

Due date: Written submissions responding to this consultation paper must be lodged with Commission by 20 November 2025.

How to make a submission: Go to the Commission's website, www.aemc.gov.au, find the "lodge a submission" function under the "Contact Us" tab, and select the project reference code ERC0356.[12]

You may, but are not required to, use the stakeholder submission form published with this consultation paper.

Tips for making submissions are available on our website.[13]

Publication: The Commission publishes submissions on its website. However, we will not publish parts of a submission that we agree are confidential, or that we consider inappropriate (for example offensive, defamatory, vexatious or irrelevant content, or content that is likely to infringe intellectual property rights).[14]

For more information, you can contact us

Please use the form on the project page (ERC0356) to contact the project leader with questions or feedback at any stage.

Email:	aemc@aemc.gov.au
Telephone:	(02) 8296 7800

12 If you are not able to lodge a submission online, please contact us and we will provide instructions for alternative methods to lodge the submission.

13 See: https://www.aemc.gov.au/our-work/changing-energy-rules-unique-process/making-rule-change-request/submission-tips

14 Further information is available here: https://www.aemc.gov.au/contact-us/lodge-submission

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1 The context for this rule change request

The Australian Energy Market Commission (AEMC) is assessing two rule change requests proposing amendments to the cumulative pricing arrangements, and seeks stakeholder feedback on:

- **Amending the Cumulative Price Threshold Methodology (ERC0356):** Delta Electricity proposes that received prices, instead of dispatch prices, should be used to calculate when the cumulative price threshold is reached in a region.[15] Once the cumulative price threshold is reached in a region, Delta Electricity suggests that the dispatch price be used to monitor the cumulative price.[16] This request is available on the project page on the AEMC website.
- **CPT calculation during administered scheduled pricing (ERC0374):** Snowy Hydro proposes that administered prices set in accordance with the Australian Energy Market Operator's (AEMO) market suspension pricing schedule (MSPS) be excluded from the calculation of cumulative price in the spot market and frequency control ancillary service (FCAS) market for electricity.[17] This request is also available on the project page on the AEMC website.

This single consultation paper will cover both projects, given both rule change requests relate to cumulative price calculation. However, these rule change projects have not been consolidated at this stage.

1.1 These rule changes relate to the calculation of cumulative price

The cumulative price is the rolling total of seven days of wholesale spot prices for a region in the National Electricity Market (NEM).[18]

The cumulative price threshold (CPT) is a threshold on the cumulative price for energy and FCAS over a period of seven days.[19] It is calculated based on the rolling seven-day average of wholesale spot prices.[20] When exceeded, it triggers an administered price period (APP). [21]

An APP is triggered for a given interval and market in a region when:

- the sum of the regional reference prices (spot prices) in the energy market for the previous 2,016 trading intervals (equivalent to seven days) exceeds the CPT; or
- the sum of the ancillary service prices for a market ancillary service for the previous 2,016 trading intervals (equivalent to seven days) exceeds the CPT.[22]

When an APP is triggered, the Administered Price Cap (APC) and Administered Floor Price (AFP), defined in NER clauses 3.14.1(a)-(b), are invoked to apply upper and lower limits on the published prices.[23]

The Snowy Hydro rule change request also relates to market suspension events. A market suspension is where AEMO declares that the spot market is to be suspended in a region when:

- the power system in the region has collapsed to a black system

15 Delta Electricity, Rule change request, p. 5.
16 Delta Electricity, Rule change request, p. 5.
17 Snowy Hydro, Rule change request, p. 3.
18 For more information see AEMO, Guide to administered pricing, p. 3.
19 AEMO, Guide to administered pricing, p. 3.
20 It is calculated according to the formula defined by clause 3.14.1(e)-(f) of the National Electricity Rules (NER) and published on the Australian Energy Market Commission (AEMC) website here.
21 Clause 3.14.2 of the NER.
22 Clause 3.14.2(c) of the NER. Also see AEMO, Guide to administered pricing, p. 3.
23 Clauses 3.14.2(d1)-(d2) of the NER. Also see AEMO, Guide to administered pricing, p. 3.

- AEMO has been directed by a participating jurisdiction to suspend the market following declaration by that jurisdiction of a state of emergency
- AEMO determines that it has become impossible to operate the spot market in accordance with the provisions of the National Electricity Rules (NER).[24]

During the market suspension, central dispatch and the determination of spot prices and ancillary service prices in the suspended region must continue in accordance with rules 3.8 and 3.9 of the NER. If, in AEMO's reasonable opinion, it is not practicable to do so, AEMO must set prices based on the relevant MSPS developed and published in accordance with NER clause 3.14.5(e).[25]

The CPT, APP, APC, AFP and market suspension settings form an important component of the market safety net, which operates to protect and sustain electricity trading in the NEM during periods of sustained high prices. If market prices in a region rise to levels that are likely to cause substantial financial stress, then those prices are capped until they drop under the CPT.[26]

Both rule changes were prompted by the June 2022 market event that saw regions in the NEM enter administered pricing, with the market suspended for one week from 15 June 2022.

The NEM is going through unprecedented change as coal-fired generation retires and is being replaced by renewable energy and storage during the transition towards net-zero. In its 2022 Integrated System Plan, AEMO forecasted that 60% of coal-fired generation will exit the market by 2030, while grid-scale wind and solar will almost triple and storage capacity will increase by over seven-fold.[27] Ageing coal-fired generation is already exiting the market faster than anticipated, which is placing increasing pressure on the electricity system.[28]

The increasing likelihood of an administered pricing event occurring again in the future also underpins both rule change requests. This is because both requests relate to having the market settings operating as intended, to protect consumers and participants during high-stress periods in the NEM.

1.1.1 Multiple regions had their CPT exceeded in June 2022

In June 2022, a confluence of high commodity prices, domestic market price caps, planned and unplanned outages of scheduled generating plant, low output from semi-scheduled generation, and high winter demand conditions led to unprecedented challenges operating the NEM.[29]

Prior to 10 June 2022, the NEM had been experiencing a prolonged period of high electricity prices. Wholesale spot prices in the NEM and eastern Australian gas markets reached unprecedented average levels, and regional markets were close to reaching the CPT for many days leading up to 10 June 2022.[30] Between 7 June and 12 June 2022, significant electricity spot price volatility around morning and evening peak demand times progressively increased Queensland's regional cumulative price from approximately $825,000 (corresponding to a weekly average spot price of $409/megawatt hour [MWh]) towards the CPT of $1,359,100 applicable for the 2021-22 financial year. [31]

24 Clause 3.14.3 of the NER. Also see AEMO, Guide to Market suspension in the NEM available here.
25 Clause 3.14.5 of the NER. Also see AEMO, Guide to Market suspension in the NEM available here.
26 AEMO, Guide to Market suspension in the NEM. Available here.
27 AEMC, Amendment of the Market Price Cap, Cumulative Price Threshold and Administered Price Cap, Final determination, 7 December 2023, p. ii.
28 AEMC, Amendment of the Market Price Cap, Cumulative Price Threshold and Administered Price Cap, Final determination, 7 December 2023, p. 12.
29 AEMO, NEM market suspension and operational challenges in June 2022, report, p. 4.
30 AEMO, NEM market suspension and operational challenges in June 2022, report, p. 11.
31 AEMO, NEM market suspension and operational challenges in June 2022, report, p. 13.

On Friday 10 June 2022, there were noticeable changes in generator bidding as the rolling sum of spot prices for the previous seven days in some NEM regions approached the CPT. On this day, AEMO observed the first withdrawal of capacity leading to AEMO issuing a market notice informing the market of an actual lack of reserve level 2 (LOR2) condition in the Queensland region from 1800 hrs.[32]

Further price volatility in Queensland on 12 June saw the regional cumulative price exceed the CPT in the trading interval ending at 1850 hrs.[33] This marked the start of an APP in the region, with the APC of $300/MWh in place.[34] Shortly after Queensland's APP began, reductions in generation capacity offered to the market led to extremely high underlying dispatch prices in Queensland (which were then capped by the APC in that region) and in other regions.[35]

Many of the extreme dispatch prices occurring outside Queensland over 12 to 13 June 2022 were also capped under the NER's "price scaling" provisions applying under administered pricing, however they contributed to rises in cumulative prices for those regions, which are calculated from the uncapped dispatch prices.[36] Consequently, cumulative prices breached the CPT in New South Wales, South Australia and Victoria on the evening of 13 June 2022 in the trading intervals ending at 1830 hrs, 2155 hrs, and 2200 hrs respectively, triggering APPs in each of those regions.[37]

During the APP, prior to market suspension, prices were initially determined using the processes for pricing in the event of intervention by AEMO under clause 3.9.3 of the NER and application of the administered price cap under clause 3.14.2 of the NER.[38]

Issues raised by Delta Electricity

Delta Electricity considers that this demonstrated the importance of having the right market settings in place, and if they are not, the uncertainty and damaging impacts this can have on the market. This was primarily identified through an inadequate APC, which once in place did not allow some generators to recover the cost of fuel as well as operations.[39]

Delta notes that, after the June 2022 event, the AEMC received a rule change request to temporarily increase the APC from $300 MWh to $600 MWh.[40]

The AEMC made this change to secure electricity supply during times of tight supply and demand. Delta supported the AEMC decision to increase the APC, but Delta also proposed what it considers to be an equally important change to amend the methodology for calculating when one or more regions have reached the CPT.[41]

1.1.2 The spot market was suspended before returning to status quo in June 2022

The underlying drivers of the stress in the spot market were some generators' reduced market availability linked to capped spot prices and high underlying costs, unlikely to be resolved quickly.

32 AEMO, NEM market suspension and operational challenges in June 2022, report, p. 13.
33 AEMO, NEM market suspension and operational challenges in June 2022, report, p. 13.
34 AEMO, NEM market suspension and operational challenges in June 2022, report, p. 13.
35 AEMO, NEM market suspension and operational challenges in June 2022, report, p. 13.
36 Clause 3.14.2(e) of the NER.
37 AEMO, NEM market suspension and operational challenges in June 2022, report, p. 14.
38 AEMO, NEM market suspension and operational challenges in June 2022, report, p. 30.
39 Delta Electricity, Rule change request, p. 1.
40 Delta Electricity, Rule change request, p. 1.
41 Delta Electricity, Rule change request, p. 1.

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.[42]

In all the circumstances at the time, AEMO concluded that it was necessary to suspend the spot market because it had become impossible to operate in accordance with the NER, and declared the suspension for all regions with effect from the trading interval ending 1405 hrs on 15 June 2022.[43]

With central dispatch no longer determining spot market or dispatch prices under rule 3.9 of the NER, prices from the MSPS also became the basis for cumulative price calculation.[44] In accordance with the Market Suspension Pricing Methodology, regional cumulative prices stabilised and then commenced declining as extreme prices more than one week old progressively dropped out of the rolling cumulative price determination.[45]

South Australia's administered price period ended at 0400 hrs on 22 June, and APPs in the other mainland regions ended at 0400 hrs on 23 June 2022.[46]

Market dispatch price outcomes, direction levels, and reserve outlooks met AEMO's criteria in the 24 hours following resumption of market-based pricing, except for a software issue in relation to published ancillary service prices, which was rectified on 23 June. Accordingly, at around 1000 hrs on 24 June AEMO notified market participants that the spot market suspension would formally end in all NEM regions from 1400 hrs that day.[47]

Issues raised by Snowy Hydro

Snowy Hydro considers that an issue became apparent during this event whereby, if the market suspension is in place long enough, it results in the cumulative spot prices being below, or well below, the CPT when the scheduled pricing is removed.[48]

Snowy Hydro suggests that this can occur despite the market conditions that initially caused the breach of the CPT persisting and can lead to the immediate resumption of extreme spot prices, undermining the protection that the CPT was designed to provide.[49]

1.2 Administered pricing events in the NEM are not common

The market event in winter 2022 was the trigger for both Delta Electricity and Snowy Hydro's rule change requests.

Administered pricing events in the NEM are rare, with five events in the spot market in the past 20 years, including the 2022 event. For FCAS, they are even rarer, with two administered pricing events having occurred in the past 20 years.

However, to contextualise the issues raised by Delta Electricity and Snowy Hydro, we have provided a summary of other market events that may relate to the issues raised in each of the rule changes. This summary is up-to-date, as at 16 October 2025.

42 AEMO, NEM market suspension and operational challenges in June 2022, report, p. 44.
43 AEMO, NEM market suspension and operational challenges in June 2022, report, pp. 44 - 45.
44 AEMO, NEM market suspension and operational challenges in June 2022, report, p. 30.
45 AEMO, NEM market suspension and operational challenges in June 2022, report, p. 30.
46 AEMO, NEM market suspension and operational challenges in June 2022, report, p. 46.
47 AEMO, NEM market suspension and operational challenges in June 2022, report, p. 46.
48 Snowy Hydro, Rule change request, p. 3.
49 Snowy Hydro, Rule change request, p. 3.

1.2.1 There has been one other administered pricing event that saw an APP in adjacent regions

Delta Electricity's rule change request relates to an issue that could occur with the calculation of cumulative prices in one region (not in administered pricing), exporting to a region that is in administered pricing.[50]

In addition to the market event in winter 2022, there was one other administered pricing event in the spot market where the issue raised by Delta Electricity may have occurred. This suggests that historically, the event is rare.

There have been no similar situations that have occurred in the FCAS market.

- **January 2009 in South Australia and Victoria**: Between 28 January 2009 and 31 January 2009, the South Australian and Victorian regions experienced a significant increase in electricity demand due to high temperatures (in excess of 40 degrees).[51] The 7-day cumulative price in South Australia reached $153,794 at 15:00 hrs on 29 January 2009, therefore an APP was declared from 15:30 hrs in accordance with clause 3.14.2 of the NER. At 17:00 hrs on the same day, the cumulative price in Victoria reached $151,446 and an APP was declared from 17:30 hrs.[52] During the APP, both energy and FCAS prices were capped at $300/MWh and the minimum energy prices were -$300/MWh (the minimum was $0/MWh for FCAS prices).[53]

However, these events may increase in the future due to increasing electricity demand, higher variable renewable energy (VRE) penetration and increased frequency and severity of extreme weather events as a result of climate change.

1.2.2 There have been three administered pricing events that involved an APP in a single region

Snowy Hydro's rule change request relates to an issue that occurred with the calculation of the cumulative price when a region is in an APP and spot prices are being set by AEMO in accordance with its market suspension pricing schedule. Aside from the market event in winter 2022, there have been no other instances where this situation has occurred.

However, there have been three instances where the wholesale electricity market has been in administered pricing.

- **March 2008 in South Australia:** On 17 March 2008, the CPT was exceeded in South Australia as a result of increasing electricity demand and high temperatures.[54] An APP commenced and continued to apply until the end of the 18 March trading day.[55]
- **June 2009 in Tasmania:** On 16 June 2009, the CPT was exceeded in Tasmania due to forecast, repeated reductions in output from non-scheduled generation.[56] An APP commenced and remained in place until 4am on 19 June 2009.[57] There were a further three prices exceeding $5000/MWh hours after the end of the APP but the cumulative price remained below the CPT.[58]

50 Delta Electricity, Rule change request, p. 4.
51 NEMMCO, Market Event Report: Record Demand in South Australia and Victoria 28 to 31 January 2009, p. 2.
52 NEMMCO, Market Event Report: Record Demand in South Australia and Victoria 28 to 31 January 2009, p. 6.
53 NEMMCO, Market Event Report: Record Demand in South Australia and Victoria 28 to 31 January 2009, p. 6.
54 AER, Spot prices greater than $5000/MWh South Australia: 5 - 17 March 2008, report, p. 5.
55 AER, Spot prices greater than $5000/MWh South Australia: 5 - 17 March 2008, report, p. 5.
56 AER, Spot prices greater than $500/MWh Tasmania: 10-19 June 2009, report, p. 5.
57 AER, Spot prices greater than $500/MWh Tasmania: 10-19 June 2009, report, p. 5.
58 AER, Spot prices greater than $500/MWh Tasmania: 10-19 June 2009, report, p. 5.

- **May 2024 in NSW:** On 8 May 2024, the CPT was exceeded in NSW due to high prices from multiple scheduled network outages, significant baseload generation outages and mostly unplanned plant issues.[59] An APP commenced on 8 May 2024 and applied until 15 May.[60]

The situation where the issue raised by Snowy Hydro could occur is uncommon. However, there may be an increased likelihood in the future due to increasing electricity demand, higher VRE penetration and increased frequency and severity of extreme weather events as a result of climate change.

1.2.3 There have been two administered pricing events for FCAS

For completeness, it is worthwhile considering whether the issue raised by Snowy Hydro may have occurred in any administered pricing event in the FCAS market.

Following the market event of winter 2022, there have been two instances where the FCAS market has been in administered pricing.

- **November 2022 in South Australia:** On 14 November 2022, the CPT for FCAS was exceeded in South Australia due to the region being 'islanded' due to the trip of two South East - Tailem Bend 275kV transmission lines from a storm.[61] An APP commenced and remained until 26 November at 4am.[62]
- **August 2025 in South Australia:** On 18 August 2025, the CPT for FCAS was exceeded in South Australia.[63] An APP was declared by AEMO and remained until the morning of 19 August.[64]

These events indicate that the situation where the issue raised by Snowy Hydro may also occur in the FCAS market.

These events are unlikely but not unprecedented. They may increase in the future due to increasing electricity demand, higher VRE penetration and an increase in frequency and severity of extreme weather events as a result of climate change.

1.3 Background to both rule change requests

1.3.1 Delta Electricity

On 17 November 2022, the AEMC published a final determination and final rule on amending the APC in response to a rule change request received from Alinta Energy.[65] As part of that rule change project, Delta proposed 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.[66] In its final determination, the AEMC decided that the method for calculating the cumulative price, and any longer-term changes, is best considered in subsequent Reliability Panel reviews or the AEMC rule change process to consider and implement the Reliability Panel's recommendations.[67]

Delta therefore submitted its rule change request on 2 February 2023, which proposes to amend the CPT methodology so that received prices, instead of dispatch prices, are used to calculate

59 AER, Electricity Prices above $5000MWh - April to June 2024, report, p. 6
60 AER, Electricity Prices above $5000MWh - April to June 2024, report, p. 15.
61 AEMO, Quarterly Energy Dynamics Q4 2022, report, p. 34.
62 AEMO, Quarterly Energy Dynamics Q4 2022, report, p. 34.
63 See the AEMO Market Notice. Available here.
64 See the AEMO Market Notice. Available here.
65 AEMC, Amending the administered price cap, Final determination, 17 November 2022.
66 AEMC, Amending the administered price cap, Final determination, 17 November 2022, p.4.
67 AEMC, Amending the administered price cap, Final determination, 17 November 2022, p.4

when the CPT is reached in a region.[68] Delta proposed that the AEMC consider the request as part of the rule change process for the Reliability Panel's Reliability Standard and Settings Review (RSSR) recommendations.[69]

1.3.2 Snowy Hydro

On 28 August 2023, Snowy Hydro submitted a rule change request to suspend the calculation of the CPT for periods during administered prices set in accordance AEMO's MSPS and continued when the MSPS is removed.[70]

1.4 We have started the rule change process for both rule changes

This paper is the first stage of our consultation process. The timeline indicated in table 1.1 below is proposed for both rule changes.

Table 1.1: The rule change process

Milestone	Date
The AEMC received the rule change request	2 February 2023 (Delta Electricity) 28 August 2023 (Snowy Hydro)
The AEMC published the consultation paper	16 October 2025
Close of first round submissions	20 November 2025
Draft determination published	29 January 2026
Close of second round submissions	12 March 2026
Final determination published	23 April 2026

Source: AEMC

A standard rule change request includes the following formal stages:

- a proponent submits a rule change request
- the Commission commences the rule change process by publishing a consultation paper and seeking stakeholder feedback
- stakeholders lodge submissions on the consultation paper and engage through other channels to make their views known to the AEMC project team
- the Commission publishes a draft determination and draft rule
- stakeholders lodge submissions on the draft determination and engage through other channels to make their views known to the AEMC project team
- the Commission publishes a final determination and final rule.

Information on how to provide your submission and other opportunities for engagement is set out at the front of this document.

You can find more information on the rule change process on our website.[71]

To make a decision on this proposal, we seek stakeholder feedback on how we propose to assess both requests, the stated problems and the proposed solutions.

68 Delta Electricity, Rule change request, p. 2.
69 Delta electricity, Rule change request, p.1.
70 Snowy Hydro, Rule change request, p. 3.
71 See our website: https://www.aemc.gov.au/our-work/changing-energy-rules

2 The problem raised in Delta Electricity's rule change request

This chapter seeks stakeholder feedback on the problem identified in Delta Electricity's rule change request – including whether it will soon become a problem (if another administered pricing event occurs like it did in winter 2022) and if so, the materiality and impact of the problem.

2.1 Is the use of dispatch prices when one region is in administered pricing, a problem?

Dispatch and settled prices are typically the same when the market is not under administered prices, so these are not discrepant under normal conditions.[72]

When a region is not under administered prices but is exporting electricity to a region that is under administered prices, the settled price that is received by the generator is lower than the dispatch price as a result of capping the dispatch price at the APC and scaling it down as per clause 3.14.2(e)(2) of the NER.[73]

Delta Electricity considers that this is an issue because it creates the outcome where a region's CPT is reached based on higher dispatch prices despite lower prices being received in settlement.[74] Delta Electricity considers that this inconsistency in how cumulative price is calculated is unintended and that it is not providing the correct market signal when multiple regions are under an administered price cap (APC).[75]

Delta Electricity understands the reason for clause 3.14.2(e)(2) of the NER is to manage negative settlement residues on regulated interconnectors and does not consider at this stage that this provision needs to be changed.[76]

Question 1: Is the use of settled prices when one region is in administered pricing, a problem?

Do you consider that the issue raised by Delta Electricity is an inconsistency in how cumulative price is calculated? If so, do you consider the issue is an unintended consequence of the existing way that cumulative price is calculated when multiple regions are in administered pricing?

Do you think that it is also a problem for the FCAS market?

Does this issue affect you or those you represent in any way? If so, how?

2.2 Delta Electricity considers that the problem is material

Delta Electricity considers that the problem is a material issue with the market price settings observed in the winter 2022 market event.[77]

72 Delta Electricity, Rule change request, p. 3.
73 Delta Electricity, Rule change request, p. 4.
74 Delta Electricity, Rule change request, p. 4.
75 Delta Electricity, Rule change request, p. 4.
76 Delta Electricity, Rule change request, p. 4.
77 Delta Electricity, Rule change request, p. 4.

This is because Delta Electricity considers that the inconsistency in how the CPT is calculated is unintended and does not provide the correct market signal when multiple regions are under an APC.[78]

In June 2022, the New South Wales CPT of $1,359,100 was reached at 1830 on 13 June based on dispatch prices. Delta Electricity considers that if the CPT was calculated on settled prices, it was more than $300,000 under the CPT value.[79]

Delta Electricity considers that NSW generators missed out on the equivalent of approximately 20 dispatch intervals at market price cap of $15,100 while Queensland generators received the full CPT value based on settled prices as it was the first region to reach the CPT.[80]

This is because Delta Electricity considers that it:[81]

- is inconsistent with the fundamental pricing principles of the NEM that the price received by a generator will not be less than its bid price. Under the NEM pricing arrangement, the highest dispatch price is received by all generators whose bids were accepted by AEMO. This pricing system was introduced to incentivise investment in new capacity;
- dampens investment signals for new and existing generation as generators are not guaranteed to receive prices up to the CPT and, thus, does not promote efficient investment – and, as such, is inconsistent with the National Electricity Objective (NEO); and
- creates revenue uncertainty through:
- inequitable revenue opportunities between regions; and
- reduced revenue opportunities for existing generators who rely on high-priced events to cover the cost of operating, often at a net loss, throughout the year during lower priced periods.[82]

Delta Electricity also notes that the Reliability Panel's RSSR does not consider how the CPT may be reduced through the combination of capping and scaling down of received prices but continuing to use dispatch prices for the CPT calculation.[83] Specifically, the revenue adequacy modelling underpinning the proposed adjustments in the 2022 RSSR to market price settings (including the CPT) does not consider the revenue impact of events like the 2022 market suspension.[84]

As outlined in section 1.2.1, there has been one other instance where the issue raised by Delta Electricity may have occurred.

Historically, there have been no instances in the FCAS market where this issue has occurred.

However, there could be a chance that these instances are more likely to occur in the future due to increasing electricity demand, higher VRE penetration and an increase in frequency and severity of extreme weather events as a result of climate change.

78 Delta Electricity, Rule change request, p. 4.
79 Delta Electricity, Rule change request, p. 4.
80 Delta Electricity, Rule change request, p. 4.
81 Delta Electricity, Rule change request, p. 4.
82 Delta Electricity, Rule change request, p. 4.
83 Delta Electricity, Rule change request, p. 4.
84 Delta Electricity, Rule change request, p. 4.

We are interested in views from stakeholders about the materiality of the issue raised by Delta Electricity, given the likelihood of these events happening in the future.

Question 2: Is there a material problem or evidence of an emerging one?

Do you consider that the issue raised by Delta Electricity is a material?

If so, do you consider that the problem will have a more significant impact in the future if it is not addressed (either in the spot market, FCAS, or both)?

3 Delta Electricity's proposed solution and implementation

Delta Electricity's rule change request proposes that received prices, instead of dispatch prices, should be used to calculate when the CPT is reached in a region.[85] Once the CPT is reached in a region, Delta Electricity suggests that the dispatch price be used to monitor the cumulative price.[86]

This chapter seeks feedback on:

- the solution proposed and any potential alternative solutions;
- other implementation matters the Commission may need to consider in making its determination; and
- any alternative solutions.

3.1 Will Delta Electricity's proposed solution resolve the problem?

Delta Electricity considers that the methodology for calculating when the CPT is reached in a region should change.

The proposal is that:

- received prices, instead of dispatch prices, are to be used to calculate when the CPT is reached in a region; and
- once the CPT is reached in a region, the dispatch price should be used to monitor the cumulative price, as is currently the case, as this provides transparency of the issues affecting price bids in the market and is used to track when underlying prices fall below the CPT.[87]

Delta Electricity considers that this will ensure that, regardless of whether there is one or multiple regions that overlap in reaching their CPT and enter into an APP:

- each region is treated the same in how the CPT is calculated; and
- the full CPT is available to be received by generation in each region.[88]

It considers that this will remove the inconsistency in how the CPT is calculated for one region compared with events where multiple regions reach their CPT.[89]

Delta Electricity considers its proposed rule change represents how many stakeholders assume the rules in relation to the CPT currently work.[90] The rule change request states that this was evident in numerous discussions Delta held with other stakeholders who were unaware of the issue.[91] Hence, Delta Electricity suggests that the proposal should not necessarily be seen as a change, but more a clarification in the NER to create a consistent approach to calculating cumulative price among regions.[92]

85 Delta Electricity, Rule change request, p. 5.
86 Delta Electricity, Rule change request, p. 5.
87 Delta Electricity, Rule change request, p. 3.
88 Delta Electricity, Rule change request, p. 3.
89 Delta Electricity, Rule change request, p. 5.
90 Delta Electricity, Rule change request, p. 5.
91 Delta Electricity, Rule change request, p. 5.
92 Delta Electricity, Rule change request, p. 5.

Delta Electricity suggests it can be resolved simply through the insertion of a new clause to clarify that the price used for the calculation of the CPT, where an APP has not been declared in a region exporting electricity to another in administered pricing, should be the received price.[93]

As part of the standard rule change process, the Commission is interested in views from stakeholders about Delta Electricity's proposed solution.

Question 3: Will the proposed solution address the issue raised by the Delta Electricity?

What do you consider success would look like if the issue identified by the Delta Electricity was solved?

3.2 What are the costs and benefits of the proposed solution?

Delta Electricity considers that there is no direct trade-off from this proposed rule change as it represents the intention of the RSSR.[94]

Delta Electricity also notes that the proposed change is likely how many stakeholders assumed the NER is currently implemented - any region that is subjected to administered pricing and an APC is assumed to have received the full value of the CPT.[95]

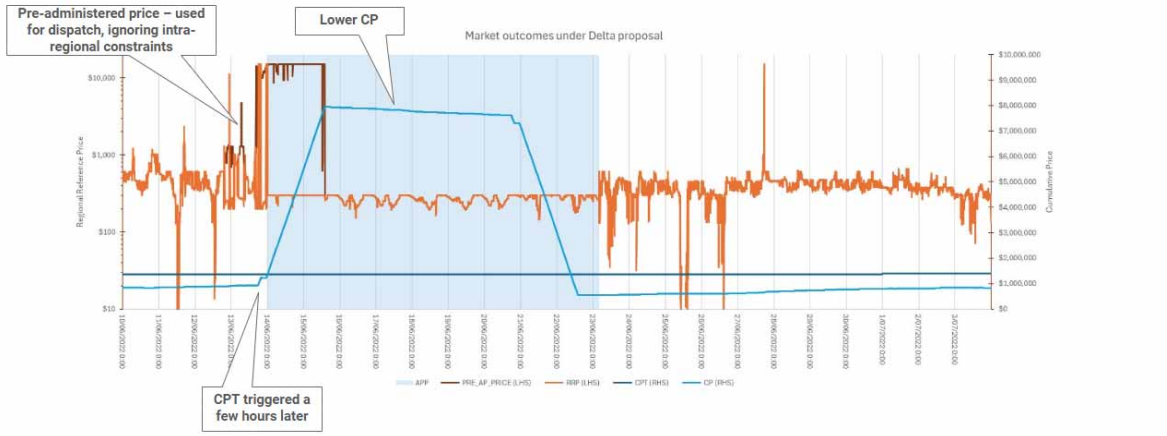
The proposed change would only take effect when there is one region already under administered pricing and would ensure other regions, that may be subject to capped and scaled settled prices as per NER clause 3.14.2(e)(2), can still receive the full value of the CPT. This would mean the full value of the prices that reach the CPT would be borne by retailers and passed onto customers.[96]

Delta Electricity notes that the CPT is the efficient level of cumulative prices over a 7-day period to incentivise investment to deliver the Reliability Standard.[97]

Figure 3.1 below uses a hypothetical example of outcomes from the June 2022 event in a scenario where the market was not suspended, which illustrates the change proposed by Delta Electricity. In this hypothetical example the cumulative price threshold is triggered later than it is in the status quo.

93 Delta Electricity, Rule change request, p. 5.
94 Delta Electricity, Rule change request, p. 5.
95 Delta Electricity, Rule change request, p. 5.
96 Delta Electricity, Rule change request, p. 5.
97 Delta Electricity, Rule change request, p. 5.

Figure 3.1: Illustrative example of price outcomes under the change proposed by Delta Electricity



Source: AEMC internal analysis
Note: Illustrative only

Delta Electricity sees that the proposed change would deliver a more efficient and positive cost-benefit outcome for the market and would be in the long-term interest of consumers of electricity.[98] This could mean that as the settled price is used in CPT calculations instead of dispatch prices, it results in a lower cumulative price than what occurred, and the CPT being triggered later.

Delta considers that while this issue has only arisen once, in June 2022, there is an urgent need to address it because of the risk and likelihood of the factors that led to the June 2022 event occurring again. This is so the right market design is in place the next time the NEM experiences fuel constraints and reliability concerns.[99]

Question 4: What are your views of the costs and benefits of the proposed solution?

What do you consider will be the benefits and costs of Delta Electricity's proposed solution?

If there are costs, will these be one-off implementation costs or ongoing? Do these costs fall across both AEMO and participants or with just one party?

Is there anything the Commission could do in designing the rule that would help to minimise the costs and maximise the benefits?

3.3 Delta Electricity proposes an amendment to Clause 3.14.2 of the NER

3.3.1 Currently, clause 3.14.2 presumes that dispatch prices are an input into the calculation of the CPT

Clause 3.14.2 of the National Electricity Rules provides for the application of the administered price cap.

If, during an administered price period the spot price:

- at any regional reference node is set to the administered price cap under clause 3.14.2(d1)(1), then spot prices at all other regional reference nodes connected by a regulated interconnector

98 Delta Electricity, Rule change request, p. 6.
99 Delta Electricity, Rule change request, p. 6.

or regulated interconnectors that have an energy flow towards that regional reference node must not exceed the administered price cap divided by the average loss factor that applies for energy flow in that direction for that trading interval and determined in accordance with clause 3.14.2(e)(5).[100]

This means that if one region is already under administered pricing, energy exported to it from another region is subject to a cap and scaled settled prices as per NER clause 3.14.2(e)(2). Delta Electricity considers that the reason for clause 3.14.2(e)(2) is to manage negative settlement residues on regulated interconnectors.[101]

3.3.2 Delta Electricity proposes that clause 3.14.2 should use received prices to calculate when the CPT is reached in a region

Delta Electricity proposed that the issue can be solved through the insertion of a new clause in the NER at 3.14.2.(e)(3).[102] For example:

> (3) Where the spot price at a region is subject to the application of Clause 3.14.2(e)(2) in a region where an administered pricing period has not been declared, the price used for the calculation of the cumulative price threshold shall be the regional reference price and not the price calculated as if clause 3.14.2(c)(1) did not apply.

Question 5: Do you agree with the implementation approach?

Do you consider that the proposed changes to the rules will solve the problem(s) raised or are there other factors that would have a greater impact?

3.4 Can the problem be resolved in a different or more efficient way?

Delta Electricity did not propose any alternative solutions to the problem it identified in its rule change request.

However, the Commission is interested in views from stakeholders about whether there are alternative changes to the rules that might better promote the long term interests of consumers.

Question 6: Are there alternative solutions that would be preferable?

Can you share any alternative solutions that you think would be preferable and more aligned with the long-term interests of consumers?

Are there alternative solutions that sit outside of the energy rules such as industry or jurisdictional initiatives that would more successfully address the issue?

100 NER clause 3.14.2(e)(2).
101 Delta Electricity, Rule change request, p. 5.
102 Delta Electricity, Rule change request, p. 5.

4 The problem raised in Snowy Hydro's rule change request

Snowy Hydro considers that the CPT and APC are key design features of the NEM.[103] Snowy Hydro notes that the logic of the CPT suggests that when breached, the protection offered by the administered price cap should remain in place until the market conditions that caused the extreme spot prices subside.[104]

Currently, when a market suspension event occurs, market event scheduled pricing (set by the MSPS) serves as an input into the calculation of cumulative price. Snowy Hydro considers that if the market suspension is in place for long enough, this can effectively cause the premature ending of APC protection for market participants, and this is inconsistent with, and undermines the purpose of, the CPT and APC.[105]

This chapter seeks stakeholder feedback on the problem identified in Snowy Hydro's rule change request – whether it is or will soon become a problem (if another administered pricing event occurs similar to winter 2022) and if so, the materiality and impact of the problem.

4.1 Is the calculation of the cumulative price during scheduled pricing, a problem?

Snowy Hydro notes that the NEM's reliability settings seek to deliver strong and robust investment signals to meet the Reliability Standard at least-cost to consumers.[106] This is because the current market price cap, CPT and APC should form a natural hedge for sellers of risk management derivatives.[107] Snowy Hydro suggests that there could be a problem in the way that the CPT operates, which could limit the natural hedge for sellers of risk management derivatives in specific periods of market stress.[108]

This is based on its view that the CPT has three purposes to:

- cap the total price risk to which market participants and customers are exposed over a given time period;
- protect all market participants from prolonged periods of high market prices, with particular consideration to impacts on investment costs and the promotion of market stability; and
- not impede the ability of the market to determine price signals for efficient operation and investment in energy services, and be determined by giving consideration to the level of the market price cap.[109]

To this end, the APC, combined with the CPT, is a mechanism designed to minimise financial instability risks to the market arising from an extended period of supply scarcity and correspondingly high prices.[110] Snowy Hydro considers that the transition to greater VRE and storage will impact the effectiveness of the CPT and APC and lead to problems in the future.[111]

103 Snowy Hydro, Rule change request, p. 1.
104 Snowy Hydro, Rule change request, p. 1.
105 Snowy Hydro, Rule change request, p. 1.
106 Snowy Hydro, Rule change request, p. 2.
107 Snowy Hydro, Rule change request, p. 2.
108 Snowy Hydro, Rule change request, p. 2.
109 Snowy Hydro, Rule change request, p. 2.
110 Snowy Hydro, Rule change request, p. 2.
111 Snowy Hydro, Rule change request, p. 2.

Noting that the Reliability Panel periodically examines whether the CPT sends the right price signal to invest in generation and storage projects,[112] Snowy Hydro suggests an important consideration should also be the calculation of cumulative price following a market suspension.[113]

The Commission is interested in views from stakeholders about whether this could mean that the way the cumulative price is calculated (both in the spot market and FCAS market) should be adjusted to align with the original policy intent of the CPT and administered pricing.

Question 7: Is the calculation of the cumulative price during an administered pricing period a problem?

Is the 'premature' ending of an administered pricing period an unintended consequence of the way that the cumulative price is calculated during administered pricing?

Do you think that it is also a problem for the FCAS market?

Do you think it provides inadequate protection to consumers and participants against the immediate resumption of high spot prices?

Does this issue affect you or those you represent in any way, if so how?

4.2 Snowy Hydro considers that the problem is material

Snowy Hydro in its rule change request, referred to the challenging market conditions that resulted in the exceedance of the CPT in QLD on 12 June 2022, and NSW, SA and VIC on 13 June 2022, when the APC was applied in these NEM regions.[114] On 15 June 2022, AEMO suspended the market, citing difficulties associated with managing a large number of constraints and supply limitations, which created issues for AEMO's automated systems and processes.[115]

In accordance with clause 3.14.5(b) of the NER, prices were set in accordance with the MSPS (based on the 28-day historical average for the relevant region and capped at the APC).[116]

Snowy Hydro considers that an anomaly became apparent during this event whereby if the market suspension is in place long enough, it results in the cumulative spot prices being below, or well below, the CPT when the scheduled pricing is removed.

This can lead to the immediate resumption of extreme spot prices, undermining the protection that the CPT was designed to provide.[117] It asserts that this can occur despite the market conditions that initially caused the breach of the CPT persisting, and allow for the immediate resumption of extreme spot prices. Snowy Hydro considers that this undermines the protection that the CPT was designed to provide.[118]

In addition to the 2022 event, there have been three instances where administered pricing has occurred in the spot market. There have been no other instances where the market suspension has occurred with the calculation of the cumulative price.

112 AEMC, 2026 Reliability Standard and Settings Review, Issues Paper, 19 June 2025.
113 Snowy Hydro, Rule change request, p. 2.
114 Snowy Hydro, Rule change request, p. 2.
115 Snowy Hydro, Rule change request, p. 2.
116 Snowy Hydro, Rule change request, p. 3.
117 Snowy Hydro, Rule change request, p. 3.
118 Snowy Hydro, Rule change request, p. 3.

However, it could be more likely to occur in the future due to increasing electricity demand, higher VRE penetration and an increase in frequency and severity of extreme weather events as a result of climate change.

We are interested in views from stakeholders about the materiality of the issue raised by Snowy Hydro, given the likelihood of these events happening in the future.

Question 8: Is there a material problem or evidence of an emerging one?

Do you consider that the issue raised by Snowy Hydro is material?

If so, do you consider that the problem will have a more significant impact in the future if it is not addressed (either in the spot market, FCAS market, or both)?

5 Snowy Hydro's proposed solution and implementation

Snowy Hydro proposes to solve the issue by amending the NER to exclude spot prices set in accordance with the market suspension pricing schedule, from the calculation of cumulative price.

This chapter seeks feedback on:

- the solution proposed and any potential alternative solutions; and
- other implementation matters the Commission may need to consider in making its determination.

5.1 Will Snowy Hydro's proposed solution resolve the problem?

Snowy Hydro considers that its proposal to suspend the calculation of the cumulative price when the MSPS is used will solve the problem with the calculation of the cumulative price.

This is because, in Snowy Hydro's view, the intent of the CPT and APP, is to provide protection to participants with 'short' positions (i.e. hedging positions with spot market exposure), while balancing the need to provide revenue adequacy for generators.[119] It notes that while, in theory, market participants with short positions will be retailers or large market customers, it is also very likely to include scheduled generators that have sold electricity contracts (probably caps) to retailers.[120]

This could mean that the protection afforded by the APC is diminished because of a decision to suspend the market.[121]

As a result, Snowy Hydro considers that the solution is to suspend the cumulative price calculation for periods during which the MSPS has been introduced, and continue when it is removed.[122]

Question 9: Will the proposed solution address the issue raised by the Snowy Hydro?

What do you consider success would look like if the issue identified by Snowy Hydro was solved?

5.2 What are the costs and benefits of Snowy Hydro's proposed solution?

Snowy Hydro set out the expected benefits of its proposed solution, noting that:

- it will remove the distortion to the CPT/APC caused by the use of scheduled pricing and thereby improve the integrity of the CPT/APC. This is because Snowy Hydro considers that scheduled pricing does not reflect real-world scarcity of supply during periods of volatility, meaning that scheduled pricing artificially hastens the protection that the CPT/APC is designed to provide to market participants;[123]
- as a consequence of addressing the issue, Snowy Hydro considers that the CPT/APC will be better able to achieve its objective of providing a safety valve during periods of extended volatility and, in particular, reducing tail risk for sellers of hedges. It considers that if this is not

119 Snowy Hydro, Rule change request, p. 3.
120 Snowy Hydro, Rule change request, p. 3.
121 Snowy Hydro, Rule change request, p. 3.
122 Snowy Hydro, Rule change request, p. 3.
123 Snowy Hydro, Rule change request, p. 3.

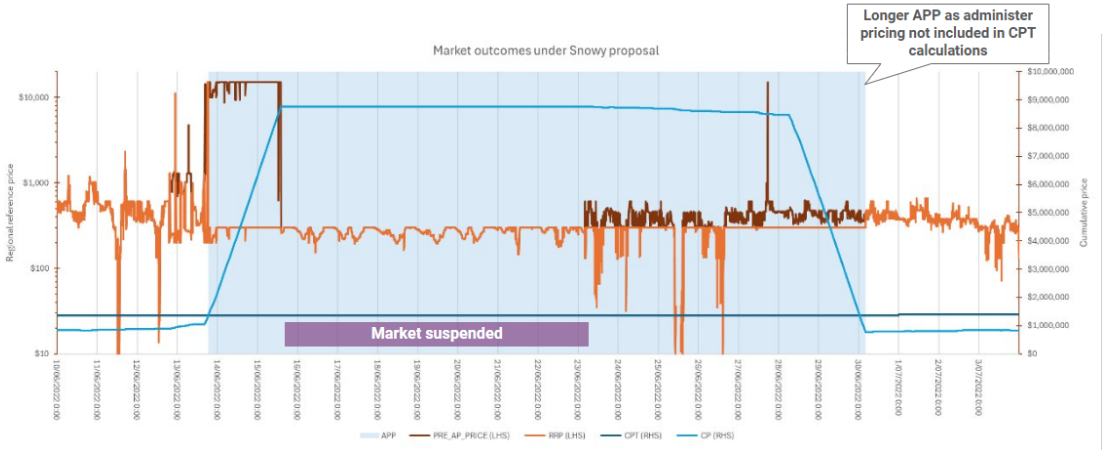
addressed, sellers of hedges will be exposed to a higher tail risk, increasing the risk premium and the cost of energy; and[124]

- market participants, both generators and market customers, should have increased financial protection against periods of extended volatility, as the CPT/APC will not be artificially shortened by the use of scheduled pricing. Snowy Hydro considers that this will improve certainty of the protection offered by the CPT/APC, allowing participants to plan their operations and contacting activity with greater confidence.[125]

The only potential cost Snowy Hydro identifies with its proposal, would be experienced by those who would otherwise benefit from a shorter APC period occasioned by the use of scheduled pricing (the rule change request notes generators that are not fuel-constrained, who are able to take advantage of pricing volatility when the APC ends as an example).[126] However, Snowy Hydro notes that given the near impossibility of accurately forecasting the likelihood of scheduled pricing, this is likely only an opportunistic benefit, because it is unlikely that such generators are able to plan their operations around this benefit or to assume a benefit from it ex ante.[127]

Figure 5.1 uses a hypothetical example (i.e. not reflective of changed bidding behaviours if an APP was extended) to illustrate that removing scheduled pricing from CPT calculations, as proposed by Snowy Hydro, could extend the administered pricing period.

Figure 5.1: Illustrative example of price outcomes under the change proposed by Snowy Hydro



Source: AEMC internal analysis
Note: Illustrative only

Snowy Hydro considers that the impact of its proposed rule on those likely to be affected by it is:

- greater confidence in the protection offered by the APC/CPT
- increased protection against periods of extended volatility in the NEM.[128]

Because of this, Snowy Hydro maintains that this will reduce the risk of financial insolvency for market participants and enhance the ability of AEMO to operate the NEM, as it will promote a more stable market.[129]

124 Snowy Hydro, Rule change request, p. 3.
125 Snowy Hydro, Rule change request, p. 3.
126 Snowy Hydro, Rule change request, p. 3.
127 Snowy Hydro, Rule change request, p. 4.
128 Snowy Hydro, Rule change request, p. 4.
129 Snowy Hydro, Rule change request, p. 4.

Question 10: What are your views of the costs and benefits of the proposed solution?

What do you consider will be the benefits and costs of the proposed solution?

If there are costs, will these be one-off or ongoing?

Is there anything the Commission could do in designing the rule that would help to minimise the costs and maximise the benefits?

5.3 Snowy Hydro proposes an amendment to clause 3.14.2 of the NER

5.3.1 Currently, clause 3.14.2 sees scheduled pricing used as an input into the calculation of cumulative price

Clause 3.14.2 of the NER covers the application of the administered price cap, including amongst other things:

- a requirement on AEMO to immediately notify all Market Participants of the commencement and closing of an administered price period[130]
- the periods that constitute an administered pricing period in a region.[131]

Clause 3.14.2(c) notes that each of the following periods is an administered price period in a region:[132]

- a trading interval where the sum of the spot prices in the previous 2,016 trading intervals, calculated as if this clause did not apply, exceeds the cumulative price threshold;
- a trading interval, where the sum of the ancillary service prices for a market ancillary service in the previous 2,016 trading intervals, calculated as if this clause did not apply, exceeds the cumulative price threshold; or
- a trading interval in a trading day in which a prior trading interval is an administered price period.

This means that the cumulative price, during an administered price period, is calculated based on the spot price irrespective of whether the spot price is set by AEMO in accordance with the MSPS.

5.3.2 Snowy Hydro's proposes that clause 3.14.2 should exclude scheduling pricing from the calculation of cumulative price

Snowy Hydro proposes that the issue can be solved through an amendment to clause 3.14.2 of the NER.[133]

Its proposed changes are:

> **3.14.2** Application of the Administered Price Cap
>
> (a) [Deleted]
>
> (b) AEMO must immediately notify all Market Participants of the commencement and closing of an administered price period under rule 3.14.
>
> (c) Each of the following periods is an administered price period in a region:

130 Clause 3.14.2(b) of the NER.
131 Clause 3.14.2(c) of the NER.
132 Clause 3.14.2(c) of the NER.
133 Snowy Hydro, Rule change request, p. 4.

(1) a trading interval, where the sum of the spot prices in the previous 2,016 trading intervals, calculated as if this clause did not apply *and excluding any trading interval in respect of which the spot price is set by AEMO in accordance with the market suspension pricing schedule,* exceeds the cumulative price threshold;

(1A) a trading interval, where the sum of the ancillary service prices for a market ancillary service in the previous 2,016 trading intervals, calculated as if this clause did not apply *and excluding any trading interval in respect of which the ancillary service price is set by AEMO in accordance with the market suspension pricing schedule*, exceeds the cumulative price threshold; or

(2) a trading interval in a trading day in which a prior trading interval is an administered price period.

Question 11: Will the proposed solution address the issue raised by the Snowy Hydro?

Do you consider that the proposed changes to the rules will solve the problem(s) raised or are there other factors that would have a greater impact?

5.4 Can the problem be solved in a different or more efficient way?

Snowy Hydro did not propose any alternative solutions to the problem it identified in its rule change request.

However, the Commission is interested in views from stakeholders about whether there are alternative changes to the rules that might better promote the long-term interests of consumers.

Question 12: Are there any alternative solutions that would be preferable?

Can you share any alternative solutions that you think would be preferable and more aligned with the long-term interests of consumers?

Are there alternative solutions that sit outside of the energy rules such as industry or jurisdictional initiatives that would more successfully address the issue?

5.5 What are your views on the interaction between both rule changes?

Each rule change relates to different issues with the calculation of the cumulative price in different scenarios.

Delta Electricity's proposal, as described in section 3.3, relates to the situation where a generator in one region (not in administered pricing), is exporting electricity to another region (in administered pricing) in the wholesale electricity market. Its proposal, as described in this paper, is to use settled prices as an input into the calculation of the CPT, not dispatch prices as is the case in the status quo.

Snowy Hydro's proposal, as described in section 5.3, relates to the situation where the wholesale market is suspended and scheduled pricing (using the MSPS) sets the spot price. Its proposal, as described in its rule change request, is to suspend the calculation of the cumulative price when the wholesale market spot price is being set by scheduled pricing.

We are interested views from stakeholders about whether the proposed changes would interact to cause some unintended consequences.

Question 13: What are your views on the interaction between both rule changes?

Do you consider that the proposed rule changes could interact to cause unintended consequences?

If so, what would they be, and how would you mitigate them?

6 Making our decision

When considering a rule change proposal, the Commission considers a range of factors.

This chapter outlines:

- issues the Commission must take into account
- the proposed assessment framework
- decisions the Commission can make
- rule-making for the Northern Territory.

We would like your feedback on the proposed assessment framework.

6.1 The Commission must act in the long-term interests of consumers

The Commission is bound by the National Electricity Law (NEL) to 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.[134]

The NEO is:[135]

> 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; and
>
> (c) the achievement of targets set by a participating jurisdiction—
>
> (i) for reducing Australia's greenhouse gas emissions; or
>
> (ii) that are likely to contribute to reducing Australia's greenhouse gas emissions.

The targets statement, available on the AEMC website, lists the emissions reduction targets to be considered, as a minimum, in having regard to the NEO.[136]

6.2 We propose to assess both rule changes using four assessment criteria

6.2.1 Our methods to analyse the proposed rule

Considering the NEO and the issues raised in both rule change requests, the Commission proposes to assess both rule change requests against the set of criteria outlined below. These assessment criteria reflect the key potential impacts – costs and benefits – of both rule change requests. We consider these impacts within the framework of the NEO.

The Commission's regulatory impact analysis may use qualitative and/or quantitative methodologies. The depth of analysis will be commensurate with the potential impacts of the proposed rule changes. We may refine these methodologies as both rule changes progress, including in response to stakeholder submissions.

134 Section 88 of the NEL.
135 Section 7 of the NEL.
136 Section 32A(5) of the NEL.

Consistent with good regulatory practice, we also assess other viable policy options - including not making the proposed rule (a business-as-usual scenario) and making a more preferable rule - using the same set of assessment criteria and impact analysis methodology where feasible.

6.2.2 Assessment criteria and rationale

The proposed assessment criteria and rationale for each is as follows:

- Outcomes for consumers - incentives

  This assessment criterion was chosen as the rule change requests are seeking to ensure that the administered pricing arrangements function as they are intended during times of market volatility to achieve better price outcomes for consumers in the long term. We will assess whether it would this establish better price signals and incentives to support efficient price setting and cost recovery that supports the long-term needs of consumers.

- Safety, security and reliability - outcomes and services

  This assessment criterion was chosen as the rule change requests seek to amend the administered pricing arrangements. Administered pricing is applied during sustained periods of volatility in the market, and as such the arrangements should operate as intended to maintain a reliable and secure power system. Furthermore, the arrangements should align with the intent of the market price settings to promote efficient investment in the market that would achieve the reliability standard.

  As such, we will assess the outcomes and services of safety, security and reliability in relation to the proposed changes.

- Principles of market efficiency - concepts of efficiency, incentives and risk allocation

  This assessment criterion was chosen as the rule change requests seek to ensure the administered pricing arrangements do not interfere with the ability of the market and market price settings to promote efficient investment and operational outcomes.

  Specifically, we will assess:

  - Concepts of efficiency – will the proposed changes promote the efficient investment and operation of the market, as intended by the market price settings?
  - Incentives – will the proposed changes promote the right incentives for investment and operation of plant through price signals in the market, as opposed to directions, obligations, or other mechanisms?
  - Risk allocation – will the proposed changes allocate risks to parties best placed to manage them?

- Principles of good regulatory practice - predictability, stability, simplicity and transparency

  This assessment criterion was chosen as the rule change requests are seeking to ensure the administered pricing arrangements function as intended.

  Specifically, we will assess:

  - Predictability and stability – will the proposed changes ensure administered pricing arrangements are predictable and stable for stakeholders to understand and act accordingly in the intended manner, particularly for investment decisions?
  - Simplicity and transparency – will the proposed changes promote a simple and transparent framework for administered pricing arrangements, such that they work as

intended and stakeholders are able to understand and act accordingly in the intended manner, particularly in operational decisions?

Question 14: Assessment framework

Do you agree with the proposed assessment criteria?

Are there additional criteria that the Commission should consider or criteria included here that are not relevant?

6.3 We have three options when making our decision

After using the assessment framework to consider the rule change requests, the Commission may decide:

- to make the rule in either or both rule changes as proposed by each proponent [137]
- to make a rule in either or both rule change requests that is different to the rule proposed by each proponent (a more preferable rule), as discussed below, or
- not to make a rule.

The Commission may make a more preferable rule (which may be materially different to the proposed rule in either or both rule changes) if it is satisfied that, having regard to the issue or issues raised in either rule change request, the more preferable rule is likely to better contribute to the achievement of the NEO.[138]

6.4 The proposed rule would not apply in the Northern Territory

Parts of the NER, as amended from time to time, apply in the Northern Territory, subject to modifications set out in regulations made under the Northern Territory legislation adopting the NEL.[139]

The proposed rules would not apply in the Northern Territory, as it amends provisions in NER chapter 3, that does not apply in the Northern Territory.[140] Consequently, the Commission will not assess the proposed rule against additional elements required by the Northern Territory legislation.

137 Delta Electricity sets out its proposed rule on p. 5 of its Rule change request and Snowy Hydro sets out its proposed rule on p. 5 of its Rule change request.

138 Section 91A of the NEL.

139 National Electricity (Northern Territory) (National Uniform Legislation) Act 2015 (**NT Act**). The regulations under the NT Act are the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016.

140 Under the NT Act and its regulations, only certain parts of the NER have been adopted in the Northern Territory. The version of the NER that applies in the Northern Territory is available on the AEMC website at: https://energy-rules.aemc.gov.au/ntner.

Abbreviations and defined terms

AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AFP	Administered floor price
APC	Administered price cap
APP	Administered pricing period
Commission	See AEMC
CPT	Cumulative price threshold
FCAS	Frequency control ancillary service
NEL	National Electricity Law
NEM	National Electricity Market
NEO	National Electricity Objective
NER	National Electricity Rules
MSPS	Market suspension pricing schedule
Proponent	The proponent of the rule change request
RSSR	Reliability Standard and Settings Review
VRE	Variable renewable energy