Justice and Equity Centre

2026 Reliability Standard and Settings Review – Issues Paper

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About the Justice and Equity Centre

The Justice and Equity Centre is a leading, independent law and policy centre. Established in 1982 as the Public Interest Advocacy Centre (PIAC), we work with people and communities who are marginalised and facing disadvantage.

The Centre tackles injustice and inequality through:

- legal advice and representation, specialising in test cases and strategic casework;
- research, analysis and policy development; and
- advocacy for systems change to deliver social justice.

Energy and Water Justice

Our Energy and Water Justice work improves regulation and policy so all people can access the sustainable, dependable and affordable energy and water they need. We ensure consumer protections improve equity and limit disadvantage and support communities to play a meaningful role in decision-making. We help to accelerate a transition away from fossil fuels that also improves outcomes for people. We work collaboratively with community and consumer groups across the country, and our work receives input from a community-based reference group whose members include:

- Affiliated Residential Park Residents Association NSW;
- Anglicare;
- Combined Pensioners and Superannuants Association of NSW;
- Energy and Water Ombudsman NSW;
- Ethnic Communities Council NSW;
- Financial Counsellors Association of NSW;
- NSW Council of Social Service;
- Physical Disability Council of NSW;
- St Vincent de Paul Society of NSW;
- Salvation Army;
- Tenants Union NSW; and
- The Sydney Alliance.

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The Justice and Equity Centre office is located on the land of the Gadigal of the Eora Nation.

Contents

1. Introduction

The Justice and Equity Centre (JEC) welcomes the opportunity to respond to the Australian Energy Market Commission (AEMC) Reliability Panel's issues paper for the 2026 Reliability Standard and Settings Review (the issues paper).

Market settings should be return to levels no higher than those in effect in 2024, in real terms.

We have seen no evidence that justifies the rise in market caps in the previous review, and none justifying a change in our position to oppose them. There has been little to demonstrate the higher market settings have been needed to induce generation investment. Rather the market impact of the market settings as investment signals has been rendered less impactful by the introduction and expansion of schemes such as the Capacity Investment Scheme (CIS) and Jurisdictional schemes such as NSW Long-Term Energy Service Agreements (LTESAs).

In this context historically high market settings enable an unnecessary and inefficient wealth transfer from consumers to energy sellers in the wholesale market. We consider this is more than sufficient justification to re-adjust the settings downwards.

The focus must be on enabling more efficient market settings, which produce market reliability outcomes in line with the preferences of consumers, as revealed in the Australian Energy Regulator's (AER) values of customer reliability (VCR). We detail three main aspects of more efficient settings in this submission.

1) **Changes to modelled entrants**
   Contenders for marginal entrants modelled should include batteries, demand response (DR) projects, and virtual power plants (VPP). Each of these is more likely to be realised as an actual entrant than a gas peaker and each potentially offers a more efficient reliability improvement on a per dollar of investment basis, enabling lower market settings.

2) **Changes to methodological approach**
   The methodology of forcing a reliability gap and deriving the market settings needed to incentivise the marginal entrant to respond to it should be replaced with a methodology based on a realistic status quo. This would identify the market settings needed to prevent expected projects leaving up to the point where a reliability gap is produced.

3) **Accounting for the suite of reliability-relevant mechanisms**
   Market settings must account for the full range of mechanisms which impact reliability. Market settings levels cannot be set as if they were solely responsible for producing reliability outcomes. Many new elements have been added to the reliability regime since the current practice was established. If the market settings continue to be set as they are, consumers will be forced to pay far more for the marginal unit of reliability than they would prefer to.

Immediately following this review the reliability panel should tasked with producing recommendations for a market price regime to replace the existing one, to be introduced by the mid-2030s . This process must take account of the changes implied in the Nelson Review but go further to address the fundamental issues with the spot market which the Nelson Review has

avoided. Starting this task immediately maximises the degree of anticipation and certainty for market participants about the nature of the replacement regime.

2. The changing generation and storage fleet

Consultation question: What are the implications of this changing generation mix for the reliability outlook for 2028-2032?

The significance of the market settings to investment decisions for new generation, storage and demand response projects has been substantially lessened. This is a difficult situation for the reliability panel, as the market settings are the key tool they have to impact their target outcome. However, the dilution of investment signals produced by the market settings should imply that lower settings are appropriate.

The panel should abandon the long-outdated practice of determining the reliability settings as if they were solely responsible for producing reliability outcomes. The list of measures in the reliability regime are now very substantial. They include (but are not limited to):

- AEMO's forecasting outputs: the Electricity Statement of Opportunities (ESOO) and Projected Assessment System Adequacy (PASA) tools.
- The Interim Reliability Measure (IRM), which triggers AEMO's Retailer Reliability Obligation (RRO) tool.
- Jurisdictions and the Federal Government investment de-risking mechanisms, such as the by Long Term Energy Services Agreements (LTESAs) and the Capacity Investment Scheme (CIS).
- Australian governments' capacity to initiate and direct new dispatchable energy projects directly.
- AEMO's powers to procure capacity directly, using the Interim Reliability Reserve (IRR) or Reliability and Emergency Reserve Trader (RERT) contracts.
- AEMO's powers to direct dispatch under NEL Section 116; NER clause 4.8.9.

Most significantly, renewable generation and storage investments are incentivised, and largely derisked, by the government under-writing schemes, including the expected long-term, standardised, fungible contracts emanating from the Nelson Review than by the market settings. This must be considered in reliability panel assessments of market settings.

Determining appropriate market settings in isolation from these considerations can only lead to consumers paying more for the reliability outcomes than they are willing to, as implied by the VCR. We contend this has been the case in recent years and must be rectified.

3. Consumer energy resources and demand implications

Consultation questions: how is the uptake of distributed resources and the growth of electrification going to impact reliability risk?

How should the reliability framework manage the uncertainty that these changes create?

The rise in consumer energy resources (CER) should enable the market caps – the market price cap (MPC), the cumulative price threshold (CPT) and the administered price cap (APC) to be lowered.

Increasing CER does increase the proportion of resources the operator does not have operational time visibility on. However, the net effect of increasing CER is to mitigate the likelihood and impact of reliability events, not the opposite. CER increases the diversity of generation as well as the volume of supply. It also increases the flexibility of energy resources.

The expected increase in behind the meter storage in the period to 2032 is very substantial. These expectations are based both on the preliminary findings released by the Australian Energy Market Operator (AEMO) in the processes associated with the 2026 Integrated System Plan (ISP) and the early take-up of the federal home battery subsidy scheme introduced in July this year. The impact of this is to reduce the number of outages that occur by reducing system demand during periods of market stress and clearly impacts the appropriate market cap settings in a downward direction.

Less significantly, but still importantly for the purposes of the reliability panel, some proportion of batteries will be able to be used during outages, which will lower the impact of network outages. The reduced impact consumers experience during network outages is a material matter for the AER to consider in the production of the VCR. However, this does not preclude the reliability panel employing the metrics on a dynamic basis.

4. Government policies and the reliability settings

Consultation questions: what implications do emissions reduction policies have for the Panel's assessment of the reliability standard and settings?

What are your views on the impact of State and Commonwealth government energy policies on the reliability settings?

What impact do you consider the NEM review will have on the reliability standard and settings?

How should this process interact with the ongoing review?

The suite of schemes from State and Commonwealth governments aimed at inducing investment in renewable generation and storage, including the measures that are introduced as a result of the Nelson Review, must impact the reliability settings (as outlined above). The dilution of the investment signal sent by the market settings implies that a lower set of market caps is appropriate, as the benefit in terms of investment of the marginal dollar has fallen.

The reliability impacts of the increased generation and storage resulting from these schemes must be also considered by the panel in assessing the likelihood of outages over the period 2028-2032.

Review of the form of the market settings

Changes to the generation fleet and energy system in recent years are profound. As the AEMC has noted in the 2023 review -of the form of the reliability standard and administered price cap- it

is not clear that the form of the reliability standard or market settings are still appropriate or able to most efficiently effect their stated aims. We concur and propose that immediately following this review the Reliability Panel should be tasked with producing recommendations on the appropriate forms of the reliability standard and market settings.

This work should be commenced as soon as possible and aim to introduce these new forms in 2032 at the end of this review's period of operation. Starting this work early and completing it as soon as possible would maximise the time market participants have to understand and prepare for the changes.

As a starting point for these new forms of market setting, we draw attention to the JEC submission to the Nelson Review terms of reference consultation. We identified the problem of inadequately reward for flexible resources in the market caused by non-flexible and flexible resources receiving the same prices during periods of market stress. We proposed that the wholesale market should be designed to incentivise investment in energy resources that consumers value: flexible resources and zero- or near-zero-emission generation. To incentivise entry of flexible resources, we propose a differentiated set of market settings for flexible and non-flexible resources. To incentivise zero- and near-zero-emission generation, we propose an in-market fixed additional benefit paid on a per-megawatt dispatched basis.

5. The use of the Values of Customer Reliability

Consultation questions: Do you consider that there is evidence that a different level of the reliability standard would deliver better overall outcomes for the NEM?

During the period 2028-2032, the level of CER in the NEM is expected to continue increasing. How would that affect the value consumers place on a reliable electricity supply?

How should the Panel account for the 2024 VCR values as part of this RSS review?

The reliability standard should not be tighter. Tightening it would result in consumers paying for reliability outcomes far exceeding their willing to pay as identified in the 2024 VCR.

In the interests of recentering the reliability regime on the VCR – as the key instrument determining the level of consumer interest in reliability – the panel should make an explicit recommendation for the reliability standard to be treated as a planning target to be achieved on average (as it is intended to be), rather than a ceiling. The standard becoming a ceiling has ensured consumers pay more for reliability than the VCR implies they are willing to for many years.

The reliability standard is defined in terms of outcomes. As noted above, the panel should explicitly recommend market settings consider all the variables that impact reliability outcomes, including federal and state government policies, and the suite of reliability tools at AEMO's disposal. Failure to do this causes consumers to pay more than the VCR would imply they are willing to for reliability outcomes

CER and the VCR

The increased rates of CER impact both the VCR and reliability standard (as we have noted earlier).

Regarding impacts on the VCR,

- Consumers with batteries can be expected to have a substantially lower VCR if their batteries provide backup during outages. This is currently a minority of batteries but is growing. For these users, the impact of outages has reduced substantially and their willingness to pay to avoid outages should fall commensurately.

- The increase in the number and size of data centres and the rise in the proportion of demand comprised by data centres also lowers the overall VCR. As data centres are well-incentivised to invest in their own back-up storage and to configure it to dispatch during network outages, the overall impact is both much higher overall demand (the denominator of the reliability standard) and lower than average VCR for a consumer class that accounts for a sizeable and increasing proportion of overall demand.

- Consumers with behind the meter generation can also be expected to have lowered VCR due to some proportion of outages occurring at times they are generating, and so receiving partial or full energy supply from their own resources. The overall implications for the reliability standard are complicated somewhat by the impact of this generation on overall energy demanded. The overall energy consumed - which is not a component of the reliability standard - diverges from the overall energy demanded from the grid - which is the numerator of the standard. As behind the meter generation grows, all other things equal, the numerator of the reliability standard will fall.

6. The Market Price Cap

Rises in the MPC in recent years have not been sufficiently justified. The marginal entrants of new gas peaking generators imagined in the modelling – and used to justify the rises – have not occurred and reliability outcomes have not substantially increased. An efficient level of reliability would result in outcomes in any given year approximating the standard on average in the worst-served region for that year. This is not the same as the standard not being breached in any year in any region. The negative impact on consumers in recent years of the costs of avoiding outages have been far greater than the negative impacts of any outages themselves.

Consultation question: How effective is the MPC in allowing for the investment of the least-cost mix of generation and storage to meet the reliability standard as the NEM transitions? And what types of generation is it critical to incentivise?

The market price cap cannot be considered in isolation from other investment signals. In recent years the significance of the market cap in generation and storage investment decisions has been markedly reduced and is likely to continue to fall. Research by Tim Nelson and Alan Rai published in 2021 – which used qualitative surveys to rank investors' perceived barriers to entry –

found that out of eleven options, 'Reliability price settings (e.g. MPC) being too low' was ranked tenth in relative importance.[1]

Given this, the impact of the MPC on shaping the mix of generation and storage (let alone causing new investment entry to occur) is likely to be very limited. This impact is dwarfed by the tools designed to impact different types of generation differentially, which the MPC is not.

We highlight our proposal (noted above) for a re-design of the market settings to enable them to reward what consumers value from the energy market: low emission bulk energy and dispatch flexibility.

Consultation question: What factors or issues regarding spot prices, investment, market participants and/or the predictability and flexibility of the regulatory framework should the Panel pay particular attention to?

The development of metrics assessing the impact spot prices have on energy suppliers should be produced on the basis of a single generator/storage provider or generator/storage provider class, according to when they are generally dispatching. The arithmetic average of all five-minute intervals for the spot market as a whole is unlikely to be appropriate for any single generator/storage provider, let alone all of them.

Consultation question: Do you consider that the introduction and continuation of government investment schemes means that changes to the MPC should be considered?

Government investment schemes must prompt reconsideration of the MPC. These schemes de-risk investment and so lower the market caps needed to render new entry attractive.

These schemes also constitute investment in increases to the reliability of the energy system paid for by consumers. Failing to include them would result in consumers paying more for reliability outcomes than they are willing to.

Consultation question: Do you consider that the emergence of new technologies warrants a change in the MPC in order to enable investment to meet the reliability standard in the most cost-effective way?

There are three technologies that can be expected to enter the market under conditions less favourable than required by a new peaking gas generator during the period in question: wholesale batteries, demand response projects and virtual power plants. One of these – arguably batteries – should be the marginal entrant modelled for the purposes of determining the minimum necessary market settings.

Consultation question: How would you suggest the Panel include the value of emissions reduction as part of this economic assessment?

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[1] Rai, A. and Nelson, T. (2021) 'Financing costs and barriers to entry in Australia's electricity market', *Journal of Financial Economic Policy*, 13(6), 730-754. Available at https://research-repository.griffith.edu.au/server/api/core/bitstreams/532fd9d7-a372-4f1c-a7b4-de0e43202999/content

See comments below.

Consultation question: Do you consider that the introduction of new markets or system security enablement approaches would mean a change to the MPC is required?

Insofar as new ancillary markets offer new revenue streams for batteries, they lower the MPC needed for a marginal battery entrant to enter the market. These income streams should be considered alongside all income streams batteries have access to when modelling the needs of the marginal entrant.

7. The Market Floor Price

Consultation question: What role, if any, does the MFP have to play in mitigating the risk of MSL events? Does this role include investment as well as operational considerations? Is the MFP set at the right level, and is it in the right form to drive efficient operational dispatch?

A key minimum system load (MSL) issue is the lack of incentive for rooftop solar generators to limit exports at times when doing so poses price or system security issues. This is ultimately caused by retailers choosing not to control or incentivize consumer-generators to reduce export or self-generation. This is facilitated by AEMO managing the issues this creates by drawing on its powers of direction at substantial cost.

The MFP could be lowered to a point where the costs to retailers stimulate a change in behaviour, and find a market-based solution, such as compensating consumer-generators when their exports are curtailed. This would be less expensive than the current arrangement.

Importantly, a lowered floor price would provide more revenue for batteries - the most likely marginal entrant – also supporting a lower MPC.

8. The Cumulative Price Threshold

Consultation questions: Should the CPT continue to function as a technology-neutral mechanism in a changing reliability landscape?

Should the formulation of the calculation of the CPT be considered to better reflect its purpose? Including the separate APP triggers for energy and market ancillary services.

How is the interaction between the CPT in the Energy and FCAS markets changing and what does this mean for this review?

The CPT is not functioning adequately as a protection for consumers from extended periods of high prices. We have seen no justification for the increases that occurred in the last review. The CPT level should be returned to below the levels of the last increase.

9. The Administered Price Cap

The APC is not functioning adequately as a protection for consumers from extended periods of high prices. We see no justification for it to be set at a level above the panel's recommendation in the last review of $500/MWh.

Importantly, the substantial increase in the APC in the last review was made to erase a perverse incentive for generators to withhold energy during periods of market stress, forcing the operator to direct them to dispatch (and be compensated). That is, a decision was made to effectively reward bad behaviour, not to empower the operator to penalise it. This was a fundamentally inappropriate response, and the arrangement is still inappropriate and should be reversed.

The APC must also be balanced with the need for compensation claims, not seek to avoid compensation claims altogether. Attempting to avoid compensation would involve setting the APC at an inefficiently high level. It is extremely unlikely that the figures of $300/MWh or $600/MWh are the product of robust and rigorous analysis identifying the optimal balance. In this review, the panel should insist on rigorous and robust modelling on which to base a recommendation on the optimal level of the APC. This analysis should be transparent and available to stakeholders – particularly consumers – beyond the reliability panel.

10. Indexation

Consultation question: Are there any specific considerations the Panel should take into account for this review, relating to the indexation of the MPC and CPT?

Indexing the market settings to consumer price index (CPI) is not appropriate as the inputs to energy production are substantially different to the bundle of goods used to derive the CPI.

Indexation may be appropriate, but if applied should be linked to a bespoke instrument comprised of a basket of goods relevant to specific energy inputs.

11. Modelling

11.1 The marginal new entrant

It is no longer appropriate that gas peaking generators are modelled as the marginal entrant to resolve a reliability gap. Marginal projects taking the form of wholesale batteries, DR projects and VPPs all provide higher reliability improvements on a per dollar basis and require lower quality investment conditions to incentivise market entry.

Importantly, each of these alternative marginal entrant candidates wants different market conditions and market settings.

Wholesale battery storage

Batteries do no need high prices to be economically viable. They need adequate price volatility, and scope to benefit from access to multiple income streams unavailable to a range of other generators.

It is likely that the marginal battery storage project will be incentivised to enter or remain in the market with substantially lower market caps than the current settings accompanied by a lower MFP.

The fact that batteries need lower market settings, all other things being equal, makes them a highly attractive candidate for the modelled marginal entrant.

Demand response

DR is the lowest capital outlay candidate for marginal entrant. While DR proponents prefer high prices, for the period 2028-2032, it is very likely that they will enter the market under less favourable conditions than marginal gas peaking generators. This is largely due to there being so much latent capacity for DR available to be captured.

Virtual power plants

VPPs have similarities both with DR and battery storage in terms of what proponents need from the market for investment to be viable. The particular needs will be determined by each project's constitution. This heterogeneity may mean they are not ideal as a marginal entrant to be modelled for the purpose of setting the market settings. However, as they are in reality likely to function as reliability providers during the period, the panel should consider the ways they might be modelled.

11.2 The reliability standard is an outcome target

In the name of recentring the reliability regime on the VCR, the panel should make an explicit recommendation for the reliability standard to be treated as it was intended to be: as a planning target to be achieved on average, not a ceiling. The transmutation of the standard into a ceiling has ensured consumers are paying more for reliability than the VCR implies they are willing to, and has been doing so many years.

11.3 Forcing the reliability gap

The method of forcing a reliability gap by removing an actually existing generator until a gap appears may have an inflationary effect on the market settings by removing the question of whether and when the market settings need to incentivise new investment.

The panel should consider a revised approach that starts with all existing generation in the system in place and constructs a pipeline of anticipated new investment, as well as an expected set of pathways for demand. The model could reduce the market settings from their existing level, marginally, until an anticipated reliability gap appears due to an anticipated marginal entrant ceasing to be viable or an existing generator in the market ceasing to be viable and exiting the market.

It is unlikely that the market settings needed to induce the marginal entrant to enter the market - identified using this method - will be the same as those identified in the forced reliability gap method, as the gap itself is modelled differently.

12. Emissions

We agree with the comments made in the issues paper concerning the obligation on the reliability to consider emissions reductions. We await greater detail on the methodology the panel will use to consider the emissions reduction impacts of its recommendations and will comment when these are available.

13. Other matters

Partial supply and partially flexible loads

The panel should consider the impacts of CER and DER on both the likelihood of outages and people's ability to respond to them, particularly with regard to the value of partial supply, the role of partial self-supply, and partially flexible loads. There is an increasing need to reconsider electricity demand in terms of the constitution of loads. This has implications for both the reliability standard and VCRs.

14. Continued engagement

We welcome the opportunity to meet with AEMC and the Reliability Panel and other stakeholders to discuss these issues in more depth. Please contact Michael Lynch at mlynch@jec.org.au regarding any further follow up.