Electrical Trades Union

ETU Submission to: *Getting it right: Building AI infrastructure that works for Australia*

October 2026

9 October 2026

Acknowledgement

In the spirit of reconciliation, the ETU acknowledges the Traditional Custodians of country throughout Australia and their connections to land, sea and community. We pay our respect to their Elders past and present and extend that respect to all First Nations peoples today.

Introduction

The Electrical Trades Union of Australia (ETU) is the principal union for electrical and electrotechnology tradespeople and apprentices in Australia, representing well over seventy thousand electrical workers around the country.

Data centres represent an enormous opportunity for the Australian economy, for jobs, and for skills. Today, thousands of ETU members are employed building and operating the infrastructure that will deliver AI. Apprentices are being trained and opportunities created. But truly seizing this opportunity requires well-designed, robust standards.

There is no AI without electrical workers. Electrical workers are critical to building and operating the infrastructure that will deliver AI, from the data centres to the renewable energy and storage assets to power these centres and the poles and wires that will connect the data centres to the grid.

The ETU strongly supports the introduction of data centre standards and legislating the federal government's *Expectations of data centres and AI infrastructure developers* (Expectations). These Standards represent a significant opportunity to shape this emerging and growing industry so that it provides long-term benefits to Australia – including providing well-paid union jobs, training the next generation of apprentices, and strengthening our energy networks.

The ETU position is clear: data centres that invest in Australian energy and skills are welcome here – ones that drive up power prices, take drinking water and lock young people out of jobs are not.

To this end, the ETU joined with industry stakeholders and ENGOs to develop a set of Public Interest Principles for Data Centres (Principles),[1] and worked with the federal government's Expectations of data centres and AI infrastructure developers (Expectations).[2] We are also engaging directly with local and state governments, as well as the data centre industry, on how to operationalise the Principles and Expectations.

Data centres already provide good, strong union jobs for ETU members across the construction, maintenance and operations phases. But these jobs only exist where the community continues to support the rollout. In overseas jurisdictions that have led on data centre development, the unfettered rollout of data centres has led to significant social pushback, grid instability (including instances of total grid failure), and increased power prices.[3] In many of these jurisdictions, from Ireland to various US states, governments have responded to these issues by putting in place moratoriums on further data centre development until risks could be addressed.

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[1] Joint statement (2026), *Public interest principles for data centre design*.
[2] Australian Government (2026), *Expectations of data centres and AI infrastructure developers*.
[3] More than 50 state and local governments across the US, as well as governments in, Ireland, Singapore and the Netherlands have implemented or are considering temporary or ongoing moratoria on data centre development. Infrastructure NSW (2026), *Reforming electricity network connection and cost recovery arrangements for data centres in NSW*.

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Australia has the opportunity to learn from these jurisdictions, to design in protective mechanisms from the outset that will harness the opportunities of this development whilst avoiding the biggest risks.

Finally, while our submission is largely focused on data centre development, the ETU strongly supports broader steps to regulate the AI industry. These regulations will necessarily cover a broad range of issues from cybersecurity to copyright to worker surveillance. A review of polling from Australia and overseas shows that opposition to data centre development is only partially due to the direct impacts of the infrastructure itself. It also stems from significant distrust of how that infrastructure will be used – and whether it is perceived to be delivering benefits for all Australians.

In this submission, the ETU has focused on two elements where we have direct expertise:

- Apprenticeships, skills and training
- Energy generation and networks

The focus on these issues should not be interpreted as a lack of support for standards governing community consultation, water provisions, copyright, tax reform or public benefit. Instead, it reflects the specific expertise of the ETU, and the experience of our members in building and operating data centres and their associated energy infrastructure.

Summary of recommendations

Overarching Recommendation: Government should actively work to maximise data centre investment, but on terms that meet Australia's interests, promote employment and training, bring more power onto our grid, and satisfy community concerns.

Recommendation: lower the proposed 20MW/100MW thresholds, consistent with the NSW 5MW/15MW large load definition, and include anti-avoidance rules such as those that aggregate facilities on a single site and staged expansions.

Recommendation: the Standards should be applied to all new and existing data centres, with appropriate and proportional transitional arrangements for existing data centres and data centres already in the approvals pipeline.

Recommendation: mandate 1 apprentice for every 5 workers in the construction phase, with sub-targets for 1st and 2nd year apprentices and women, and ongoing apprentice opportunities during the operations phases.

Recommendation: data centres should be required to contribute to funding the additional training capacity required to meet their additional workforce demand through the payment of a training levy.

Recommendation: governments should use training levy funds to invest in new training centres, VET teachers, and industry GTOs.

Recommendation: data centres should be required to contract new renewable energy to meet *at least* their stated demand. REGOs should only be used as a compliance mechanism or as part of transitional arrangements, with additional requirements that data centres sign PPAs with new renewable energy projects.

Recommendation: data centres should be required to contract new renewable energy to meet *at*

least their stated demand. REGOs should only be used as a compliance mechanism or as part of transitional arrangements, with additional requirements including PPAs and ramp-up management used to ensure maximum renewables coverage from the earliest date possible.

Recommendation: data centres should be required to meet global best practice PUE and WUE, with non-potable or recycled water as the default.

Recommendation: data centres should be required to meet the costs of network augmentation, with cost recovery determined by the capacity reserved on the network *not* the capacity used by the data centre.

Recommendation: introduce robust regulation of frontier AI development, including mandatory disclosure of breaches.

Questions on capacity thresholds for application of the AI standards

The ETU supports a tiered approach to ensure that obligations are proportionate to the size of the development. However, we note that the consultation paper's proposed 20MW lower threshold and 100MW higher threshold is significantly higher than the thresholds adopted by the NSW government in their legislative and regulatory requirements for large load infrastructure (which includes data centres). This defines "large load infrastructure" as "infrastructure that has, or is proposed to have, a network connection with a rated capacity of 5 MW … and meets any other requirements prescribed by the regulations".[4] In other words, the MW rating provides a minimum threshold that must be met but it is not sufficient for a data centre to be captured by the requirements, in order to allow the NSW government to amend the regulations "if it appears proponents are lowering connection capacities to avoid regulatory requirements".[5]

The NSW government approach addresses the need to put in place safeguards to prevent developers sizing projects to marginally under the threshold to avoid regulation. Other jurisdictions that have put in place similar thresholds include Texas – that considers all facilities on a single site together – and Ohio and Ireland, that include expansions in calculating whether or not data centres are required to meet local standards and regulations.[6]

Finally, we note that some overseas jurisdictions – such as Germany – have their first tier set as low as 1MW, for the application of transparency and efficiency requirements.[7]

Recommendation: lower the proposed 20MW/100MW thresholds, consistent with the NSW 5MW large load definition, and include anti-avoidance rules such as those that aggregate facilities on a single site and staged expansions.

Questions on the approach to the application of the AI standards

The ETU argues that the Standards should come into force from the date they are legislated and apply to both new and existing data centres, albeit with existing data centres only the energy and efficiency Standards are relevant and centres should be afforded and appropriate transition

[4] Infrastructure NSW (2026), *Reforming electricity network connection and cost recovery arrangements for data centres in NSW*, p. 11.
[5] Ibid, 11.
[6] Ibid, p. 13
[7] Weiss, K. (2025), *From EU framework to national action: how Germany regulates data center energy use.*

arrangements. The application to existing data centres avoids the unintended consequences of a rush of data centre development applications made to avoid the application of the standards, while still meeting the objectives of the Standards and mitigating the risks of data centre development (e.g. increased wholesale energy prices).

There are few overseas jurisdictions that provide examples of how to regulate an ongoing pipeline of work, as the majority of jurisdictions that have sought to regulate the data centre industry have resorted to placing a moratorium or pause on new data centre applications while regulations were developed. However, Germany does provide an example of regulations that capture existing data centres by providing reasonable transitional arrangements.

In 2023 the German Parliament passed the Energy Efficiency Act (EnEfG), introducing new energy efficiency standards for all data centres over 1 MW. The legislation came into force on 18 November 2023 and applies to all data centres including those already constructed at the time the legislation was passed. The legislation included a different pathway for data centres depending on their year of construction, in order to differentiate between those that entered the approvals pathway after the legislation was tabled. Specifically:

> For data centers that commence or have commenced operation **before July 1, 2026**, PUE of no higher than 1.5 will apply from July 1, 2027, and no more than 1.3 from July 1, 2030. In each case, the annual average is taken into account. Data centers with operations starting on or **after July 1, 2026** must achieve PUE of less than or equal to 1.2 in accordance with Section 11 (2) Sentence 1 No. 1 of the EnEfG. The requirements must be met at the latest after an optimization phase of two years after commissioning.[8]

The German legislation also puts in place requirements for both existing and new data centres to cover their energy usage with renewable energy, with requirements ratcheting from 50% in 2024 to 100% in 2027 to allow time for existing data centres and data centres currently under construction to achieve compliance.[9]

In Australia, the Safeguard Mechanism offers an analogous example of a government approach to improve efficacy and lower pollution, by applying efficiency standards to both existing and new large polluters.

In determining any application of the Standards to projects that have already entered an approvals pipeline, consideration should be given to the overall impact on investment and the objectives sought. For example, the Federal government and several state governments have stated that data centres *must not* increase energy costs for consumers. Following this, it makes sense that data centres in the approvals pipeline and existing data centres should be required to meet provisions to bring their own new renewable energy and improve operational efficiency, so long as suitable transition arrangements are introduced.

Recommendation: the Standards should be applied to all new and existing data centres, with appropriate and proportional transitional arrangements for existing data centres and data centres already in the approvals pipeline.

[8] Dentons (2023), *How Germany's Energy Efficiency Act will Impact Data Center Operators*.
[9] Telatnkov, R., Burmeister T., and Iffert P. (2023), *Data Center Requirements under the New German Efficiency Act.*

Questions on building skills and training

The ETU welcomes the federal government's inclusion of skills as part of their data centre expectations, and the Prime Minister's announcement that he would be bringing these expectations under a single, mandatory regulatory framework under the Australian Standards for AI.[10]

The construction of data centres and associated renewable energy infrastructure is one large electrical project. They require a highly qualified electrotechnology workforce that includes licensed electricians, high-voltage technicians and specialist post-trade roles. And they need these workers on a scale that significantly surpasses all other projects.

Currently, large data centres employ approximately 800 – 1000 electricians at the peak of construction. New builds look set to surpass this, with at least two forthcoming data centre projects projected to each employ between 2000 and 2500 electricians at the peak of construction – the largest electrical workforce at a single site in Australia's history. By way of comparison, the US$45b Ichthys mega-project, at its peak, employed in the order of 1400 electricians - each one of these data centres will engage between 40 and 80 per cent more electricians than Australia's largest resource builds.

This demand will exacerbate the persistent, structural shortages of electrotechnology trades in every State and Territory across the country.[11] In 2023, JSA's *Clean Energy Generation* report found that Australia will require an additional 42,500 electricians by the end of the decade, growing to nearly 100,000 extra electrical workers by 2050 to meet Australia's energy transition requirements. **This figure did not include the data centre build or housing targets. More recent research by Powering Skills Organisation (PSO) estimates these will add a further 13,280 and 17,300 electricians respectively.**[12] And these challenges are not restricted to Australia, with the International Energy Agency highlighting the global shortage[13] are "putting timelines, system reliability, and cost control at risk".

The impact of these shortages fall disproportionately upon ETU members, with workers increasingly being required to work long hours on anti-social shifts to compensate for industry and government's failure to train.

Meeting that workforce target requires increasing apprenticeship enrolments by 40% each year from 2023 to 2027. However, enrolments have fallen from a high in 2022 due to shortages in the number of employers wanting to employ apprentices, VET trainers and training places.

If data centres are not required to contribute to training new electrical apprentices, they will critically threaten the delivery of key government priorities – most acutely housing.

[10] Albanese, A. (2026), AI in Australia's Interest.
[11] JSA (2023), *Skills Priority List September 2023 – Historical*.
[12] Powering Skills Organisation (2026), Electrician Workforce Capacity Study.
[13] International Energy Agency (2025), World Energy Employment 2025 .

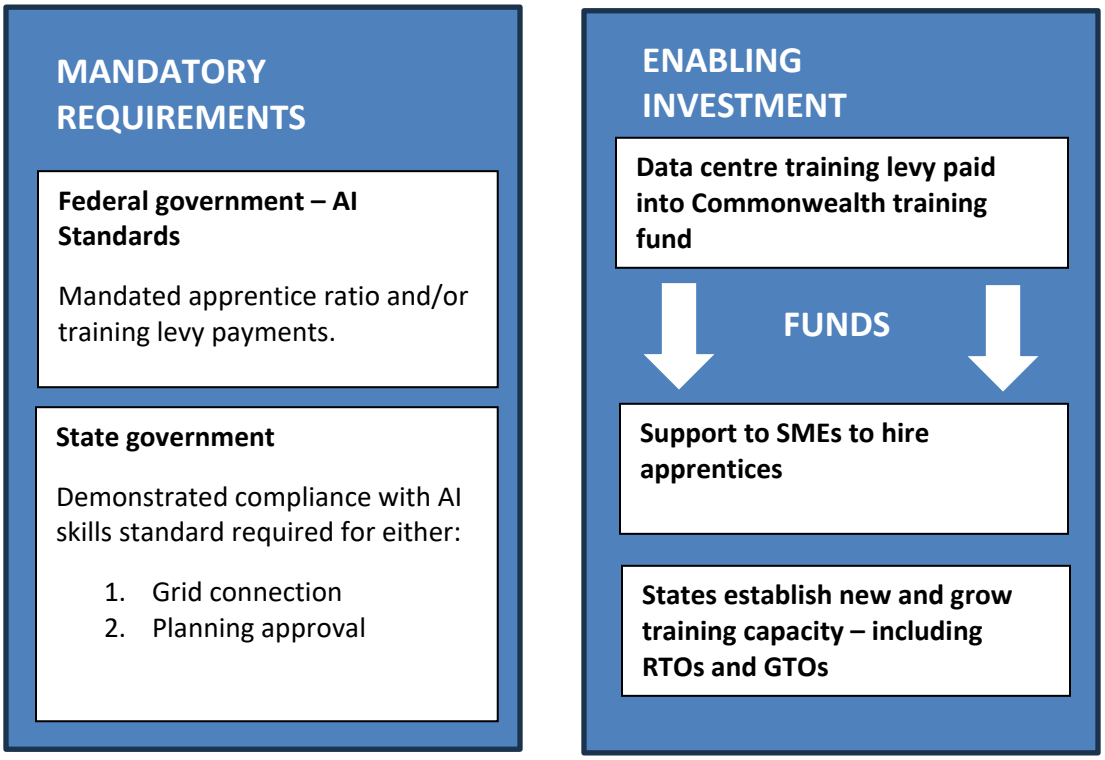
The Opportunity: Data Centres as anchor employer for the energy transition

With the right policy settings in place, data centres represent one of the strongest opportunities to address trades shortages across the entire economy – delivering the apprentices that government needs to build new housing and renewable infrastructure.

No other worksites offer the same scale of opportunities to train new electrical apprentices. These sites are some of the cleanest, safest sites for new apprentices, and they are largely located in metro areas, close to existing concentrations of training infrastructure.

The ETU has developed a set of recommendations where data centres act as anchor employers, able to employ large numbers of apprentices and second them to the broader construction industry via high-quality industry group training organisations (GTOs) – this will require mandatory requirements and enabling investment.

As designed, these requirements provide a degree of flexibility for data centre operators in meeting the objectives of the Standards. For example, where data centres can demonstrate that they are unable to employ and train the required number of apprentices they may be given the option to make additional payments into the Commonwealth training fund.



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Mandatory requirements

1. **AI standards should include mandated, minimum apprentice ratios**

   The Federal Government should mandate an apprentice ratio of 1 apprentice for every 3 workers in the construction phase of data centres.

   This should include a sub-target for 1st and 2nd year apprentices to minimise poaching of more experienced apprentices from SMEs, as well as gender targets to increase diversity in the trades (and broaden the pool of potential apprentices). They should also include ongoing opportunities for apprentices in the operations phases. These sub-targets may seem unduly specific but, as the recent Electrician Workforce Capacity Study by Powering Skills Organisation makes clear, they are crucial.

   Data centre operators who are unable to hire enough apprentices to meet the ratio should be required to pay into training funds at a set amount per apprentice. An inability to hire apprentices to the threshold may include a lack of available training places or RTO capacity in the region.

   These funds should be earmarked to fund new training capacity, including CAPEX investment and support workers to become VET teachers.

   Targets could be met through direct employment or through GTOs. As in the case of the Australian Skills Guarantee (ASG), ratios would be calculated at a head contractor level, with the head contractor responsible for reporting and compliance across their subcontracting chain. Where smaller subcontractors do not employ or host apprentices, the head contractor will be required to meet the ratio through other contractors employing or hosting apprentices above the mandated ratio.

   These ratios could be enforced by state governments requiring these ratios as a requirement of connection approvals[14] and/or planning approvals. As part of these applications, data centre developers should be required to submit workforce development plans as part of accessing streamlined assessment processes and/or network connection applications, to provide state and federal government with data to inform training investments.

   Data centre operators who are either unable to comply or are found not to be complying with contracted apprentice ratios should be required to pay into the training fund at a set amount per apprentice.

[14] States have the ability to attach conditions to their connection agreement applications. VicGrid and EnergyCo already attach social licence criteria to their connection agreement applications. These could be extended to include compliance with the AI Standards.

Enabling investment

In addition to mandating apprentice requirements, state and federal governments will need to invest in enabling infrastructure to facilitate the employment of apprentices. The following outlines key elements of this investment, which will need to be adapted to existing infrastructure in each state.

Significantly, it identifies the role for data centre operators to contribute to funding the training infrastructure required to meet the additional demand.

1. **Levy data centre operators to fund additional training capacity required**

   In addition to ratios, data centres should be required to contribute to funding the additional training capacity required to deliver apprenticeships, by paying into a dedicated Commonwealth training levy.

   To provide flexibility in the delivery of these mandates, data centres who can demonstrate that they are unable to hire sufficient apprentices to meet the required ratio, would have the option to pay an additional levy. This could be calculated based on the number of apprentices below the mandated threshold that they employ.

   Existing training levies have in-built enforcement mechanisms, which include fines and payment of the outstanding amount.

2. **Invest in industry-led RTOs**

   Federal and state governments must invest in growing the training of the Vocational Education and Training sector, including TAFEs and industry-led RTOs. This investment should be subsidised by data centre payments into training levies.

3. **Invest in industry-led and/or state run GTOs**

   State and federal governments should invest in establishing and growing industry-led group training organisations, to provide apprentices to large data centre projects. Where data centres agree to host apprentices over and above the required apprentice ratio, these apprentices should be part subsidised by government.

   GTOs solve for the issue of an apprenticeship being longer than a typical construction project. They can also ensure that apprentices are provided with the full range of employment experience required to meet their apprentice profile, by moving apprentices between data centres and other parts of the construction sector, including housing.

Recommendation: mandate 1 apprentice for every 3 workers in the construction phase, with sub-targets for 1st and 2nd year apprentices and women, and ongoing apprentice opportunities during the operations phases.

Recommendation: data centres should be required to contribute to funding the additional training capacity required to meet their additional workforce demand through the payment of a training levy.

Recommendation: governments should use training levy funds to invest in new training centres, VET teachers, and industry GTOs.

Make a positive contribution to Australia's energy transition

Questions on renewable electricity certificate obligations for data centres

As we've argued in previous submissions, the ETU supports requirements that data centre operators are required to demonstrate that they have contracted sufficient new renewable energy to meet – at a minimum - their stated demand.

This obligation is critical to ensuring that data centres do not increase wholesale prices for consumers. The CEFC estimates that if data centre loads increased total demand on the NEM by 1.2GW by 2034 (consistent with industry figures) *without* adding additional renewable energy generation, this would see:

- 26% increase in the NSW wholesale electricity price
- 23% increase in the Vic wholesale electricity price[15]

These price rises would largely be driven by increasing reliance on gas peakers to meet evening peak demand, reversing the decreases to energy prices that have resulted from the accelerating rollout of batteries on the grid. These price rises do not include the additional network infrastructure (transmission and distribution) required to connect these new demand loads and their corresponding generation.

The ETU shares concerns of several experts that argue the current AEMC proposal will fail to deliver *new* renewable energy. As Green Energy Markets (GEM) note, while Renewable Energy Guarantee of Origin (REGO) compliance certificates can be an effective compliance mechanism, especially if restricted to REGOs issued by new projects, they are insufficient to bring new projects to FID.[16]

Similarly, in their submission to this inquiry, the Institute for Sustainable Futures (ISF) highlights several shortcomings with the current proposal by the AEMC, including:

- Certificate only purchases leading to new renewable energy generation projects are very rare and have not occurred outside the 2016 – 2020 boom.
- Large increases to REGO prices would be required to underwrite new projects.
- It cannot guarantee that all purchases are additional.[17]

ISF and GEM argue that mandating PPAs with new projects – something the AEMC explicitly recommends against – would solve many of these issues. Furthermore, it would allow data centres to shift from being a "problem" of excess demand to potentially becoming a "solution" for the current difficulties in renewables reaching FID.

Finally, while the solutions proposed by ISF and GEM may solve for the issue of renewables reaching FID, they do not solve for the issue of data centres potentially crowding out more price sensitive users. In their *Smelting Poin*t report, the Aluminium Council makes the distinction between energy price 'sensitive' and 'insensitive' users.[18] These users include aluminium smelters and other trade-exposed heavy industries that require PPAs at substantially below market rates in order for their

[15] CEFC (2025), *Getting the balance right: data centre growth and the energy transition*.
[16] Upston, J. and Edis, T. (2026), *Six steps to stop the data centre boom from sending power prices through the roof.*
[17] Institute of Sustainable Futures (2026), *Bringing their own Power: Data Centres and Renewable Energy*
[18] Aluminium Council (2026), *Smelting Point: (Australia's Critical Window for Energy Market Reform during the Energy Transition).*

business to remain international cost competitive.

This is already playing out:

- Tomago: the smelter needs about 3 GW of new NSW renewables, and wind projects that may well be needed to supply Tomago are reportedly close to signing offtake agreements with data centres instead.
- Bell Bay: the smelter had been struggling to lock in an ongoing power deal while data centres secure contracts from Tasmania's existing supply.

In other words, requiring data centres to bring their own renewable energy is necessary but not sufficient to ensure the viability of a diversified economy. In addition to implementing the Standards, the federal government will need to put in place a mechanism to support these large users. To address the issue of large industrial McKell Institute proposed the creation of a new Commonwealth entity that would build, own and operate renewable assets with the sole purpose of providing internationally cost-competitive renewable energy to industry, and which was based on the recent deal to save the Tomago Aluminium smelter from closure.[19]

Questions on time to build new renewable energy

The AEMC and other stakeholders note that the time to gain approvals and build data centres can be faster than the time to build new renewables and storage, particularly wind, and that this should be taken into account in designing requirements for data centres to offset their demand with new renewable energy projects. However, the solution to this issue is not to extend the time that data centres are given to demonstrate that they are providing additional new generation. Doing so would only undermine the government's stated objective that data centre development should result in no net increase in energy costs for consumers.

Instead, mitigating this risk will necessarily involve a multi-faceted solution, which includes:

- Ramp up management: acknowledging that data centres do not go from 0 – 100% energy use overnight, the government could work with this ramp up path to put in place staged obligations whereby data centres are only able to progress to the next stage once they meet specified energy goals.
- DC connection management: whereby data centres who can demonstrate the use of additional and renewable energy supply are given preferential treatment in connection approval requests.
- DC energy use management: whereby limits are placed on data centre operations during their 'time to power' gap e.g. restrictions on usage at peak power time that could operate in conjunction with broader flexibility measures.

In addition, the government should seek to bring forward time to FID for renewable energy projects, by addressing real issues in renewable energy projects being unable to source financing with only PPAs from non-energised data centres.

Overseas jurisdictions have sought to address this issue, by including interim thresholds that correspond to a ramp up in data centre demand and the ability to secure new renewable infrastructure. For example, the French government is currently consulting on a model that would

[19] Pennington, A. and Probst, T. (2026), *Powering Australia's Future.*

split infrastructure and capacity contracts, that would limit the draw on network and energy infrastructure until particular milestones were met.[20] A similar approach could be taken to limit the ability of a data centre to ramp up to full capacity ahead of a set percentage of new renewables coming online.

Recommendation: data centres should be required to contract new renewable energy to meet *at least* their stated demand. REGOs should only be used as a compliance mechanism or as part of transitional arrangements, with additional requirements including PPAs and ramp-up management used to ensure maximum renewables coverage from the earliest date possible.

Questions on incentives or obligations to encourage data centres to invest in on-site generation, batteries or other flexible demand measures

The ETU supports minimum mandatory flexibility requirements for data centres, alongside additional incentives to support additional reductions in energy usage during peak pricing periods to reduce energy bills for all users. Flexible demand measures are already commonplace for other large energy users, and lessons should be taken from existing users on suitable incentives.

The NSW government outlines several promising trials of data centre flexibility, that show that data centres can reduce computing loads by up to 40% for several hours at a time without compromising on critical services, simply by time shifting less critical operations.[21]

Questions on purchasing energy for a state-owned operator

The ETU does not support exemptions from renewable electricity obligations if electricity is being purchased from a state-owned operator.

Questions on unintended consequences or implementation challenges

The ETU sees four main risks the framework must design out:

- Threshold avoidance: projects split across sites or sized just below thresholds. Facilities on a single site and staged expansions should be aggregated, as in Texas, Ohio and Ireland.
- Crowding out industry: data centres outbidding price-sensitive, trade-exposed industrial users for new renewable offtake, as discussed above. The framework must be paired with a mechanism to support these users.
- Paper compliance: certificate-only compliance using REGOs from existing generation adds no new supply. Only certificates from, or PPAs with, new projects should count.
- Workforce bottlenecks: the renewables and transmission needed to meet these obligations rely on the same electrical workforce building data centres. Without the apprentice requirements set out in this submission, obligations will be delayed by labour shortages, not just approvals.

Questions on making a positive contribution to the energy transition

Data centres should be held to global best practice standards for PUE and WUE. Data centres should be required to use non-potable and/or recycled water, and only where it can be demonstrated that this is not possible, should they be able to use potable water sources. The use of potable water

[20] RTE (2026), *Raccordement des clients au réseau de transport d'électricité*
[21] Infrastructure NSW, p. 26.

sources should be considered in government planning processes, as part of determining overall impact on the community.

Recommendation: data centres should be required to meet global best practice PUE and WUE, with non-potable or recycled water as the default.

Questions on imposing no net costs on consumers and communities

The ETU supports proposed changes to cost-recovery frameworks that would see data centres be required to cover additional costs of augmenting existing grid infrastructure and/or building new grid infrastructure, including those currently subject to a rule change request being progressed by the AEMC.

However, we note the analysis by the NSW government regarding the importance of properly calculating the actual increases in demand that will result from data centre applications, in order to augment and develop new network capacity at a suitable scale. The NSW government notes that speculative – including duplicative – data centre applications can result in an overbuild of network infrastructure beyond that required by the data centres once constructed and energised. Where overbuild occurs, but data centres are not required to meet the full costs of requested capacity in their connection agreements, there is a risk that the cost of additional network capacity is shared between all network users not just data centres:

> Data centres that have high-capacity connections but low use may not pay enough in network charges over time to cover the network costs they create. This is because network charges are predominantly based on usage, meaning those with lower usage will pay lower network charges. […] it is common for data centres to reserve a large amount of capacity before they have secured contracts with customers to use their services. In many cases, even at maturity a large percentage of the rated capacity of a data centre's connection is not used. Demand forecasts in AEMO's 2026 Integrated System Plan assume load factors at maturity for hyperscalers will average 68%.[22]

In order to combat speculative applications, the ETU supports requirements by the NSW government that data centres are required to pay for the costs of capacity that is made available to them – not the capacity that they ultimately use. This will limit data centres putting in connection requests substantially above the intended demand of the data centre, which is then used to calculate overall infrastructure upgrade requirements.

Recommendation: data centres should be required to meet the costs of network augmentation, with cost recovery determined by the capacity reserved on the network *not* the capacity used by the data centre.

Consultation questions on meaningful engagement with communities and councils

The ETU supports state-based and/or regional approaches to determining preferred sites for data centre construction. A regional planning approach could identify areas with suitable energy, water and/or telecommunications infrastructure, taking into account the overall capacity of a local government or regional area to support data centre investment. A regional approach would allow for an assessment of the cumulative impact of multiple data centre investment, rather than

[22] Infrastructure NSW, p. 6.

individual data centres being assessed on a case-by-case basis.

Questions on security, safety and transparency

The ETU is deeply concerned by the recent breach of Medicare's Statistics Reporting Service by an OpenAI agent, which acted without authorisation during internal testing of a frontier model. Breaches of this kind contribute to community mistrust of AI technologies and increase opposition to new technologies. In this context, robust regulation of AI development is required to maintain overall community trust.

Recommendation: introduce robust regulation of frontier AI development, including mandatory disclosure of breaches.

Consultation questions on investing in local capability, skills, research and innovation

Frontier AI developers that benefit from Australian infrastructure should contribute to the workforce that builds and powers it. In particular, frontier AI developers should:

- contribute to the state training funds established under the AI Standards, scaled to their use of Australian compute, where they are not themselves the data centre operator;
- fund VET teaching capacity, including support for experienced electricians to become TAFE and RTO teachers;
- fund skills and retraining for workers whose jobs are affected by AI adoption, delivered through the VET system and negotiated with unions; and
- report annually against measurable indicators, including apprentices and trainees funded, training places created and workers retrained.