

National Electrical & Communications Association

Reforming electricity network connection and cost recovery arrangements for data centres in NSW

**Department of Climate Change, Energy, the Environment
and Water**

September 2026



Executive summary

NECA welcomes the opportunity to respond to the Consultation Paper released by the Department of Climate Change, Energy, the Environment and Water (the Department), Reforming electricity network connection and cost recovery arrangements for data centres in NSW (the Consultation Paper). NECA represents electrical and communications contracting businesses across NSW and the ACT, whose members design, install, test, commission and maintain the electrical infrastructure that connects homes, businesses, community infrastructure and major projects — including data centres — to the electricity network.

This submission responds directly to the ten reform proposals and the specific consultation questions set out in the Consultation Paper. NECA's comments are made from the perspective of an industry association representing electrical contracting businesses and, through them, the households, small businesses and communities that depend on a safe, reliable, timely and fairly priced electricity network. NECA does not hold the specialist regulatory, financial or system-planning expertise of network service providers, AEMO, the Australian Energy Regulator or the Consumer Trustee, and this submission does not attempt to prescribe the detailed technical or commercial settings that properly fall to those bodies.

Within that context, NECA's overarching position is straightforward. Data centre proponents should meet the network costs their connections create, upfront and on an ongoing guaranteed basis, consistent with the beneficiary pays principle already embedded in the NSW Data Centre Guidelines. NECA supports the general direction of all ten proposals in the Consultation Paper and responds to the specific consultation questions (1A, 1B, 6A, 6B, 7A and 10A) in the sections below.

NECA also raises three additional concerns for the Government's consideration, set out in a separate section of this submission. These relate to the workforce implications of concurrent, large-scale electricity infrastructure and data centre construction for energy security; the risk that data centre demand may crowd out network capacity and connection resources needed for NSW homes and businesses, particularly in Western Sydney; and the importance of securing data centre network costs upfront to prevent cost-shifting to households and small business customers.

About NECA

The National Electrical and Communications Association (NECA) is the peak industry body representing more than 6,500 electrical and communications contracting businesses across Australia, including a substantial base of member businesses operating across NSW and the ACT. NECA members design, install, test, commission and maintain the electrical and communications systems that support homes, businesses, community infrastructure, energy networks and major projects, including new and upgraded network connections. NECA also contributes to workforce development through affiliated registered training organisations (RTOs) and group training organisations (GTOs), which provide direct insight into electrical workforce capacity and training delivery.

NECA's response to the reform proposals and consultation questions

NECA's response follows the structure of the Consultation Paper, addressing each of the three reform themes in turn and the specific consultation questions raised against them. NECA has confined its comments to matters within its area of legitimate interest and expertise: the practical impact of the proposed reforms on the timeliness, cost and fairness of electricity network connections for NSW businesses, residents and the wider community. NECA has not commented on matters that require detailed technical, financial or system-security expertise, such as the precise calibration of prudential instruments, cost-of-capital assumptions or power system operation, which are properly the responsibility of network service providers, AEMO, the AER and the Consumer Trustee.

1. Improving network connections and planning (Proposals 1–4)

NECA supports measures that reduce speculative and duplicative connection applications and improve the information available for network planning. The Consultation Paper notes that finite network service provider (NSP) resources spent assessing speculative or duplicate data centre applications can delay other customers' connections, including new housing and public infrastructure such as hospitals, and businesses seeking to electrify. This is a direct concern for NECA members, who routinely manage electrical connections and upgrades for residential and commercial customers and rely on NSPs being able to process legitimate applications promptly.

Consultation question 1A: When should entry bonds lapse or be forfeit?

Consultation question 1B: Which connection applicants should be required to provide an entry bond?

NECA supports the introduction of an entry bond as an appropriate and proportionate mechanism to filter speculative and duplicative applications and to protect the connection queue for genuine projects, including those of NECA members' residential and business customers. NECA considers a bond should be forfeited where a proponent fails to provide required information or project updates within a specified timeframe; fails to maintain contact with the NSP regarding progression of the application within a specified period; is found to have lodged a substantially duplicate or speculative application (including through a related entity or intermediary); or where the NSP has reasonable grounds to conclude the applicant is not negotiating in good faith. NECA supports clear, objective and publicly available forfeiture triggers and milestone timeframes, so that genuine proponents have certainty while speculative behaviour is deterred.

On the question of which applicants should provide a bond, NECA supports the bond applying consistently to all data centre connection applicants at or above the proposed 15 MW threshold, regardless of whether the connection is sought at distribution or transmission level, and regardless of whether the application is lodged directly or through an intermediary or related entity acting on behalf of a data centre proponent.

A consistent approach will help prevent the kind of duplicative, multi-front applications identified as a driver of planning uncertainty in the Consultation Paper.

Recommendation 1. Entry bond scope and forfeiture settings

That entry bonds apply consistently to all data centre connection applicants at or above the proposed 15 MW threshold, at distribution and transmission level and irrespective of intermediary or related-entity lodgement, with clear, objective and publicly available forfeiture triggers linked to information non-provision, loss of contact, duplicate applications and bad-faith negotiation.

NECA also supports, in principle, Proposals 2 to 4, which strengthen requirements for NSPs to collect and share information about prospective and existing data centre connections, to develop and share load forecast and transfer capacity information, and to incorporate demand and capacity profiles into connection agreements. Improved visibility of the data centre pipeline should help NSPs plan and prioritise network investment more efficiently, which is in the interests of all connecting customers, not only data centres. NECA does not propose detailed settings for the frequency, format or content of this information sharing, which are matters for NSPs, AEMO and the Department to determine.

2. Improving network cost allocation and recovery (Proposals 5–8)

NECA strongly supports the principle underpinning this part of the Consultation Paper: that data centres should meet the network costs they create, and that gaps in the current framework which would otherwise see those costs socialised across all electricity customers should be closed. NECA's members, and the households and small businesses they serve, are electricity consumers who would ultimately bear socialised network costs through higher charges on their power bills.

NECA supports Proposal 5, requiring distribution network service providers (DNSPs) to recover appropriate transmission network upgrade costs from data centres connecting to distribution networks. Extending existing negotiate-in-good-faith obligations into a firmer requirement is a sensible way to close a gap that could otherwise see transmission augmentation costs triggered by distribution-connected data centres passed through to all customers via transmission use of system charges.

Consultation question 6A: How much flexibility should the regulations provide in relation to minimum guaranteed contributions to ongoing network costs?

Consultation question 6B: Is 10 years a sufficient and appropriate period for minimum guaranteed contributions to ongoing network costs?

NECA supports the principle of a minimum guaranteed contribution to ongoing network costs, given the Consultation Paper's evidence that data centres commonly reserve high connection capacity relative to actual usage, including an average maturity load factor for hyperscalers of around 68 per cent. Regulations should provide only limited flexibility, sufficient to accommodate genuinely staged projects with binding, pre-agreed ramp-up schedules captured through the demand profiles proposed under Proposal 4, but should stop short of open-ended case-by-case

negotiation that would undermine certainty for other customers and re-create the cost-recovery gap the reform is intended to close.

On the appropriate period, NECA considers 10 years to be a reasonable minimum floor rather than an upper limit. Major network augmentations of the kind data centre demand is bringing forward, such as Sydney Ring South, are financed over multi-decade horizons, while data centre connections and the facilities they serve are generally expected to operate for periods considerably longer than 10 years.

NECA recommends the settings be reviewed periodically, for example alongside the Government's commitment to annually review the NSW Data Centre Guidelines, as more empirical data on ramp rates and utilisation becomes available.

Recommendation 2. Guaranteed minimum contributions

That regulations set a standard guaranteed minimum contribution to ongoing network costs with only limited scope for adjustment (confined to binding, pre-agreed demand profiles), and that the proposed 10-year minimum period be treated as a floor and reviewed periodically as ramp-rate and utilisation data matures.

Consultation question 7A: What principles and cost and benefit categories should the Consumer Trustee consider in setting the Major Network Upgrade Fee?

NECA supports the introduction of a Major Network Upgrade Fee (MNUF) as a reasonable way to recover the incremental cost of network augmentation brought forward by data centre demand, consistent with the beneficiary pays approach set out in Box 1 of the Consultation Paper.

NECA recommends the Consumer Trustee's principles include, at minimum:

- full recovery of augmentation costs directly attributable to demand-driven acceleration;
- transparent and regularly published fee-setting methodology and inputs;
- a requirement that any offset for network utilisation benefit be demonstrated rather than assumed; avoidance of double-counting between the MNUF and other charges, including guaranteed minimum contributions and jurisdictional scheme contributions;
- retention of the proposed locational differential between the Sydney-Newcastle-Wollongong region and the rest of NSW, reflecting genuine network constraints; and,
- most importantly for NECA members and their customers, an explicit test that the fee-setting outcome does not result in households and small businesses cross-subsidising network costs created by data centres.

NECA supports the proposed limit of one rate adjustment every two years as an appropriate balance between cost-reflectivity and investor certainty.

Recommendation 3. Major Network Upgrade Fee principles

That the Consumer Trustee's principles for setting the Major Network Upgrade Fee include full cost recovery, transparent methodology, a requirement to demonstrate (not assume) utilisation benefits, no double-counting with other charges, and an explicit test to protect households and small businesses from cross-subsidising data centre network costs.

NECA supports Proposal 8, requiring transmission-connected data centres to contribute to the costs of jurisdictional schemes such as the Electricity Infrastructure Roadmap and the Climate Change Fund. It is inequitable for some of the largest individual electricity loads in NSW to rely on these schemes for reliable, affordable and clean energy while contributing nothing towards their cost, with the shortfall recovered from households and small businesses.

NECA agrees this proposal should proceed as an interim measure while more enduring national reform is pursued through the AEMC rule change process.

Recommendation 4. Jurisdictional scheme contributions

That Proposal 8 proceed as an interim measure so that transmission-connected data centres contribute to Roadmap and Climate Change Fund costs without delay, alongside continued pursuit of enduring national reform through the AEMC rule change process.

3. Supporting implementation of the NSW Data Centre Guidelines (Proposals 9–10)

NECA supports Proposal 9, requiring NSPs to use connection agreements to reinforce compliance with requirements for data centres to offset demand through power purchase agreements and firming arrangements. Without this reinforcement, non-compliant demand growth risks higher wholesale prices and reduced reliability for all electricity customers, including NECA members' households and small business customers.

Consultation question 10A: Which events should trigger demand flexibility requirements?

NECA supports demand flexibility being triggered by objective, transparent and consistently applied system conditions, such as AEMO-declared low reserve or lack of reserve conditions, wholesale spot prices exceeding a defined threshold, NSP-identified local network constraint events, and directions issued during declared network emergencies.

NECA also supports retaining the existing requirement that diesel back-up generation cannot be used to meet demand flexibility obligations, consistent with the NSW Data Centre Guidelines.

Clear and publicly available triggers will give all data centre operators predictable obligations and support community confidence that the framework is being applied consistently.

Recommendation 5. Demand flexibility triggers

That demand flexibility obligations be triggered by objective, publicly available system conditions — AEMO-declared low reserve conditions, wholesale price thresholds, identified local network constraints and declared network emergencies — with the existing prohibition on diesel back-up generation retained.

4. Future actions — the proposed large load access scheme

NECA notes that a large load access scheme, and further reform of jurisdictional scheme cost recovery, will be progressed separately from this Consultation Paper. NECA supports, in principle, a coordination mechanism that aligns the scale, timing and location of data centre investment with available network and generation capacity. NECA recommends that any merit criteria adopted for such a scheme have explicit regard to the cumulative impact of large load connections on the capacity available to serve other NSW customers, an issue expanded upon in NECA's additional concerns below.

Recommendation 6. Merit criteria for the future access scheme

That merit criteria for any future large load access scheme explicitly have regard to the cumulative impact of proposed large load connections on network capacity available to serve residential, small business and community customers in the same region.

NECA's additional concerns

In addition to NECA's comments on the specific reform proposals above, NECA raises three further concerns for the Government's consideration. These matters extend beyond the immediate connection and cost recovery settings addressed in the Consultation Paper, but NECA considers them material to the successful and sustainable delivery of the Government's broader data centre and energy security agenda, and offers brief commentary and associated recommendations on each.

1. Workforce and energy security

The Consultation Paper confirms that meeting the legislated Energy Security Target depends on 38 generation, 58 storage and 6 network projects being delivered and commissioned before summer 2033–34, including at least 1,340 kilometres of new network infrastructure, with two-thirds of these projects yet to commence construction.

This construction task must occur at the same time as up to 28 GW of data centre connections, and the data centres themselves, are designed, installed, tested, commissioned and maintained. All of this work depends on licensed electricians and electrotechnology tradespeople, a workforce already under acute pressure from housing and other essential infrastructure construction. If NSW does not ensure this concurrent construction pipeline is matched by growth in the licensed electrical workforce, delivery risk increases for the very projects — Roadmap network works, Renewable Energy Zone transmission, Sydney Ring South and data centre connections themselves — that underpin the Energy Security Target. Thus potentially compounding the reliability and cost risks this Consultation Paper is designed to manage.

NECA notes this issue is being progressed in more detail through the separate NSW Data Centre Guidelines process, particularly Principle 6 and Performance Measure 17, and NECA stands ready to assist Government further in that context.

Recommendation 7. Workforce capacity as a delivery risk factor

That the NSW Government treat electrical workforce capacity as a material delivery risk factor in energy security planning and project readiness assessments, having regard to the concurrent construction demands of the Roadmap, Renewable Energy Zone transmission and the data centre connection pipeline.

2. Access to electrical infrastructure capacity for NSW businesses and residents

The Consultation Paper confirms that more than 90 per cent of the data centre pipeline is seeking connection in the Sydney-Newcastle-Wollongong region, with over 52 per cent of requested capacity concentrated in Greater Western Sydney as at June 2026 — the same region experiencing rapid population growth, new housing supply targets and business electrification.

Transgrid has already advised proponents that no transmission capacity will be available for new connections in Western Sydney beyond 2033. NECA's concern is that the scale and pace of data centre demand could consume finite network planning, connection assessment and construction resources, and ultimately network capacity itself, ahead of the connection needs of new homes, small businesses and community infrastructure in the same corridors.

NECA's electrical contractor members regularly manage new connections and upgrades for residential and commercial customers and are well placed to observe whether queueing or capacity constraints begin to affect these everyday connections.

Recommendation 8. Transparency on cumulative capacity impacts for other customers

That NSPs, through the joint planning and information-sharing measures in Proposals 2 to 4, and any future large load access scheme, be required to monitor and publicly report on the cumulative impact of data centre connections on available network capacity and connection timeframes for residential, small business and community customers in affected regions, particularly Western Sydney.

3. Potential for increased energy costs unless data centre network connection costs are met upfront

NECA strongly supports the principle underpinning Proposals 1, 6, 7 and 8 that data centre proponents should meet the network costs they create upfront and on an ongoing guaranteed basis, rather than through deferred or contingent arrangements that expose NSW households and small businesses to cost-shifting risk if a project is delayed, downsized or exits early.

The Consultation Paper itself identifies that gaps in the current framework could see these costs recovered from other customers through distribution and transmission use of system charges. NECA's members, and their residential and business customers, are electricity consumers who would ultimately bear any such socialised costs through higher network charges on their power bills.

NECA therefore supports the strongest available form of upfront and guaranteed cost recovery being secured before, or at, connection, and cautions against any softening of these settings — whether through extended negotiation periods, discretionary waivers or delayed payment schedules — that would increase the risk of costs being passed through to small customers.

Recommendation 9. Binding, upfront security for data centre network costs

That the NSW Government ensure all data centre network cost obligations — entry bonds, guaranteed minimum contributions, the Major Network Upgrade Fee and jurisdictional scheme contributions — are secured through binding, upfront instruments such as bank guarantees prior to connection, rather than through deferred or renegotiable arrangements, to minimise the risk of cost-shifting to households and small businesses.

Summary of recommendations

Recommendations R1 to R6 respond directly to the reform proposals and consultation questions in the Consultation Paper. Recommendations R7 to R9 arise from NECA's additional concerns regarding workforce and energy security, access to network capacity for NSW businesses and residents, and the timing of data centre network cost recovery.

Ref.	Recommendation
R1	Entry bonds apply consistently to all data centre applicants ≥ 15 MW (distribution and transmission, including intermediaries), with clear, objective forfeiture triggers. (Q1A, Q1B)
R2	A standard guaranteed minimum network cost contribution with limited flexibility for binding demand profiles; the 10-year period treated as a floor and reviewed periodically. (Q6A, Q6B)
R3	Major Network Upgrade Fee principles to include full cost recovery, transparency, demonstrated (not assumed) utilisation benefit, no double-counting, and an explicit small-customer protection test. (Q7A)
R4	Proposal 8 (jurisdictional scheme contributions from transmission-connected data centres) to proceed without delay as an interim measure.
R5	Demand flexibility triggered by objective system conditions (low reserve, price thresholds, network constraints, declared emergencies), retaining the prohibition on diesel back-up generation. (Q10A)
R6	Merit criteria for any future large load access scheme to explicitly consider cumulative impacts on network capacity available to other NSW customers.
R7	Electrical workforce capacity treated as a delivery risk factor in energy security planning and project readiness assessments.
R8	NSPs and any future access scheme to monitor and publicly report on cumulative impacts of data centre connections on capacity and connection timeframes for residential, small business and community customers.
R9	Data centre network cost obligations (bonds, guaranteed contributions, MNUF, jurisdictional scheme charges) secured through binding, upfront instruments prior to connection, to prevent cost-shifting to households and small businesses.

To arrange a meeting or discuss this submission further, please contact:
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