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Friday, 12 June 2020

Dr Kerry Schott AO
Chair
Energy Security Board

Dear Dr Schott

RE: Interim Reliability measure

ERM Power Retail Pty Ltd (ERM Power) welcomes the opportunity to respond to the Energy Security Board's (ESB) consultation on the Draft National Electricity Amendment (Interim Reliability Measure) Rule 2020.

About ERM Power

ERM Power (ERM) is a subsidiary of Shell Energy Australia Pty Ltd (Shell Energy). ERM is one of Australia's leading commercial and industrial electricity retailers, providing large businesses with end to end energy management, from electricity retailing to integrated solutions that improve energy productivity. Market-leading customer satisfaction has fuelled ERM Power's growth, and today the Company is the second largest electricity provider to commercial businesses and industrials in Australia by load¹. ERM also operates 662 megawatts of low emission, gas-fired peaking power stations in Western Australia and Queensland, supporting the industry's transition to renewables.

<http://www.ermpower.com.au>

<https://www.shell.com.au/business-customers/shell-energy-australia.html>

General comments

The past few years has seen a renewed focus on the reliability standard and the tools used to safeguard reliability in the National Electricity Market (NEM). The Retailer Reliability Obligation, the Enhancement to the Reserve and Emergency Reserve Trader (RERT) Rule Change, the AEMC Reliability Panel's reliability standard and setting review, the reinstatement of the long-notice RERT rule change and the recent Victorian RERT derogation rule change have all sought ways to improve reliability in the NEM and the way in which AEMO responds to forecasts of potential reliability shortages. All of this has been done in less than three years.

All these reviews considered the evidence and found that the existing reliability standards and settings remain appropriate for the NEM. In 2018, the Australian Energy Market Commission's (AEMC) Reliability Panel found that the current reliability standard of 0.002 per cent unserved energy and settings were fit for purpose and required no change. In addition, they argued 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*".²

ERM Power therefore considers that the case for moving away from the existing reliability standard is weak. Further, the proposal to reduce it to 0.0006 per cent, without adjusting the reliability settings (market price cap, cumulative price threshold etc.) makes it increasingly difficult for the market to signal the need for more capacity

¹ Based on ERM Power analysis of latest published information.

² AEMC Reliability Panel (2018), Reliability standard and settings review – Final Report, p iii.



economically. As noted in the Ernst & Young (EY) modelling for the ESB³, along with EY's previous work for the AEMC's Reliability Panel⁴, a tighter reliability standard should be joined with a higher market price cap (MPC) and cumulative price threshold (CPT). This is to allow new supply, with a marginal cost higher than the existing market price cap can enter the market and cover its costs if dispatched.

The ESB's proposal of a tighter reliability standard with an unchanged MPC and the potential for out-of-market contracts of three years will possibly drive any new supply to the RERT rather than moving into the market. This is likely to distort the market as new entrants may try to strike a RERT contract with AEMO rather than participate in the market and unscheduled reserves (like demand response) could prefer to wait to strike a contract with AEMO than to commit to participating in the market.

In addition, by tightening the reliability standard, the volume of any RERT procured is also likely to be higher than it would have been under the existing reliability standard. This means that any potential efficiencies from multi-year contracts may be lost by the higher volumes of reserves needed in order to meet the interim reliability standard.

Ultimately, the Interim Reliability Measure Rule is not one reform but three, all attempting to solve the same issue. A single, appropriately designed change such as multi-year RERT contracts could achieve the ESB's aim. Instead, there are multiple changes that overall, may lead to higher costs for consumers. While multi-year contracts on their own could come out cheaper than multiple single-year contracts, the tighter reliability standard means that more contracts will likely be needed, which could outweigh any benefits from the multi-year contracts. Adding to this, the interim reliability standard also means that the RRO is more likely to trigger meaning that the risk of compliance and increased demand for electricity hedging contracts may be priced into electricity costs. ERM Power questions the need to adopt all of these arrangements at once, potentially increasing costs for consumers at a time when many households and businesses are facing serious financial and social pressures as a result of the COVID-19 pandemic. Recent falls in wholesale prices may help, but ERM Power believes it is somewhat counter-productive to claw back some of these lower cost influences through multiple approaches to address the same issue.

Multi-year contracts

ERM Power considers that the proposed requirements for when AEMO can enter into a multi-year contract and for what volumes are appropriate under the circumstances. This should help to limit multi-year contracts to only when absolutely necessary. As we will discuss, we believe that the draft rule requires some changes to its drafting to better reflect the intent described in the consultation paper.

ERM Power notes the proposed approach that the ESOO will be used to determine if there is a breach of the Interim Reliability Standard. The justification for this is that the ESOO can cover the full three-year period whereas other forecasting tools used by AEMO – the Medium Term Projected Assessment of System Adequacy (MTPASA) and the Energy Adequacy Assessment Projection (EAAP) – only cover a two-year forward outlook. While we agree that a consistent three-year outlook is important given the conditions for a multi-year contract to be signed. However, we do see that the MTPASA and EAAP can be a particularly important 'sense check' for the first two years given the differences in approaches between the MTPASA and ESOO. We are not arguing for an approach where a breach of the interim reliability standard in the ESOO is invalidated if there is no breach in the MTPASA or EAAP. Rather, a material difference in forecasts between the two should be seen as a cause to reconsider the need for a multi-year contract. For example, if the ESOO shows a small breach in the interim reliability standard but the MTPASA shows minimal risk of unserved energy (USE), then a reassessment of the need for a multi-year contract should occur.

Under current arrangements the supply contracted under a multi-year contract would not be factored into the ESOO or other reliability forecasts. However, the contracted reserve capacity would be available at times of low reserve condition. Therefore, sufficient capacity could be available to ensure no breach of the reliability standard

³ EY, Assessment of potential market impacts associated with moving to a higher reliability standard, 6 May 2020

⁴ EY, Reliability Standard and Settings Review 2018 – Modelling Report, April 2018



but contracted under a multi-year contract, but because AEMO does not have to factor these reserves into its reliability forecasts, a T-1 gap period may still be declared under the RRO. Generation or other supply side infrastructure that would otherwise have 'closed' the reliability gap could be incentivised by a multi-year capacity contract to sit outside the market with consumers facing higher costs to meet any reliability gap, and retailers and some large users at risk of penalties if they are determined to be under-contracted. Retailers may also find it difficult or extremely costly to secure sufficient contracts for RRO compliance given a substantial volume of potential options could be locked out of the market in a multi-year reserve contract with AEMO. As such, we propose that any multi-year reserves are factored into ESOO forecasts to provide a truer reflection of the state of reliability.

We consider that the limitations on the ability of AEMO to contract for multi-year reserves are generally appropriate and will help to ensure that multi-year contracts are truly justifiable and no larger than is necessary to address to bring reliability to within the interim reliability standard. We do see that there is some uncertainty around the provision relating to the size of multi-year contracts. It is unclear whether the maximum "for each year of the term is no more than AEMO considers is reasonably necessary to address the largest interim reliability exceedance that is forecast to occur during the term".

The consultation paper explains that the draft rule contains provisions designed to limit the volumes and terms of multi-year contracts to ensure that contracts last only as long as they need to in order to solve any reliability issues and cover enough volume to bring reliability within the interim standard. These are sensible and worthwhile provisions to include in the draft rule to ensure that the cost impact to consumers is limited. In our view though, the draft rule itself does not make this clear. In 11.xxx.4, the draft rule states:

(i) For a reserve contract for interim reliability reserves for a region that is a multi-year reserve contract, AEMO must ensure that, at the time of entering into that contract:

(1) the term of the reserve contract is no longer than three years and at least two of those years must relate to years in which there is an interim reliability exceedance for that region of which one of those exceedances must occur in the first year of the term; and

(2) the amount of reserve procured under the reserve contract:

(i) for each year of the term is no more than AEMO considers is reasonably necessary to address the largest interim reliability exceedance that is forecast to occur during the term; and

(ii) is no more than AEMO considers is reasonably necessary to ensure the reliability of supply in that region.

Our interpretation is that clauses 2 (i) and (ii) are in conflict. Clause 2(i) suggests that any contract should have a volume limit no larger than the largest exceedance over the course of the contract's duration. While clause 2(ii) seems to impose a volume limit for each year. The consultation paper describes the intent of this clause is that for multi-year contracts "with respect to the contract term, no more than reasonably necessary to secure reliability of supply in the relevant region."⁵ We therefore suspect that based on the ESB's intent the clause 2(ii) should in fact be part of clause 1 and read:

(i) For a reserve contract for interim reliability reserves for a region that is a multi-year reserve contract, AEMO must ensure that, at the time of entering into that contract:

(1) the term of the reserve contract is:

⁵ Energy Security Board, Consultation Paper on Interim Reliability Measures Draft Rule 2020, May 2020, p 9



(i) no longer than three years and at least two of those years must relate to years in which there is an interim reliability exceedance for that region of which one of those exceedances must occur in the first year of the term; and
(ii) no more than AEMO considers is reasonably necessary to ensure the reliability of supply in that region.

(2) the amount of reserve procured under the reserve contract for each year of the term is no more than AEMO considers is reasonably necessary to address the largest interim reliability exceedance that is forecast to occur during the term.

Our proposed drafting would limit the length of contracts to no longer than is reasonably necessary to ensure reliability in a region as per the consultation paper's stated intent. We also consider that additional clauses are required to ensure that markets are provided an opportunity to resolve any forecast breach of the reliability exceedance and that volumes of existing contracts are used when considering the reliability exceedance in future years. This would still allow for multi-year contracts to be signed and for sufficient resources to be procured if needed but would provide an additional safeguard against excessive volumes being procured. We propose that clause 11.xxx.4(i) contain the following additional clauses:

(3) in determining the level of reliability exceedance in any year, AEMO must take into account contracted volume under any reserve contract already applicable to the period for which a reliability exceedance is forecast.

(4) in determining the amount to be contracted for future years under any multi-year reserve contract, AEMO must consider the level of potential market response which may occur prior to dispatch

Modelling the interim reliability standard

The ESB has provided two modelling reports as part of the overall consultation which have informed the decision to bring the interim reliability standard to 0.0006 per cent. ERM Power has closely analysed the modelling reports in order to better understand the rationale for the lower reliability standard. In summary, we consider that the two reports do not show a strong case to justify the change to the reliability standard, even on an interim basis.

Firstly, we note that the EY report is based on a more economic approach where the tougher reliability standard is tied to a market price cap and other reliability settings that allow new investments needed to meet the standard to cover its costs. This is not what the ESB has proposed. The proposed approach contains no change to the reliability settings. It is therefore unclear how any new capacity would be expected to make a return in the market and instead, potential new suppliers may be incentivised to stay out of the market in the hope of striking a multi-year contract with AEMO. As this capacity remains "off-market", this would also increase wholesale market prices above that which would have otherwise occurred, further increasing costs to consumers.

EY's report does note that increasing the market price cap would lead to higher overall energy costs. The EY report points to an impact of \$2-4/MWh on an annual basis but this is based on the tying the interim reliability standard implemented to changes in the reliability settings. As EY points out, a \$2-4/MWh impact will be relatively small for households. For large users, wholesale costs represent a far greater proportion of bills. For these customers a \$2-4/MWh impact is noticeable, even with recent falls in wholesale prices.

While the ESB has not chosen to go down the path of a higher market price cap, the impact on energy costs has largely been ignored in the modelling. While it is impossible to determine the precise cost of RERT in advance, a scale of costs would be crucial to understanding the impact of multi-year contract on energy costs. For large users in particular, RERT costs are often passed through when AEMO includes them on settlement charges, usually a month after the RERT event. This means that RERT costs can be a significant one-off hit to large energy users instead of a smaller annualised cost which would be unnoticed by small users on typical fixed price contracts.



During the January – March 2020 quarter RERT was dispatched on three days in NSW and one day in Victoria following multiple transmission line failures to maintain forecast reserve levels in the required regions. On each occasion AEMO efficiently procured and dispatched short-notice RERT to increase the level of regional reserves. Absent the multiple transmission line failures, RERT dispatch would not have been required and no RERT costs would have been incurred. AEMO's Quarterly RERT Report for Q1 2020 detailed that RERT cost \$34.93 million for the quarter for events in Victoria and NSW. The average cost of RERT was \$18,317.77/MWh, well above the existing market price cap.⁶

When translated into a per MWh cost, the impact is clearly significant. Three events in NSW on 4, 23 and 31 January cost \$19.68/MWh, \$13.24/MWh and \$22.02/MWh respectively.⁷ Victoria's 31 January 2020 RERT event worked out to a \$24.82/MWh impact while RERT dispatch in Victoria on 30 December 2019 resulted in cost recovery of \$15.53/MWh for consumption in Victoria during that week.⁸ It should be noted that these costs were for short-notice RERT dispatch and reflect the costs of business interrupting their manufacturing processes and included none of the ongoing availability costs which would be associated with multi-year RERT costs. These availability costs associated with the procurement of multi-year RERT contracts are expected to exceed the above costs and would be paid for by consumers even where actual RERT dispatch was not required.

Repeats of these kinds of costs will hit businesses hard, especially those already struggling as a result of COVID-19. Hospitality and tourism businesses in particular, which tend to be busier in summer periods when RERT is likely to be dispatched will therefore be at greater risk of higher RERT costs as their consumption would tend to be higher at times when RERT is dispatched.

In terms of ACIL Allen's modelling, we have closely assessed their modelling and contend that the approach they have used is unstable. By this we mean that the results are highly dependent on the initial reliability forecasting results for this year. The closer the unserved energy forecasts are to meeting the interim reliability standard, the less expensive it will be for reserve contracts to bring reliability back to within the interim standard. This is the case for the Victorian and South Australian forecasts. Whereas for NSW, the forecasts show a higher initial breach of the interim reliability standard (but within the existing 0.002 per cent standard). In this case, and as shown in the modelling results, the costs to bring forecasts of potential unserved energy back to within the standard is far higher. The modelling results for NSW do in fact show that the costs of meeting the interim reliability standard in NSW are higher than the benefits.

Additionally, we note that the 2019 ESOO forecast does not include the supply provided by the South Australian emergency diesel generators which have been transferred to market participants and will be bid in using the normal market process in the future. Once the supply from these generators is included in future reliability forecasts, it is more likely that there will be no breach of the interim reliability standard. This would further suggest that the costs of meeting the interim reliability standard will exceed the benefits as it is most likely to apply in New South Wales at this stage where the costs are higher because a higher volume of reserve contracts is needed. We note that the most recent update of the MTPASA indicates no breach of the interim reliability standard for any region over the 24-month period.

ACIL Allen's modelling also fails to consider the classes of customer most likely to be subject to involuntary load shedding which are generally aluminium smelters and households. Instead, ACIL spreads the potential for involuntary load shedding across all customer types (excluding agriculture). By doing this, ACIL finds a higher 'cost' of USE as large users with higher values of customer reliability (VCR) are included in the calculations, despite the fact they are less likely to experience involuntary load shedding. The VCR that ACIL uses is far higher than any of the general values found in the Australian Energy Regulator's (AER) Final Report on Values of Customer reliability published in December 2019. By using a higher value, the notional benefits from a tougher reliability standard

⁶ AEMO, Reliability and Emergency Reserve Trader (RERT) Quarterly Report Q1 2020, May 2020, p 32.

⁷ Ibid.

⁸ AEMO, Reliability and Emergency Reserve Trader (RERT) Quarterly Report Q4 2019, February 2020, p 11.



appear higher than they likely would were the AER's values used. Also, it should be noted that whilst the VCR indicates on average what customers would be prepared to pay for lower levels of all supply interruptions, which tends to be heavily influenced by recent events in their respective distribution system, forty-one percent of respondents to the AER's process indicated a willingness to pay of zero.⁹

Proposed changes to Retailer Reliability Obligation

The structure of the Retailer Reliability Obligation with a trigger three years in advance of a potential reliability 'gap' followed by a confirmation one year in advance was extensively consulted on and came into place on 1 July 2019. Yet now, the rules are slated to change already so that no T-3 trigger is necessary. The purpose of the T-3 trigger was to provide the market with a signal that more capacity is needed and allow retailers the opportunity to close the gap by investing in supply or striking contracts. The T-3 arrangement also allowed for a particular time period to be flagged as being of most concern. For example, the SA Government's recent T-3 declaration cites "working weekdays from 10 January 2022 – 18 March 2022 for the trading periods between 3pm and 9pm EST" as the relevant trading intervals. By signaling the timeframes well in advance, contracts can be struck with counterparties for these specific times or to reach demand response agreements. By removing the T-3 trigger, retailers will have fewer options to meet their contract position as it will be far more difficult to strike bespoke contracts for specific trading intervals with little advance notice.

ERM Power considers that it is challenging to fully assess the impacts of the removal of the T-3 trigger alone without also understanding how other aspects of the RRO related to the T-1 or T-3 trigger will change. In particular, we believe it is crucial to understand whether arrangements for the Market Liquidity Obligation and the contract position day will remain or change in some way. We firmly consider that changes would need to be made to both. The contract position day is currently set at one year before the start of the gap period. This would mean that a liable entity has around three months to finalise its contract book before the contract position day. But that would follow a two-year 'warning' period thanks to the T-3 instrument. Without that, there is not warning. Retailers will either need to wear the carrying costs of hedge contracts for longer periods in anticipation of a potential T-1 trigger or attempt to contract in a short period of time before the contract position day. We recommend that the contract position day be moved to three months prior to the start of the gap period. This will allow liable entities around 12 months from the confirmation of a T-1 trigger to the contract position day.

In addition, the MLO was designed to assist retailers contracting following a T-3 instrument because while retailers *must* contract, generators are under no obligation to (Prohibiting Energy Market Misconduct Act notwithstanding). Without a T-3 trigger there is seemingly no legal requirement for the MLO to continue, leaving non vertically integrated retailers vulnerable. The ESB must consider how to ensure contract market liquidity can be maintained in the absence of a T-3 trigger.

In considering the proposed change to the declaration of a T-1 Reliability Instrument, it is unclear to ERM Power that the ESB has given reasonable consideration to the ability for AEMO to efficiently manage a forecast of a potential reliability gap that arises in the T-1 period via use of the existing RERT framework. It is unclear what contribution to meeting the National Electricity Objective would be achieved by the proposed change.

Conclusion

The proposed Interim Reliability Measure Rule sets out three methods to concurrently enhance the reliability of the NEM. We find that two of these approaches – removing the T-3 trigger in the RRO and changing the reliability standard to 0.0006 per cent – are unnecessary. In contrast to the proposed aims of lowering the costs of emergency reserves via the procurement of multi-year contracts, these two policies are likely to increase costs as more reserves will be needed and retailers will need to contract for longer periods to manage the risks of a T-1 gap being declared without previous notice.

⁹ P42 – AER Value of Customer Reliability Final Report



The proposed design for multi-year contracts is largely sound, with subject to the inclusion of our proposed amendment and additions adequate protections in the draft rule to prevent multi-year contracts being signed when unnecessary. As the ESB has argued, multi-year contracts could in some circumstances lower the overall costs of the RERT compared with multiple single-year contracts if multiple single-year contracts were in fact forecast to be required. It is therefore unclear to us why the potential benefits of this method would be undone by having two additional policies which would push up costs. We encourage the COAG Energy Council to agree only to multi-year contracts as an interim measure while leaving the reliability standard and RRO unchanged.

If the COAG Energy Council does push ahead with changes to the RRO then we believe significant changes will be needed to the MLO and contract position day in order to allow retailers to compete fairly in the market and manage their liability in a timely fashion.

Please contact me if you would like to discuss this submission further.

Yours sincerely,

[signed]

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