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Submission from the Expert Consumer Panel on the WEM Investment Certainty Review (Initiatives 1 and 2) Consultation Paper, July 2024

Dear Ms Guzeleva,

Thank you for the opportunity to make a submission on the above Consultation Paper.

The energy sector in Western Australia exists to provide electricity and gas to consumers. It is central to energy production and delivery that the interests of all energy consumers are served well. 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. ECP members include representatives from a variety of energy-related backgrounds, all of whom bring a unique customer perspective to the work of the group.

As ECP members, we represent energy consumers on the Market Advisory Committee (MAC) and the Wholesale Electricity Market (WEM) Investment Certainty Review ('Review') Working Group that have been considering five initiatives, announced by the Minister for Energy in May 2023, that are part of the Review.

The Consultation Paper sets out the findings and proposals for two of the five Review initiatives:

- Initiative 1 - reform the Reserve Capacity Price (RCP) curve to send sharper signals for investment when demand for new capacity is stronger and introduce a price curve for the new Flexible Capacity Product; and
- Initiative 2 - provide a ten-year RCP guarantee for new technologies.

As context for this submission, ECP members note that the "Scope of Work for the WEM Investment Certainty Review" document provided alongside the Consultation Paper identifies two key areas of concern relating to the ability of the WEM to deliver price signals which provide investment certainty for new renewable generation:

- The potential decrease in energy market prices when renewable generators with low operating costs set the market price more frequently in the future; and

- The lack of a mechanism to price the market externality associated with greenhouse gas emissions.

This Consultation Paper addresses the first concern relating to energy market prices, and ECP members note the equally urgent need to progress work towards resolving risk related to the lack of a mechanism to price greenhouse gas emissions in the WA energy sector.

In this context ECP members support Initiatives 1 and 2 in principle and, except where described below, the proposals outlined in the Consultation Paper to achieve them.

We understand the purpose of these initiatives as being to enhance the incentives for investment in new low-emissions facilities and help the energy industry achieve decarbonisation targets, while maintaining system security and reliability, and importantly, without unduly increasing costs to consumers. This is the energy trilemma of achieving reliable, affordable and environmentally responsible electricity supply, consistent with the new State Electricity Objective expected to come into force this year.¹

Specific comments regarding the proposals

ECP members provide the following comments regarding proposals considered in the Consultation Paper. These comments relate to the potential for significant increases in capacity costs and other concerns that could result from these proposals, which may not be necessary.

We recognise that costs of moving to zero emissions electricity supply are almost certain to increase in the near term, but are concerned about avoiding any 'undue' increases. Avoiding excess costs is always important for businesses and household consumers, and especially so in the context of an ongoing cost-of-living crisis affecting all consumers.

¹ The new State Electricity Objective is to promote efficient investment in, and efficient operation and use of, electricity services for the long-term interests of consumers of electricity in relation to —

- (a) the quality, safety, security and reliability of supply of electricity; and
- (b) the price of electricity; and
- (c) the environment, including reducing greenhouse gas emissions.

Initiative 1: Reform the Reserve Capacity Price (RCP) curve and introduce a price curve for the new Flexible Capacity Product

Proposal 1: Set the Peak RCP to 100% of the Peak BRCP (Benchmark Reserve Capacity Price) if the number of Peak Capacity Credits issued equals the Peak RCT (Reserve Capacity Target).

(1) Do stakeholders support setting the price to the BRCP at the RCT? If you have any concerns, please outline your reasons.

ECP Members strongly support this proposal.

Proposal 2: Set the Peak RCP to 100% of the Peak BRCP when the number of Peak Capacity Credits provided is between 95% and 105% of the Peak RCT.

(2)(a) Do stakeholders support including a deadband in the Peak RCP curve?

Yes.

(2)(b) Do stakeholders support the proposed settings for the deadband?

ECP Members have concerns about a deadband that is symmetrical around the 100% mark of the RCT.

A flat deadband from 95-105% of the RCT fails to provide any greater incentive for new capacity to enter the market when we are a full 5% below our capacity target than if we have a full 5% excess of capacity. Waiting to reach a full 5% shortfall before increasing the incentive for new capacity increases the risk of capacity shortfalls, and increases the likelihood of needing to rely on emergency procurement measures to secure capacity which end up being even more costly for all - like NCESS (Non-Co-optimised Essential System Services) currently.

It is likely for this reason that almost all other jurisdictions around the world have settings which reach the RCP Cap at between 92% and 98% of the RCT, rather than waiting until a 5% capacity shortfall before increasing the price towards the cap.

To avoid this issue the proposed deadband should begin at 100% of the RCT, so that any shortfall in capacity below the RCT increases the RCP towards the RCP cap sooner.

Also of concern for consumers is whether or not it is appropriate to use a percentage based deadband. A 10% deadband, while seemingly appropriate for current grid circumstances, may become inappropriately large as the total amount of capacity on the grid rises over time. It may be more appropriate to base the size of the deadband in proportion to some other variable. Given the underlying reason for the proposed 10% deadband is relative to the size of the largest generator on the grid currently, it may be more appropriate to specify a deadband that is relative to the size of the largest generator. This would ensure the deadband plays its function of increasing certainty for investors, while also preventing an unnecessary accumulation of costs with direct impacts on consumers.

Proposal 3 - Set a maximum Peak RCP (cap) at 150% of the Peak BRCP, when the number of Peak Capacity Credits issued is 85% of the Peak RCT.

(3) Do stakeholders have any concerns about the proposed parameters for the Peak RCP cap?

ECP members support the design in principle, but have the following specific concerns:

- Questioning whether the proposed 150% and 160% BRCP multipliers are set at appropriate needs-based levels. These multipliers, with the following combination of factors, are likely to result in very high RCPs in the near term if there continues to be a forecast shortage of capacity:
 - A recent step-change increase in reserve margin determined by the AEMO; the reserve margin is now based on assuming the three largest generators are all offline at the same 1-in-10-year annual peak demand time, compared to the previous practice of assuming only the single largest generator is offline.
 - Increases in underlying demand forecasts
 - The recent change of benchmark technology from a diesel-fired OCGT (Open Cycle Gas Turbine) to a more costly 4-hour lithium-ion battery energy storage system (BESS). This change was driven primarily by the announced and expected generator emissions thresholds, and the new Strategic Electricity Objective. The 'emissions thresholds' related requirements have been excluded from this consultation, so it is unclear if these emissions thresholds are being progressed.
 - The continued use of gross CONE to set the BRCP

- The potential future use of an ‘annuity tilt’ in the calculation of the BRCP to bring forward BESS capital recovery and increase the BRCP in the early years.²
- The incentivisation of new capacity during shortfall may be too slow to avoid reliance on costly emergency procurement measures like NCESS, especially at a time of growing and repeatedly underestimated increases of demand.
- It is not necessarily appropriate for the rate of incentivisation during periods of capacity undersupply to symmetrically match the rate of disincentivisation during oversupply.

While excessive oversupply of peak capacity is important to avoid, an oversupply of between 5-10% may represent or even encourage competition in the energy market, especially during times of rapidly growing consumer demand for electricity.

On the other hand a 5-10% undersupply of peak capacity could present a serious risk to system security, and thus to reliable energy supply to both business and household consumers. As such it is critically important to increasingly incentivise the procurement of new reserve capacity as shortfalls increase.

Proposal 4 - Set a minimum Peak RCP (floor) at 50% of the Peak BRCP, when the number of Peak Capacity Credits provided is greater than or equal to 115% of the Peak RCT.

(4)(a) Do stakeholders support a non-zero RCP floor?

We do not support a non-zero RCP floor for **new capacity** above 130% of the RCT. When the reserve capacity quantity is greater than 130% of the RCT, the price floor for **new capacity** should reduce to zero.

It is not in the interests of business and household consumers to be providing any level of subsidy for new capacity that is not needed, particularly in a cost of living crisis. We oppose the proposal to continue to pay capacity credits for new capacity at 50% of the BRCP for all levels of excess capacity credits greater than or equal to 115% of the RCT. It is not in the interest of consumers for new capacity to be assured of receiving such a floor price if there is already a significant excess of capacity.

² The ERA has just published the revised procedure for determining the BRCP based on the new BESS reference technology. The ERA chose to use an annuity tilt of 1.0 at present which means it will not increase the BRCP initially.

Unless there is some kind of clawback mechanism in place for when prices and facilities' profits are excessive, which there is not, then this would unfairly shift the risk of unnecessary or wasteful investment from market participants to both business and household consumers.

At some point a limit must be set on the amount of excess capacity consumers are expected to continue paying for.

However, it may be reasonable to implement a price floor which covers principal and interest payments for **existing capacity** which is incurring such costs, up to a certain point.

(4)(b) Do stakeholders consider that a non-zero RCP floor should be recalculated each year or set based on a fixed proportion of the BRCP?

No comment.

(4)(c) Do stakeholders consider that a non-zero RCP floor should allow for principal repayments, interest payments, or be symmetrical with the RCP cap?

Energy Policy WA may need to reconsider the basis of the application of the proposed 50% price floor in light of our comments below, and qualify the application of the floor to avoid unnecessary additional costs to business and household consumers:

For **existing** capacity a price floor of 50% of the BRCP (subject to more rigorous analysis of the appropriate level) seems reasonable for capacity excesses from 115% up to 130% of the RCT.

As the floor payments would be based on the number of capacity credits a facility receives, using principle and interest as the basis for choosing 50% of BRCP floor may seem appropriate for facilities that receive a number of capacity credits that is close to their installed MW capacity.

For intermittent generators or BESS where the number of capacity credits allocated can be substantially less than their installed MW capacity, a 50% floor may fall well short of covering their principle and interest, so this may not be an appropriate basis for choosing the floor level.

For instance, a wind farm typically receives around 40% of its nameplate capacity as capacity credits, while a gas turbine will receive close to 100% of its capacity as capacity credits paid for at the same floor price.

Proposal 5:

5.1 Allow any new facility that provides Flexible Capacity to receive (on request) a fixed

RCP for ten years

5.2 Set a maximum Flexible RCP (cap) at 160% of the Flexible BRCP, when the number of Flexible Capacity Credits issued is 85% of the Flexible RCT.

See our comments above under proposal 3 regarding the proposed 160% BRCP multiplier.

5.3 Set the Flexible RCP to 100% of the Flexible BRCP where the number of Flexible Capacity Credits issued is 100% of the Flexible RCT .

5.4 Set the minimum Flexible RCP on the same basis as the Peak RCP.

(5)(a) Do stakeholders support a higher RCP cap for Flexible Capacity than Peak Capacity?

Yes, flexible capacity is playing a slightly more demanding role and needs to be separately incentivised to a higher extent than pure peak capacity.

(5)(b) Do stakeholders consider that the Flexible RCP curve should have a deadband?

We have no firm view either way on whether or not a deadband should exist for Flex capacity.

However if one is implemented, then as per our comments above regarding the deadband in the Peak Capacity proposal, we hold concerns about waiting to reach a full 5% shortfall in Flexible Capacity before increasing the incentive for new capacity. This may increase the risk of shortfalls in Flexible Capacity, and increases the likelihood of needing to rely on emergency procurement measures to secure Flexible Capacity which end up being even more costly.

(5)(c) Do stakeholders consider that Flexible Capacity should have a non-zero RCP floor?

For new capacity, no. For existing capacity, a non-zero floor price for Flexible Capacity may be reasonable for the same reasons, and with the same concerns, as outlined in our earlier comments regarding floor pricing for existing peak capacity.

Proposal 6: Include a review of the RCP curves in the Coordinator's regular review of the BRCP reference technology.

(6) Do stakeholders agree that the RCP curves should be considered in conjunction with the BRCP reference technology? If you have any concerns, please outline your reasons.

Yes. It is important to regularly review the RCP curves to ensure they are acting as intended and not creating undue risks, costs or perverse incentives.

Proposal 7:

7.1 Adjust existing transitional pricing arrangements to include a lookback adjustment for actual inflation.

7.2 There will be no new transitional arrangements for existing facilities not already subject to transitional pricing arrangements.

(7)(a) Do stakeholders agree that existing transitional pricing arrangements should consider actual outcomes in addition to forecasts?

Yes. Where possible it is always good practice to link pricing arrangements to real world outcomes.

(7)(b) Do stakeholders agree that new transitional pricing arrangements are not necessary?

It is unnecessary to create new transitional pricing arrangements at this time.

Initiative 2: Ten-year Reserve Capacity Price guarantee for new technologies

As announced by the Minister on 9 May 2023, Initiative 2 of the WIC Review included developing a policy that provides a ten-year period of fixed reserve capacity pricing for “proponents of new flexible technologies, such as long-duration storage”.

This would provide additional incentive for investment in these technologies, and allow more renewable generation to connect. A period of fixed pricing provides investors with certainty of capacity revenue for a longer period than under the existing WEM Rules.

Proposal 8:

8.1 Allow any new facility that provides Flexible Capacity using a renewable energy source to receive (on request) a fixed RCP for ten years.

ECP members support this proposal where the RCP is reasonable.

We do not support agreeing to a ten-year price guarantee with an RCP that is unreasonably high, and well above what is necessary to ensure the viability of the facilities in question.

Any price guarantee provided should be needs-based and reasonable, and not pass on undue costs to consumers.

8.2 Require facilities capable of running on fossil fuels and seeking the ten-year fixed price to provide in each Reserve Capacity Cycle evidence of 100% renewable fuel supply.

Yes, but the definition of 'renewable fuel' will need to be clear to avoid disputes about what fuels are considered 'renewable'.

Proposal 9: Require a facility requesting the ten-year fixed RCP to provide evidence that it can provide firm output for at least 120% of the prevailing Energy Storage Resource (ESR) Duration Requirement.

We support this proposal.

Proposal 10: Longer duration ESR facilities requesting a ten-year fixed RCP be treated together with proposed floating RCP facilities for Network Access Quantity (NAQ) eligibility purposes.

We support this proposal.

Additional comments

BRCP benchmark technology choice is predicated on emissions thresholds

As a result of the Reserve Capacity Mechanism (RCM) Review last year, the Minister for Energy gazetted WEM rules that require the Coordinator to determine the benchmark technology to be used as the basis for determining the BRCP.

The Coordinator determined the technology in late in 2023, supported by the technology review and consultation, to be a 200 MW / 800MWh Lithium Ion battery energy storage system(BESS).

The technology review started with a long list of possible suitable technologies that needed to meet a number of criteria, one of them being:

“The technology must have the potential to meet the emission threshold requirements proposed under the WEM Investment Certainty Review” (Initiative 4) announced by the Minister in May 2023”.

This criterion excluded the lower-cost, diesel-fired 160 MW open-cycle gas turbine (OCGT) that was previously the benchmark reference technology, because its emissions are above the proposed threshold(s).

If these thresholds do not proceed, the outcome may be:

- Generators that would have been phased out because of their emissions being above the proposed thresholds, could continue to emit at those higher levels.
- Retailers and, in-turn, consumers will be paying higher reserve capacity prices (due to the new higher-cost benchmark technology chosen) without the commensurate emissions reductions being achieved as expected by consumers.

The five initiatives announced by the Minister were a package of interdependent initiatives that overall would deliver a certain amount of emissions reduction. If the emissions thresholds do not go ahead, then the extra costs incurred by consumers for "half of the package" going ahead are incurred without consumers being confident that they are receiving the full benefit of the package available from the synergies of the five initiatives. A perverse incentive could be created by paying high emissions generators prices intended for low emission generators.

The trilemma balance

The balance between providing investors certainty to ensure sufficient low-emissions capacity is built and available, and imposing unnecessarily high costs on consumers is important to get right. At present there are too many compounding causes of cost increases to consumers, including business and industry, and we suggest that more weight is given to avoiding unnecessary costs. The Chamber of Minerals and Energy and large mining industry representatives have recently made it clear that they too are concerned about the large WEM and network cost increases occurring.

We support measures to encourage the provision of capacity through the reserve capacity mechanism and normal market processes to avoid the higher capacity costs incurred by running emergency procurement processes like NCESS.

Recent increases in the RCP have not yet driven significant new investment in the SWIS. The RCP is only one factor in project developers' decision to invest. In recent years, development decisions have also been influenced by:

- Access to the Western Power network and its interaction with the RCM certification mechanism
- Energy transition outcomes, including the 1 Oct 2023 market commencement and the RCM Review outcomes, with more likely to come. The issue remains that the nature, timing and permanence of key transition policy interventions (e.g. emission thresholds, carbon related prices or subsidies) is highly uncertain.
- The highly unpredictable nature of the market (e.g. demand) which is likely to continue during the next decade or more of the transition
- Commonwealth energy transition policies, including the future of the Renewable Energy Target (RET), and the new Capacity Investment Scheme (CIS).

As such, it is not clear that the proposed changes in the price curve would be sufficient – on their own – to drive necessary investment in the SWIS. The changes must be considered in context of the wider investment landscape.

At present there is a substantial increase in the number and capacity of facilities being built, and proposed, to provide capacity to the WEM, primarily due to higher-cost, short-term contracts awarded through NCESS tenders run by AEMO.

We need to be careful not to overcompensate capacity through much higher capacity prices at consumers' expense, without sufficient focus on addressing other barriers or disincentives to the timely provision of capacity.

We would be pleased to provide any further information to support this submission.

Yours sincerely,

Expert Consumer Panel