Zero Emissions Noosa Inc.
www.zeroemissionsnoosa.com
8 January 2025

For Attention: Gavin Fox, General Manager, AER
Subject: Submission re Energex amended Tariff Structure Statement

Dear Mr. Fox,

We note that Energex has now submitted its amended 2025-2030 Tariff Structure Statement documents and that AER has provided for interested parties to make submissions on these documents until 17 January. Zero Emissions Noosa Inc. is pleased to provide the following comments.

1. Our focus

ZEN Inc. has a particular focus on encouraging the uptake of community batteries to assist with the energy transition, and our comments are therefore related to that part of the documents which deals with LV utility scale storage. As per our previous submission, we see the key benefits of community batteries in the energy transition being:

Given the widespread acceptance that solar PV, wind and storage must be ramped up to contribute to the energy transition, community batteries have two vital roles in the energy transition. These are:

a. Facilitating the maximum roll-out of solar PV by providing storage capability and thus avoiding system instability and solar curtailment which could otherwise occur; and
b. Making available electricity from storage at peak demand times (eg early evening) and thus increasing the percentage of renewable energy at this time.

Consequential benefits of these two key roles are:

- alleviate export limits and facilitate the huge uptake of solar PV required for the energy transition;
- reduce losses, by keeping electricity generation, storage and consumption local
- provide network support services on the LV network, addressing the problems where they originate
- facilitate energy equity, by allowing non-solar customers to still benefit from the lower generation costs that rooftop solar PV provides
- defer network upgrade / augmentation costs; and
- contribute to the overall goal of reducing carbon emissions and meeting both State and Federal climate change targets.

In addition to these benefits, awareness is also emerging of the value proposition offered by community batteries due to their speed and flexibility in roll-out, when compared to the emerging social licence difficulties, high costs and extended timelines for larger high voltage connected renewable energy alternatives.

In summary, community batteries offer a service to DNSPs, and tariff arrangements should reflect that.

2. Transition Analysis

Again, as noted in our previous submission, the significant role of community batteries in the energy transition is highlighted in the 2024 Integrated System Plan published by AEMO, which forecasts a quadrupling of CER by 2050, with forecast total rooftop solar capacity growing to 72 GW (pp. 50/51). AEMO then discusses various types of storage, with community batteries coming under the "shallow storage" category defined as "*grid-connected storage to dispatch electricity for less than four hours, valued for both their system services and their energy value" (p. 66).*

AEMO further notes the projected significant contribution to be made by shallow storage:

Intra-day shifting is achieved through both consumer-owned storage and shallow utility storage, with the latter also focused on power system services. In total, approximately 17.9 GW of utility-scale storage is forecast to be needed by 2030, with an optimal mix of 2.4 GW as deep, 4.8 GW as medium and 10.7 GW as shallow storage (p. 67)

Thus 60% of intra-day shifting is expected to be delivered by shallow storage by 2030.

3. Policy Framework

We think it is important that focus remains on the National Energy Objectives (NEOs) when reviewing proposed electricity framework changes. In particular, we note that in June 2023, the ECMC incorporated an emissions reduction objective (item c) into the National Energy Objectives(NEO):

"to promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to:

price, quality, safety, reliability and security of supply of electricity; and
the reliability, safety and security of the national electricity system; and
the achievement of targets set by a participating jurisdiction—
for reducing Australia's greenhouse gas emissions; or
that are likely to contribute to reducing Australia's greenhouse gas emissions."

4. Response to Energex Explanatory Statement in Support of the Revised Regulatory Proposal 2025-2030

Table 1 (p. 4) reviews that part of the Energex Explanatory Statement in Support of the Revised Regulatory Proposal 2025-2030 (combined with the revised Indicative Network Prices[1]) which specifically deals with LV utility scale storage. Our comments note the following:

a) We welcome what appears to be a reduction in the fixed network access charge for dynamic flex storage;

[1] https://www.aer.gov.au/documents/energex-901-2025-30-indicative-network-prices-november-2024

b) However, we note that this is still third highest out of the 6 DNSP examples reviewed[2], and believe there is room for further reduction;
c) We are disappointed that a reward component has not been provided for import and export at system critical periods. Again this compares poorly with its interstate colleagues, all of whom already offer some version of import and export reward rebate.
d) We note that it is proposed to introduce some such variant via a trial tariff at some point in the 2025-2030 TSS period. However no further details as to timing and quantum are provided. Given the important role of community batteries in the energy transition previously outlined, we would like to see these details included in the final documentation, rather than awaiting for a trial tariff.

We look forward to consideration of our comments by all parties.

Sincerely,

(signed)

Anne Kennedy
Chair
Zero Emissions Noosa Inc.
[redacted]

[2] See Appendix 1

TABLE 1 Analysis of Energex Amended Storage Tariff Arrangements	
Extract from Energex Explanatory Statement in Support of the Revised Regulatory Proposal 2025-2030	**ZEN comment**
P. 43 **6.4.1 Dynamic Flex Storage tariff** Our Initial TSS provided rationale and justification for the introduction of Dynamic Flex Storage tariffs. In Section 5.4.4 above we outline our engagement post-lodgement, the AER's Draft Decision and our consideration of the AER's Draft Decision in the context of our Revised TSS. In response to the AER's Draft Decision, the Dynamic Flex Storage tariff structure has been revised to remove critical peak prices. The Dynamic Flex Storage tariff is available for LV and HV connections. The LV version of the tariff is available to SACs. The HV version of the tariff will be available to CACs. Tariff structures are the same for both voltage levels.	• It is noted that the Dynamic Flex Storage Network Access tariff appears to have been reduced, and this is welcomed. According to our analysis, this will now be $2797 in 25/26, rising to $3699 in 29/30. • We point out however, that this is still considerably higher than that offered by several interstate DNSPs (see Appendix 1 comparative table). • We would therefore like to see further reduction, given the important role which storage will play in the energy transition. • We note also that, again in comparison with interstate DNSPs, there is no proposed import or export reward prices for times of peak solar export (peak import reward) or peak demand (peak export reward). • We note, however, that this is proposed under the dynamic price storage trial tariff to be introduced some time in the 25/30 period.) • We would therefore like to see the introduction of such a mechanism for the dynamic flex storage tariff, again as incentive to the roll out of low voltage community batteries.
P. 44 Eligibility for the tariff will be based on technical and operational considerations associated with the connection, including: • the connection demonstrating import from the network for the purpose of exporting back to the network, and • customers entering a dynamic connection agreement, which stipulates network-determined DOEs. The term "Dynamic Connection Agreement" is used by Energex to refer to any connection arrangements that involve a DOE. This could take the form	We agree with this proposal, as long as it does not introduce a qualification requirement of "system constraint" which had previously been cited.

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of: • a standard or negotiated connection agreement with a baseline zero export limit unless the DOE permits export • an Energy Queensland approved dynamic connection standard, or • any other arrangement agreed between Energex and the customer at the connection. Distribution Use of System (DUOS) rates for import and export demand will be initially set to zero. In response to the AER's Draft Decision and stakeholder engagement, indicative prices for our DUOS fixed charge for the Dynamic Flex Storage tariffs will be aligned in the first year to the fixed charge for the Large TOU Demand and Energy tariff. For consistency we have applied a proportional adjustment to fixed charges in the HV Dynamic Flex Storage tariff. For all storage tariffs, indicative rates apply zero Transmission Use of System and Jurisdictional Scheme volume rates to off-peak and shoulder periods. Fixed charges remain consistent with default tariffs.	This is appreciated.
P. 44 A Dynamic Connection Agreement allows Energex to offer a customer access to the network that differs from a traditional static "firm" capacity connection. It involves a customer accepting restrictions on its import or exports, in exchange for receiving a reduction in its network bill that reflects the lower network costs (current or expected) associated with a dynamically controlled service. Recognising the network benefits of load and generation flexibility and the potential for future cost avoidance through the operation of a DOE	We support this provided, as stated above, the restrictions on times of import and export relate only to those periods where battery import and export are in conflict with system demand, eg the battery does not import at times of peak demand, and does not export at times of peak solar production. We emphasize this because the previous reference to "system constraint" appeared to limit the roll out of community batteries and not enable their installation in areas where there was no system constraint.
P. 44 Our proposed approach links the rates to the on-going suite of standard tariffs and so no longer involves separate calculation. This approach is a	

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starting point, addressing stakeholder and AER feedback with respect to the level of the fixed charges and will be reviewed over time. These tariff rates are attractive with respect to alternative non-storage tariffs. We consider the Dynamic Flex Storage tariff is flexible enough to accommodate different types of storage customers and scalable to allow expansion as more customers participate. For more detail about dynamic connections including allocation and application processes see Appendix A, Appendix G for a process map on the dynamic connection agreement and a case study at Appendix G.	
P. 45 **6.4.2 Trial storage tariffs** We will trial a Dynamic Price Storage tariff and a new Dynamic Reward (secondary) tariff during the 2025–30 regulatory control period, rather than including these tariffs in our TSS (see Appendix E). However, we have sought to include these tariffs in the TSS through the contingent tariff adjustment process in the event learnings from these trials and further stakeholder consultation warrants inclusion.	It is not clear whether this category is similar to dynamic flex, with the inclusion of rewards for appropriate import and export to be included. It is disappointing that these rates are not available at this time, (nor when they will be made available) as storage customers are unable to decide between dynamic flex storage rates and dynamic price storage rates for the complex assessments in developing a business case.
The Dynamic Price primary tariff will include the following dynamic charges: • Critical Peak Period import charge ($/kVA, up to 40 hours per year, 80 half hours), assumed during high network demand periods, to discourage import. • Critical peak export charge (applied > 1.5kW, $/kW, up to 40 hours per year, 80 half hours), assumed during low network demand periods, to discourage export. The Dynamic Reward secondary tariff will include the following dynamic charges: • Critical peak import reward charge ($/kWh), assumed during minimum	In general, we support this approach which is one most other DNSPs have already introduced. However, as stated above, the details of this proposed trial tariff should be released as soon as possible, so that potential community battery proponents can develop their business case. The trial tariff should also clarify under what circumstances this dynamic reward tariff will be made available, again relating to our concerns that it might only be made available in circumstances of “system constraint”.

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network demand periods, to encourage import. • Critical peak export reward charge ($/kWh), assumed during high network demand periods, to encourage export.	

APPENDIX 1

COMPARISON OF STORAGE TARIFFS BY VICTORIAN, NEW SOUTH WALES AND QUEENSLAND DNSPs as at 1/1/2025

DNSP	STATE	FIXED NETWORK ACCESS CHARGE	IMPORT REBATE	EXPORT REBATE
Powercor	Victoria	45 cents/day $164 pa	-1.5 cents/kWH (between 10am-3pm)	-1.0 cents/kWh (between 4pm-9pm)
United Energy	Victoria			
Citipower	Victoria			
Jemena	Victoria	$3629	-1.5 cents/kwH (between 10am-3pm Sep-May)	-1.5 cents/kWh (between 3-9 pm all year)
Essential Energy	NSW	$2.0579/day ($751.1335 pa)	0	-4.8793 cents/kWh (5-8pm)
Endeavour	NSW	158.77 cents/day ($579 pa)	0	-11.33 cents/kWh (high season) (4-8pm business days November – March) -3.36 cents/kWh (low season) (4-8 pm business days April to October)
Ausgrid	NSW	1205.4794 c/day ($4400 pa)	-41.8 cents/kWh	-94.6 cents/kWh~~H~~
Energex	QLD	$7.663/day ($2797 pa)	0	0