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**Dear Board Members** 



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# Capacity mechanism High-level Design Paper – 20 June 2022

EnergyAustralia is one of Australia's largest energy companies with around 2.4 million electricity and gas accounts across eastern Australia. We also own, operate and contract a diversified energy generation portfolio across Australia, including coal, gas, battery storage, demand response, wind and solar assets, with control of over 4,500MW of generation capacity.

Our guiding principle in approaching resource adequacy issues is that we must build the new system before the old one closes. This principle is aligned with the ESB in its desire to not follow an alternative 'wait and see' approach, where investment cases are built on resource gaps opening up in the market. Avoiding such gaps will be necessary if we want to deliver the transition at least cost and with minimal disruption for customers, as well as dissuade jurisdictions from intervening and undermining investment signals.

The ESB is grappling with genuinely complex issues and a wide variety of stakeholder views on the best set of solutions that might also be acceptable to jurisdictional governments. There are many ways to ensure that both new and existing technologies are there to deliver when customers need them the most. The ESB's recommended market design ultimately needs to ensure that all resources are appropriately incentivised from an investment and operational standpoint, and there are no gaps or overlaps, whether it be via a capacity mechanism, the energy-only market or other via other means.

### We need more than a capacity mechanism

There are two ways to ensure the entry and exit of resources occurs in the right sequence. The first is to provide certainty around when existing thermal generation exits. The second way is to accelerate investment in new generation, storage and transmission infrastructure. It makes little sense to focus on either exit or entry and hope that the other works out. The 2022 Integrated System Plan (ISP) provides the latest and clearest articulation of the prospects of accelerated coal closures, but AEMO's comments that Actionable transmission investments progress "as urgently as possible" with some already past optimal timing<sup>1</sup> should be a warning to all of us of the growing

<sup>&</sup>lt;sup>1</sup> ESB, Capacity mechanism High-level Design Paper, June 2022, p. 12.

risk of delay in new investment, due to pressures around costs, supply bottlenecks and social licence. Hence we recommend that market settings around resource adequacy involve a two-pronged approach, encouraging new entry as well as providing certainty on coal closure dates.

The ESB correctly states that a capacity mechanism would not and cannot address the technical incompatibility of coal generation with energy systems dominated by variable renewables.<sup>2</sup> The ESB should commission independent quantitative analysis to illustrate the risk of a capacity mechanism rewarding and prolonging the lives of fossil fuel assets. IEEFA's extrapolation of capacity payments in Western Australia's Reserve Capacity Mechanism suggests a capacity mechanism in the National Electricity Market could involve payments "primarily to fossil fuel generators" of up to \$6.9 billion per year.<sup>3</sup> This seems to conflict with analysis of actual returns of generators in Western Australia where coal generation is consistently the least profitable technology, and by a considerable margin, followed by combined-cycle then open-cycle gas generators.<sup>4</sup>

Economic considerations aside, plant owners deal with broader environmental goals, fuel supply issues, employee interests and impacts on the surrounding communities of which they are a critical part. A capacity mechanism would be too blunt and ultimately ineffective in dealing with all of these factors.

Dealing with the risk of disorderly coal exit does not have to be a complex or marketwide reform. Nor does it necessarily mean extending the life of coal plant. It might only be necessary in limited circumstances and in some jurisdictions, for example, where there is no clear pipeline of new capacity, or where closures need to be brought forward to meet emissions targets. Certainty on closure dates should de-risk new incoming investment, which would help accelerate the transition. The ESB was directed by Ministers to conduct further work on orderly exit management contracts in response to its July 2021 recommendations<sup>5</sup> and this should be consulted on in tandem with the design of a capacity mechanism.

### A capacity mechanism should focus on encouraging new investment

We agree with the ESB that all resources contributing to reliability should be rewarded in line with the value they contribute. We also agree in principle that including the widest range of technologies and market participants (loosely framed as technology-neutrality) would help deliver resource adequacy at least cost. It does not necessarily follow, however, that a centralised 'whole of market' mechanism, capturing both existing and new resources, would achieve these objectives.

EnergyAustralia has consistently pointed out the shortcomings of a centralised approach in prior consultations. But we accept the ESB's latest decision that this approach provides more investment certainty. We appreciate the ESB now exploring detailed design features to address shortcomings in a centralised model, like including retailers in

<u>https://www.energy.gov.au/sites/default/files/2021-</u>

<sup>&</sup>lt;sup>2</sup> ESB, p. 18.

<sup>&</sup>lt;sup>3</sup> <u>https://ieefa.org/wp-content/uploads/2021/08/ESB-Proposal-to-Require-Consumers-to-Pay-Generators-a-Capacity-Payment\_August-2021.pdf</u>

<sup>&</sup>lt;sup>4</sup> Microsoft Word - FINAL REPORT for AEC - Generator Revenue Adequacy 1.04.2022 (energycouncil.com.au)

<sup>10/</sup>Summary%20of%20the%20final%20reform%20package%20and%20corresponding%20Energy%20Security%20Board%20recom mendations0.pdf – see the National Cabinet Decision against recommendation 2.

resource procurement, accommodating event-driven 'at risk' periods, and performance obligations tied to lack-of-reserve (LOR) triggers.

A better approach that satisfies the desire to provide investment certainty, while minimising errors or conservatism in centralised forecasting and procurement, would be to limit the scope of the mechanism to new resources only. This provides more confidence as it is based on a transparent identification of a problem, namely any reliability gap forecast by AEMO, as well as a tangible solution via new resources coming in. The ESB's proposal for an 'always on' whole of market mechanism suffers some of the alleged shortcomings of a decentralised approach, in that it involves payments to existing resources with less clarity or transparency on what additional value they will deliver in the face of an expected reliability gap. It may also be challenging for policy makers and market bodies to justify payments to existing resources under annual rolling auctions where AEMO's forecasts are taken as highly accurate and suggest no reliability issues.

Targeted procurement to address forecast reliability gaps might also be a preferred as:

- noting the apparent desire from ministers to move quickly in this space, and the ESB's own questions around transitional measures ahead of 2025<sup>6</sup>, a targeted mechanism could be implemented quickly, and potentially broadened to cover existing capacity later on (along with other refinements).
- it aligns with the experiences of other markets, where tailored incentives have been introduced for different technologies. The ESB has already suggested differential incentives for old versus new technologies<sup>7</sup>, with a further reference to needing long duration storage.<sup>8</sup> This departs from what would be a 'proper' technology neutral market, where each unit of capacity is equally rewarded and competes on price alone.
- it more easily accommodates the desire of jurisdictions to select or exclude certain technologies from participation, including on a prospective basis.
- from a design perspective, it seems easier to simply exclude existing fossil fuel plant to satisfy environmental objectives, rather than overlay additional parameters via emissions constraints. Such parameters will be contested and likely highly politicised, so introduce potential risks to investors.
- it accommodates the desire for jurisdictions to opt out entirely. That is, an 'always on' mechanism that pays all resources in the market is more likely to interfere with existing and prospective jurisdictional investment frameworks than one that is effectively a 'backstop' intervention triggered by reliability gaps.
- it potentially makes it easier to accommodate the impact of inter-regional flows to the extent reliability gaps are only identified in a single NEM region at a time. It should avoid the inevitable politicisation of imports from regions with fossil fuel resources and having to account for this if there are emissions parameters in the mechanism design.

<sup>&</sup>lt;sup>6</sup> ESB, p. 75.

<sup>&</sup>lt;sup>7</sup> ESB, pp. 39-40.

<sup>&</sup>lt;sup>8</sup> ESB, p. 35.

# Existing price signals in the energy-only markets should be preserved

Perhaps the most important question faced by the ESB is whether the mechanism should do most of the 'heavy lifting' in terms of fixed cost recovery, or whether it should operate as a less intrusive 'top up' to scarcity price signals in the current energy-only market. That is, a 'heavy lifting' mechanism would be accompanied by a significant reduction in the market price cap (MPC). Virtually all capacity mechanisms in place today sit alongside energy-only markets with relatively low price caps.

Our preference is that a capacity mechanism provide 'top up' payments with a focus on bringing in new investment, which would then preserve operational signals for existing assets by retaining current<sup>9</sup> price settings in the energy-only market. This set of arrangements would be important in ensuring there are no incentive 'gaps' in the event jurisdictions decide to modify the coverage of a capacity mechanism to specific technologies or opt out entirely.

Any reduction in market price settings goes beyond some of the primary academic justifications for capacity mechanisms, in terms of missing money to cover capital costs. That is, the NEM's relatively high price cap and at least some political acceptance of associated price volatility is an advantage over other markets.

Retaining strong operational incentives under a high MPC will be important to help ensure resources show up when needed, as a centralised mechanism will inevitably be inflexible to new sources of reliability risk. This includes energy scarcity stemming from coal and gas fuel supply issues (as seen currently) as well as periods of low wind and solar output.

We note the concerns from customer representatives that a capacity mechanism would result in fixed costs being recovered twice, with one potential solution being to reduce the MPC. Often when this concern is directed at existing resources, it ignores that there are fixed costs beyond initial (sunk) capital investments. All technologies, not just aging coal plants, require material and ongoing maintenance and capital expenditures which are only recoverable when prices rise above short-run marginal costs. By depressing the energy-only price towards short-run marginal costs, entities will be forced to bid their fixed costs through the capacity mechanism. The real risk from a customer perspective is not that these fixed costs will be recovered twice, but rather they will not be recovered at all, or worse not expended, precipitating declines in asset reliability and accelerated exit. As it relates to new investment, forcing more fixed cost recovery through the capacity mechanism would scale up the distortions (and, ironically for those advocating for the MPC to be lowered, the costs for customers) associated with centralised forecasting and procurement.

The ESB should explore how different MPC and capacity market settings might involve the transfer of wholesale cost recovery from variable tariff components towards fixed components. The experience with network and retail tariff reform suggests this could be regressive for vulnerable customers or otherwise not align with customer preferences. The ESB's discussion of cost allocation to retailers suggests this would reflect volumetric charging and encourage demand response, however the costs of capacity auctions are

<sup>&</sup>lt;sup>9</sup> Noting changes have been recommended by the Reliability Panel, as well as a proposal to adjust administered price settings following recent market suspension.

locked in well in advance of delivery and so become a zero sum game in terms of cost recovery (at least in the short term).

The ESB needs to provide certainty on the prospects of changes to market price settings as soon as possible. Leaving this open will tend to add risk to or even pause investment cases currently under consideration.

# Resources need incentives to show up when needed and the freedom to set their own derating factors

The ESB's assessment of different performance obligations seeks to balance the desire to provide incentives for resources to 'show up' when they are needed the most, versus burden in undertaking ex post compliance assessments.

We support the ESB's preference for consult further on tying performance obligations to PASA availability but moreover declared LOR events. Both involve ex post compliance assessments of plant availability, which the ESB considers worth exploring:

The ESB considered an availability performance obligation balanced the burden of the obligation. However, availability has some significant enforceability weaknesses as it may be difficult to verify the accuracy of the information. In the capacity mechanism, some instances may occur where a capacity provider is bid-available in response to a LOR2 event but is not called upon for dispatch. The ESB considers self-reporting in these instances may be effective in increasing transparency and foster a culture of compliance with the mechanism. The AER took this approach in response to contingency FCAS compliance issues.<sup>10</sup>

If the ESB maintains the view that there is a net benefit in having payments attached to LOR availability, this should feed back into the derating approach. That is, where performance incentives are sufficient, participants should have some flexibility to decide how much capacity they wish to sell. This could be subject to administrative bounds or oversight by AEMO, for example, where participants are prohibited from selling more than their nameplate capacity.

For storage technologies in particular it makes little sense for a central administrator to try and predict behaviour rather than incentivise it. The derating approaches suggested by the ESB, used in existing capacity markets, involve complex, burdensome and, in our view, unnecessary, ex ante assessments of plant capabilities. We encourage the ESB to consider whether there is lower overall administrative burden in a managing a compliance regime and allowing resource providers to take more accountability, based on their own superior knowledge of their own assets. Harnessing this information will also result in better forecasts of any reliability gaps in the first place.

The other justification for having AEMO determine derating factors is to provide confidence that resources are properly counted and then procured to cover system needs. For the most part, reliability gaps will be plugged by resources that are yet to be commissioned. Confidence then rests on whether these assets will materialise in the form and by the time specified by project proponents, rather than on AEMO's derating assessment. Generally, we should have less confidence in AEMO's assessment of a resource's capability than that of an asset owner pledging to deliver output on the basis

<sup>&</sup>lt;sup>10</sup> ESB, p. 55.

of an expected penalty or reward. As the ESB notes, these incentives will be in addition to high spot prices arising at these times<sup>11</sup>, further adding to confidence and reducing the need for intensive ex post monitoring and compliance.

In addition to having some flexibility in plant deratings, resources should not be locked into 'at risk' periods, whether these are pre-defined or LOR events. That is, resource owners should be able to trade any real time performance obligations amongst themselves. If this is not allowed, the ESB will need to establish a (likely more costly) centralised process whereby performance obligations can be forfeited and subject to reauction due to a range of circumstances, including plant exit or non-completion of pledged investment.

Our detailed responses to the ESB's questions are attached.

If you would like to discuss this submission, please contact me on 03 8628 1655 or Lawrence.irlam@energyaustralia.com.au.

Regards

Lawrence Irlam Regulatory Affairs Lead

<sup>&</sup>lt;sup>11</sup> ESB, p. 55.

ESB questions	EnergyAustralia response	
Forecasting demand and the building	Forecasting demand and the building blocks for a mechanism	
Q1 What measures could be put in place to improve AEMO's forecasting process and to access the best information from retailers and large customers on their likely demand?	Forecasting improvement is an ongoing area of work, as noted in the ESB's paper. Stakeholders are currently focused on uncertainties in renewables output and the likely need for long duration storage to cover wind droughts. The depth of data stemming from AEMO's weather reference years as well as assumptions around the behaviour of storage owners through perfect foresight is also subject to increasing scrutiny. In our view, and highlighted by the recent market crisis, AEMO should enhance its monitoring and reporting around energy adequacy. As more dispatchable capacity exits and remaining units become more critical, the availability of gas, coal and storage resources will need to be monitored and managed from a whole of system perspective.	
	AEMO's existing ESOO and RRO reliability forecasting are already subject to AER forecasting best practice guidelines. There may be scope to enhance stakeholder scrutiny of and participant data provision in these processes.	
Q2 Do you agree that the capacity mechanism should provide for multiple zones being the existing NEM regions?	Yes.	
Q3 Is there sufficient evidence to say that the at-risk periods can be defined on a time-based definition?	There may be merit in initially using a simple time-based definition then evolving the framework as better data become available on the causes, likelihood and severity of other and emerging risk drivers. The ESB should validate the premise of its statement that the capacity mix that solves for the highest demand in a year will solve for other times. The selection of a particular period should reflect modelling of customer impacts, consideration of willingness to pay as well as potential risk aversion in procuring different volumes or types of capacity to deal with different events.	
Q4 If there is a risk of the emergence of more than one at-risk period in the NEM how should that be addressed?	Our preferred approach would be to not lock into particular 'at risk' periods for the purposes of forecasting but identify procurement needs on the basis of identified reliability gaps, of which there could be multiple in any forecast year, with different characteristics that could jointly be factored into an overall procurement objective.	
Q5 The de-rating factors produced by different at-risk period definitions and modelling methodologies can show large	The various challenges outlined on pages 31 to 36 have a bearing on how technologies are modelled when forecasting reliability gaps, and do not have to bind how capacity is offered or is assumed to perform in real time. Our preferred approach would be to de-link the derating	

ranges particularly for non-traditional technologies. How should this and potential year to year variability in de- rating factors be addressed?	approaches in this process to those used in procurement and in making performance payments. A key shortcoming of the centralised approach is that ideally there should be alignment between the choice of 'at risk' periods and derating factors used in procurement to what occurs in real time several years later. This this will almost never happen. As the ESB notes for non-traditional technologies the misalignments could be very large. The starting premise should be to incentivise out-turn performance in line with dynamic 'at risk' periods which should then flow into how and even whether participants choose to bid their capacity. In this way the inaccuracies in the centralised approach are limited to setting the demand for capacity at auction without also unnecessarily distorting supply.
Q6 What approaches should be used to de-rate different technologies? Should different approaches apply to different technologies?	As above.
Q7 What is the right balance between transparency/simplicity and accuracy?	As above. Plant owners will be the better judge of their performance ex ante. And provided rewards and penalties are appropriately set, they will deliver on this in real time. This information can also be harnessed in improving forecasts of reliability gaps.
	If the ESB is minded to implement a mechanism in an expedited manner and have it evolve over time, in general it should be opting for more simple methods rather than pursuing accuracy. In this case we still consider that imposing derating factors on participants would involve higher degrees of complexity and administrative burden.
Q8 Should de-rating factors be determined at a technology class/region level or at a station level?	As above. Under the ESB's proposed approach there would need to be unit level adjustments anyway as part of ex post performance feedbacks.
Q9 Do you agree with the approach to setting the forecast capacity requirement and the target capacity in a region?	Yes a regional approach seems appropriate.
Q10 How should the target capacity be determined where there are gaps in more than one region?	Our position is that the procurement target reflects what is needed to address reliability gaps rather than covering the entire market. There should be some feedback between the procurement target and associated resources being procured to recognise that each increment of new resource

	has a different value and also changes the expected incidences and severity of unserved energy. This would include how resources are expected to affect inter-regional flows which will have a bearing on how to address reliability gaps that arise simultaneously in multiple regions.
Procuring capacity and auction design	
Q11 Should retailers have a role in a centralised capacity mechanism?	Our preference would be to, at least initially, not pursue a hybrid approach in the procurement of capacity as the benefits do not seem to outweigh the complexities in accommodating both retailers and AEMO in the design. As noted elsewhere, if the ESB wishes to accommodate flexibility in a centralised mechanism this should be on the supply side.
Q12 If you support retailer involvement in procurement, what are your views on how this could operate?	Noting we do not support this, retailer involvement could function generally as per decentralised approaches where they contract directly with capacity providers and trade certificates amongst themselves, and with AEMO, ahead of delivery years. Any certificates surrendered would be used to avoid or offset liabilities to AEMO for any centralised procurement including under RERT.
	If the ESB wishes to explore the role of retailers in procurement it should approach the AER and the ESC on their understanding of how this might flow through to retail prices. Our experience with their setting of the DMO and VDO is that both regulators are materially undercompensating retailers for prudent costs in underwriting renewables projects under the LRET. Their preference has been to compensate retailers only in terms of market clearing prices (equivalent to whatever capacity AEMO would centrally procure), even though the bulk of retailer costs are incurred offmarket. This is based on a preference for transparency, but also on an erroneous view that offmarket costs are sunk solely because they are lower than prevailing market prices. Were the AER and ESC to take the same approach for capacity payments (and we expect they would) it would deter any retailer-led procurement.
Q13 Do you agree with holding two auctions for each delivery year and is this timing appropriate? If no, what auction frequency and timing is appropriate and why?	4 years ahead of delivery seems to strike an appropriate balance between accommodating investment lead times and reducing the scope of changes in capacity needs. Projects are likely to require a longer than this from inception to commissioning, hence once the mechanism is first established, general auction parameters and administrative processes would ideally be predictable beyond a 4 year horizon. There are also benefits in pressuring developers to have projects reasonably scoped and ready for financial close prior to entering auctions.
	It also seems prudent to have a further T-1 auction where AEMO and other participants can adjust their positions and in anticipation of any remaining shortfalls. Stakeholders might need to set

	lower expectations on the likely supply-side resources that could be delivered in this shorter timeframe but might provide better opportunities for demand response. Regarding auction frequency, our general preference is to have auctions triggered on the basis of identified reliability gaps rather than rolling annual processes that become the primary mechanism for compensating all capacity providers. While this provides less predictability in the timing of auctions and payments to capacity providers, it ensures the mechanism preserves existing investment signals that provide for the more efficient identification of, and solutions for, evolving reliability risks in the NEM.
Q14 How should the timing of the auctions align with the notice of closure obligation?	Our suggestion would be to exclude existing plant from the mechanism. However if they are included, it is unclear whether auction timing or frequency should be decided around closure notifications which could arise at any time. In the same way that new plant pledge to deliver capacity several years in advance, exiting plant would need to realistically consider the prospects of staying in the market until the end of the delivery year. These decisions should not be second-guessed by AEMO in registering eligible capacity and participants should take accountability for backing their auction bids. The benefits in signalling exit intentions to the wider market in this process applies to capturing owners' views in derating of all plant types, including likely forced and unforced outages, network access, mothballing etc.
Q15 What are your views on how existing and new capacity should be treated in the auction process?	The ESB's considerations in this area are appropriate but highlight departures from a technology neutral whole of market approach and hence the value in shifting design considerations towards incentivising the diversity of new investments. These should build on the investment and operational incentives in the current energy-only market which already cater for existing technologies, noting our recommendation that some coal exits may need to be separately orchestrated.
Q16 Are there other considerations the ESB should take into account for the detailed design?	The presence and strength of other incentives, including uncertainties that remain about coal exit timings or payments under jurisdictional schemes, will dictate what 'top ups' are needed for different incoming technologies under the capacity mechanism. This can be seen in overseas examples where there are a range of capacity market price settings, contract durations, adjunct auctions for specific technologies and technology eligibilities that reflect the surrounding energy market framework, including the presence of explicit emissions constraints.

Q17 Do stakeholders have a view on the optimal duration of certificates or price certainty for new capacity?	The ESB could survey the duration of privately struck technology services agreements. Our expectation is that 10 years is probably sufficient.
Q18 Do stakeholders have a preference as to whether the investment support scheme provides guarantees of price only, or of both price and quantity?	Having participants periodically re-apply or have quantities varied throughout the duration of contracts would appropriately reflect the dynamics of the system e.g. changing 'at risk' periods, as well as technical characteristics over time e.g. battery degradation or actions of plant owners to improve performance.
Q19 Internationally, capacity mechanisms rely on some multiple of the net-cost of new entry (net-CONE) assessment to determine the capacity mechanism market price cap. Is this appropriate or should an alternative approach be used?	This is a standard approach and appears appropriate, noting the assigned values will be contested.
Q20 How should the price settings interact with the energy market price? Over time, when settings are regularly reviewed, should the price settings in the capacity auction and the energy market be jointly determined?	All these parameters (including for auction demand curves and any centrally determined deratings) are critical for investment signals. Price settings would need to be periodically and independently reviewed with long lead times. It seems appropriate that the Reliability Panel adopt this role.
Q21 Are there other considerations the ESB should take into account when determining demand curves in the detailed design?	As per Q20.
Q22 While the RRO requires mandatory participation for the largest three participants in a region, the ESB	We do not have a view on whether this is a credible concern under the ESB's proposed design. Under our preferred approach, where the capacity mechanism is targeted at new entrants in

considers a methodology for determining market power should be applied to account for changing market concentration over time. Are there specific market concentration thresholds of concern?	response to reliability gaps, we would not expect the exercise of market power to be a material concern.
Q23 Should market power mitigation measures be applied to capacity providers with large market shares in supply-side regardless of their market share in retail?	It is unclear how a solution like mandatory participation would work in a design where all existing resources are assigned deemed derating factors, thus are already counted in the market. Setting price caps in line with new entrant costs, net of other revenues, would seem to be a sufficient mitigant.
Q24 Do stakeholders support the proposal to integrate capacity mechanism settlement with the existing NEM settlement process? If not, what alternative process would better meet the design objectives?	This seems appropriate.
Obligations on capacity providers	
Q1 Do you have preliminary views on compliance obligations for capacity providers?	As per our main response we support providing appropriate incentives for capacity providers to show up at times when customers value them the most. This includes providing appropriate rewards and penalties for non-delivery under the capacity mechanism in conjunction with retaining high price cap settings in the energy-only market. Any rewards and penalties would need to be appropriately calibrated to ensure resources (including prospective new entrants) are incentivised to provide efficient levels of capacity. This includes outcomes in the adjacent energy only market.
Q2 Do you have views on compliance obligations for new entrant capacity in advance of the delivery year?	The obligations on new versus existing plant should be identical. This includes plant eligibility, credibility of asset owners, prudential and licencing requirements etc.

Q3 Do you support the ESB's proposed performance model for consultation? If no, what other proposed model would be better and why?	Yes we support having split payments for annual availability as well as others paid with respect to LOR events.
Q25 Are there any issues with using LOR2 and LOR3 as the trigger for capacity payments? If yes, please explain the issues and any alternative triggers.	Participants, or AEMO in a centralised setting, will need to factor in whether resources are likely to respond within LOR notice periods. Escalating payments in line with LOR severity also seems appropriate.
Q26 How would an appropriate methodology year-round availability be determined?	We note the ESB's comments that payments flowing from availability would not be an automatic assessment and may require revisions to PASA and other bid information if used for these purposes.
Q27 Do you support the ESB considering capacity payments based on availability throughout the year and during periods of system stress?	Yes it appears appropriate to provide some split of payments based on general availability, to provide investment certainty, as well as at times of system stress to reflect what customers value and incentivise resources to 'show up'.
Q28 If you support payments based on two factors, what is the preferred distribution of the first and second payment? Should more or less weight be given to responding to events?	The ESB might wish to give more weight to annual availability in reflection of existing operational incentives through energy-only prices. In the event it recommends these price settings be lowered, which we oppose, it would need to compensate for this.
Q29 To support revenue smoothing, should the ESB consider grouping events within the delivery year? If yes, what frequency (such as quarterly or monthly) is appropriate?	No response.
Q30 Should an upper threshold of performance events in a delivery year be	No response.

considered? If yes, what is an appropriate threshold?	
Q31 Are there any other interactions with the existing energy only market that the ESB should consider when designing the capacity mechanism performance obligation?	Note that owners of dispatchable plant are likely to have contract positions meaning that they face significant downside risk of non-performance during high price events rather than simply exposure to upside revenues. The strength and symmetry of incentives generally will be important to consider, including the need to apply penalties for non-performance, not just foregone revenues. Non-performance could also form the basis for allocation of RERT costs e.g. on some sort of causer-pays basis.
Q32 Are there any other compliance issues the ESB should be mindful of in detailed design?	As noted above the ESB's acknowledgement that some "small ex post assessment" will be necessary should open up consideration of allowing participants to take accountability for their own derating factors.
Q33 Are there any other implications the ESB should consider in detailed design?	No response.
Q34 What is the appropriate combination of performance obligation and capacity de-rating methodologies?	As above we consider that appropriate performance incentives would negate the need for centrally determined derating factors, and minimise the prospects of over- or under-rewarding capacity relative to actual performance.
Q35 Should de-rating be based on pre- defined time periods or a forecast of when the anticipated trigger periods are expected to occur?	Similar to our response to Q7 it may be preferable to set pre-defined 'at risk' periods for the benefit of expeditiously implementing an initial mechanism, which can evolve over time. With more experience and better datasets on underlying risk drivers, 'at risk' periods could then be identified from a modelled approach, with plant deratings aligned to this (whether done by AEMO or left to participants).
Q36 Given VRE is likely to be particularly affected by any mismatch in the forecast and actual conditions during performance events, should special consideration be given to VRE's compliance with the performance obligation?	As the mechanism is intended to reward (implicitly, dispatchable) capacity we would expect AEMO to take a conservative derating approach to renewables, particularly wind. As compliance is based on availability rather than dispatch there does not seem to be a further need to accommodate differences in renewables technologies.

Q37 Do you think the MPC should be reduced if a capacity mechanism is introduced, and if so, by how much? What key issues should the ESB take into account when considering this issue?	We consider it would be imprudent and unnecessary to remove the existing investment and operational incentives from the energy only market, including competitive interaction with retailers and other efficient contracting practices, and replace this with centralised contracting by AEMO. The Reliability Panel has identified that energy only price settings are insufficient hence the benefit of the capacity mechanism is in addressing this shortfall rather than shifting it from one market segment to another.
Cost allocation	
Q38 Do you agree that costs should be passed on via retailers, rather than NSPs?	Seems more appropriate to recover from retailers given there should be an incentive or ability for them to try reduce their cost exposure via demand reduction.
Q39 What do you consider to be the most appropriate mechanism to allocate costs to retailers?	An ex post allocation of costs according to their contribution to demand during at risk periods (aligning with resource performance obligations) seems appropriate. Where a capacity mechanism operates as a top-up to existing market settings, and is focused on new resources only, the amounts to be paid by retailers should not constitute a large proportion of their wholesale costs. If the capacity mechanism is the primary means for cost recovery, retailers will likely need more certainty of their payments and hence ex ante allocation methods would be more important.
	The ESB should consider how costs passed onto retailers would be recovered from customers, for example where the mechanism involves a material shift from variable to fixed costs.
Treatment of transmission capacity	
Q40 Do you think that Option 1 or Option 2 better meets the assessment criteria?	Option 1 is preferred on the basis of simplicity and could be revised in inevitable revisions to the mechanism.
Q41 Are there any other factors that the ESB should consider when assessing the relative merits of the options?	As above the expeditious implementation of the overall mechanism is a relevant factor.
Q42 Are there other ways to ensure that procurement of interstate capacity	No response.

resources does not exceed inter-regional transmission limits, in addition to the two approaches outlined above?	
Q43 Do you think that where a market interconnector exists between two regions, it should be the entity that is eligible to submit inter-regional capacity bids?	No response.
Q44 Do you think that proposed new market interconnectors should be able to participate in the capacity mechanism?	No response.