17 September 2025

Electronic Lodgement: NEMreview@dcceew.gov.au

Dear NEM Review Panel,

National Electricity Market (NEM) wholesale market settings review – Draft Report

Energy Networks Australia (ENA) welcomes the opportunity to make this submission in response to the Review Panel's NEM wholesale market settings Draft Report (the 'Draft Report').

ENA represents Australia's electricity transmission and distribution and gas distribution networks. Our members provide more than 16 million electricity and gas connections to almost every home and business across Australia.

ENA congratulates the NEM Review Panel on its process to date and open consultation approach. While noting that significant details are yet to be developed, we consider the core recommendations to represent a pragmatic path forward that avoids significant market disruption during the next critical phase of the energy transition. A summary of our views on the Draft Report is as follows:

- We support the recommendation for visibility and/or dispatchability of price responsive resources, including consumer energy resources (CER), as well as the recommendation to not progress distribution level wholesale markets, but rather to allow time for the evolution of dynamic operating envelopes and dynamic network pricing to facilitate the greatest overall consumer benefit (including to the shared network)
- We support the inclusion of essential system services (ESS) in the proposed electricity services entry mechanism (ESEM), so long as this ensures competitive price outcomes for consumers. This includes ensuring there is a clear and effective framework to avoid the concentration of market power in the provision of ESS
- We support appropriate risk allocation through 'user pays' recovery of the costs of the ESEM. This suggests that the cost of operating ESEM should be recovered through wholesale market settlements in a manner that avoids market distortions and incentivises market participants to collaborate proactively with the ESEM administrator on its risk management, and also to efficiently manage their contracting risks
- We support suspension of the market impact component (MIC) of the service target performance incentive scheme (STPIS) and working with the Australian Energy Regulator (AER) to find practical and workable approaches to limiting market impact from transmission network service provider (TNSP) operational decisions, noting there are significant challenges to overcome in a dynamic operational environment.

We have focused our responses on the issues of most concern to our members. Further detail is provided in the **Attachment**.

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ENA looks forward to the opportunity to continue working with the NEM Review on relevant aspects of the proposed framework and changes for networks as it develops its final advice. In the meantime, if you would like to discuss this submission, please contact Dominic Adams (dadams@energynetworks.com.au) in the first instance.

Yours sincerely,

Dom van den Berg
Chief Executive Officer

Attachment

Recommendation	Comments
1 – Maintain current market structure	ENA supports the recommendation to maintain the real-time regional energy-only spot market as the core market for efficient dispatch and rewarding the provision of physical energy services. The proposed approach is targeted at identified emerging issues and, as such, represents a pragmatic path forward that avoids significant disruption during the next critical phase of the energy transition. ENA also welcomes recommendation 1D, which recognises that the development of distribution level wholesale markets would be an overly complex and unnecessary approach to stacking the wholesale and network value of CER. We recommend allowing some time for distribution networks to progressively implement dynamic operating envelopes and dynamic network pricing, when the value to customers of implementing such approaches outweighs the costs in the individual contexts for those networks.
2 – Require price responsive resources to be visible or dispatchable	ENA supports the recommendation for price responsive resources to be required, by 2030, to become visible and/or dispatchable. As CER and other price responsive resources are, collectively, the largest source of capacity as part of an increasingly dynamic and weather dependent NEM generating fleet, it is important that they be visible and/or dispatchable to support the efficient real-time operation of the market through dispatch.
3 – Prioritise the CER Roadmap and implement programs in a way that supports the energy system	ENA supports the recommendation to focus the CER Roadmap on delivering critical elements that enable market participation, dynamic operation to support efficient network use, and consumer protections. It is particularly important that the CER Roadmap prioritises the technical foundations for CER integration and interoperability, including creating new regulatory roles, developing critical technical standards and cyber security arrangements, and setting clear compliance frameworks to ensure the reforms result in reliable and known technical performance. ENA welcomes the recommendation that government incentives for investment in CER should support resources to be enabled for dynamic network connections. Dynamic network connections are essential tools to help manage networks within their technical operating envelopes while maximising the benefits of solar photovoltaic (PV) to all consumers.

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4C – Market bodies should work to minimise the impact of transmission network outages	ENA supports the suspension of the market impact component (MIC) of the service target performance incentive scheme (STPIS). The MIC is no longer fit-for-purpose in a more dynamic operational environment and is no longer achieving its objective of benefiting consumers by incentivising transmission businesses to schedule outages in a manner that minimises the upward pressure those outages have on wholesale price and therefore the impact on consumers. TNSPs are acutely aware that outages can result in consumer and market impacts and already incorporate these considerations into current outage planning. It is also unavoidable that the development of major new transmission infrastructure, the prudent maintenance of transmission assets, and the connection of many new renewable generators, will involve transmission outages. The reality of a more dynamic energy system and its increasingly complex operating envelope is that outages planned well ahead can be cancelled or deferred due to reliability concerns. Forecasting reliability issues is increasingly uncertain due to heavy reliance on wind and solar forecasts in the period from 40 to 72 hours from a planned outage. Compounding this is the narrowing window to conduct network maintenance and other works as the climate and energy use patterns change, causing the 'peak' periods to spread further into the 'shoulder' periods that were traditionally less risky periods to take outages, and new issues (such as minimum system load) to emerge during the shoulder periods. Repeatedly deferring outages increases the risk of asset failure by impeding optimal maintenance, while delaying the commissioning of new generation and transmission assets will result in sustained higher energy market prices, as well as risk power system security. ENA acknowledges the impact of transmission outages on consumers and would welcome the opportunity to work with Market Bodies to develop pragmatic and workable approaches to minimise those impacts. In the meantime, it is appropriate to focus on transparency through reporting and gathering appropriate data to properly consider the merits of future options to balance market and network impact. Any future decisions on such options should focus foremost on consumer outcomes and avoid seeking to address re-allocation of welfare between generators, which is not an appropriate end for an incentive framework and would not be consistent with the National Electricity Objective (NEO). The Reliability Panel could also be tasked with considering market price capping options during major network outage events to limit unnecessary exposure to wholesale market prices to ensure capacity scarcity signals are better targeted.
5 to 7 – Market price settings, market making obligation and market information for liquidity	No comments

8B – Use the ESEM to coordinate the procurement of ESS	ENA agrees that the current processes to identify needs for essential system services (ESS), to consider prudent and efficient procurement and investment options through the regulatory investment test for transmission (RIT-T), and investment timeframes and incentives for new generation, lead to a muted incentive for that new generation to specify equipment that is capable of providing ESS when needed in the future. Accordingly, ENA supports the inclusion of a framework for the body administering the electricity services entry mechanism (ESEM) to allow proponents of generation projects to enter secondary contracts for ESS where this is technically feasible and cost effective as a prudent, least-regrets approach. The proposed approach, for generation proponents to separately bid in their incremental ESS capital price and for the ESEM administrator to transparently consider these bids with reference to identified needs and alternative prices, considering locational and competitive issues, appears pragmatic. The framework to manage market concentration (noted in recommendation 8C) should apply to the procurement of ESS, noting the heightened risk of market concentration in locational ESS. The Review Panel notes that the ESEM administrator should collaborate closely with the Australian Energy Market Operator (AEMO) to ensure any procurement is likely to meet system needs. The ESEM administrator should also consult with AEMO to ensure that the nature of the services procured is capable of enablement by AEMO when needed, noting there may be some period of time between a bid made to the ESEM administrator and procurement of the relevant service and ultimately its enablement by AEMO. There is also a distinction between the up-front fixed costs of enabling system service provision and the ongoing variable costs of providing these services when required, so it is important that both elements are considered up front. In addition to collaboration with AEMO, it is also important that the ESEM administrator collaborates closely with the relevant party ultimately responsible for the procurement of the relevant ESS (e.g. the system strength services provider or local TNSP). This will help ensure the service is appropriately located to meet system needs and is likely to dovetail with real world ESS and network planning and procurement. While the proposal to novate contracts to TNPSs responsible for procuring ESS, via the RIT-T, appears on its face to be workable, it will likely require further development and changes to the RIT-T. The RIT-T is a cost-based assessment and if the ESEM administrator has already procured ESS capability, this will mean that they are likely to be considered by the RIT-T as largely costless other than incremental costs for availability and use. This may cause the RIT-T to prefer the use of those services, even if the price of those services (that consumers ultimately pay) is higher than the price for alternative services or investments, including competition and market power considerations. It is important that there is no disconnect between actual service costs and those considered in the RIT-T. Equally, it is important that the system service provider can be considered as ‘committed’ for the purposes of the RIT-T so that the assessment of options can focus on incremental costs, otherwise the RIT-T could require the full value streams of the new entrant to be considered, which would be counterproductive. The NEM Review

	Panel should therefore consider worked examples to ensure that in all circumstances consumers pay no more than necessary for the provision of ESS. The Panel is proposing that where secondary ESS contracting occurs, this contract could be novated to the TNSP if it aligns with a RIT-T outcome. For this to be efficient and effective, TNSPs would need to work closely with the ESEM administrator to ensure appropriate risk allocation and performance requirements are included in contracts to adequately meet system strength and other relevant ESS operational requirements. For example, TNSPs need to have a high degree of confidence in the financial standing of counterparties and the timing of project delivery to ensure that ESSs will be available when needed, which would need to be reflected in the terms of any novated contracts. Costs would be minimised if AEMO co-optimised the scheduling, dispatch and pricing/settlement of generation units for system security within wholesale electricity and ancillary services markets. This way, AEMO could make use of its up-to-date visibility of all available units (not only those contracted with TNSPs) and could dispatch the least-cost combination to meet system security and energy requirements based on competitive bids submitted for each trading interval. In building on the current framework, it should be recognised that TNSPs are playing a key role in the provision of ESS in the current stage of the transition while network solutions represent the most economic solution available. This may not be the case in future as technology evolves and market solutions mature. It is important not to prevent the ongoing evolution of the ESS framework and to enable the transition to market solutions if they become the most efficient approach to deliver ESS in closer to real-time timeframes. The framework for the ESEM to allow for the procurement of ESS and provision of those services to market through the current ESS frameworks should therefore be alive to the potential for services to ultimately be disaggregated and procured through markets by a central coordinating body such as AEMO. The contractual arrangements between the ESEM administrator and new generators should manage this risk appropriately.
8 – ESEM administrator cost recovery	ENA broadly supports the proposed principles for the allocation of the costs of the ESEM. The costs of the ESEM administrator are likely to be material. One need only look to the costs, for example, of the scheme financial vehicle under the NSW Roadmap arrangements. This party will be exposed to the risk that, over the years, the contracts they hold become less valuable. This could be due to several causes: • technologies markedly change and lower the cost of providing bulk energy, shaping or firming services, or • demand forecasts are materially wrong, or the risk appetite of the procurer is overly conservative, and the market is therefore oversupplied

	At the same time, once the ESEM framework is in place, market customers in the NEM will have new options to manage their longer-term risks. They will be able to choose to either • rely on the ESEM to manage those risks, or • 'self-manage' those risks through long-term off-take agreements, in which case it may be appropriate that they bear a lesser proportion of costs ENA supports the allocation of the risks and costs associated with the ESEM administrator's role to market customers through AEMO's market settlements functions. This will provide the right incentives on market customers to choose the lowest cost approach to managing their longer-term risks, which will ultimately be passed on in lower prices to consumers. Market customers are also best placed to understand evolving demand and generating technologies and to work with the ESEM administrator to set an appropriate risk appetite for its procurement of energy services. Allocation of the costs and risks associated with the role of the ESEM administrator to market customers would help incentivise their close collaboration with the ESEM administrator to effectively manage those risks in the long-term interests of consumers. The costs of any jurisdictional capacity reserve should be allocated in the same manner, including any provision for opt-out arrangements. It is important that the allocation of the scheme administrator's costs to market customers does not create market distortions. This includes ensuring that market participants that do choose to manage their own longer-term risks directly, rather than through the ESEM, do not pay twice to manage the same risk, yet still pay for the broader services that are provided by the ESEM. While there may be some complexity in achieving this, it remains critically important that the right incentives are in place to ensure the ESEM is operated efficiently and in the long-term interests of consumers. It would not be appropriate to recover the costs of the ESEM through network charges. In the first place, these are not network services. Secondly, recovery through network charges could distort important locational signals. This approach would lose the link to market settlements which is essential to provide the right signals and incentives to market participants as explained above. Overall it is critical that the costs of the ESEM be transparent so that participants and consumers are aware of the costs of the services that it provides and can clearly review its effectiveness over time.
9D – AEMC to conduct a settlements review	ENA supports the Australian Energy Market Commission (AEMC) conducting a wide-ranging review of settlement arrangements. While it is important to consider the tenor of inter-regional settlement residue units to extend the value of this risk management tool, it is also important to consider the appropriate path for cost-recovery of negative settlements residue in an increasingly

	weather dependent and interconnected market. Coordinating Network Service Providers are not well placed to manage, through network customers, volatile market costs that would be better borne in the market. When negative settlements residue was first allocated to transmission businesses the NEM was a more predictable and stable environment and negative inter-regional settlements residue (IRSR) was typically very small when compared with transmission revenues. Transmission charges were seen as a convenient mechanism to refund what where largely positive residues to customers. Transmission businesses now face significant uncertainty and difficulty in forecasting negative IRSR, caused by increasingly weather dependent resources and the potential for transmission loop flows. Maintaining the current cost recovery approach to negative settlements residue places new and increased risks on transmission cashflows, which are ultimately borne by consumers as both increased costs to manage risk and more volatile transmission charges. We suggest the Review Panel should make it clear that any review of interconnector hedging arrangements should consider within its scope the cost recovery arrangements for negative settlements residue and other residue related cost streams in general to ensure fit for purpose arrangements for a changing power system. ENA also recommends that if Settlement Residue Auctions are to be conducted further in advance, as proposed in the Draft Report, that auction schedules should ensure that some proportion of units continue to be available at shorter tenors. This will promote competition from new entrants and ensure they can access hedging instruments in a timely way, which may not be possible if incumbent market participants secure significant volumes of settlement residue units many years in advance.
9F – Pursue opportunities to rationalise planning and forecasting	ENA supports rationalising forecasting and planning processes and documentation in the NEM to avoid inconsistencies, duplication and additional costs. ENA notes that AEMO has been considering this issue and is looking to rationalise a range of documentation, while at the same time evolving its approach to delivering the integrated system plan. We also support further work to better align and rationalise roles and responsibilities for planning and forecasting between the national framework and the jurisdictional approaches. The NSW Transmission Planning Review Interim Report notes that NSW has created a range of planning and other documentation to meet its states objectives and there is now a level of duplication which should be rationalised.
9G – Level playing field for connection across distribution and transmission	ENA supports efforts to ensure a level playing field, to the extent reasonable, for parties seeking to connect resource within distribution and transmission networks, specifically allowing distribution network service providers greater flexibility to negotiate offers with prospective applicants. We do not consider that this means treating all resources connecting at both transmission and distribution in the exact same way, but rather treating them all fairly and allowing a reasonably equal opportunity to provide relevant services at all voltage levels, subject to the practicalities of doing so in each unique context.

	It is important to recognise the deliberate differences in design between the distribution and transmission connection frameworks. The transmission framework operates under a shallow connection access model in which non-load connections have no firm access rights, and in return do not pay network charges. Grid connected storage that is fully scheduled in the wholesale market essentially operates as a generator and can only operate when spare network capacity is available and cannot drive network augmentation. In contrast, distribution connected resources generally have firm network access and drive network augmentation, unless alternative arrangements are put in place. ENA particularly supports closer consideration of approaches to ensure an efficient level of grid scale storage connected within distribution networks. These solutions complement transmission-connected resources and have the potential to avoid significant capital expenditure within the distribution system. We would support any review of this space considering whether the consumer export curtailment value is fit for purpose, distribution pricing for storage services, and the role of local energy hubs where distribution networks are able to partner with market participants to ensure storage is well placed to support the grid and also provide competitive services into markets.
Observation 2 – Reform network tariff structures	ENA notes the Review Panel's observation that the AEMC should consider, as part of its pricing review, a transition away from volumetric tariffs toward tariffs with a higher fixed component. ENA notes that in economic terms recovering a greater, more cost reflective share of residual costs in the fixed access charge component of network tariffs may help to: • better avoid potential consumer behaviour distortion • reduce inequitable cost recovery between CER and non-CER owning consumers • lessen the variability in network costs that retailers face when managing the cost effects of consumers energy usage and CER decisions, and • better align the network retail interface by aligning the more limited share of network cost that are variable with the end user tariff charged to consumers.

	ENA has previously noted in submissions to the AEMC pricing review that a desirable approach to network pricing in future might involve separating the network access service from the network use service and price to enable networks to offer a variety of network design options enabling variable tariffs that recover variable costs via a range of use-signalling means.[1] The Review Panel's observation that today's network tariffs may conflict with wholesale market signals, also notes that this does not mean network tariff signals must 'give way' to wholesale price signals. ENA agrees and notes that it is not the role of network tariffs to reflect wholesale price volatility. Noting the role of retailers to manage costs and risks on behalf of customers, and package them into tariff offerings, the Review Panel could consider approaches to sharpen the incentives for retailers to package tariffs and facilitate customer flexibility in a manner that best supports the overall use of the energy system to lower costs for all customers.

[1] ENA.pdf