SUBMISSION

CAPACITY MECHANISM PROJECT INITIATION PAPER 10 FEBRUARY 2022



INTRODUCTION

The Energy Users' Association of Australia (EUAA) is the peak body representing Australian commercial and industrial energy users. Our membership covers a broad cross section of the Australian economy including significant retail, manufacturing, building materials and food processing industries. Combined our members employ over 1 million Australians, pay billions in energy bills every year and in many cases are exposed to the fluctuations and challenges of international trade.

As large energy users, our members are highly exposed to movements in both gas and electricity prices and have been under increasing financial stress due to escalating energy costs. These increased costs are either absorbed by the business, making it more difficult to maintain existing levels of employment or passed through to consumers in the form of increases in the prices paid for many everyday items.

The reforms being considered by the ESB are of critical importance to EUAA members and we welcome the opportunity to participate in the process. The Capacity Mechanism Project Initiation Paper (Project Initiation Paper) released by the ESB in December 2021 provides a very good overview of the issues at hand and provides useful guidance on the pathway forward requested by government officials.

The energy transition is resulting in the accelerated exit of traditional dispatchable fossil fuelled generators that to date have provided energy users where a bundle of services that were folded into the provision of energy including dispatchability, system strength and inertia. While the provision of zero emission energy is of great value, Variable Renewable Energy (VRE) is not currently required to provide many of the services vital to the reliable operation of the energy system. From an energy system perspective, 1MWh of energy from VRE is less valuable than 1MWh of energy from traditional sources.

The unbundling of these services, including capacity/dispatchability means they now need to be provided separately. In recent years we have begun to see the costs of this unbundling with the increase frequency and value of AEMO market interventions (RERT, Market Directions etc) and increasing FCAS cost, although it must be said that some of these costs are a result of other factors such as generator bidding and escalating gas costs making gas peaking plant uneconomic at times.

The EUAA wants to ensure that as new markets are developed to replace these previously bundled services, that the costs and risks of doing so are first borne by those best placed to manage them. We are also strongly in favour of the causer pays principle as a driver of policy and market development. We believe these principles strongly align with the NEO.

We welcome this opportunity to respond to the Project Initiation Paper and look forward to a productive, collaborative process as we participate on the Technical Working Group and elsewhere as appropriate. As always our mission is to ensure the long-term interests of consumers are met. As an independent group representing consumers we feel well placed to do so.



ASSESSMENT CRITERIA

CRITERIA AND DESIGN PRINCIPLES	EUAA RESPONSE
Achieving the optimal level of reliability: a mechanism	Partially Agree. We are concerned that a "political
should achieve the level of reliability that consumers	reliability standard", directed by governments (such as
and governments value.	the interim reliability standard), does not reflect the
	balance of cost v reliability that consumers are
	prepared to accept. Therefore we do not believe it
	appropriate that government and or political reliability
	objectives should be included as part of the criteria and
	design principles. The level of reliability must be
	dictated by a true independent source via a
	transparent process. Therefore, the existing Reliability
	Panel is a good place to start.
Appropriate allocation of risk: a mechanism should	Agree. The principle of causer pays should be at the
efficiently and appropriately allocate risks.	forefront of this. The allocation of cost and risk to
	those in the best place to manage them is paramount
	to an equitable outcome for consumers.
Technological neutrality: a mechanism should be	Agree. EUAA are a technology neutral organisation.
technologically neutral while recognising the rapid	
pace of change, noting there are design principles	
which relate to these criteria that will be addressed	
during the process.	
Minimise regulatory burden: a mechanism should	Agree. However minimising regulatory burden should
minimise the regulatory burden for market participants	not be code for poor processes, reduced transparency
	and lack of accountability. Strong governance and
	accountability are paramount to winning consumer
	trust that these reforms are in their long-term interest.
Emissions reduction: a mechanism should be	Agree. The EUAA support the pursuit of net zero
compatible with emissions reduction targets set out by	targets but this should not exclude allowing traditional
state and federal governments.	forms of generation participating as an interim
	measure while zero emissions technology moves down
	the cost curve.

Below we outline what we believe to be three missing elements that we strongly suggest be included in the assessment and design criteria:

- <u>Clear definition of capacity</u>: We elaborate on this later in this submission. A clear definition of capacity will determine the applicability of a capacity mechanism for different industries (i.e. what capacity is needed for what purpose). As the ESB resolves this definition, the key issue will be ensuring that only truly dispatchable entities (including load) are eligible to receive payment and ensure compliance processes support this.
- <u>Least cost</u>: A design criteria that seeks to minimise <u>total</u> consumer costs must be at the forefront of design of any future market or policy. The absence of consumer costs as a consideration makes it difficult for a potential capacity mechanism (or any policy or regulation) to meet the NEO.



• <u>Capable of dispatch</u>: If an asset is to receive a capacity payment it must be capable of dispatching that capacity (or a specific part thereof) on demand.

IMPORTANT ISSUES FOR ENERGY USERS

After consulting with member companies, following are our initial thoughts on the issues raised in the Project Initiation Paper. We have focussed our comments on what we believe are the most important issues for energy users. As there are still many unanswered questions our views may change over time so we look forward to working with the ESB and our industry colleagues over the coming months as more detail is provided and developed.

The case for change is yet to be made.

While recognising the ESB are acting on instructions from energy ministers to develop recommendations on a capacity mechanism, we thank you for recognising the concerns raised by the EUAA and others that we feel the case for change has yet to be made and that the need to clearly demonstrate this will be a feature of the work moving forward. It is the view of many EUAA members that based on current data regarding coal retirements, reliability and future investment, we are not entirely convinced that additional mechanisms are needed to address reliability. See for example the most recent AEMO Electricity Statement Of Opportunities (ESOO) and recent MTPASA.

We also note recent media reports¹ stating that:

"With many large-scale projects set to be operational, utility-scale battery capacity will top 1.1 GW by the second half of 2022"

"Costs are declining and operators are being incentivised by energy arbitrage"

This could indicate that existing market arrangements are sufficient to encourage investments in the type of technology that a capacity market is designed to incentivise.

We note it is challenging to make and support policy decisions without an appropriate and informed evidence base. We look forward to working with the ESB and market bodies over the coming months as further evidence is collected and the true counterfactual is developed.

What is the true counterfactual?

The NEM has dramatically changed over the last 10 years and will continue to change over the coming years, even more so than previously contemplated. Therefore, we need to assess new market models, such as a capacity market, against what the NEM is likely to be, rather than what the NEM once was.

¹ https://www.afr.com/companies/energy/australia-s-battery-capacity-set-to-double-within-months-20220206-



The Project Initiation Paper correctly identifies jurisdictional schemes "are introducing additional uncertainty" into the NEM. These jurisdiction interventions are accelerating transitional issues created in part by rapid deployment of VRE and early retirement of synchronous generation. Ironically, jurisdictional interventions are simultaneously muting signals for market based solutions. This makes it extremely difficult to fully understand the true nature of the problem at hand and what the true counterfactual may be in the absence of these jurisdictional interventions.

For example, the AEMO ESOO and MTPASA continually show that even the significantly stricter interim reliability standard will not be breached in the foreseeable future. We can also observe that significant investment in short duration storage (i.e. large scale batteries) appears to by accelerating. As stated in the previous section of this submission, on the surface it appears existing market arrangements are already delivering the required investments, at least in the interim.

However, we also see initiatives to support storage from State Governments including the NSW Government Energy Infrastructure RoadMap and funding/underwriting support for short duration storage by the Victorian Government. We also see direct investment by the Federal Government in Snowy 2.0 and the Kurri Kurri gas/hydrogen project.

Another recent example of jurisdictional intervention that may hide the true counterfactual is the arrangement between the owners of the Yallourn power station and the Victorian Government that ensured this asset continued to operate in order to maintain a reliable power supply in the short to medium term. While the details of this arrangement have not been made public, it could be reasonably argued that this arrangement amounted to a capacity payment from the state to the asset owners. It could also be reasonably argued that the same outcome could have been facilitated in a more economically robust and transparent manner via a well-functioning and highly liquid capacity market. The lack of transparency means it's virtually impossible to determine the true nature and benefit to energy users of this arrangement.

We are also observing increase costs associated with AEMO interventions over the last few years with the most recent AEMO Quarterly Energy Dynamics Report² showing the FCAS and Directions costs increased again in 2021 Q4 to \$181million with total FCAS and Directions costs for 2021 approaching \$600 million.

All of this paints a confusing picture for market participants and has a direct impact on energy users' appreciation of what the true counterfactual is likely to be. What does seem certain is that governments, both state and federal, will continue to be active participants in energy policy with jurisdictional schemes set to dominate the NEM making it extremely difficult to even develop a case for a consistent national approach to solving issues in the NEM.

We agree with the ESB that developing the base case (or true counterfactual) is critical but so too will be a commitment from governments to a true national approach to energy market reform as without this the exercise of developing new national markets is largely theoretical.

Design options.

The Project Initiation Paper identifies three potential design options for a capacity market. While more detail on each of these options is required before we can indicate a preference we are initially drawn to a decentralised, market based approach (Option 1a). However, there are many questions yet to be answered such as will this

² <u>https://aemo.com.au/energy-systems/major-publications/quarterly-energy-dynamics-qed</u>

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approach exacerbate market power issues or will it stop a generator from backing up two different PPA's at different times as might happen now in the spot market? It could be that auctions with required participation (at least for larger participants) under set conditions may be highly beneficial as it would aid price discovery which can be an issue with the decentralised approach. These, and many other issues will need to be fleshed out before we are able to make a final decision on our preferred approach.

Some members have indicated that Option 1b (hybrid decentralised approach) may also be acceptable provided the central body responsible for determining capacity requirements follows a transparent process and adheres to independently assessed reliability standards. We understand that a hybrid approach where capacity requirements are set by a central body and sourcing is left to liable parties is used in other jurisdictions and has proven successful.

In assessing a centralised approach our main concern is we end up overcooking reliability and capacity leading to higher costs than necessary. We have expressed our concerns with the Interim Reliability Standard and the apparent conservative nature of AEMO and governments on many occasions as both have a tendency to force additional, potentially unnecessary costs onto consumers. If central bodies are to maintain a high degree of control over a future capacity market then transparency and accountability of processes must improve.

The Project Initiation Paper makes reference to capacity markets that are operating in overseas jurisdictions. It would be useful to understand the consumer cost impacts of each of these capacity markets and the level of reliability that was achieved against stated reliability targets. We would have thought that the WEM capacity market would also provide important insights and are surprised that it was not featured as part of the Project Initiation paper.

Market Price Cap (MPC) .

It is the firm view of many EUAA members that with the introduction of a capacity market, where capacity payments are provided in order to encourage investment in the right form of asset, there can be no justification for maintaining the MPC at its current level. The key concern is that by providing capacity payments and a high MPC we are effectively rewarding assets twice, leading to unnecessarily high costs for consumers.

However, other members believe this does not have to happen and the ability of participants to game the market can be managed through bidding requirements on generators that have committed capacity in the capacity market (i.e. through the introduction of a bid price cap).

We look forward to participating in the process of market design to ensure energy users do not end up paying twice for the same service (or no service at all).

We recognise that some existing investments (generators, batteries) have been made on the assumption that the MPC remains at current levels so a transition period, including the potential for limited grandfathering (with appropriate sunset dates) would be appropriate if this option was pursued.

Capacity costs must be capable of being hedged.

An important feature of the recovery of energy-only costs from consumers, is that retailers are able to hedge their spot market exposure through the contract market and offer large electricity customers fixed prices.



As the NEM continues to evolve, the percentage of costs that was historically recovered via the energy-only market is shifting into cost components that can not be fixed by retailers (such as FCAS, market interventions, system strength etc).

Many of these other market costs cannot be readily hedged by retailers, effectively requiring that retailers have little choice but to pass-through these variable costs as they are incurred. The unhedgeable nature of these other market costs causes large, unexpected and unbudgeted electricity costs to be passed through to large electricity consumers. Large electricity consumers have no capability to manage this financial risk.

Therefore, a design element that should be considered is that capacity market costs should be capable of being passed through as a fixed cost to large electricity consumers. This necessitates that the design of the capacity market provides a liquid contracting market that trades years ahead to allow retailers to hedge their exposure and provide fixed pricing when quoting electricity consumers.

Interaction with energy-only market.

A capacity requirement for residual generation will necessitate a need to consider the interaction with the energyonly market, particularly how AEMO schedules generation. Further consideration will be needed on scheduling rules, to minimise overall system costs to consumers between the energy-only market and the capacity market. We expand on our concerns in the next section.

We would also add that the ESB needs to look carefully at the impact to energy only market through potentially encouraging assets with higher LRMC and very low SRMC costs becoming "baseload" generators on the back of capacity payments as this may have a counterproductive impact on reliability.

Gaming and double dipping.

We are concerned that the creation of a capacity market, sitting alongside the existing energy only market, may lead to instances of generators gaming their position, leading to those generators receiving capacity payments <u>and</u> payments for the same energy. Market rules will need to be carefully designed such that a generator can receive an energy price (MWh) OR they can receive a fixed capacity payment (MW) and perhaps a variable capacity price, e.g. \$300 cap (we believe this would be the financial equivalent to how the WA WEM works).

Some members have also raised issues around the potential for bad faith bidding particularly with fast response assets and their ability to arbitrage multiple markets.

To manage some of these issues we suggest the following principles:

- The capacity market should be defined to avoid any double dipping by generators.
- A principle of "additionality" should be applied. That is, the capacity that is rewarded under a capacity market framework is in addition to the capacity that already operates in the energy only market.
- Capacity market revenue should not be earned by generations in addition to (or at the same time as) the energy-only market. We need to avoid the instances where generators seek to maximise profit at the expense of consumer by generating additional revenue but not providing an additional service.



• Capacity requirements should be defined as being the residual generation required to support the market. Defining capacity as residual generation ensure costs are minimised and that consumers are paying for technologies that are providing firming capacity.

Total cost of the reform.

All too often consumers are directed to reductions in the wholesale price of energy as the key indicator of benefits arising from new policy or regulation. While the reduction in wholesale prices are welcome, if this comes about by the shifting of cost from one part of the system (i.e. wholesale) to another part of the system (i.e. networks) then the benefit evaporates very quickly.

Therefore, in developing a capacity market that sits alongside the energy only market consumers will be focussed on the total cost of the reform, not just the impact of individual pieces. It is the impact on the final bill that is important for energy users and we ask that the ESB is similarly focussed on this outcome.

Treatment of existing contracts and transitional issues.

Most large commercial and industrial facilities have long term electricity contracts in place that contain a range of change-in-law provisions meaning energy users are not immune to changes in the market. Many EUAA member companies feel that existing long-term contracts (including VRE PPA's) need to be grandfathered in some way, especially where such a significant change in the market structure is being proposed.

It should be noted that these contracts are in many cases underpinning minimum demand and dispatchable generation. These industrial loads have not reduced their minimum load and therefore, the counterparty retains their ability to manage capacity and other services on these loads through existing NEM mechanisms. These existing contracts underpin, and will continue to underpin dispatchable generation and system reliability, particularly when demand is low and VRE generation is high.

Some EUAA members feel there is a real risk that large base load could pay twice for additional market services (i.e. via existing contracts and via capacity payment pass-through) introduced to provide reliable and secure supply for customers with highly variable demand.

For those assets seeking to re-contract or develop new long-term contracts, the situation is becoming increasingly difficult with the increasing number of markets adding complexity and risk. Member companies report that contract counterparties are less able to supply bundled contracts and as noted above there is the real risk that through bundled contracts that pre-date particular changes to the market, large users may pay twice.

Some member companies have identified the potential impact on VRE PPA structures:

- A typical run of plant deal becomes extremely risky (where generation output is variable and may not match counter party consumption), particularly for load who have some demand elasticity
- Firmed offtake agreements i.e. such as those designed to match an ASX Swap products under PRS framework, which technically have a firmness factor of 1 become invalidated
- Potential for double pass through from the asset owner (on the generator side) and retailer on the pool passthrough on capacity



• ASX products become somewhat invalid based on design choices - i.e. Swap becomes more complex given the makeup of capacity + energy only + cap

Interaction with other reforms.

We need to be conscious of the interactions with other reforms that are progressing in parallel such as that being undertaken in the Congestion Management Model (CMM) and Wholesale Demand Response (WDR) Technical Working Groups (TWG).

We note that the ESB have identified that demand side resources could play a role in a future capacity market and we would be keen to ensure that the pathway to participation is less problematic for large loads than has been the experience in WDR. One observation is that the existing WDR framework provides virtually no revenue certainty for a participant while a potential capacity market would, making it a more attractive proposition for a large load. In fact, some member believe that capacity becomes a competitor to wholesale demand response. Therefore, one of the questions we are contemplating is, will a potential capacity market be more efficient at driving demand response than the existing WDR framework?

We also note the work being undertaken as part of the CMM TWG will have important impacts on a future capacity market where transmission or interconnector constraints exist. This may also impact inputs and assumptions of the ISP and in particular the future assessment of net market benefits as part of a RIT-T. For example, if transmission congestion has a negative value of reduced transfer capacity, then will the relief of this congestion through the augmentation of transmission (therefore allowing a capacity service to flow between jurisdictions) be included as a future benefit under RIT-T? If so, then how?

We are also conscious of other initiatives such as the proposed Strategic Reserve and the ability for jurisdictions to essentially go beyond both capacity market parameters and well considered reliability standards. We are concerned this will result in consumers being forced to pay for a "political reliability standard" regardless of what the capacity market delivers, adding additional costs while not improving reliability in any meaningful way.

While each of the ESB reforms are pursued in parallel via the various TWG's, consumers will remain focussed on what the total energy bill looks like in the coming years and that can only be assessed when all reforms are considered as a package. We trust this will be part of the future considerations and assessment of the ESB and energy ministers.

Once again, thank you for the opportunity to make this submission. Do not hesitate to be in contact should you have any questions. We look forward to engaging with the ESB over the coming months.

Kind regards,

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Andrew Richards Chief Executive Officer