



8 April 2021

Lisa Shrimpton
Australian Energy Market Commission
GPO Box 2603
Sydney NSW 2001

Lodged via: <https://www.aemc.gov.au/contact-us/lodge-submission>

Dear Ms Shrimpton

RE: Review of the reliability standard and settings guidelines

Shell Energy Australia Pty Ltd (Shell Energy) welcomes the opportunity to respond to the Australian Energy Market Commission (AEMC) Reliability Panel (the Panel) consultation paper on the review of the reliability standard and settings guidelines (the Guidelines).

About Shell Energy in Australia

Shell Energy is Australia's largest dedicated supplier of business electricity. We deliver business energy solutions and innovation across a portfolio of gas, electricity, environmental products and energy productivity for commercial and industrial customers. The second largest electricity provider to commercial and industrial businesses in Australia¹, we offer integrated solutions and market-leading² customer satisfaction, built on industry expertise and personalised relationships. We also operate 662 megawatts of gas-fired peaking power stations in Western Australia and Queensland, supporting the transition to renewables, and are currently developing the 120 megawatt Gangarri solar energy development in Queensland. Shell Energy Australia Pty Ltd and its subsidiaries trade as Shell Energy.

www.shellenergy.com.au

General comments

Shell Energy considers a well-designed reliability standard and associated reliability settings to be core components of an energy-only market. If the market is allowed to operate without excessive intervention, the standard and settings can underpin "efficient investment in and operation of electricity services to maintain reliability", while balancing the "costs of providing reliability against the value customers place on that reliability".³ In this context, the National Electricity Market's (NEM's) energy-only design, reliability standard and associated reliability settings are broadly fit for purpose.

Shell Energy does not support amending the Guidelines to allow the Panel to routinely consider the form of the reliability standard and/or settings as part of the four-yearly reliability standard and settings review (RSSR). Three core arguments underpin this position.

¹ By load, based on Shell Energy analysis of publicly available data

² Utility Market Intelligence (UMI) survey of large commercial and industrial electricity customers of major electricity retailers, including ERM Power (now known as Shell Energy) by independent research company NTF Group in 2011-2020.

³ Reliability Panel, *Review of the reliability standard and settings guidelines, Consultation paper*, 4 March 2021, pp 13



- A stable, predictable regulatory framework supports market confidence and reduces perceived regulatory risk, thereby helping to facilitate efficient investment. Consistent with the Panel's views in previous RSSR-related processes, the reliability standard and settings still appear to be serving their purpose. It follows that there needs to be a clear and convincing rationale to justify reviewing the form of the reliability standard and/or settings as part of the RSSR. Shell Energy does not believe the consultation paper has made a compelling argument to this effect. Indeed, most of the issues raised in the consultation paper relate to the level (not the form) of the reliability standard and or/settings, which each RSSR can already consider under the current Guidelines.
- Allowing the Panel to automatically review the form of the reliability standard and/or settings as part of each RSSR would add complexity and regulatory burden to the consultation process. The existing guidelines provide a high degree of certainty and transparency to the RSSR. Amending the Guidelines so that the form of the reliability standard and/or settings is automatically 'open' would effectively ensure that each RSSR is longer and more complex. This would increase regulatory burden, in addition to the risk premium (see previous dot point) in the NEM. These costs would ultimately be passed to consumers (for likely negligible benefit), which is counterproductive to achieving the National Electricity Objective (NEO).
- Shell Energy believes there is no clear rationale for why the form of the reliability standard and/or settings needs to be reviewed (either routinely as part of each RSSR, or as a 'once off' in the near term). However, if there is a genuine need for the Panel to consider the form of the reliability standard and/or settings in the future, there is already a mechanism to allow it. Clause 8.8.3(c) of the National Electricity Rules (NER) provides for the AEMC to issue the Panel with a terms of reference for any RSSR. Clause 3.9.3A(e) of the NER requires the Panel to have regard to this terms of reference. Therefore, if the AEMC determines that there is a clear rationale for the Panel to consider the form of the reliability standard and/or settings, then this can be accommodated as part of the RSSR without any changes to the Guidelines.

The body of this submission provides more detail on these arguments by responding to the specific questions raised in the consultation paper.

Shell Energy considers that it would be beneficial if the Panel held a public meeting to discuss its review of the Guidelines (as per clause 8.8.3(f) of the NER). This would provide stakeholders an opportunity to better understand the Panel's rationale for seeking to review the form of the reliability standard and settings as part of the RSSR. The Panel may also benefit from hearing the views of consumers, who would likely bear additional costs for negligible benefit if the forms were subject to regular review.

Question 1: General assessment principles to meet the NEO

Shell Energy agrees that the general assessment principles the consultation paper outlines in Box 1 are appropriate and should be maintained in the Guidelines.

Question 2: Broad approach for guidelines update

Question 2 in the consultation paper is split into three prompting questions, with an overarching theme of the benefits of regulatory stability vs. the benefits of the Panel having flexibility as part of the RSSR process. Shell Energy considers that regulatory stability should be retained unless there is a compelling case for change. We do not think that the consultation paper makes such a case.



The reliability standard and settings are serving their purpose in their existing form

As acknowledged in the consultation paper:

“Over the past 14 years, interruptions to power supply in the NEM due to a lack of available capacity have been very rare. That is, there have been very low levels of unserved energy across all NEM regions.”⁴

During this time, the reliability standard was “only exceeded in 2008-09 in South Australia and Victoria, which was as a consequence of extreme weather conditions and reduced availability of Victorian generators and the Basslink interconnector”⁵. To be clear, the involuntary load shedding events (for reliability and security) in South Australia and Victoria in January and February 2009 were caused by unprecedented conditions. For example, there were multiple occasions of concurrent transmission outages, including one day where Victoria experienced simultaneous outages of six high voltage (500 kV, 330 kV and 220 kV) intra-regional transmission lines^{6, 7}. Additionally, NEMMCO, (the market and power system operator at the time) calculated temperatures to be in excess of 1% POE conditions⁸.

It should also be noted that, in August 2008, “NEMMCO decided not to procure reserve for the 2008/09 summer period” under the Reserve Trader framework because the Medium Term Projected Assessment of System Adequacy indicated that there would be sufficient capacity to meet the reliability standard⁹. Had the current Reliability and Emergency Reserve Trader (RERT) framework existed at that time, reserves recruited under the Short Notice RERT (SNRERT) panel provisions would have mitigated (if not totally removed) the involuntary load shedding and unserved energy (USE) on 29 and 30 January 2009.

The fact that load shedding due to wholesale market conditions has been rare – only occurring under conditions of the most extreme stress on the power system – indicates the current form and level of the reliability standard/settings have been serving their purpose.

As shown in Figure 1 below, only 0.30% of all supply interruptions over the 10 years to 2018-19 were due to reliability events, with the remaining 99.70% of supply interruptions caused by other issues (mainly distribution). Given the inherent trade-off between increased reliability and cost, it is unlikely that a more stringent form (or level) of the reliability standard would deliver value to consumers. I.e. even if a new form was implemented (which would come at a cost) that somehow cut in half the reliability interruptions, the consumer experience would be largely unchanged.

⁴ Reliability Panel, *Review of the reliability standard and settings guidelines, Consultation paper*, 4 March 2021, pp 5

⁵ *ibid*

⁶ NEMMCO, *Load shedding in Victoria and system separation between Victoria and New South Wales on 8 February 2009*, 3 June 2009, pp 1

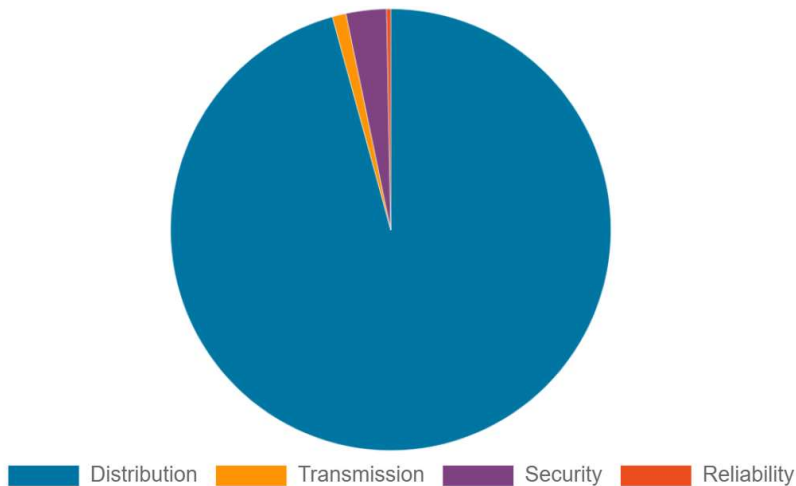
⁷ NEMMCO, *Unplanned Outages of South Morang to Keilor and South Morang to Sydenham 500kV Transmission Lines in Victoria Region on 30 January 2009*, 26 May 2009, pp 3

⁸ NEMMCO, *Actual Lack of Reserve (LOR3) in Victoria and South Australia Regions on 29-30 January 2009*, 26 May 2009, Section 2

⁹ *ibid*, Section 5



Figure 1: Sources of supply interruptions over the decade (2008-09 to 2018-19)¹⁰



Shell Energy is not aware of any consumer-led push to change the form of the reliability standard and/or settings. This is consistent with previous consumer submissions to the Panel and the AEMC. For example:

- The Panel “did not receive any stakeholder requests to reassess the level or form of the reliability standard as part of the 2018 [RSSR]”.¹¹
- During consultation for the 2018 RSSR, PIAC stated that that a 0.002% USE standard “represents a level of reliability that, given the cost trade-offs of higher reliability and the impact of lower reliability, is consistent with... delivering a level of reliability consistent with the value placed on that reliability by customers”.¹²
- During the AEMC’s 2018 consultation on the Enhancement to the RERT rule change, the Major Energy Users Inc. noted that:

“The current Reliability Standard has stood the test of time (recognising that the concept was used prior to the NEM being created) and there is no driving reason to change it. As noted above, it is just one element in the supply chain where other issues of reliability also apply and which have a greater impact on reliability seen at the point of consumption.”¹³

Shell Energy is concerned that changing the form of the reliability standard and/or settings may give rise to an excessively stringent reliability regime that adds costs above what consumers are willing to pay. Further, it is likely that any consumer benefit would be negligible.

Value of regulatory stability

The Panel summarised the benefit of regulatory stability when it made the Guidelines in 2016.

¹⁰ Reliability Panel, *2019 Annual market performance review, Final Report*, 12 March 2020, Figure 2.20, pp 36. Accessed from: <https://www.aemc.gov.au/market-reviews-advice/annual-market-performance-review-2019>

¹¹ Reliability Panel, *Reliability Panel advice on the Enhancement to the Reliability and Emergency Reserve Trader rule change*, 28 September 2018, pp 4. Accessed from: <https://www.aemc.gov.au/sites/default/files/2018-10/Letter%20of%20Advice%20from%20the%20Reliability%20Panel.pdf>

¹² PIAC, *Reliability Standards and Settings Review 2018: submission to the AEMC Reliability Panel*, 20 July 2017. Accessed from: <https://www.aemc.gov.au/sites/default/files/content/d64f2f94-8660-48de-b656-d79bdf963962/MarketReview-Submission-REL0064-PIAC-170720-%28%29.pdf>

¹³ MEU Inc, *Enhancement to the RERT Consultation paper ERC0237*, 25 July 2018, pp4. Accessed from: <https://www.aemc.gov.au/sites/default/files/2018-07/Major%20Energy%20Users.pdf>



"The standard and settings inform decisions to invest in long term assets. As such, there is value in maintaining stability in the level and form of components wherever appropriate. Stability and predictability of outcomes supports market confidence and reduces perceived regulatory risk, helping to support efficient investment. This value needs to be considered against the value of reassessing each component."¹⁴

The 2018 RSSR went on to assert that policy uncertainty disincentivises investment in long-term assets.¹⁵

These points are more salient than ever. As the Panel acknowledged in its consultation paper, the market is undergoing substantial changes. In this changing environment, it makes sense to provide regulatory stability and certainty with respect to the form of the reliability standard and settings. Increasing the risk of form changes adds another unknown variable to an already uncertain situation.

In addition to market design changes, both state and federal governments are directly intervening in the NEM. While government intervention is beyond the Panel's control, it provides important context for the Guidelines. For example, in 2018, the Panel found that a 0.002% USE standard was fit for purpose, and that "providing regulatory stability through no changes will benefit consumers and market participants, given the extent of the current flux and range of uncertainties that impact on market participants' long-term decisions"¹⁶. Despite this, in 2020, the COAG Energy Council approved the Interim Reliability Measure of 0.0006% USE¹⁷.

At the moment, the risk of direct government intervention to the reliability standard and settings is largely constrained to their level (not their form). Amending the Guidelines to allow the form of the standard and settings to be reviewed and potentially changed in each RSSR magnifies the risk of future invention. Increasing the likelihood and/or magnitude of government intervention makes it more difficult for the reliability standard/settings to drive efficient investment. This undermines the NEO and will result in increased cost to consumers.

Finally, as the Panel noted in 2016:

"The Panel considers that when conducting each review, it should focus on the components where regular assessment is likely to be materially beneficial. Focusing our analysis in this way will provide the market with more predictable outcomes and help minimise the complexity of each review."¹⁸

Allowing the Panel to automatically review the form of the reliability standard and/or settings as part of the standard RSSR process would add complexity and regulatory burden to the consultation process. This cost would ultimately be passed to consumers (for likely negligible benefit), which is counterproductive to achieving the NEO.

There is insufficient rationale to review the form of the reliability standard and/or settings

When making the Guidelines in 2016, in addition to general arguments relating to regulatory stability, "the Panel assessed the reasons behind the form and level of each component... [and] determined whether there is likely to be a material benefit in reopening these assessments in future reviews"¹⁹. After considerable analysis, the Panel

¹⁴ Reliability Panel, *Review of reliability standards and settings guidelines, final determination*, 1 December 2016, pp 20. Accessed from: <https://www.aemc.gov.au/sites/default/files/content/b143b076-45c4-4b08-8296-778d03b5d7c8/REL0059-Final-determination.PDF>

¹⁵ Reliability Panel, *Review of the reliability standard and settings guidelines, Consultation paper*, 4 March 2021, pp 3

¹⁶ Reliability Panel, *Reliability standard and settings review 2018, Final report*, pp iii. Accessed from: <https://www.aemc.gov.au/sites/default/files/2018-04/Reliability%20Panel%20Final%20Report.pdf>

¹⁷ ESB, *Interim Reliability Measures*, 2020. Accessed from: <http://www.coagenergycouncil.gov.au/reliability-and-security-measures/interim-reliability-measures>

¹⁸ Reliability Panel, *Review of reliability standards and settings guidelines, final determination*, 1 December 2016, pp ii. Accessed from: <https://www.aemc.gov.au/sites/default/files/content/b143b076-45c4-4b08-8296-778d03b5d7c8/REL0059-Final-determination.PDF>

¹⁹ *ibid*



concluded that the form of the standard and each of the settings should not be reassessed in each RSSR²⁰. It follows that there would need to be a compelling case for the Panel to reverse its position. Shell Energy considers that the only reasonable way to build such a case would be to:

- methodically explore the Panel's previous rationale for why the form should be 'closed' as part of the RSSR
- demonstrate that changes since 2016 are so material that the Panel's previous arguments are no longer valid.

In Shell Energy's view, the consultation paper does not mount a compelling argument for why the form of the reliability standard, or any of the settings, warrants consideration as part of the RSSR. The issues raised in the consultation paper appear to be primarily about the level, not the form of the standard and settings. Additionally, the consultation paper does not explore the rationale behind the 2016 final determination (or the determinations of the numerous previous reviews into the form of the reliability standard and settings) in any meaningful detail. Instead, the Panel only makes a broad argument that "given the substantial changes that are now presenting themselves in the market... it may make sense to consider both form and level in a comprehensive manner". A broad comment that the market is undergoing changes appears insufficient to justify the Panel's view that "the benefits of stability may no longer outweigh the benefits of a flexible framework in a changing environment"²¹. Similarly, the consultation paper provides limited to no detail (depending on the component) on what alternative forms could be, or why alternatives would be better than the status quo.

As a result, Shell Energy does not consider it is appropriate to remove the existing structure of the Guidelines where components are either open, subject to materiality assessment or closed for review. We consider that the Guidelines should retain the existing arrangements outlined in Table 3.1 of the consultation paper - in particular that the form of the standard and settings should remain closed.

If there is a genuine need for the Panel to review the form of the reliability standard and/or settings in the future, there is already a mechanism to facilitate it without making changes to the Guidelines. NER 8.8.3(c) provides for the AEMC to issue the Panel with a terms of reference for any RSSR. Clause 3.9.3A(e) of the NER requires the Panel to have regard to the terms of reference. Therefore, if the AEMC determines that there is a clear rationale for the Panel to consider the form of the reliability standard and/or settings, then this can be added to the RSSR terms of reference.

Question 3: Issues pertaining to the reliability standard

Form of the reliability standard

Shell Energy does not consider there is value in the Panel routinely considering the form of the reliability standard as part of each RSSR. Nor is there value in considering the form of the reliability standard as a 'once off' in the next RSSR.

As discussed in the above response to Question 2, the form of the reliability standard is effective. This is consistent with:

- the Panel's 2016 position that "the form of the standard should be retained as USE and that it should not be reassessed at each review"²²

²⁰ *ibid*, pp 20-22, 25-27, 30-31, 34, 38-39.

²¹ Reliability Panel, *Review of the reliability standard and settings guidelines, Consultation paper*, 4 March 2021, pp 16

²² Reliability Panel, *Review of reliability standards and settings guidelines, final determination*, 1 December 2016, pp 22. Accessed from: <https://www.aemc.gov.au/sites/default/files/content/b143b076-45c4-4b08-8296-778d03b5d7c8/REL0059-Final-determination.PDF>



- the Panel's 2018 advice to the AEMC that "nothing material has changed [since the Panel's 2016 consideration] that would necessitate further consideration of the [form of the] reliability standard".²³

Shell Energy notes that the Panel and the AEMC have previously considered (on numerous occasions) a range of alternative forms for the reliability standard. Shell Energy agrees with the Panel's 2016 position that:

"...the best way to determine if there has been sufficient capacity investment to meet customer demand is to measure the extent to which all customer demand has been met. A volumetric measure of energy demand met, such as USE, provides an optimal measure of the relative effectiveness of the NEM to meet customer demand."²⁴

With this in mind, Shell Energy makes the following observations about the alternative reliability standard forms described in Appendix A of the consultation paper.

- A 'frequency of interruptions' reliability standard has limited utility. Shell Energy understands that, while frequency of interruptions contributes to consumer frustrations, the total time offline is the major issue.
- A 'maximum probability of USE' reliability standard is equivalent to changing the level of the existing percentage of USE form. For example, a standard based on a 10% probability of exceeding 0.002% USE is statistically similar to having a standard based on 0.0006% USE. Therefore, if the Panel is concerned that the existing USE form may not provide sufficient reliability in the future, (noting that Shell Energy sees no evidence this is the case), the Panel should consider the level of the standard as part of the RSSR.
- A 'maximum probability of any lost load' reliability standard takes no account of the magnitude or duration of load shedding. As such, it does not accurately reflect how consumers value reliability, and is therefore an inferior metric to USE as a percentage of total load.
- A 'volumetric buffer' is a deterministic standard that is effectively a function of the number of generators in service at any given time. As such, there is no direct link to how consumers value reliability. It has previously been considered and rejected as a high-cost option.

Given that the existing form of the reliability standard is effective, all proposed alternatives have major drawbacks, and the Panel and AEMC have previously considered this issue on numerous occasions, there is no compelling rationale to justify why each RSSR should assess the standard's form. Instead, the Panel should only review the form of the reliability standard if specifically directed by the AEMC. The AEMC should only make such a request if it can clearly demonstrate that the current form (as opposed to the level) is unable to meet the reliability desired by consumers. Shell Energy sees no evidence of this.

Level of the reliability standard

The commentary pertaining to the reliability standard in Section 2 of the consultation paper is primarily around the level (not the form), and whether it is likely to be met in coming years. While the level of the reliability standard is not the purpose of the consultation paper (because the RSSR can already take the level into account), Shell Energy makes the following observations.

- Despite the unprecedented entry of variable renewable energy (VRE) capacity into the market, there is no credible analysis to suggest the NEM is facing a significant change in forecast reliability outcomes.

²³ Reliability Panel, *Reliability Panel advice on the Enhancement to the Reliability and Emergency Reserve Trader rule change*, 28 September 2018, pp 6. Accessed from: <https://www.aemc.gov.au/sites/default/files/2018-10/Letter%20of%20Advice%20from%20the%20Reliability%20Panel.pdf>

²⁴ Reliability Panel, *Review of reliability standards and settings guidelines, final determination*, 1 December 2016, pp 22. Accessed from: <https://www.aemc.gov.au/sites/default/files/content/b143b076-45c4-4b08-8296-778d03b5d7c8/REL0059-Final-determination.PDF>



To the contrary, AEMO's 2020 Electricity Statement of Opportunities (ESOO) forecasts the 0.002% USE reliability standard to be met in all regions and in all years over the 10-year forecast period.

- As noted in the consultation paper, AEMO currently forecasts "that there will be a breach of the interim reliability measure (0.0006% USE) for NSW in 2023-24"²⁵ and for subsequent years. However, this appears to be partially due to AEMO's model omitting some new supply and transmission network upgrade capability. For example, the 2020 ESOO does not include the NSW side of the VNI Minor project²⁶ (because at the time AEMO did not consider it to be a 'committed' project), which would likely remove the 2023-24 reliability gap. Additionally, while the 2020 ESOO includes the 2,000 MW capacity of Snowy 2.0, it does not include the transmission required to transport the Snowy 2.0 generation to load (stages of which will likely be built before Snowy 2.0 is commissioned); nor does it include the potential 3,000 MW capacity from the Central-West Orana REZ²⁷. We expect AEMO's modelling to be progressively corrected starting from the 2021 ESOO, such that the forecast of potential USE moves below the interim reliability measure (which only applies to June 2025). We also note that AEMO's ESOO reliability assessment modelling includes unplanned outages on intra-regional network elements, as opposed to only inter-regional transmission network elements²⁸. This results in an overstatement of forecast USE in AEMO's modelling.
- When considering the relationship between the reliability standard and the level of RERT activation, the Panel should consider the role played by AEMO in underestimating real-time demand response, overestimating forecast demand, and the impact of this on AEMO RERT activation decisions. Recent quarterly RERT reports²⁹ show:
 - a higher level of observed demand response than AEMO forecasts.
 - price outcomes at the time of RERT dispatch have tended generally to not be at (or even close to) the market price cap (MPC), which suggests higher-cost generation remained undispached during the RERT activation periods
 - the majority of RERT activation has been to increase reserve levels as opposed to preventing or reducing USE due to Instructed involuntary load shedding
 - in most instances, RERT activation has been associated with failures in the intra-regional transmission network, which prevented available generation from supplying the load centres.

The WDR mechanism developed as part of the ESB process may make the level of WDR more visible to AEMO. This could lead AEMO to include WDR in its operational reliability assessment, and therefore lead to lower RERT dispatch.

Question 4: Issues pertaining to the market price cap

Shell Energy does not consider there is value in the Panel routinely reviewing the form of the market price cap (MPC) as part of each RSSR. Nor is there value in considering the form of the MPC as a 'once off' in the next RSSR.

²⁵ Reliability Panel, *Review of the reliability standard and settings guidelines, Consultation paper*, 4 March 2021, pp 6

²⁶ AEMO, *2020 Electricity Statement of Opportunities*, August 2020, pp 50. Accessed from: https://aemo.com.au/-/media/files/electricity/nem/planning_and_forecasting/nem_esoo/2020/2020-electricity-statement-of-opportunities.pdf?la=en

²⁷ *ibid*, pp 8, 64-65.

²⁸ AEMO, *2020 Inputs and assumptions workbook*, 11 December 2020. Accessed from <https://aemo.com.au/en/energy-systems/major-publications/integrated-system-plan-isp/2022-integrated-system-plan-isp/current-inputs-assumptions-and-scenarios>

²⁹ AEMO, *RERT Reporting*, n.d. Accessed from: <https://www.aemo.com.au/energy-systems/electricity/emergency-management/reliability-and-emergency-reserve-trader-rert/rert-reporting>



In an energy-only market “there is no alternative form that could be applied to the MPC” other than a \$/MWh value³⁰. Similarly, in both the 2014 RSSR and the 2016 Guidelines final determination, the Panel concluded that regional-specific MPCs are an inferior option to a single MPC that applies to all regions³¹. The Panel’s decision was informed by AEMC analysis that identified a range of regulatory, administrative and implementation issues with regional-specific MPCs (e.g. increased risk management complexity, changes to AEMO’s systems, apportioning load-shedding between regions, co-optimising ancillary services between different regions). Additionally, there may be reduced retail market competition in regions assigned a different (higher) MPC due to smaller retailers opting to take on less risk compared with regions with a relatively lower MPC. In the face of these arguments, the consultation paper does not provide a clear or convincing rationale as to why the form of the existing MPC requires changes.

The issues raised in the consultation paper (e.g. relating to demand-side participation and the costs of new-entrant generation to support peak demand) appear to be about the level of the MPC (not the form). The Guidelines already allow the Panel to routinely consider the MPC level in every RSSR. Therefore, the issues raised in the consultation paper can be considered as part of the RSSR without changes to the Guidelines.

Question 5: Issues pertaining to the market floor price

Shell Energy does not consider there is value in the Panel routinely reviewing the form of the market floor price (MFP) as part of each RSSR. Nor is there value in considering the form of the MFP as a ‘once off’ in the next RSSR.

As for the MPC, in an energy-only market, “there is no alternative form that could be applied to the MFP” other than a \$/MWh value³². The consultation paper does not provide a clear or convincing rationale as to why the form of the MFP requires changes.

The consultation paper raises the prospect of the Panel contemplating a “minimum cumulative price threshold and associated minimum administered price period and administered price floor”³³. In Shell Energy’s view, these concepts do not merit detailed consideration. The rationale for a maximum cumulative price threshold (CPT) and administered price cap (APC) is ultimately to protect consumers from exposure to sustained high prices without eliminating the price signals necessary to incentivise new investment. Negative prices are in the benefit of consumers, so there is no clear reason for a minimum CPT. Similarly, a minimum CPT would mute the negative price signal, which incentivises generators to lower their output. This is an important market mechanism – it enables AEMO to manage the supply/demand balance and therefore operate the power system securely. The stronger the negative price signal is, the more clearly it incentivises flexible load (e.g. storage charging), and disincentivises generation when it is not valued (or rather, is explicitly disvalued) by the market. This helps to achieve efficient real-time market outcomes, facilitates secure operation of the power system, and provides investment signals for plant capable of providing the flexibility the market values. This is consistent with achieving the NEO.

Question 6: Issues pertaining to the cumulative price threshold

Shell Energy does not consider there is value in the Panel routinely reviewing the form of the CPT as part of each RSSR. Nor is there value in considering the form of the CPT as a ‘once off’ in the next RSSR.

³⁰ Reliability Panel, *Review of reliability standards and settings guidelines, final determination*, 1 December 2016, pp 25. Accessed from: <https://www.aemc.gov.au/sites/default/files/content/b143b076-45c44b08-8296-778d03b5d7c8/REL0059-Final-determination.PDF>

³¹ *ibid*, pp 26

³² *ibid*, pp 34

³³ Reliability Panel, *Review of the reliability standard and settings guidelines, Consultation paper*, 4 March 2021, pp 18



Unlike for the MPC and the MFP, we acknowledge that there are slightly different forms the CPT could potentially take (e.g. by changing the time period over which the CPT is calculated, or by only considering non-negative prices during the relevant timeframe). However, there is no evidence that the existing CPT is not serving its purpose; and alternative forms do not appear materially preferable. For example, the Panel considered the CPT time period in 2016, and concluded that:

*"[changing the time period] would impact on the ability of the market to send signals for efficient investment and operation of energy services, as well the degree of price risk faced by participants. The Panel considers that these issues are more appropriately considered as part of the determination of the level of the MPC and the CPT."*³⁴

Shell Energy agrees that "any considerations or changes of the [MPC] will necessarily relate to the [CPT] and its role in managing market participant risk without hindering efficient price signals".³⁵ However, as highlighted in the above response to Question 4, the issues raised in the consultation paper relate to the level of the MPC (not the form). Therefore, the flow-on impacts to CPT are also only relevant to the level. The Panel may already routinely consider the CPT level in each RSSR without changes to the Guidelines.

Question 7: Issues pertaining to the administered price cap

Shell Energy does not consider there is value in the Panel routinely reviewing the form of the APC as part of each RSSR. Nor is there value in considering the form of the APC as a 'once off' in the next RSSR. The Panel considered the issue in 2016 and concluded that "there is no alternative form that could be applied to the APC" in an energy-only market³⁶.

The consultation paper raises the Panel's concern that the level (not the form) of the APC may be below the price at which demand response providers are willing to decrease their load. To some extent, this issue may be addressed by the AEMC's wholesale demand response (WDR) mechanism final determination, which makes it clear that registered demand response service providers can "claim compensation following the application of an APC"³⁷ to ensure they do not operate at a loss. However, if the Panel deems this to be a material issue, then the RSSR can already consider the APC level without any amendments to the Guidelines. As part of this process, the Panel would need to determine whether the issue was best addressed by changing the level of the APC, by demand response providers participating in the new WDR framework, by non-WDR demand response applying for SNRERT panel membership in response to an AEMO request for SNRERT offers, or by some other mechanism. This would require the Panel to assess the extent to which the additional financial risks to the market of a higher APC were outweighed by additional non-WDR demand response participation.

Shell Energy considers detailed stakeholder consultation as part of the RSSR (which would include analysis of the impact on non-WDR demand response during previous administered pricing periods) is the most appropriate avenue to explore this further.

The consultation paper notes that the operating cost of battery energy storage systems (BESS) depends on intra-day price variation, which may be impacted by the APC during an APP. However, it is not clear why this would warrant a change in APC form. It is possible that the consultation paper has again confused form with level, and is in fact suggesting that the APC should be increased to allow greater price variability to the benefit of BESS. Given that this is a question of level, the Panel can already consider it as part of the RSSR without changes to

³⁴ Reliability Panel, *Review of reliability standards and settings guidelines, final determination*, 1 December 2016, pp 30-31. Accessed from: <https://www.aemc.gov.au/sites/default/files/content/b143b076-45c4-4b08-8296-778d03b5d7c8/REL0059-Final-determination.PDF>

³⁵ Reliability Panel, *Review of the reliability standard and settings guidelines, consultation paper*, 4 March 2021, pp 19

³⁶ Reliability Panel, *Review of reliability standards and settings guidelines, final determination*, 1 December 2016, pp 39. Accessed from: <https://www.aemc.gov.au/sites/default/files/content/b143b076-45c4-4b08-8296-778d03b5d7c8/REL0059-Final-determination.PDF>

³⁷ AEMC, *Wholesale demand response mechanism, Rule determination*, 11 June 2020, pp 234-237. Accessed from: https://www.aemc.gov.au/sites/default/files/documents/final_determination_-_for_publication.pdf



the Guidelines as long as it meets a materiality threshold. However, all generators (including batteries) are entitled to compensation to cover marginal costs if they are scheduled to generate during an APP and the APC is below marginal costs. It is not clear why a profitability impact on batteries during an APP should trigger an APC change, when this treatment hasn't been given to any other technology.

Question 8: Issues pertaining to the application of indexation

Indexation is largely immaterial compared with the other issues the consultation paper is considering. Section 3.7 of the current Guidelines³⁸ (which covers indexation) is appropriate.

Question 9: Modelling

Question 9a: Is there value in removing the section on modelling approach from the updated guidelines?

The Panel "considers that the inclusion of the modelling parameters in the [current] guidelines may be constraining if they do not consider matters related to future scenarios or modelling approaches". However, Shell Energy observes that all the inputs and scenarios mentioned in the current Guidelines give the Panel the option (but not the requirement) to consider them. Indeed, the only requirements in Section 4 of the Guidelines pertain to general principles relating to an equilibrium between price and reliability, and assumed generator behaviour.³⁹ The Guidelines allow the Panel to include any other inputs it (in consultation with stakeholders) considers relevant.

In addition, more complexity in the modelling does not equate to improved accuracy, and may lead to inconsistent or different interpretations of what the outcomes from the modelling may indicate. As noted by the Panel in its 2016 development of the Guidelines:

*"The Panel also acknowledges the relative benefits and trade-offs that must be made when developing models. More complex models can consider a wider range of variables, helping to develop a better understanding of potential future trends. However, more complex models also depend on more assumptions and, as such, may give a false sense of accuracy. The more complex a model is, the more difficult it may be to interpret its results. Lastly, more complex models are typically more time consuming and costly to develop."*⁴⁰

Given that Section 4 of the Guidelines is not overly prescriptive, Shell Energy remains unconvinced that:

- the modelling parameters as set out in the Guideline constrain or restrict the panel in any way
- there would be value in removing Section 4 when the Guidelines are updated.

If the existing modelling content is removed from the Guidelines, it is crucial that the Panel consults on how the modelling will be undertaken (perhaps as part of an initial 'issues paper') at the start of the RSSR.

Question 9b: Is there value in including broad statements on the objectives, transparency of assumptions and use of sensitivity analysis in the modelling?

Shell Energy does consider there is value in the Guidelines including broad statements on the objectives, transparency of assumptions, a commitment to meaningful stakeholder engagement, and use of sensitivity analysis for the modelling.

³⁸ Reliability Panel, *Review of the reliability standards and settings guidelines, final guidelines*, 1 December 2016, pp 8-9

³⁹ Reliability Panel, *Review of the reliability standards and settings guidelines, final guidelines*, 1 December 2016, pp 10-11

⁴⁰ Reliability Panel, *Review of reliability standards and settings guidelines, final determination*, 1 December 2016, pp 46. Accessed from: <https://www.aemc.gov.au/sites/default/files/content/b143b076-45c4-4b08-8296-778d03b5d7c8/REL0059-Final-determination.PDF>



Conclusion

Shell Energy does not support amending the Guidelines to allow the Panel to routinely consider the form of the reliability standard and/or settings as part of the RSSR. Further, the form of the reliability standard and settings appears to be appropriate, so does not warrant review in the near term. If ever there is a strong case to review the form of the reliability standard and/or settings, the AEMC can request the Panel to do so as part of the RSSR terms of reference.

Shell Energy considers that it would be beneficial if the Panel held a public meeting to discuss its rationale for seeking to review the form of the reliability standard and settings as part of the RSSR. This would provide an opportunity for the Panel to explain why the Guidelines (which were only developed in 2016) require substantial amendments, and to hear directly from consumers, who would likely bear additional costs for negligible benefit if the form were regularly reviewed.

If you would like to discuss this submission further, please contact Matthew Ladewig, Policy Adviser at matthew.ladewig@shellenergy.com.au or on 03 9214 9397.

Yours sincerely

Michelle Barry
EGM Corporate Services
07 3020 5145 - michelle.barry@shellenergy.com.au