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To: The Australian Energy Market Commission (AEMC)
Re: Electricity Network Regulation Review – Package 1, Consultation paper

Thank you for the opportunity for the Institute for Energy Economics and Financial Analysis (IEEFA) to provide input to the AEMC Electricity Network Regulation Review – Package 1.[1]

IEEFA is an independent energy finance think tank that examines issues related to energy markets, trends and policies. The Institute's mission is to accelerate the transition to a diverse, sustainable and profitable energy economy.

IEEFA's view, set out in our 2024 report *Reforming the economic regulation of Australian electricity distribution networks*, is that Australian distribution network economic regulation needs a **first-principles review** that examines all aspects of the regulatory regime together, including contestability, ring-fencing, cost allocation and network returns.[2] The AEMC's decision to structure this work as Package 1 (service classification and ring-fencing) followed by Package 2 (expenditure efficiency, incentives and returns) is a reasonable administrative sequencing, particularly given the two rule changes from Energy Networks Australia (ENA) and Nexa Advisory that are relevant to Package 1. However, IEEFA considers that the two packages address economically interdependent questions and should feed into one another. Because they are being run separately, Package 1's service classification decisions are being made without a directly relevant piece of evidence: whether a network service provider (NSP) proposing expanded regulated scope has (or should have) a demonstrated incentive to do so.

IEEFA sets out its position on Package 1 below, structured around three questions the review should answer in sequence: **what** services the system will need; **how** each should be provided; and **who** should provide them.

What: The starting point of this review package should be a broad consideration of what network services will be needed in future

The AEMC starts the review Package 1 with the question: "What services do we need networks to provide in the future?" IEEFA recommends AEMC consider this broadly, and perform a comprehensive examination of the network services needed now and likely to be needed in the future, noting the full range of technology solutions that can provide network services. As the AEMC has noted, "developments… are changing how network services are conceptualised. Rather than being defined by their physical connection to network assets, services are increasingly understood in terms of the functions they perform (e.g. electricity conveyance, orchestration of distributed resources, optimisation of system performance, provision of digital platforms)."[3]

[1] AEMC. Electricity Network Regulation Review – Package 1. 25 June 2026.
[2] IEEFA. Reforming the economic regulation of Australian electricity distribution networks. 31 May 2024.
[3] AEMC. Electricity Network Regulation Review – Package 1. 25 June 2026. Page 19.

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How: Classifying network services according to <u>how</u> they should be delivered – through a natural monopoly or contestable market

Once the current and future network service needs are clearly identified, the review should consider how best to provide those services: through natural monopolies, contestable markets, or a mix. IEEFA's 2024 report argued that the central question for distribution network economic regulation is whether distribution networks remain a natural monopoly or are contestable (or on their way to becoming contestable), and recommends a first-principles review considering this question.[4] Two examples illustrate this point.

a) In Western Australia, Western Power decided to convert more than half of its remote and regional network serving 3% of its customer base to stand-alone power systems and microgrids, showing distributed energy resources (DER) can substitute directly for network infrastructure.[5]

b) In Great Britain, residential 'last-mile' electricity connections are highly competitive. Following reforms introducing 'last-mile' contestability in 2004, independent distribution network operators (IDNOs) now handle around 80% of new home connections in England.[6] In 2013, the Office of Gas and Electricity Markets (Ofgem) introduced the RIIO framework (revenue = incentives + innovation + outputs), which treats capex and opex expenditures holistically. This has been cited as a key enabler of local flexibility markets.[7] Electricity networks in Great Britain contracted a record 9GW of flexibility in 2024.[8]

IEEFA's view is that the AEMC should use Package 1 to develop and publish its own assessment of which network services are genuinely contestable, and which remain natural monopolies. Classification decisions should then follow based on this assessment.

This also applies to the transmission network, because non-network solutions – such as transmission support batteries ("virtual transmission"), dynamic line ratings, demand response and other technologies – can increasingly help maximise transmission network utilisation and unlock additional capacity without building new lines. Ideally this AEMC review would also consider transmission network services in detail from a first-principles perspective, considering what services are needed now and into the future and what remains a natural monopoly compared to what is contestable.

Separately, high-voltage direct current (HVDC) transmission is emerging internationally as a helpful technology in the context of the energy transition, but its deployment can be constrained by existing regulatory processes.[9] The AEMC should consider the role of HVDC in Australia and whether the regulatory regime adequately enables HVDC technology as needed.

[4] IEEFA. Reforming the economic regulation of Australian electricity distribution networks. 31 May 2024. Page 7.
[5] Ibid. Page 7.
[6] Eclipse Power. How competition in Britain's transmission network could cut energy bills and boost growth. 13 July 2026.
[7] IEEFA. Reforming the economic regulation of Australian electricity distribution networks. May 2024. Page 39.
[8] Energy Networks Association. GB cements status as world leader in energy flexibility with estimated £300m savings for billpayers. 26 June 2025.
[9] El Myasse, El Magri, El Mezdi et al. A comprehensive review of HVDC transmission systems: From fundamental concepts to emerging technologies. 2026.

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The classification of network services as regulated vs contestable should consider that competitive processes and markets may deliver lower costs and innovation over the long term compared with a monopoly provider, who is shielded from competitive pressure and does not have the sharpened incentives for efficiency and customer benefit that competition provides. This is the case for erring towards contestable classification when there are low barriers to entry and exit and/or wherever a genuine substitute exists or could emerge.

The benefits of natural monopolies providing certain services could be real or could be merely a feature of the existing regulatory regime, so any claims should be thoroughly examined. This is relevant to Nexa's rule change request, which proposes that distribution network service providers (DNSPs) only be permitted to obtain ring-fencing waivers as a last resort, where there is an independently verified market failure and measurable long-term consumer benefit.[10] This is an evidentiary standard IEEFA supports. The same standard should apply to ENA's rule change request: an expansion of DNSPs' regulated scope into kerbside EV charging should only proceed where the associated benefits, and underlying market failure, are clearly demonstrated – not merely a consequence of DNSPs recovering costs from consumers while competitors bear them commercially, information asymmetry or other barriers that could be fixed more directly. It is also relevant to services or locations markets fail to serve (for example, rural areas with low demand): here too, the appropriate response may be targeted financial support, a competitive tender, or another targeted regulatory mechanism, rather than defaulting to natural monopoly classification.

The AEMC should consider all available evidence and commission independent analysis to determine the benefits and costs associated with monopoly vs contestable routes for various network services in light of the wide range of potential regulation frameworks that could be taken up in the National Electricity Market (NEM), and the increasing ways in which DER can provide network services.

This consideration of how network services should be classified should also cover how access to the underlying physical assets – such as the poles and wires – is managed, since that access determines whether a service classified as contestable can function as contestable in practice. IEEFA's research into commercial and industrial (C&I) solar and storage found that grid connection approval timelines for C&I solar and storage projects can be slow and unpredictable, ranging from a few months to more than a year, and technical requirements are applied inconsistently between DNSPs. We recommend the connections process be streamlined by creating a fast-track process for systems that adhere to a standard technical architecture, alongside other measures.[11] If a service is categorised as a contestable service, but its connection process is slow, difficult or unfair, the provision of those network services would be undermined. The AEMC should consider in parallel both the ideal level of contestability of various network services and also access to the underlying physical assets that enable the network service provision.

[10] Nexa. Rule change request - Protecting Consumers by Enhancing Competition in Distributed/Consumer Energy Resources and Services in the NEM. 2 March 2026.
[11] IEEFA. Unlocking the clean energy potential of Australian business rooftops. 9 June 2026.

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Who: The role of regulated vs competitive providers and other stakeholders in network services provision

Having established what network services are needed and how they should be provided, the review should then consider who could deliver services in each category most efficiently over the long term, exploring regulated monopoly providers and competitive providers. For monopoly services, the "who" is evident – but for contestable services the "who" could be a range of parties or a mix and could also include some level of coordination between various stakeholders.

IEEFA recommends the AEMC consider whether an independent demand-side entity, separate from DNSPs, could help deliver coordinated demand-side "non-network" solutions investment in Australia. This could involve establishing an independent agency to identify cost effective opportunities to use demand-side resources, and implement processes to procure those resources on a competitive basis. An alternative would be to improve the underlying incentives in the regulatory regime to encourage efficient levels of investment in non-network solutions and allow a wide range of parties to engage.

Further considerations for Package 2: Capex bias and efficiency

The recommendations above on how services should be provided are shaped by the underlying incentives DNSPs face – and what incentives they could face in a newly designed regulatory regime. This is why IEEFA also raises the following evidence on capex bias, even though it appears to fall within Package 2's remit. The Averch-Johnson effect predicts that rate-of-return regulation of the kind used in the NEM will bias firms toward capital-intensive solutions. Moreover, a 2018 KPMG review identified features of the current framework – guaranteed capex cost recovery, WACC [weighted average cost of capital]-driven capex returns, and the administratively 'easier' path of network build over non-network alternatives – that reinforce this bias.[12]

Analysis by energy consultancy Energeia of Australian Energy Regulator (AER) incentive scheme data found non-network alternatives such as DER accounted for only around 0.15% of total network spending in the period it examined, whereas Energeia's own modelling suggested up to 25% of network spending could potentially be replaced with non-network solutions. Energeia also found that spending on capital works such as grid upgrades increase shareholder returns by 200% compared with the best-performing non-network incentive.[13] IEEFA's C&I report found that the Regulatory Investment Test for Distribution (RIT-D)'s options screening process is largely not conducive to effective participation from non-network alternatives in the form of C&I solar and storage due to inherent process burdens.[14]

In terms of efficiency considerations, the AEMC should consider the historical financial performance of electricity NSPs in the regulation review. IEEFA has found that regulated electricity network businesses received around $15 billion in supernormal profits (equity returns

[12] IEEFA. Reforming the economic regulation of Australian electricity distribution networks. 31 May 2024. Page 26-27
[13] Energeia. Are electricity network incentive schemes rewarding the wrong behaviour? Accessed 20 July 2026.
[14] IEEFA. Unlocking the clean energy potential of Australian business rooftops. 9 June 2026.

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above the allowed/target equity return) between 2014 and 2023, on top of allowed/target equity returns of around $17.6 billion. IEEFA has not seen evidence that these excess returns were associated with productivity improvements.[15]

IEEFA thanks the AEMC for the opportunity to provide comments and looks forward to the next stages of the electricity network regulation review.

Kind regards,

Johanna Bowyer, Lead Analyst, Australian Electricity

[15] IEEFA. Taming electricity price inflation starts with addressing network supernormal profits. 5 November 2024.