

**Dora Guzeleva**

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Dear Ms Guzeleva,

Thank you for the opportunity to comment on your review of the Reserve Capacity Mechanism.

The energy sector in Western Australia exists to provide electricity and gas to consumers. It is central to energy production and delivery that the long-term interests of energy consumers are served. The Expert Consumer Panel (ECP) was established by the Western Australian Government to provide input on policy, rules and other processes across all elements of the energy supply chain. The ECP has a broad membership base with representatives from the social welfare sector, climate movement, former senior energy sector executives and experts, all of whom bring a unique customer perspective to the work of the group.

The ECP is represented on the Market Advisory Committee (MAC) and the RCM Review Working Group where members are contributing to the detailed technical discussions in those forums.

ECP members made a submission on the Part 1 Consultation Paper in September 2022.<sup>1</sup> In this submission ECP members supported the direction of the proposals outlined in the consultation paper, and provided suggestions about how they could be enhanced in ways that support consumer outcomes. ECP members support where Energy Policy WA has landed in this latest consultation paper.

We note that through the RCM Review Working Group, members provided comments in relation to the details of Stage 1 and 2 proposals, particularly where they relate to the way that the community's energy needs are evolving as the climate changes (e.g. peak demand and associated fuel availability requirements for generators) and the need to enable new technologies and services for reliability and efficiency as we decarbonise (e.g. how demand side resources participate in flexibility markets). We are comfortable with how Energy Policy WA has responded to this feedback, although we do note that there are implications that go beyond the scope of this review.

ECP members provide the following feedback on proposals A-U in the Part 2 Consultation Paper.

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<https://www.wa.gov.au/system/files/2022-09/RCMR%20Consultation%20Paper%20-%20Stage%201%20Submission%20-%20ECP.pdf>

### **Proposal A**

*ECP members support Proposal A to continue to set participant IRCR based on contribution to load in high demand intervals.*

*It is a participant's demand in these high system demand intervals that drives the need for more reserve capacity and so Proposal A is consistent with the causer pays principle. It provides participants with the incentive to reduce their demand during those intervals and so should reduce the amount of capacity required in future, and capacity costs, if participants respond to this incentive.*

*Proposal A is also based on the current practice and so implementation costs should be minimal.*

### **Proposal B**

*ECP members support Proposal B to retain the current approach of using only intervals in the Hot Season to set IRCR, but amend the IRCR interval selection provisions.*

*It is an improvement on the current interval selection method and will more consistently select the intervals with the highest system demands. This will more appropriately allocate reserve capacity costs to participants based on their demand during these intervals that drive the need for more reserve capacity.*

*The additional flexibility around the interval selection process is appropriate given the increasingly volatile weather we are experiencing due to climate change.*

*We note the discussion in the paper about the potential in the future for extreme demand events to occur in the winter - a prospect that should be explored given the need for heating and transport loads that are currently fossil fuel-based to be electrified and for the system to cater for load growth. ECP members therefore support this issue being explored in detail as part of the Coordinator's review of WEM effectiveness, to ensure that IRCR settings support electrification.*

### **Proposal C**

*ECP members support Proposal C to remove temperature dependent and non-dependent load (TDL/NTDL) multipliers from the IRCR process. The current settings dull the incentives for NTDL - which typically have a flatter load profile and the potential to be managed flexibility - to participate in demand response programs.*

*As the paper notes, the removal of these settings will also simplify the administrative load for AEMO and participants, which should ultimately benefit consumers by reducing the costs.*

### **Proposal D**

*ECP members do not have specific feedback on this proposal to amend the way IRCR is calculated for new loads, although the proposed approach appears reasonable.*

*ECP members do note the potential link between these settings and the challenges households and businesses have historically faced if they want to track and make sense of their energy use in the absence of smart meters. Now that smart meters are being rolled-out, there is an opportunity to use actual data instead of second-best estimation and forecasting approaches, and increase the efficiency of the system.*

### **Proposal E**

*ECP members support Proposal E to set participant IRCR for flexible capacity based on the load shape in high ramp periods, with some qualifications.*

*From the qualitative analysis in the consultation paper Proposal E appears to support more of the desired outcomes than the other option considered (Option 1) and provide the incentive for consumer participants to reduce their contribution to the highest demand ramps.*

*ECP members understand that the need for flexible capacity is driven by:*

- *the volatility of intermittent generation output from behind-the-meter generation like rooftop PV;*
- *normal demand (load) variability (e.g. the typical ramp to the evening peak excluding behind-the-meter PV effects); and*
- *volatility of utility-scale intermittent generator output on the supply-side in the wholesale market.*

*The highest demand ramps seem to be a reasonable proxy for what drives the need for flexible capacity from the demand (load) side including rooftop PV (the first two bullet points above), and so seems to be a reasonable basis on which to allocate flexible capacity costs via the flexible IRCR to consuming market participants.*

*It is reasonable to assume that at present the contribution of the demand-side (load and behind-the-meter generation) to the quantity of flexible capacity required, is greater than the contribution from the volatility of utility-scale intermittent generation output.*

*In future when the quantity of utility-scale intermittent generators grows significantly, the volatility in total output from these generators may grow to the point where it becomes the dominant cause of the quantity of flexible capacity needed to maintain the security and reliability of the system. In this case it would seem more appropriate to allocate a fair proportion of the costs of the flexible generation capacity required to those intermittent generators. We understand that this is being addressed by the Cost Allocation Review currently underway.*

### **Proposal F**

*ECP members support Proposal F to set IRCR for flexible capacity based on the three days with the highest four-hour upwards ramp at any time during the year, and require AEMO to publish the forecast ramp so that consumers can monitor and respond to the cost signal.*

*ECP members agree that AEMO should publish the forecast ramp to inform the market, and crucially, to help inform and give consumers the opportunity to take steps to manage their use in a way that could reduce their bills and make a contribution to keeping the power on for everyone.*

*ECP members offer similar qualifying comments about cost allocation in relation to this proposal as we did for Proposal E.*

### **Proposal G**

*ECP members support Proposal G to incorporate greater flexibility in the way CRC is calculated for Demand Side Programs (DSP).*

*The proposal incorporates some flexibility in its application, recognising that DSPs vary in their makeup. This is an improvement over the current approach and should allow greater DSP participation in the wholesale market, rewards flowing back to consumers and lower bills overall.*

### **Proposal H**

*ECP members support Proposal H to remove Consumption Deviation Applications (CDAs) from the assessment of DSP CRC, and instead have AEMO make the necessary adjustments automatically on behalf of the DSP. This should reduce administrative overheads for DSP and make it easier to participate.*

*We do however suggest that the rest of the sentence in the paper's text above the proposal box – "and instead adjust consumption records where necessary using AEMO's records of DSP dispatch (including testing)" – be included in the wording of the proposal to be clear about what will be adjusted.*

### **Proposal I**

*ECP members support Proposal I to allow sites with collocated load and generation or storage to be Associated Loads of a DSP.*

*We note the risk highlighted in the paper that sites with both generation and load could game the RCM, and support work to explore mitigations through the Demand Side Response Review.*

### **Proposal J**

*ECP members support Proposal J.*

*A dynamic baseline allows the actual demand reduction of a DSP during a dispatch event to be determined more accurately than the current static baseline, for facilities that do not have a flat demand profile, as outlined in the consultation paper.*

*We consider the current 200-hour availability requirement to be a barrier to a significant number of suitable DSP facilities. Different DSPs can afford to be available for different*

*numbers of hours in a year before their participation becomes uneconomic or unacceptable to the provider. It is not a case of “one size fits all”.*

*Some facilities may only be able to be available for 50, or 100 or 150 hours in a year, for example, and so these facilities will not make themselves available if the rigid 200-hour requirement is in place.*

*The SWIS load-duration curve for a 10% PoE year - for example the very hot summer of 2021/22 - shows that the highest 500 MW of demand occurs for around 100 hours of the year or less. The top 200 MW of demand occurs for much fewer hours in the year, and so on. In milder years when peak demand is lower, availability requirements for the highest (last in the merit order capacity) are even less. For these reasons we consider it appropriate to examine the 10% PoE year load-duration forecasts – on which the RCM reserve capacity requirement is based – to determine the necessary availability requirements for DSP capacity to meet the peak demand in a year.*

*Requiring last-in-the-merit-order DSPs to be available for much longer than peak system demand over-specifies the required availability and is a potential barrier to DSP participation.*

*It is important to encourage greater DSP capacity in the WEM to help avoid the need to build fixed plant generation capacity to meet 1-in-10-year (10% PoE) demand. More DSP participation in the WEM will help with meeting the forecast capacity shortfalls in the coming years, and increase competition between capacity providers.*

*ECP members suggest that the Demand Side Response Review examine this in more detail to come up with more appropriate availability requirements for DSPs.*

*We are also concerned that the rigid “one size fits all” 2-hour notice period requirement is a barrier to participation for some DSP facilities. It prevents facilities that may need slightly longer to prepare to reduce their demand, from offering their capacity and participating in the market. The notice that DSP facilities require before being able to reduce demand varies from facility to facility along a continuum, rather than there being a single notice period that is suitable for all available DSP capacity.*

*The shorter the notice period required by a DSP the more valuable and useful it is for AEMO dispatch, just like shorter generator start-up times are more flexible and valuable. However AEMO successfully manages to dispatch generators with much longer start-up times than two hours.*

*ECP members suggest that the DSP notice period requirement be examined in the Demand Side Response Review.*

### **Proposal K**

*ECP members support Proposal K around testing requirements for DSPs. We consider the proposed tests to be sufficient. Experience with flexible capacity requirements in*

*future should highlight if there are opportunities to streamline the testing further, or indicate whether any other tests are required.*

*Testing flexible characteristics by observation appears to be a pragmatic approach. Scheduling flexible capacity tests at the same time as peak capacity tests would seem to be a more efficient way to do them for the provider and AEMO.*

#### **Proposal L**

*ECP members support Proposal L and agree with the proposed changes to Reserve Capacity Testing for DSPs.*

*Aligning the generation and DSP testing regimes does not seem to be appropriate, because generators and DSPs are very different in the way they provide capacity – generation versus demand reduction. We do not support this without a clear explanation of how this could be done and the benefits.*

#### **Proposal M**

*ECP members support Proposal M to bring flexible capacity into AEMO's outage notification and management process and agree with the proposed changes.*

#### **Proposal N**

*ECP members support Proposal N to require flexible capacity holders to lodge outages relating to capability to provide flexible capacity and agree with the proposed approach.*

#### **Proposal O**

*ECP members support Proposal O to allow DSP's to manage their own outage schedules and not be required to participate in AEMO's outage planning regime. This should reduce the administrative burden of participation, without diluting the incentives to perform under the RCM.*

#### **Proposal P**

*ECP members consider that Proposal P to manage flexible capacity refunds appears to be reasonable based on the consultation paper commentary. We are interested in hearing feedback from peak and flexible capacity providers with market insights about the implications.*

#### **Proposal Q**

*ECP members consider that Proposal Q to calculate a dynamic refund multiplier for flexible capacity, and the proposed approach to refund multipliers, appear to be reasonable based on the consultation paper commentary. We are interested in further*

*feedback on this proposal from peak and flexible capacity providers with market insights about the implications.*

### **Proposal R**

*ECP members consider that Proposal R to amend the maximum facility refund for DSPs and the proposed approach for refunds appear to be reasonable based on the consultation paper commentary. We are interested in feedback from peak and flexible capacity providers, including DSP providers, with greater knowledge of the implications - including whether this would create an unnecessary barrier to DSP participation in the market.*

### **Proposal S**

*ECP members support Proposal S to distribute capacity refunds to participants responsible for loads (and ultimately consumers) and consider it to be an important change from the current practice for the reasons outlined in the consultation paper.*

*Consumers should not have to pay twice for capacity due to unavailability of capacity or fuel that is normally expected to be available.*

### **Proposal T**

*ECP members offer qualified support for Proposal T to decrease the Expected Unserved Energy (EUE) criterion, subject to highlighting the need to ensure that changes to this reliability standard do not unnecessarily increase costs to consumers.*

*ECP members recognise the critical importance of keeping the power on for consumers as the energy system transforms. We also recognise that bridging from fossil fuels to renewables in an increasingly volatile climate requires significant investment and costs that will need to be recovered from Western Australians through energy bills and taxation.*

*We do note that the proposed WEM EUE of 0.0002% is three times more stringent than the new National Electricity Market (NEM) EUE criterion of 0.0006% cited in the paper. In reaching our position, we have taken into account the analysis in the paper that suggests that this more stringent 0.0002% criterion is unlikely to affect the quantity of reserve capacity required until the 2040s.*

*We also note that historically, most supply interruptions to consumers are caused by network outages rather than generation outages, although this may change with the pressing need to replace retiring fossil fuel generation. It will be important nevertheless to ensure that avoiding network outages remains a primary focus.*

*Our qualified support for Proposal T also reflects a pragmatic assessment of the current state of the WEM. ECP members have been struck in recent weeks by the extent of out-of-market procurement over and above the RCM that AEMO is undertaking to secure adequate energy resources to maintain the security and reliability of the system, including for example, through the Supplementary Reserve Capacity mechanism and Non-co-optimised Essential System Services.<sup>2</sup> Reforming the RCM - including by changing the EUE settings - must reduce the need for ad hoc and less transparent interventions by AEMO and more efficient outcomes overall.*

*The ECP suggests that the setting of this EUE limb of the planning criterion be re-examined closer to when this limb is likely to affect the quantity and costs of WEM reserve capacity.*

### **Proposal U**

*ECP members support Proposal U to have the Coordinator determine the reference technology, and use of net CONE with the reference technology, noting the need for these determinations to be supported by appropriate stakeholder consultation.*

In our contributions to the RCM Review, the Cost Allocation Review, and related processes to reform the Wholesale Energy Market, ECP members have emphasised the significant challenge of driving and managing the rapid decarbonisation of the State's energy system in a way that ensures that it continues to meet the needs of Western Australians. Market reform is detailed, complex work that needs to be managed in a careful and deliberate way, but it also needs to reflect the urgency of the task.

While changes being progressed through the RCM Review should make it easier for demand side resources to participate in the WEM, ECP Members view is that there is much more still to do to level the playing field and unlock its potential to work alongside generation to manage peak demand, minimum demand, duration gaps and other challenges. The Demand Side Response Review that recently commenced is a critical and long-overdue exercise which ECP members look forward to contributing to over the next 12 months.

We also note that these measures to reform the RCM to ensure it remains fit for purpose, and consider ways to enable DSP in the WEM through the DSRR, need to be supported by a wider transition strategy to inform and empower consumers to - among other things - manage their energy use and appliances in a flexible way, and unlock the value of DSP. Continuing the rollout of smart meters as fast as possible, helping households migrate to more dynamic tariffs where appropriate, and supporting energy service innovation more generally, are critical pieces of the puzzle. The significant DER Roadmap work underway is consistent with this. There are also

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<https://www.aemo.com.au/newsroom/media-release/power-system-resilience-strengthened-for-summer-rough-supplementary-reserve-capacity-mechanism>

other opportunities for consumers to assist - even voluntarily, given the right messaging - to help keep costs down.

The ECP would be pleased to discuss the submission further if required, and will continue to engage in the process as it progresses.

Kind regards

Expert Consumer Panel