AusNet

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Dear Arek

RE: Capital Expenditure Incentive Guidelines Review – AusNet's response to the AER's draft guidelines

AusNet welcomes the opportunity to provide this submission to the AER in response to its draft guidelines on the Capital Expenditure Incentive Guidelines Review.

AusNet continues to strongly support the application of incentive regulation as driving better customer outcomes and acknowledges that the AER's draft guidelines has made significant inroads into distinguishing overspending due to ISP and non-ISP projects to the benefit of transmission network businesses and their customers.

The AER's proposed amendments to section 2.8 of the draft guidelines effectively introduces a mechanism to allow ex-post CESS exclusions for ISP and non-ISP projects. We support this mechanism whereby TNSPs are not penalised where there is an efficient increase in the scope of works, and projects could not be reprioritised to keep the overall scope unchanged. Yet, the AER's approach could be enhanced by allowing for early advice from the AER, to provide comfort to TNSPs when they become aware that a major scope increase may be necessary.

With respect to the amendments impacting DNSPs:

- We support the draft guidelines particularly the volumetric adjustments for standard connection types.
- The draft guidelines can be further refined to account for the significant forecasting risks that distribution networks and customers are exposed to with respect to new technology connection types (defined as grid-scale batteries and renewable generator hybrids, public EV chargers, data centres and community batteries). Specifically, new technology types should be excluded from the CESS on an ex-ante basis as they carry the dual risk of having bespoke and highly variable unit rates with highly unpredictable volumes.
- The AER's ex-post exclusion for large connections capex should be made more certain by providing clarity of its definition and applying the exclusion on an ex-ante basis. Currently, the exclusion only applies if an ex-post review has been triggered. There are circumstances in which a capex overspend caused by large and new technology connections may not trigger an ex-post review, yet they remain included in the calculation of the CESS penalty, when they should not be for exactly the same reasons that they should not feature in an ex-post review.

Consideration should also be given by the AER regarding the CESS treatment of upfront capital investments that are not provided for in allowances and enable networks to achieve lower capex costs during a subsequent regulatory period. Where these upfront investment costs fall towards the end of a regulatory period, and the resulting savings are reflected in forecast expenditure for the subsequent regulatory period, we consider the upfront costs should be excluded from the CESS. Not taking this approach unreasonably penalises networks and may lead to them not making investments in lower cost arrangements that, ultimately, benefit customers through lower costs. We consider this is contrary to the principles of the CESS and incentive-based regulation more broadly.

We note that, under the current CESS guideline, differences between actual and forecast capex in the final year of a regulatory period will be trued up through a CESS revenue adjustment as part of the determination for the subsequent regulatory period. Should the AER retain in its final CESS guideline its draft position of not allowing for retrospective exclusions of the type explained above, which will apply to AusNet's 2026-31 determination, may be open to the AER to exclude these costs when calculating a CESS revenue adjustment as part of its 2031-36 determination.

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Ex-post (non-ISP) exclusion for transmission network businesses

The AER have proposed to amend section 2.8 in the draft Guidelines allowing ex-post CESS exclusions. This mechanism applies where there is an efficient increase in an NSP's scope of works, and the incurred capex is not accounted for in a contingent project application, cost pass through application or a reopener.

AusNet supports the addition of this mechanism to the CESS and considers this is a sensible mechanism to ensure that TNSPs are not penalised where there is an efficient increase in the scope of works, and projects could not be reprioritised to keep the overall scope unchanged. We note that the AER has indicated that it would only allow ex-post exclusions in limited circumstance and outlined the factors that it would consider in making a decision. Perhaps unavoidably, these factors still leaves significant risk on a TNSP that has to undertake an increased scope of works, as the financial outcome would not be known until the completion of the next regulatory decision. We suggest that allowing for the AER to provide early guidance to TNSPs may be a mechanism to provide comfort to a TNSP, when they become aware that a major scope increase may be necessary.

Ex-ante volumetric adjustments for distribution network businesses

The AER have proposed to make volumetric adjustments for standard connection types on an ex-ante basis. AusNet agrees that volumetric adjustments for standard connection types are appropriate as forecasting risk is primarily caused by volume uncertainty compared to unit rates. For these connection types, unit rate risk can be reasonably managed by networks as they are relatively well understood and supported by established forecasting methodologies. Importantly, volume forecasting risk impacts both networks and customers, with either windfall gains or losses (caused by differences between actual and forecast volumes) being shared between customers and networks at 70% and 30% respectively.

The AER's draft guidelines do not define standard connection types, and we consider this to be appropriate as it provides in-built flexibility for network businesses to propose its own definition and, therefore, establish the scope of the volumetric adjustment mechanism that will be applied as part of its CESS calculation.

Specific to AusNet, for the EDPR 2026-31 regulatory period, we have developed our connections capex forecast based on the sub-categories outlined below. The table also contains our current view as to whether a volumetric adjustment would be appropriate, and we envisage that similar information could be provided by other networks should the AER allow network businesses to propose their own standard connection types for volumetric adjustments. This information has been provided to support our proposed CESS treatment for different types of new connections, and demonstrate how, in practice, volumetric adjustments or exclusions could be implemented by networks and the AER.

	CONNECTION SUBCATEGORY	AusNet's proposed view
RESIDENTIAL	UNDERGROUND SERVICE INSTALLATION	Yes, a volumetric adjustment is appropriate as: • Volumes clearly contained in the capex forecast (that we submitted alongside our Regulatory Proposal on 31 January 2025) which enables practical implementation of the volumetric adjustment • Well known sub-category of connections where the volume risk is likely to be greater than the unit rate risk, given that unit rates are relatively well understood, or if they do vary, the large volume enables network businesses to manage the risk • Historical volumes are in the thousands which means small deviation of actual from forecast volumes would **not** have a large and out of proportion impact on the volumetric adjustment
	COMPLEX RESIDENTIAL SUPPLY PROJECTS	
	LOW DENSITY HOUSING - SUBDIVISION[1]	
	PRIVATE ELECTRIC LINE REPLACEMENT - RESIDENTIAL	Yes, a volumetric adjustment is appropriate for the same reasons listed in the first row. Yet, we note that

[1] "LOW DENSITY HOUSING – SUBDIVISION" has appeared twice because a proportion of it has been allocated to residential, with the balance allocated to subdivision. That is, the low-density housing volume can be split into residential and subdivision enabling volumetric adjustments to be calculated individually.

	CONNECTION SUBCATEGORY	AusNet's proposed view
COMMERCIAL / INDUSTRIAL	PRIVATE ELECTRIC LINE REPLACEMENT - RESIDENTIAL	our capex forecast for this category is based on historical costs and not volumes, which means that the practicality of making a volume adjustment is more complex.
	BUSINESS SUPPLY PROJECTS	Yes, a volumetric adjustment is appropriate for the same reasons listed in the first row.
	DATA CENTRES	No. A volumetric adjustment is inappropriate due to its emerging nature and having bespoke and highly variable unit rates with highly unpredictable volumes. The most appropriate treatment for these subcategories is a CESS exclusion on an ex-ante basis. At the same time, they can be reliably used in the capex model for forecasting purposes because it is the current and most up-to-date information, and the rules require that we must include a capex forecast in our Regulatory Proposal for the AER's approval.
	EV charging stations	
SUBDIVISION	MEDIUM DENSITY HOUSING - SUBDIVISION	Yes, a volumetric adjustment is appropriate for the same reasons listed in the first row.
	LOW DENSITY HOUSING - SUBDIVISION	
EMBEDDED GENERATION	COGENERATION PROJECTS up to 1.5MW	This category is primarily made up of small generation projects, BESS and hybrid projects up to 1.5MW capacity, and community batteries. New technology connections (as defined above) that fall within this category should be excluded from the CESS on an ex-ante basis. A volumetric adjustment should apply to the remaining connection types.
	EMBEDDED GENERATION >1.5MW	These connection types sit outside the RAB, are not forecast as part of regulatory determinations and, therefore, fall outside the scope of the CESS.
	BESS and hybrid generation facilities >1.5 MW	No. A volumetric adjustment is inappropriate for the reason outlined for data centres.

Ex-post exclusion for distribution network businesses

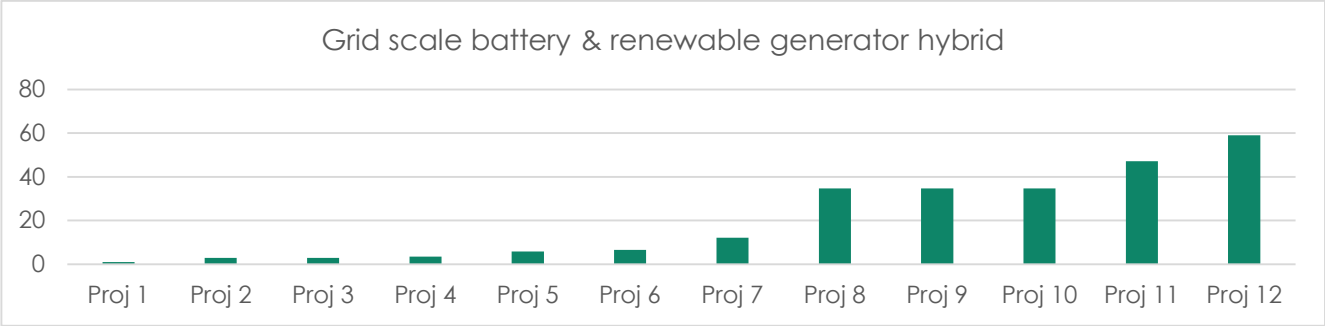
The AER's draft guidelines exclude large connection capex from the CESS if an ex-post review is triggered, noting that the exclusion would not apply if an ex-post review has not been triggered. The AER reasoned that individual large connections do not have standardised unit rates, and the bespoke costs could vary significantly based on a customer's requirements.

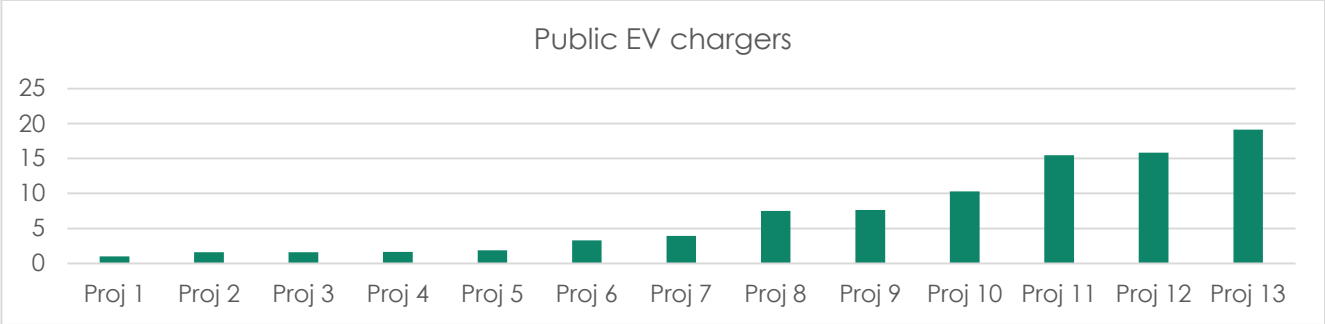
AusNet agrees that large connection capex should be excluded from the CESS if an ex-post review has been triggered, and for regulatory certainty, the AER should provide clarity of its definition. However, the same risk – of not having standardised unit rates – remains even if the ex-post review has not been triggered. Specifically, if an ex-post review has not been triggered on an overspend because the network has not met the overspending requirement (nor the other NER provisions relating to the AER's ability to conduct an ex-post review), then the penalty related to overspend on large connections is borne by customers and network businesses on a 70% and 30% basis. To neutralise both the penalty and reward for large connections capex which has heighted forecasting errors, they should be excluded on an ex-ante basis. This has the symmetric benefit of not rewarding DNSPs if there are underspends against large connection capex.

New technology connection types are also subject to the same unit rate and volumes risk as large connections capex and should therefore be excluded from the CESS on an ex-ante basis. AusNet's definition of new technology connection types includes grid-scale batteries and renewable generator hybrids, public EV chargers, data centres and community batteries. Below are charts showing the unit rate fluctuations across AusNet's historical projects for two new technology types. The Y-axis represents an index rather than dollar amounts, with lowest cost project normalised to 1 and the other capital expenditure amounts being expressed

as multiples. The charts clearly demonstrate the forecasting risks related to unit rates for these connection types:

- for grid scale batteries & renewable generator hybrids, the highest capex project is more than 60 times greater than the lowest cost project
- for public EV chargers, the highest capex is approximately 20 times greater than the lowest cost project





Currently, do not have any large-scale data centres located on our network and thus do not have historical cost to share. However, our research has indicated that they can vary significantly. For example:

- From Ausgrid's contingent project application to address increased customer demand requirements in the Macquarie Park area (link), we observe that the capex requirement is $162m to build a new 132/33kV sub-transmission station to meet increased demand from four new data centre connection requests.[2] This is equivalent to connections capex unit rate of $40m per data centre.
- From Jemena's application to re-open its EDPR 2021-26 final decision, we observe that the capital expenditure requirement (in real $2018 dollars) is $218m to connect 12 new data centres.[3] Once escalated to current $2025 dollars, this is equivalent to a connections capex unit rate of $23 million per data centre.

The above examples demonstrate the very high materiality of the forecasting risk on a per-unit basis. A large difference between actual and forecast volumes for data centres will, therefore, translate to significant capex impacts.

With respect to community batteries, they are a novel technology type where we currently have 24 on our network, with another 35 expected over the next 12 months. Given their low volumes and that they are driven by policies (such as Community Batteries for Household Solar program and 100 Neighbourhood Batteries Program), they should be excluded from the CESS on an ex-ante basis.

An ex-ante exclusion is appropriate for new technology connection types – as opposed to an ex-ante volumetric adjustment or ex-post exclusion – because both unit rates and volumes are inherently uncertain

[2] Ausgrid 2025, Addressing increased customer demand requirements in the Macquarie Park area, Contingent project application, 7 February, pp. 6-7.
[3] Jemena 2024, Unforeseen major connections model, worksheet "Calc | Expenditure", row 63.

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due to the novel nature of these connections and a lack of historical data on both costs and volumes. For example, the volumes associated with these new technology types are very low:

- Approximately 214 data centres spread across Australia[4]
- Approximately 30 large scale batteries (sized 10MW or 10MWh and above) operating across Australia[5]
- More than 2,000 public EV charging sites across Australia[6]

The exclusion of new technologies from the CESS removes rewards and penalties, which benefits our customers as they do not fund a reward for AusNet for underspending the allowance, and customers do not get penalised if AusNet overspends the allowance, for capex categories that are highly uncertain in both volumes and unit rates. It would also remove any incentive for networks to adopt conservative forecasts to manage the significant forecasting risk associated with these connection types.

Importantly, the exclusion of new technology connections from the CESS does not erode AusNet's incentive to minimise cost as an ex-post review can be triggered when our overspend is $1 above our approved allowance and we operate on a revenue cap form of regulation meaning our revenues are determined on an ex-ante basis for the forthcoming five years and overspends are not funded during the five-year period.

Please contact Angella Nhan ([redacted]) with any questions in relation to this submission.

Sincerely,

[redacted]

Rob Ball
Manager, Regulation (Electricity Distribution)
AusNet

[4] Power-hungry data centres scrambling to find enough electricity to meet demand - ABC News, accessed 26 June 2025.
[5] Big Battery Storage Map of Australia | RenewEconomy, filter for "operating" batteries, accessed 26 June 2025.
[6] The Aussie states with the most public EV chargers | Drive, accessed 26 June 2025.