23 April 2020

Mr John Pierce
Mr Charles Popple
Ms Michelle Shepherd
Ms Allison Warburton
Ms Merryn York
Australian Energy Market Commission
PO Box A2449
SYDNEY SOUTH NSW 1235

Lodged electronically: www.aemc.gov.au (ERC0247)

Dear Commissioners,



EnergyAustralia Pty Ltd ABN 99 086 014 968

Level 33 385 Bourke Street Melbourne Victoria 3000

Phone +61 3 8628 1000 Facsimile +61 3 8628 1050

enq@energyaustralia.com.au energyaustralia.com.au

AEMC 2020, Wholesale Demand Response Mechanism, Consultation Paper

We welcome the opportunity to comment on the AEMC's second draft determination on the rule change requests for a Wholesale Demand Respond Mechanism (Demand Response). This reform seeks to introduce a new participant type, a Demand Response Service Provider (DRSP), who is able to bid registered components of customer load into the NEM wholesale market under an effectively modified scheduled load framework. The rules will apply to large customers only, as defined by jurisdictional thresholds, and is to be implemented by October 2021. The reform introduces new settlements arrangements between DRSP, AEMO and retailers to reflect the impact of reduced consumption from a calculated baseline level of consumption on the wholesale market spot price. The stated objective of this reform is to increase the provision of demand response in the market through competition.

EnergyAustralia is one of Australia's largest energy companies with around 2.5 million electricity and gas accounts in NSW, Victoria, Queensland, South Australia, and the Australian Capital Territory. We also own, operate and contract an energy generation portfolio across Australia, including coal, gas, battery storage, demand response, solar and wind assets with control of over 4,500MW of generation capacity in the National Electricity Market (NEM).

We retain the position expressed in our submission to the AEMC's 2018 Consultation Paper, that it is unclear how much additional demand response (DR), and therefore value, will be added to the market under this reform. That is, demand response capability over and above what is currently provided by customers working with retailers and networks. We are disappointed that the AEMC hasn't attempted to quantify possible additional DR to be uncovered through this reform, instead indicating only that an undefined number of customers have expressed interest.

It remains unclear to us that the introduction of additional market participants, transfer prices and complex billing and settlements arrangements will provide significant benefits to the market, nor prove more efficient than retailer or network-led DR. The proposition that this reform will genuinely reduce investment in peaking generation, thereby lowering prices for customers, remains speculative. Retailers will be required to purchase contracts for approximately equivalent levels of consumption and it remains to be seen

whether DR providers will be able to offer firm contracts at lower cost to peaking gas generators.

Despite the lack of substantive quantification of the benefits case, we recognise and appreciate the AEMC's efforts to quantify expected costs. Further, we recognise and appreciate both AEMC and AEMO's efforts to reduce these costs¹ and the impacts of the proposed reforms to stakeholders and customers. The key design changes to avoid modifications to retailer billing systems and AEMO's dispatch systems are pragmatic and sensible.

Despite this, the AEMC has characterised these changes as satisfactorily eliminating costs, and has failed to acknowledge that this reform will still impose costs on retailers and metering providers, including changes to reporting, management and settlement reconciliations. The implementation requirements for these parties should not be disregarded or under-estimated.

A key change from the first draft determination is the proposed implementation date. We question whether the proposed date of 24 October 2021 remains appropriate in the context of the proposal to delay implementation of the 5 Minute Settlements rule change², and broader uncertainty in the industry due to the impacts of COVID-19 restrictions. We recommend that a decision on implementation dates is not made until the date for 5 Minute Settlements is confirmed.

There are several additional design elements in the second draft that we support as suitable solutions to concerns that were raised previously. These include:

- The regional SCADA (Supervisory Control and Data Acquisition System) threshold (draft cl. 3.10.1(c)),
- the requirement on AEMO to report on baselines (draft cl. 3.10.6(b)), and
- the restriction on bidding of Wholesale Demand Response Units (WDRUs) that have spot price exposure (draft cl.3.8.2A(d)(2)).

This submission details

- our material concerns with the proposed implementation date,
- identifies aspects of the proposal that require significant further clarification explanation, particularly around the practical operation of the proposed reform, and
- suggests several necessary improvements to ensure the reform has the potential to deliver on the stated objectives.

¹ Cost estimates for AEMO reduces from \$45-\$90M to \$13-17M. Cost estimates for retailers, generators and metering providers have not been provided.

² AEMC, Delayed implementation of minute and global settlements rule change request, ERC0298, https://www.aemc.gov.au/rule-changes/delayed-implementation-five-minute-and-global-settlement

Implementation timeframe should be reconsidered to accommodate interdependencies with other reforms and external market environment changes

The interaction between the Demand Response rule change and rule changes affecting similar participant and AEMO systems should be carefully considered by the AEMC. Since publishing the draft determination in early March, the economic and operational impact of COVID-19 has escalated in Australia. In the energy sector, there has been reduced interaction between all personnel, affecting resource availability and efficiency. This impact, and the proposed delay to 5 Minute Settlements, should be carefully considered when determining the implementation date.

COVID-19

While the settlements model of the draft rule seeks to minimise changes to retailer systems, retailers will still be required to make changes to a number of systems and processes. For example, those used for management and performance reporting, pricing, load forecasting, settlement and reconciliation and interactions with MSATS. This includes:

- o changes to MSATS to include information on the DRSP and baseline method,
- introduction of new B2B transactions to communicate with AEMO and DRSPs (e.g. regarding meter data, time of DR dispatch, meter changes),
- additional capability to estimate baselines for forecasting and settlements reconciliation,
- o additional data and storage requirements for baseline consumption values,
- o additional settlement reconciliation systems, processes and staff, and
- increased capacity requirements for processing and handling exceptions associated with CATS and B2B transactions.

These changes are not insignificant and will require implementation effort.

The Commission, in conjunction with the other regulatory bodies, is currently considering changes to the regulatory reform pipeline to minimise implementation risks and costs for the sector due to the impacts of COVID-19.³ At the time of writing, it appears that demand response will not be delayed. We question this decision due to the delivery effort and cost that is required for this reform.

The criteria outlined by the regulatory bodies for assessing the reform pipeline includes consideration of stakeholders' ability to engage on, and implement, changes; impacts to customers of a delay; relevance to supporting market resilience and recovery; and urgent need to direct security, affordability, and reliability concerns arising from the situation.

We do not believe that this rule is urgently needed for the delivery of a reliable service to customers. While conceptually it seeks to improve reliability for customers by helping

³ AEMC, https://www.aemc.gov.au/news-centre/media-releases/covid-19-power-plan-launched-support-energy-sector-through-pandemic

manage periods of tight supply and demand, we do not believe it is a critical reform to ensuring the reliability of the market in the short term. We understand that the ESB is currently developing interim policy solutions to address AEMO's concerns regarding reliability and security, such as a strategic reserve and changes to the Retailer Reliability Obligation (RRO), which, if fit for purpose, should provide sufficient comfort to AEMO. As such, we question the urgent nature of this rule against the pressures it is likely to impose on the industry.

Implementation will draw attention from staff at AEMO and market participants who are critical to ensuring the continuation of essential services to customers at this time. Further, the imposition of additional costs during an anticipated period of economic downturn may be inappropriate given the arguably marginally positive benefit to cost ratio. It is assumed that an increased number of customers may be unable to pay part or all of their utility bills. Retailers are expected to carry the costs of this debt, and placing additional cost burdens will place further pressure on businesses trying to support their customers.

Due to the cost imposition, resourcing requirements and low level of urgency, we believe the delivery date should be reassessed, allowing this reform to be introduced under a more favourable economic and operating environment.

Proposed 5 Minute Settlements delay

In assessing the regulatory reform pipeline, the regulatory bodies' have recommended delaying the implementation of 5 Minute Settlements. If the AEMC approve this request, we would prefer to delay implementation of demand response to reflect this, in order to simplify implementation and reduce costs. Implementation of the rule change described in the draft determination is expected to be a 12-month project for retailers, which will overlap with 5MS. The timing of 5MS delivery therefore influences the design of system changes required for the DR rule change.

A suspended 5MS will create ambiguity around system changes. Under the currently proposed schedule, 5MS will be implemented in July 2021, with Demand Response slated to commence 3 months later in October 2021. This date allows for a clean introduction of DR on a 5-minute basis. This means baselining, pricing and settlements systems required for Demand Response are designed on a 5-minute basis. The proposed delay for 5MS will require the implementation of Demand Response systems using 30-minute data, followed by revised systems on a 5-minute basis following commencement of 5MS in July 2022, increasing the overall cost of delivery for both participants and AEMO.

	2020		2021				2022			
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Current					5MS	Proposed				
scenario:					start	DR start				
	Build and test DR using <u>5MS</u> environment and systems									
Delayed						Proposed			5MS	
5MS						DR start			start	
scenario:										
	Build and test DR using <u>existing</u> environment and systems				Re-impleme environmer					

In our view, it would be preferable for DR to be delayed for six months after the implementation of the 5MS program to minimise re-work and additional costs. We

therefore propose that the AEMC avoid making a decision on implementation date for Demand Response until a decision has been made regarding implementation dates for 5MS. We would not support concurrent implementation as we believe this would lead to unnecessary competition for resources and testing environments.

More broadly, we see the review currently being undertaken by the regulatory bodies as an opportunity for a collective reassessment of priorities and determination of an efficient delivery path. Rule changes inherently accommodate preceding decisions. However, this current review enables all confirmed, but yet to be implemented, rule changes to be considered coherently, providing an opportunity to optimise delivery by streamlining changes into a logical timeline thereby minimising overall costs to customers. The opportunity to reassess optimal timelines for delivery of key reforms should not be missed.

Design elements that need further development

• Dispatch performance and FCAS cost recovery

The draft determination exempts DRSPs from Regulation FCAS cost recovery. We understand the underlying reason for this decision is to reduce implementation costs for AEMO. However, we think this approach requires further consideration as the introduction of a rule to address reliability concerns could create subsequent issues for system security. This decision also places DRSPs on a different level to other types of generation.

Regulation FCAS is recovered from market participants using causer pays contribution factors. These are calculated based on whether a participant's export, or import, is compounding or alleviating system stability. DRSPs will contribute to the need for FCAS but, under the draft rules, will be exempt from cost recovery. This raises questions around sufficient incentives on DRSPs to minimise deleterious impacts on the system, and ensuring a level-playing field between participants.

The draft rules outline clear consequences for baseline non-conformance (deregistration) but are less clear on dispatch non-conformance. Consistent deviations from targets will further deteriorate, not improve, issues AEMO has well-documented in relation to system stability and control. We therefore consider it unusual that AEMO would recommend changes that remove incentives on DRSPs to minimise system deviations.

By exempting DRSPs from cost recovery, other participants will be required to pick up the tab, creating an uneven playing field between participant types. Further, participants will bear the direct burden of frequency disturbances caused by the WDRU deviations. This distortion will increase as the contribution of DR within the generation portfolio increases.

We support the AEMC's decision that AEMO should regularly assess the impact of DRSPs' dispatch on system security. The threshold for acceptable deviations should be published and AEMO should report against this on a quarterly basis to identify the appropriate time at which to review the allocation of FCAS costs.

In the interim period, AEMO and the AEMC should consider alternative arrangements to allocate some of these costs to DRSPs and provide incentives to improve performance.

This could be an alternative financial incentive framework and separate cost recovery scheme, that incentivises support for the system. There could be requirements on those WDRUs with SCADA and 4-second telemetry to be included in cost recovery.

NMI shifting

Restrictions on the practice of load shifting between NMIs is critical to the integrity of the reform. We recognise the inclusion of draft clause 3.8.22A (a2) which seeks to address the issue of NMI shifting. It states that bids must not result in a *baseline deviation* that is a result of a *baseline deviation offset*, defined as offsets occurring due to 'the configuration of the WDRU or facility associated with the WDRU'.

While it is clear this attempts to address shifts in consumption around a particular locale with multiple NMIs, it is unclear how this adequately addresses the opportunities for load shifting between multiple NMI sites. For example, a corporate entity could reduce commercial production, ergo electricity consumption, at one location and simultaneously increase productivity at another location owned by, or related to, the corporate entity. It is unclear how the provisions of the rules will address this behaviour, nor how this will be monitored, as AEMO does not collect information regarding corporate entities associated with NMIs.

Suggested minor improvements and requests for clarity

AEMO's annual reporting on Demand Response

The draft rules amend existing rules relating to Demand Side Participation (DSP), to require AEMO to report on volumes of DR, reported to the portal, in respect of each category of registered participant (draft cl. 3.7D(c)). This information will be invaluable to AEMO, but also the broader industry and policy-makers seeking to understand possible levels of supply of demand response in the NEM.

We suggest that in this reporting, AEMO should not only capture total volume ascribed to each participant category, but should report on the number of NMIs (and associated MW capacity) in each region that have switched between different arrangements. For example, NMIs changing from a spot pass-through contract to a specific DR product with their retailer, or from retailer-led DR arrangements to DRSP-led arrangements. This reporting will support analysis on the additionality of DR under the reforms, and provide insights on customer preferences for providing DR.

Use of metering data

The draft rules allow DRSPs to receive NMI metering data associated with their customers (draft cl. 7.15.5(f)(5)). The rules should specify that this information can only be used by a DRSP for the purposes of its role as a DRSP, such as validating settlements and assessing baseline compliance, as approved by the customer. As a DRSP could be the same entity as a competing FRMP, there is a risk that this information could be used for retail competition activities, providing FRMPs with DRSP registration competitive advantages in the retail market.

Abnormal baselines

The draft rules specify that AEMO may allow DRSPs to adjust their baselines temporarily to reflect material changes in consumption due to an atypical event or circumstance (draft cl 3.10.5). We suggest that the relevant retailer/FRMP should also be notified of this change for load forecasting purposes. This provision also creates significant potential operational complexities for AEMO and arbitrage risks for other participants that have not been fully explored by the Commission. Much clearer guidelines and criteria should be established around these provisions and when they can be enacted.

• Notice of closure obligations

The AEMC has outlined in the draft determination that DRSPs will be exempt from the notice of closure provisions.⁴ We think that not applying this policy to large WDRU's is inconsistent with the policy intent of ensuring the market has sufficient time to invest in replacement supply capacity. The sudden closure of a 30MW WDRU would have the same impact on the market as the sudden closure of a 30MW gas peaking plant; resulting in supply shortfalls during critical peaks. We accept that this obligation does not currently apply to loads and that it would be impractical to apply to many small WDRUs. However, we suggest that it should apply to DRSPs whose portfolio exceeds a certain threshold, to minimise impacts to the market. Consideration could be given to reducing the notice period for such loads as the removed capacity could be feasibly replaced in less than 3 years by an alternative DRSP. This obligation should apply to DRSPs, not the loads themselves, consistent with the current framework.

Review of reform

The draft rules include the requirement for the AEMC to review the rule change after three years (draft cl. 3.10.7). Given the intent of this rule to serve as an 'active trial' of a possible transition towards greater inclusion of demand side in dispatch decisions⁵, such a report will be valuable. Its instructive nature could be improved if it was conducted in conjunction with AEMO and incorporated AEMO's experiences concerning operational forecasting and dispatch, billing, baseline calculation and application, the impact of aggregate sites, system frequency and system stability. The AEMC should also consider reporting on customer insights from their experiences of being a WDRU, and retailer experiences such as an assessment of the suitability of the reimbursement rate.

Additionality compliance

The draft rule outlines requirements on DRSPs to keep records and the AER to develop guidelines that support the additionality obligations (that DR can only be provided through this mechanism if it would not have otherwise happened). We consider these provisions insufficient. It will be challenging to identify violations of this provision so random audits by the AER should be mandated.

⁴ AEMC, Draft Determination, Wholesale Demand Response Mechanism, 12 March 2020, p 252

⁵ ESB, Moving to a two-sided market, April 2020 http://www.coagenergycouncil.gov.au/energy-security-board/post-2025

Requirement for Prudentials

The Commission has highlighted that Prudentials might be required for circumstances where a DRSP's units have consumed above the baseline level. We suggest they may also be required to ensure sufficient funds for reimbursement rates. While we expect that spot payments would exceed the reimbursement payment, there could be circumstances where spot prices are below the reimbursement rate, requiring a net payment by DRSPs to AEMO.

• Timeframe for notifying retailers of dispatch

New Clause 3.8.21(m) specifies that AEMO must notify the FRMP when a WDRU is dispatched but does not specify a timeframe for such a notification. We suggest that it should be as close as practicable to real-time notification coincident with sending dispatch instruction to the respective WDRU.

• DR provision by non-registered component of load

We request clarity around whether the non-registered component of a qualifying load is permitted to engage in non-mechanism related demand response activities, such as retailer-led DR.

• Market Ancillary Service Provider (MASP) lower limit

We request confirmation that the existing lower capacity limit on MASPs is removed. It is implied by the proposal to combine the MASP category with the new DRSP category, which has no defined limit.

Meter churn

Clarity is needed on whether a DRSP is able to initiate a meter churn or metering services. Given retailers will retain responsibility for metering and have commercial arrangements with metering and metering data providers (and will retain responsibility for billing customers for any services associated with DRSP use of meter data), it would be inappropriate for DRSPs to request services directly that are subsequently charged to a retailer.

Conclusion

We would like to take the opportunity to commend the AEMC on their thorough and extensive engagement process undertaken to develop and improve the initial rule change proposals to the version currently under consideration.

Notwithstanding, we have significant reservations about the design, associated costs and proposed implementation timeframe as detailed in this submission. Primarily, we are concerned that this reform will not promote significant and sustainable additional DR capacity. It appears that the cyclic value of wholesale demand response (with the market presently at a high point in the value cycle), is being used to promote a reform

⁶ AEMC, Draft Determination, Wholesale Demand Response Mechanism, 12 March 2020, p 126

that purports to increase competition but will simply transfer value from one party to another, creating no material net benefits for customers.

Should you wish to discuss these further, please contact me on 03 9976 8482, or Georgina.Snelling@energyaustralia.com.au.

Regards

Georgina Snelling

Industry Regulation Lead