evoenergy

Attachment 4: Revised Tariff Structure Statement

Revised regulatory proposal for the Evoenergy electricity distribution determination 2024 to 2029

30 November 2023

Contents

List of tables **3**
List of figures **4**
List of appendices **5**
1. Introduction **6**
2. Overview **7**
3. Tariff classes and allocations **9**
4. Complying with pricing principles **10**
4.1. Two-step framework 10
4.2. Compliance 12
5. Tariff structures **13**
5.1. Residential tariff reforms 13
5.2. Commercial tariff reforms 18
5.3. Evoenergy's proposed tariffs and structure 27
6. Tariff assignment **30**
6.1. Residential 30
6.2. LV Commercial 32
6.3. HV commercial 34
6.4. Tariff assignment summary 35
7. ACT export tariff transition strategy **36**
7.1. Large-scale battery tariffs 38
7.2. Summary of the basis for export prices 39
8. Alternative Control Services **40**
Glossary **44**

List of tables

Table 1 Summary of proposed tariff reforms 7
Table 2 Avoidable and standalone costs, 2024/25 ($'000) 11
Table 3 LRMC of import services by tariff class (2024/25, $2024) 11
Table 4 LRMC of export services by tariff class (2024/25, $2024) 11
Table 5 Charging windows for proposed residential demand tariff 15
Table 6 Tariff codes for new tariffs targeted at large-scale storage 18
Table 7 Proposed tariff structure targeted at large-scale batteries 19
Table 8 Application and eligibility criteria for capacity charge review 24
Table 9 Revenue forecast analysis for 2022/23 26
Table 10 Proposed tariff structure for sub-transmission customers 27
Table 11 Proposed residential tariffs and structures 28
Table 12 Proposed LV and HV commercial tariffs and structures 29
Table 13 Residential tariff assignment policy 31
Table 14 LV commercial tariff assignment policy 33
Table 15 HV commercial tariff assignment policy 34
Table 16 Summary of tariff assignment criteria 35
Table 17 Basis of export charges and rewards 39
Box 1 Formula for metering services 41
Box 2 Formula for quoted services 42

List of figures

Figure 1 Current and proposed residential demand tariff 15
Figure 2 Current and proposed residential TOU tariff 17
Figure 3 Proposed residential TOU and demand tariffs 17
Figure 4 Capacity charge review example 25

List of appendices

Appendix	Document	Author
Appendix 4.1	Tariff Structure Explanatory Statement	Evoenergy
Appendix 4.2	Indicative Pricing Schedule	Evoenergy
Appendix 4.3	Demand for flexible load tariffs in the Australian Capital Territory	The Centre for International Economics

1. Introduction

Evoenergy owns and operates the electricity network in the Australian Capital Territory (ACT) and gas networks in the ACT and surrounding New South Wales (NSW) areas. Within the ACT, Evoenergy operates and maintains a network of poles, wires, transformers and other equipment to distribute electricity safely and reliably to consumers. The Evoenergy network is an essential part of the process of moving electricity from where it is generated to where consumers use it.

The National Electricity Rules (NER) require network businesses like Evoenergy to prepare a Tariff Structure Statement (TSS) that describes its network tariff structures and how these have been developed in accordance with the pricing principles under the NER. Once approved by the Australian Energy Regulator (AER), a tariff structure statement applies for the duration of the regulatory period, which is typically five years.

This revised TSS provides Evoenergy's customers and other stakeholders with information on Evoenergy's proposed network tariffs for the 2024−29 regulatory period and how the tariff structures have changed since the prior 2019−24 regulatory period. The term 'revised' refers to the fact that the TSS has been updated since Evoenergy's initial proposed TSS was submitted to the AER in January 2023.[1] The updates include Evoenergy's responses to the AER's draft decision on the TSS (issued in September 2023),[2] additional feedback received from stakeholders, and updates to account for the latest available information at the time of Evoenergy's revised proposal.

This revised TSS should be read in conjunction with Evoenergy's revised Tariff Structure Explanatory Statement (TSES) contained in Appendix 4.1. The TSES provides a more detailed explanation of Evoenergy's tariffs, how they have been developed in accordance with the requirements of the NER, and how Evoenergy has responded to the AER's draft decision and other stakeholder feedback. Both the TSS and TSES form part of Evoenergy's regulatory proposal for the 2024−29 regulatory period.

This is Evoenergy's third TSS. Once approved by the AER, the TSS will remain in place for the entire regulatory period (1 July 2024 to 30 June 2029) unless an event occurs that is beyond the reasonable control of Evoenergy and could not reasonably have been foreseen, and the AER approves a change.

In accordance with the requirements of the NER, this revised TSS and TSES includes the following elements:[3]

- a description of the tariff classes into which customers will be divided (section 3 of the TSS and section 4.1 of the TSES);
- the proposed policies and procedures that will apply to assign or reassign customers from one tariff to another (section 6 of the TSS and section 12 of the TSES);
- a description of the strategies for the introduction of export tariffs (section 7 of the TSS and section 9 of the TSES);
- the structures and charging parameters for each proposed tariff (section 5 of the TSS and sections 4 and 11 of the TSES); and
- a description of the approach to setting each tariff in each year of the regulatory period (section 4 of the TSS and section 6 of the TSES).

[1] Evoenergy, *Appendix 7.1: Tariff Structure Explanatory Statement for the ACT electricity distribution network 2024–29*, January 2023.

[2] AER, Draft Decision Evoenergy Electricity Distribution Determination 2024 to 2029 (1 July 2024 to 30 June 2029) Attachment 19 Tariff structure statement, September 2023.

[3] NER, Clause 6.18.1A(a)

2. Overview

Evoenergy's TSS for the 2024−29 regulatory period continues to transition Evoenergy's network tariff structure along the cost-reflective spectrum. In preparation for this TSS proposal, Evoenergy considered the expected future uses of the ACT electricity network and consulted widely with the ACT community, retailers, and the ACT Government about their preferences regarding network tariffs. In conclusion, Evoenergy has developed a series of proposed tariff reforms suitable for the 2024–29 regulatory period. These reforms are presented in Table 1 below.

The proposed changes to the ACT electricity network tariff structure aim to strike a balance between the need to respond to the pace of the ACT's energy transition, while maintaining simple tariffs, and improving equity in the network pricing structure.

Importantly, there are a number of key changes in Evoenergy's revised TSS compared to the initial TSS submitted to the AER in January 2023. This includes the removal of the residential export tariff, changes to residential charging windows, and other targeted simplification to Evoenergy's proposed residential tariffs. The proposed changes are a direct response to stakeholder feedback and new information which has become available since Evoenergy's initial TSS proposal. A detailed explanation of the changes, the reasons for them, and Evoenergy's engagement with key stakeholders is outlined in the TSES. In particular, section 9 of the TSES addresses Evoenergy's proposed withdrawal of the residential export tariff for the 2024−29 period. The TSES also responds in detail to matters raised in the AER's draft decision, including consideration of tariff options to support EV charging (section 10 of the TSES).

This revised TSS summarises the key elements of Evoenergy's proposed tariff structures and tariff assignment policies. It is important that the revised TSS and TSES are both read together for a complete explanation of Evoenergy's proposed tariffs, tariff strategies, and how these were developed for the 2024−29 regulatory period.

Table 1 Summary of proposed tariff reforms

Tariff	Tariff reforms proposed for 2024–29
Residential	
New time-of-use (TOU) tariff	• Introduce a low 'solar soak' charge, between 11am− 3pm daily, to encourage customers to soak up solar energy that is exported to the electricity network, and gradually introduce customers to export-related pricing concepts. • Introduce an extended evening peak period (5pm – 9pm) compared to the existing TOU tariff (5pm – 8pm). This responds to trends in residential network demand and will help manage the risks of EV charging in the evening, which can impose higher network costs. • No shoulder periods, providing a simpler and more cost-reflective tariff design.
New demand tariff	• Introduce a low 'solar soak' charge, between 11am− 3pm daily, to encourage customers to soak up solar energy that is exported to the electricity network, and gradually introduce customers to export-related pricing concepts. • Introduce an off-peak demand charge between 9pm−9am. • Introduce a seasonal peak demand charge with higher demand charges in the high season (winter months from 1 June to 31 August), and lower charges in other months. • Introduce an extended evening peak period (5pm–9pm) compared to the existing demand tariff (5pm–8pm), to manage the risks of higher evening residential loads (e.g. due to EV fast charging) that can impose higher network costs

Low voltage (LV) commercial	
kVA capacity tariffs	• Provision to review capacity charges in extenuating circumstances, as negotiated between Evoenergy and individual customers.
Streetlighting tariff Small unmetered loads tariff	• Remove fixed charge; only apply energy consumption charge.
Large-scale battery tariff	• New tariff for large-scale, stand-alone batteries (and other storage technologies) connected to the distribution network. • Different peak and off-peak periods depending on the location of the ~~large-scale battery~~customer (residential or commercial area).
High voltage (HV) commercial	
All tariffs	• Provision to review capacity charges in extenuating circumstances, as negotiated between Evoenergy and individual customers.
Large-scale battery tariff	• New tariff for large-scale, stand-alone batteries (and other storage technologies) connected to the distribution network. • Different peak and off-peak periods depending on the ~~large-scale batteries'~~customer's location (residential or commercial area). • Different prices to LV commercial large-scale battery tariff, above.
Individually calculated tariffs for customers connecting to the sub-transmission network	• New individually calculated tariffs for customers that connect at 66kV and above. • The tariff structure includes a peak demand charge, peak export rebate, capacity charge and, if necessary, export charge and import rebate. • A net consumption charge will be included to recover jurisdictional scheme costs. • All prices are to be based on long-run marginal cost (LRMC), with residual costs recovered from the capacity charge. • Tariffs will be tailored to reflect customers network use, any pre-funding of network assets, and the circumstances that apply to the relevant part of the sub-transmission network.

Note: All times refer to Australian Eastern Standard Time (AEST).[4]

During the 2019–24 regulatory control period, Evoenergy trialled a residential battery tariff and a large-scale battery tariff. These tariffs were refined throughout the trial period. Lessons learned from the residential battery tariff trial have been incorporated into the revised demand and TOU tariffs. The large-scale battery tariff trial is proposed for introduction to Evoenergy's network tariff structure in the 2024–29 regulatory period (to apply to large-scale, stand-alone batteries and other storage technologies).

In the 2024−29 regulatory period, Evoenergy is considering a tariff trial for EV charging stations to promote efficiency on the network because EV charging stations have the potential to impose costs on the network due to very high levels of demand. The structure of this trial tariff will be finalised following further analysis and closer to the proposed commencement of the trial. Prior to commencing the tariff trial, Evoenergy will engage further with EV public charging proponents and other interested stakeholders, including retailers.

[4] AEST is the time zone 10 hours ahead of Coordinated Universal Time (UCT+10hours). AEST is used in the ACT from the first Sunday in April to the first Sunday in October. Australian Eastern Daylight Time (AEDT) is used during the remainder of the year (UTC +11hours). TOU times will therefore advance by 1 hour from the first Sunday in October until the first Sunday in April each year.

Subject to approval by the AER, the tariff structures and assignment policy contained in the revised TSS will form the basis of Evoenergy's annual pricing proposals for the financial years 2024/25 to 2028/29. The AER will conduct a review process for annual prices to check consistency with the TSS, compliance with pricing principles, and other requirements, such as the control mechanism under the AER's final distribution determination for Evoenergy.

3. Tariff classes and allocations

Evoenergy serves approximately 210,000 residential and commercial electricity consumers assigned to three groups – called tariff classes – based on their characteristics.

Tariff classes are important for consumers because they determine the selection of tariffs that are available to them. The NER require tariff classes to be established by grouping retail customers on an economically efficient basis and avoiding unnecessary transaction costs. Evoenergy, therefore, groups consumers into tariff classes based on the following two features that reflect the way consumers use Evoenergy's network.

- the nature of their connection activities – residential or commercial; and
- the level of the network to which they connect – LV or LH.

Customers on the LV network connect at less than 11,000 volts (11kV), which are typically connections at the street level. Both commercial and residential customers can connect to the LV network; hence, there are two tariff classes for the LV network – LV residential and LV commercial.

Customers connected to the HV network connect at or above 11 kV. These customers are required to make a capital contribution towards their connection assets and transformers. These customers also have the option of owning and operating their own HV assets. There is only one tariff class for the HV network because only commercial customers can connect to that part of the network.

On this basis, Evoenergy has and proposes to continue to have the following three tariff classes.

1. LV residential customers
2. LV commercial customers
3. HV commercial customers.

4. Complying with pricing principles

This section outlines Evoenergy's overarching, two-step approach to setting the price levels for each tariff component of each tariff.

4.1. Two-step framework

Evoenergy determines the prices for each tariff using the following two-step methodology.

1) Calculate the total level of revenue to be recovered from each tariff, which must be equal to the total efficient cost of serving those customers.
2) Set the price of each tariff component so that, based on expected customer numbers and demand, Evoenergy expects to recover the amount calculated in step one from each tariff.

Step 1: Estimate total efficient cost

Evoenergy calculates the level of revenue it expects to recover from each tariff,[5] equal to the total efficient cost of serving the customers that are assigned to that tariff. This is so that when summed with the revenue it expects to recover from all other tariffs, Evoenergy can expect to recover the level of revenue approved by the AER.

In practice, Evoenergy achieves this result by estimating the level of revenue it expects to recover from network charges that are based on efficient, long run marginal cost (LRMC) estimates. It then allocates the remainder of its approved revenue (residual costs) across tariffs with reference to the previous year's allocation of residual costs and the current year's forecast consumption.

This allocation methodology for residual costs accounts for the effect on retail customers of tariff changes from the previous regulatory year.[6] The total efficient cost of serving customers on each tariff is then equal to the revenue expected to be recovered from an efficient, LRMC-based price signal and the residual costs allocated to that tariff.

To avoid cross-subsidies between customers in different tariff classes, Evoenergy checks that the revenue recovered from customers in each tariff class is:[7]

- higher than the costs that could be avoided if it did not provide network services to those customers (the avoidable cost); and
- lower than the cost of providing network services to those customers only (the standalone cost).

Table 2 presents Evoenergy's estimates of the standalone and avoidable cost of providing services to each tariff class in comparison to the revenue it expects to recover from distribution use-of-system (DUOS) charges in 2024/25.

[5] NER, clause 6.18.5(g)(i)-(ii).
[6] NER, clause 6.18.5(h).
[7] NER, clause 6.18.5(e).

Table 2 Avoidable and standalone costs, 2024/25 ($'000)

	Avoidable cost	DUOS charges	Standalone cost
Residential	$19,483	$75,113	$149,588
LV commercial	$14,239	$77,118	$144,343
HV commercial	$2,484	$13,359	$132,589

Step 2: Set prices that recover the total efficient cost

The second step is to set a price for each tariff component that recovers the level of revenue allocated to that tariff in step one, with regard to Evoenergy's forecast of customer numbers and consumption. Evoenergy's tariffs are based on the LRMC of providing network services to the customers assigned to those tariffs.[8] The LRMC is the future network costs that could be avoided by a change in a customer's use of the network, and its estimation is explained in section 7.1 of the TSES.

Evoenergy typically sets the peak demand and/or peak energy price in a tariff based on the LRMC of providing import network services. Given that additional exports can also impose costs on the network in the middle of the day, Evoenergy bases export prices on the LRMC of providing export services.

Evoenergy's estimates of the LRMC of providing import and export services are presented in Table 3 and Table 4, respectively. Evoenergy derived these estimates using the average incremental cost approach, as explained in section 7.1 of the TSES.

Table 3 LRMC of import services by tariff class (2024/25, $2024)

Tariff class	Long run marginal cost
Residential	$125 per kW per annum
LV commercial	$60 per kW per annum
HV commercial	$46 per kW per annum

Table 4 LRMC of export services by tariff class (2024/25, $2024)

Tariff class	Long run marginal cost
Residential	$23 per kW per annum
LV commercial	0
HV commercial	0

Note: Given the removal of residential export tariff, the export LRMC estimate has not been updated in Evoenergy's revised TSS and reflects the value used in Evoenergy's proposed TSS (January 2023).

[8] NER, clause 6.18.5(f).

Since these LRMC-based prices reflect only future costs, and the majority of Evoenergy's costs are historical costs, Evoenergy then sets other fixed and variable charges in the tariff so that it expects to recover the total efficient cost of serving those customers, as determined in step one.

Evoenergy describes key reforms to the structure of its tariffs in section 5 below and in section 11 of its TSES. Evoenergy's export tariff transition strategy is described in section 7 below and section 9 of the TSES.

Throughout the price-setting process, Evoenergy analyses the effects on customer network bills and tailors its approach to avoid unacceptable bill impacts.[9] Evoenergy presents its assessment of customer bill impacts in section 14 of the TSES. In evaluating the effect on customers, Evoenergy also ensures that its prices comply with the side constraint specified in the NER, and the requirements of the AER's two-stage annual pricing process review.

The outcome of Evoenergy's two-step approach to price-setting is that network tariffs reflect the efficient cost of providing services to its customers, consistent with the network pricing objective.

4.2. Compliance

Evoenergy's two-step approach to setting prices and how it complies with each pricing principle is described in more detail in sections 6 and 7 of the TSES.

By way of a broad summary of the six pricing principles in the NER, Evoenergy's approach ensures that:

- the revenue Evoenergy expects to recover from each tariff is equal to the total efficient cost of serving the customers that are assigned to that tariff, and Evoenergy expects to recover its AER-approved revenue;
- the revenue recovered from each tariff class lies between the standalone and avoidable cost of serving customers in that tariff class;
- each tariff is based on the LRMC of providing services to customers assigned to that tariff;
- the structure of each tariff is reasonably capable of being understood by customers;
- the structure of each tariff is reasonably capable of being incorporated by retailers into their contracts offered to customers;
- the proposed reforms and cost allocation do not give rise to any unacceptable customer bill impacts; and
- Evoenergy complies with all rules and applicable regulatory instruments, including jurisdictional obligations.

[9] NER, clause 6.18.5(h).

5. Tariff structures

Evoenergy's proposed network tariff reforms are targeted at more effectively signalling the future cost of providing network services. They ensure tariff structures remain simple and enable customers to manage the network component of their electricity bill. This section describes Evoenergy's tariff reforms for each tariff class.

Evoenergy describes its existing tariff structures and charging parameters in section 4.4 of its TSES.

5.1. Residential tariff reforms

As described in section 3 of the TSES, Evoenergy expects increased uptake of solar, batteries, EVs and home energy management systems (HEMS) during the 2024–29 regulatory period. The network load associated with these technologies will differ considerably from the current network load. The proposed tariff reforms, therefore, address the times and seasons at which the network is expected to peak in the future.

Evoenergy proposes to introduce a new residential TOU tariff and a new residential demand tariff from 1 July 2024 that reflect:

- key learnings from Evoenergy's residential trial tariff during the 2019–24 regulatory period;
- forecast use of the network in the 2024–29 regulatory period; and
- extensive consumer engagement on tariff design.

Evoenergy proposes to maintain the existing residential demand (codes 025 and 026) and TOU (codes 015 and 016) tariffs to avoid unexpected changes and bill impacts for those customers already on cost-reflective tariffs. However, customers on the existing tariffs will have the option to opt-in to the new residential demand and new TOU tariffs during the 2024–29 regulatory period.

The structure of the proposed residential tariffs has been informed by detailed network analysis, described in section 11.1 of the TSES.

New residential demand tariff

Evoenergy proposes to introduce a new residential demand tariff from 1 July 2024. The new tariff is based on detailed network analysis (described in section 11.1 of the TSES), the learnings from its residential battery tariff trial during the 2019–24 regulatory period, and extensive stakeholder engagement. The new residential demand tariff includes the following key features:

- a relatively low solar soak energy charge between 11am–3pm AEST;
- an off-peak demand charge between 9pm–9am AEST; and
- a lower peak demand price outside of winter months (June, July and August).

Solar Soak period

Evoenergy proposes to apply a solar soak period between 11am–3pm (AEST) to signal that network costs are relatively low at this time of the day and help manage exports on the network. That is, during the solar soak period, electricity is typically generated by household solar PV systems and exported into the electricity network, creating a potential surplus of electricity in the network.

With the ongoing uptake of solar, Evoenergy must plan to manage increased levels of reverse power flows onto the ACT electricity network. Introducing a solar soak charge into key residential network tariffs aims to encourage the absorption of some of those reverse power flows, thereby constraining the need for additional capital and network maintenance expenditure.

The anticipated benefits of a solar soak charge are that it has the potential to:

- shift some network demand to meet the additional energy supplied by solar generation;
- help the network efficiently integrate technologies such as EVs and batteries as recharging these technologies may be shifted to the middle of the day when it is relatively cheap to use the electricity network;
- shift some consumption away from the peak evening period;
- help prevent voltage issues associated with solar-driven reverse flows on the network; and
- allow Evoenergy to initially explore the potential for more simple charges, like the solar soak, to manage exports prior to considering more complex alternatives, such as export pricing for residential customers.

Off-peak demand charge

Evoenergy is aware of the potential for the uptake of renewable technologies with very peaky loads to create new import peaks outside the peak window (5pm to 9pm AEST). This could, for example, materialise from concentrated fast charging of EVs overnight. Hence, Evoenergy proposes to introduce an off-peak demand charge between 9pm and 9am AEST to signal that high demand levels could lead to the formation of new peak demands requiring network upgrades (to accommodate the new peak demand level). The off-peak demand charge is designed to signal the network cost associated with the potential new peak demand levels.

The proposed introduction of an off-peak demand charge will achieve the dual purpose of creating an incentive to smooth new peaky loads overnight while also providing a price signal during the morning peak period. The persistence of a demand-based price signal until 9am will help manage the relevant risks presented by the electrification of gas heating in the mornings, as discussed in the previous section.

In summary, the inclusion of an off-peak demand charge is designed to send a price signal about the network costs associated with the potential formation of new demand peaks in the future that may occur with the advent of new technology (particularly EV fast charging). The charge also aims to encourage customers to monitor network usage throughout the day, including in the off-peak period. The proposed reform will render the new residential demand tariff more cost reflective than the existing residential demand tariff (025, 026), which sends no price signal outside the peak demand period.

Seasonal peak demand charge

Evoenergy's existing residential demand tariff has a seasonal structure. Still, Evoenergy has previously not actioned this seasonal structure and has kept the demand charge at the same level across all seasons. This has enabled ACT retailers and customers time to adjust to the concept of demand charging.

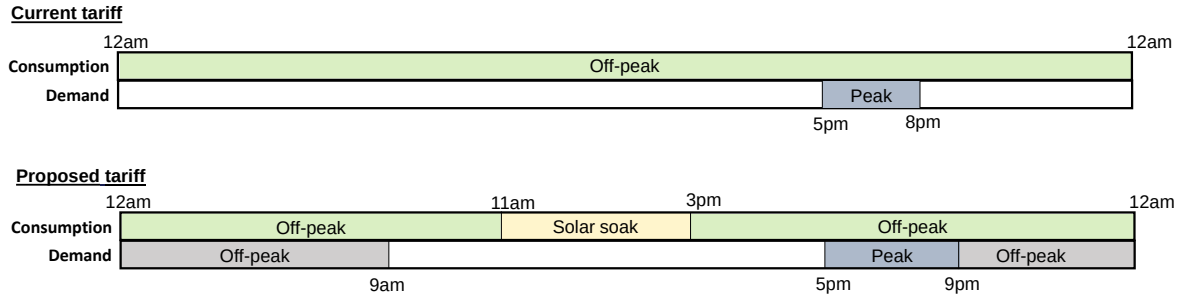
Evoenergy proposes a peak demand window of between 5pm–9pm AEST daily, based on the charging window analysis for the residential network (see section 11.1 of the TSES). This is one hour longer than the evening peak period of 5pm–8pm AEST within Evoenergy's existing residential demand tariff. The extension of the evening peak period reflects the latest available load profile analysis, which shows the persistence of high demand between 8pm–9pm AEST. The extended evening peak also provides an important price signal to encourage customers to avoid using high-powered appliances (such as EV fast-chargers) until later in the evening (after 9pm AEST) when residential demand is typically lower.

Evoenergy's charging window analysis also indicates that peak demand typically occurs in June, July and August. Evoenergy, therefore, proposes to apply a relatively lower peak demand price outside of winter months (June, July and August). This will improve the efficiency of the peak demand price signal in winter months and, at the same time, benefit customers in the short term through a lower peak demand price in non-winter months.

Proposed charging windows

Figure 1 summarises the charging windows in Evoenergy's current and proposed residential demand tariffs.

Figure 1 Current and proposed residential demand tariff



The charging windows for the proposed residential demand tariff are presented in Table 5 below.

Table 5 Charging windows for proposed residential demand tariff

Demand tariff	Charging windows (AEST)
Peak demand	5 pm–9 pm every day (The peak demand price will be lower outside of June, July and August)
Off-peak demand	9pm–9am every day
Off-peak consumption	3pm–11am every day
Solar soak consumption	11am–3pm every day

New residential TOU tariff

Evoenergy proposes to introduce a new residential TOU tariff from 1 July 2024. The new tariff is based on detailed network analysis (described in section 11.1 of its TSES), the learnings from its residential battery tariff trial during the 2019–24 regulatory period, and extensive consumer engagement.

In comparison to the existing residential TOU tariff (015, 016), the new residential TOU tariff (017, 018) includes the following key features:

- a solar soak period between 11am–3pm AEST;
- the removal of shoulder periods between 9am and 5pm, and between 8pm and 10pm AEST; and
- extension of the evening period by one hour, to between 5pm–9pm AEST.

Evoenergy's reasons for introducing a solar soak period are the same as the proposed residential demand tariff and are described in section 11.1 of its TSES.

Peak period

In the proposed residential TOU tariff, Evoenergy proposes to introduce an evening peak period between 5pm–9pm AEST daily. This is because Evoenergy's charging window analysis (section 11.1

of its TSES) indicates that peak demand on the residential network extends beyond 8pm, and typically occurs between 5pm–9pm AEST daily. This is also consistent with the peak period applied in the proposed residential demand tariff.

Like with the existing TOU tariff (015, 016), a morning peak period is also proposed to apply between 7am and 9am AEST. Evoenergy's proposed TSS, published in January 2023, did not include a morning peak period on the new residential TOU tariff. However, updated charging window analysis indicates growth in morning peak demand, in part driven by the transition of residential heating loads from gas to electricity. Therefore, Evoenergy's revised TSS now proposes to include a peak period between 7am–9am AEST to signal to customers the costs of using the network during the morning peak.

Evoenergy is not proposing to introduce seasonality in the peak period for the 2024–29 regulatory period to retain the simplicity of the TOU tariff and its role as an opt-out 'protection' mechanism for customers who prefer simpler tariffs. However, Evoenergy will consider introducing seasonality in the residential TOU tariff in the 2029–34 regulatory period if it is necessary by reference to the latest network load data and is supported by customers and retailers.

Removing shoulder period

A key theme of the feedback Evoenergy received from customers was their preference for simple network tariffs. Evoenergy, therefore, proposes to remove the two existing shoulder periods[10] in the proposed TOU tariff.

A higher price is no longer appropriate in the middle of the day because the residential demand is often very low during that time, enabling capacity for additional load on the network. Furthermore, generation from solar PV during the middle of the day adds to the capacity available on the network. It creates an important opportunity to encourage customers to 'soak up' solar energy to manage export-related network costs. Hence, removing shoulder periods aims to encourage (rather than discourage) usage during the middle of the day.

Removal of inclining block (or tiered) off-peak charges

Evoenergy's proposed TSS, published in January 2023, included an inclining block tariff structure as part of the proposed residential TOU tariff. This involved applying a low off-peak energy charge when hourly consumption is below 6 kWh between 8pm–9am AEST and a higher off-peak charge when hourly consumption is above 6 kWh between 8pm–9am AEST.

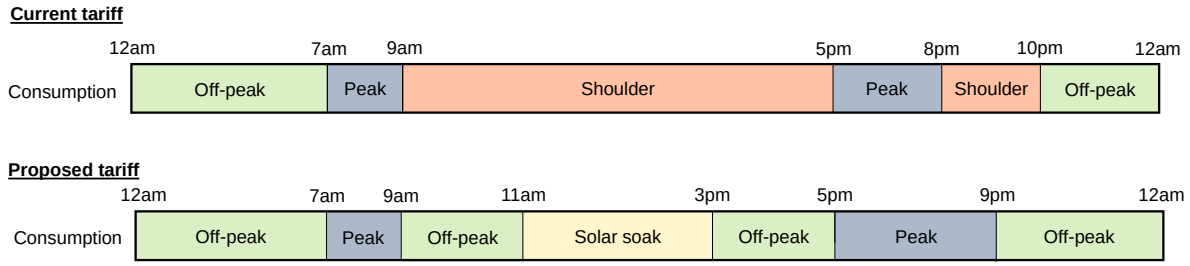
In response to feedback received on the proposed TSS, as well as further residential load profile analysis, Evoenergy has removed the inclining block charges from this revised TSS. The rationale for removing the inclining block charges is outlined in section 11.1 of its TSES.

[10] Shoulder periods in the current TOU tariff are 9am–5pm and 8pm–10pm.

Proposed TOU tariff structure

Figure 2 below summarises the charging windows in Evoenergy's current residential TOU tariff, and the charging windows for the proposed TOU tariff, as described above.

Figure 2 Current and proposed residential TOU tariff



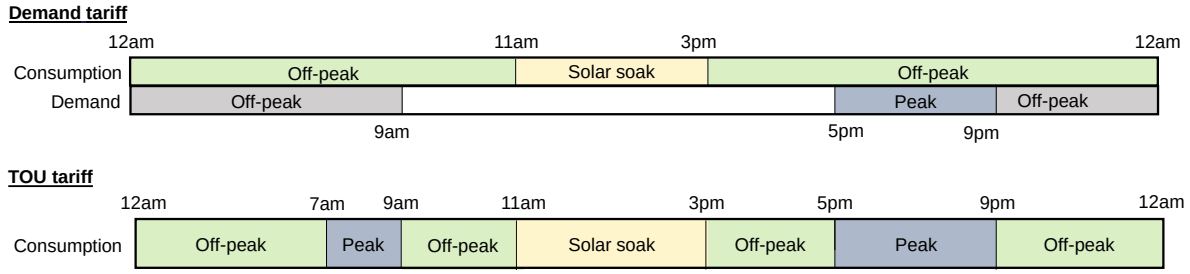
Alignment between proposed residential demand and TOU tariff structures

In response to customer and retailer feedback about simplifying the network tariff structure, Evoenergy has, as much as practical, aligned the charging windows on the proposed residential demand and TOU tariffs. That is, Evoenergy has deliberately set these key residential tariffs as follows.

- **Evening peak period**: both tariffs have an evening peak set at 5pm–9pm AEST daily.
- **Solar soak period**: both tariffs are set at 11am–3pm AEST daily.
- **Tariff components designed to encourage network use**: both tariffs contain price signals to encourage usage 9am–5pm AEST daily.

This alignment between the tariffs is outlined in Figure 3.

Figure 3 Proposed residential TOU and demand tariffs



Retailers of eligible ACT residential customers will have the opportunity to receive consistent network price signals when/if they choose to switch between the proposed residential demand and proposed TOU network tariffs,[11] thereby improving the simplicity of the network tariff structure.

[11] Residential customers are only eligible to switch to an alternative residential tariff once in a 12-month period.

5.2. Commercial tariff reforms

Evoenergy focussed on progressing the cost reflectivity of commercial tariffs with significant reforms introduced in the 2019–24 regulatory period. Evoenergy is proposing relatively minor amendments to the existing commercial tariff structure in the 2024–29 regulatory period since Evoenergy's LV and HV commercial tariffs are already highly cost-reflective, with most tariffs including TOU consumption charges, peak demand charges, and (in some cases) capacity charges. This aligns with the feedback received from commercial consumers, where Evoenergy heard they are not seeking changes to the existing tariff structure.

The commercial tariff reforms proposed for the 2024–29 regulatory period continue refining the cost reflectivity of ACT network tariffs. The commercial tariffs that Evoenergy proposes to change structurally are the Streetlighting and Small unmetered tariffs. Minor amendments are also proposed for commercial tariffs containing a capacity charge. The reforms also aim to address emerging renewable technology trends, including the anticipated introduction of stand-alone, grid-scale batteries, including community batteries. Hence, Evoenergy is proposing the introduction of a new tariff targeted at large-scale batteries that connect to the ACT distribution LV or HV network. The proposed changes reflect:

- key learnings from Evoenergy's large-scale battery trial tariff during the 2019–24 regulatory period;
- forecast use of the network in the 2024–29 regulatory period; and
- consumer engagement on tariff design.

Notably, the major key change to Evoenergy's commercial structure is the proposed introduction of a new individually calculated tariff structure for large, HV customers seeking to connect directly to Evoenergy's sub-transmission network in the 2024−29 regulatory period. A detailed explanation of the need for individually calculated tariffs is provided in section 11.2 of its TSES.

New tariffs targeted at large-scale batteries

A variety of large-scale batteries are expected to connect to the ACT electricity network in the coming years. Evoenergy, therefore, trialled a tariff designed for large-scale batteries during the 2019–24 regulatory period, which provided Evoenergy with the opportunity to test customer responses to the highly cost-reflective price signals and refine the tariff in a trial setting. The trial was particularly important given that large-scale batteries generally respond to a range of price signals (including wholesale prices and FCAS), not only network price signals. Evoenergy engaged significantly with large-scale battery operators and other stakeholders throughout the trial period to ensure the learnings from the trial were fully incorporated into the network tariff, which is now proposed for introduction in the 2024–29 regulatory period.

Evoenergy proposes to introduce four ~~large-scale battery~~ tariffs applicable to large-scale batteries (and other large-scale storage technologies) to refine the price signals according to customers' network connection (i.e. low or high voltage) and location (i.e. primarily residential or commercial). The tariff codes associated with these proposed tariffs are outlined in Table 6.

Table 6 Tariff codes for new tariffs targeted at large-scale storage

	Residential areas	Commercial area
LV connection	108	109
HV connection	123	124

The structure of these tariffs will be identical, except for the application of different charging windows depending on whether the connection is in a predominantly residential or commercial area (as determined by Evoenergy). Further, the price level of each tariff will differ depending on whether the ~~battery~~ customer is connected to the LV or HV network.

The structure of these new tariffs is summarised in Table 7, and then described in more detail in the remainder of this subsection. It is also relevant to note that customers assigned to this tariff may be eligible for a reimbursement of avoided TUOS costs and/or subject to a payment of incurred TUOS costs. The avoided/incurred TUOS will be settled, between Evoenergy and the ~~battery operator~~customer, externally to the tariff structure.

*Table 7 Proposed tariff structure targeted at large-scale batteries **and other large-scale storage technologies***

Tariff component	Description
Seasonal peak demand charge	Based on a customer's maximum demand (kVA) in a 30 minute interval in the billing period (typically one calendar month) between: • 5pm–8pm daily AEST for connections in primarily residential areas; and • 7am–5pm weekdays AEST for connections in primarily commercial areas. This charge has the following seasonal elements: • lower charge applies during the 'low season' of winter and autumn months; and • higher charge applies during the 'high season' of the summer and spring months.
Net consumption charge	Applied to total electricity imported less total electricity exported
Capacity charge	This is based on a customer's maximum half-hourly demand (kVA) over the previous 13 months, including the current billing month.
Critical export rebate	Applied to exports during a critical peak export rebate event. Evoenergy will notify customers of up to six critical peak rebate events in a financial year and at least 48 hours before one commences. The maximum duration of each critical peak event is three hours. Customers who export during the critical peak event will receive a rebate based on the level of electricity exported (measured in kVAh) within the critical peak rebate event.
Critical export charge **(only in predominantly residential areas)**	Only ~~batteries~~ storage customers that connect in predominantly residential areas are subject to a critical export charge. Applied to exports during a critical peak event. Evoenergy will notify customers of up to six peak charge events in a financial year, and at least 48 hours before one commences. The maximum duration of each critical peak event is three hours. Customers who export during the critical peak event will pay the critical peak export charge based on the level of electricity exported (measured in kVAh) within the critical peak period, with a Basic Export Level of 2kWh per critical export event.

Seasonal peak demand charge

The seasonal peak demand charge signals the cost of importing electricity during peak periods when additional imports can contribute to the need to expand the network. Given that network expansions increase network costs, the peak demand charge is designed to reflect the cost associated with future network upgrades. Specifically, the peak demand charge is based on the LRMC of providing import services at the level of the network to which the ~~battery~~ storage customer connects (i.e., LV or HV). The demand charges also recover a portion of residual costs, which are relevant because batteries and storage technologies utilise the network when they import during peak demand periods.

The demand charge is applied to the customers' maximum half-hourly demand (measured in kVA) during the peak period in each calendar month. The definition of the peak period depends on whether the ~~battery~~ storage customer is connected in a primarily residential or commercial area of Evoenergy's network as follows:

- if the customer is located in a primarily residential area, the peak period is 5pm–8pm AEST daily all year-round; and
- if the customer is located in a primarily commercial area, the peak period is 7am–5pm AEST on weekdays all year-round.

The demand charge varies with the season, reflecting the different costs imposed on the network at different times of the year.

This ensures that Evoenergy signals its costs to large-scale batteries (and other large-scale storage technologies) at times that coincide with the periods when additional demand is expected to cause additional costs in the relevant area of the network.

Net consumption charge

Due to energy losses, large-scale ~~batteries~~ storage operates with a round-trip efficiency of less than 100 per cent. A ~~battery~~ storage customer will export (to the grid) less electricity than it imports (from the grid). From the perspective of the distribution network, the energy losses represent the 'net consumption' of electricity by the ~~battery~~ storage customer (electricity imported minus electricity exported). This net consumption incurs only a jurisdictional scheme charge, and there is no distribution or transmission charge because these network costs are reflected in the other tariff components.

Under ACT legislation, Evoenergy is obligated to make various jurisdictional scheme payments, which it recovers from customers through network tariffs.[12] Evoenergy applies jurisdictional scheme charges within the electricity consumption charges on its network tariffs. Since energy is lost during the process of a ~~battery~~ storage customer importing and then exporting electricity, it is appropriate for ~~a battery~~storage customers to pay for the jurisdictional scheme charges that would otherwise have been recovered from the consumption of the lost electricity.

Failing to recover these costs from large-scale batteries (and other large-scale storage technologies) would create a cross-subsidy between ~~large-scale batteries~~storage customers and other customers. Therefore, the tariff for large-scale ~~battery~~ batteries (and other large-scale storage technologies)~~tariff~~ includes a net consumption charge to recover jurisdictional scheme charges.

[12] At the time of writing, the jurisdictional schemes include an Energy Industry Levy, Utilities Network Facilities Tax, and Feed-in Tariffs for small, medium, and large scale generators.

Export critical peak rebate/charge

The export critical peak rebate and charge are designed to send a price signal to ~~battery~~ storage operators about the costs and benefits of exporting during nominated critical peak events. This charge/rebate recognises the ability of a large-scale ~~battery~~ storage customers to assist the distribution network by either reducing its export loads on the network at times of high solar output, or increasing exports when the network is experiencing high demand. The ~~battery~~ storage customer can also assist the network during times when there are generation shortages. However, such events are rare.

Under this arrangement, a large-scale ~~battery~~ storage operator will be notified of the timing of a 'critical peak' (CP) event up to 48 hours in advance. Depending on the type of critical peak event, the large-scale ~~battery~~ storage customer may receive a notification for either of the following.

- A **critical peak export charge (only in predominantly residential areas)** – is designed to discourage exports during critical peak events. This can help address rising voltage issues due to increased solar exports in residential areas and is expected to apply primarily during the middle of the day in spring and summer. During the critical peak charge event window, the ~~battery~~ storage customer will pay a charge for any exports (measured in kVAh) above a basic export level of 2kWh per critical export event. If the ~~battery~~ storage customer does not export above the basic export level during this period, then the export charge will be zero and, therefore, avoided.
- A **critical peak rebate** – designed to encourage exports during critical peak events. This can help address periods of high network demand and is expected to apply primarily during the morning and evening periods in summer. During the nominated period, the ~~battery~~ storage customer will receive a rebate from Evoenergy for any exports (measured in kVAh). If the ~~battery~~ storage customer does not export during this period, it will not receive any rebate.

The number of critical peak events will be limited to a maximum of six export charge events and six rebate events per financial year. The duration of any event will be limited to a maximum of three hours. This helps provide greater operational certainty to ~~battery~~ storage operators and more fairly share critical peak risk between the ~~battery~~ storage operator and Evoenergy.

Basic export level for the critical peak export charge

A basic export level reflects the network's capacity to accept supply from distribution customers with minimal or no further network investment.[13] It is the threshold under which customers are not charged for exports.

A critical peak event is triggered when there is a significant imbalance between demand and supply on the network, such that all additional exports contribute to the need for further network investment.

A critical peak event, therefore, reflects the circumstances in which a basic export level (BEL) is intended to allow DNSPs to signal their costs to customers using export charges, i.e. when accepting supply contributes to further network investment.

As a matter of principle, Evoenergy's view is that the basic export level should, therefore, be equal to zero during critical export events, such that critical export charges apply to all exports during critical peak events. The off-setting benefit for customers facing critical export charges would be that, outside of critical peak events, they never face export charges.

The AER did not approve Evoenergy's initially proposed BEL of zero for the critical export charge because it was not consistent with the expectation set out in the AER's export tariff guideline that 'a basic export level must always be greater than zero'.[14]

[13] NER, 11.141.13(b)(1)(i)
[14] AER, *Export Tariff Guideline*, May 2022, p 17

Evoenergy, therefore, proposes to adopt a nominally low BEL that is equal to 2 kVAh per critical export event.[15]

This is consistent with the approach that the AER accepted as reasonable for the BEL that applies to critical peak export events for Ausgrid's low voltage utility scale storage tariff.[16] Ausgrid similarly explained that an efficient BEL would be equal to zero for critical export events, but proposed the lowest BEL that it could practically apply (i.e., 1 kWh/hour during a peak event).[17]

Capacity charge

The capacity charge ~~for~~ within Evoenergy's tariff for ~~the~~ large-scale batteries (and other large-scale storage technologies)~~y tariff~~ is applied to a ~~battery's~~ storage customer's highest demand (measured in kVA) at any time of day during the previous 13 months.

It is an efficient and equitable way of recovering Evoenergy's residual costs and also avoids the need for a fixed charge.

It is efficient because a ~~battery's~~ storage customer's highest anytime demand over the previous 13 months is likely to be relatively constant (i.e. around its maximum rate of charging). This means that the capacity charge is relatively constant through time, which minimises any distortion to Evoenergy's efficient, LRMC-based price signals, consistent with the requirements of the NER.

The capacity charge is more equitable than a fixed charge because it scales the recovery of Evoenergy's residual costs to reflect the ~~battery's~~ storage customer's size/capacity rather than having a flat fixed charge. Further, if it were not for the capacity charge, Evoenergy would need to recover the resulting shortfall in residual costs by applying a fixed charge to ~~batteries~~storage customers.

Evoenergy's capacity charge does not disincentivise batteries (and other storage technologies) from charging on days when solar exports are peaking because it applies to maximum anytime demand *over the previous 13 months*. This means that in the likely event that a battery (or other storage technology) has already charged at its maximum rate over the previous 13 months, a decision to charge during a period of peak exports will not affect the capacity charge that it pays.

This is an example of why charges that do not vary with a customer's network use are an efficient means of recovering residual costs. That is, capacity charges have almost no effect on customer's marginal use of the network.

Avoided/incurred TUOS charge

Evoenergy is required to pay TUOS fees to transmission network operators. Under the NER, Evoenergy is required to make avoided TUOS payments to certain embedded generators over 5MW. This tariff extends avoided TUOS payments to all eligible large-scale batteries (and other large-scale storage technologies), even below the 5MW threshold. Evoenergy is proposing a symmetric arrangement where large-scale batteries (and other large-scale storage technologies) also pay for incurred TUOS costs. This is because, unlike traditional embedded generators (such as solar and wind farms), large-scale batteries (and other large-scale storage technologies) typically import and export electricity and can, therefore, increase or decrease Evoenergy's TUOS costs.

Under Evoenergy's existing suite of network tariffs, TUOS charges are recovered by spreading the costs across the customer base rather than charging each customer based on their actual incurred TUOS. This is because Evoenergy's customer base is relatively diversified, meaning it is difficult to identify when or if a particular customer contributes to Evoenergy's highest transmission demand.

[15] A critical peak event may range in duration between one and three hours long. To maintain simplicity of the tariff structure, Evoenergy specified a fixed BEL by reference to the mid-point duration of a peak event (two hours), and based on a nominally low BEL equal to 1kWh per hour.
[16] AER, Draft Decision - Ausgrid Electricity Distribution Determination 2024 to 2029 (1 July 2024 to 30 June 2029) Attachment 19 Tariff structure statement, September 2023, p 38
[17] Ausgrid, *Tariff Structure Statement Compliance Document*, January 2023, p 17 and footnote 29

This also allows for a simpler charging structure that is easier for customers to understand and provides greater predictability of network bills.

Large-scale batteries and other large-scale storage technologies have a significantly different relationship with the distribution network. They respond to market price signals to optimise energy imports and exports and actively participate in the wholesale electricity market. This allows large-scale batteries (and other large-scale storage technologies) to be highly responsive to price signals and contributes to improving network efficiency. Their relatively large size and active participation in energy markets mean that large-scale batteries (and other large-scale storage technologies) can increase or decrease maximum transmission demand, thereby directly impacting Evoenergy's TUOS bill. Therefore, ~~large-scale batteries~~these customers will be charged based on their actual incurred or avoided TUOS costs as follows:

- if the ~~battery~~ storage customer reduces maximum transmission demand, Evoenergy passes the TUOS saving to the ~~battery~~ storage customer via an avoided TUOS payment; and
- if the ~~battery~~ storage customer increases maximum transmission demand, the ~~battery~~ storage customer is charged based on the incremental increase in TUOS payments made by Evoenergy.

If the ~~battery~~ storage customer does not contribute to peak transmission demand in a given month, it will not pay the incurred TUOS charge. Similarly, if the ~~battery~~ storage customer does not reduce transmission demand, it will not receive an avoided TUOS payment. The accumulated monthly avoided/incurred TUOS payments will be reconciled and paid/received annually.

To account for uncertainty as to the effects of the ~~battery's~~ storage customer's operation on Evoenergy's TUOS bill, the avoided/incurred TUOS charges will be calculated retrospectively at the end of each calendar month. This is because it is not possible to determine, at any point in time, whether ~~the~~ a battery (or other storage technology) is contributing to an increase or decrease in the monthly maximum transmission demand. This also helps to ensure an equitable outcome for ~~battery~~ large-scale storage operators, who will be billed based on actual TUOS incurred or avoided. This approach is the most cost-reflective way to account for TUOS charges and rebates and avoids potential cross-subsidies between batteries and other customers.

Capacity charge review mechanism

Evoenergy's commercial tariffs for HV connections and the TOU kVA Capacity tariff (code 103) for LV commercial customers include a capacity charge used to recover residual network costs. The capacity charge is specified in cents per kVA per day and is applied to a customer's maximum demand over the previous 13 months (inclusive of the current month). The capacity charge promotes the equitable recovery of Evoenergy's residual costs by scaling a customer's contribution to the recovery of those costs (up or down) based on its maximum use of the network. That is, relatively more residual costs are recovered from customers with relatively higher maximum demand.

There are select instances in which a customer has a rare, one-off spike in demand. For example, an unusual spike in demand may be due to the testing of new equipment that is not representative of their typical network use. The affected customer has historically paid a higher capacity charge within their network bill, potentially for the next 13 months. While the capacity charge reflects the customers' actual use of the network, it does not reflect their typical use of the network.

Evoenergy, therefore, proposes to introduce a capacity charge review mechanism that customers can use in extenuating circumstances to mitigate the effect of the capacity charge on their network bill. Evoenergy has carefully designed this review mechanism to ensure its application is limited to extenuating circumstances rather than being routinely used by a customer to reduce their network bill.

A 'capacity charge review event' will only be triggered if Evoenergy approves the customer's written application. The application must be provided at least six weeks before the commencement of the capacity review window, allowing Evoenergy four weeks to review the application and notify the customer. This will allow two weeks between the final decision and the commencement of the capacity review period. The application criteria and eligibility criteria are set out in Table 8.

Table 8 Application and eligibility criteria for capacity charge review

Application criteria	Eligibility criteria
The length of the nominated capacity review event period.	The nominated capacity charge review event period must be no longer than two weeks.
Description of the extenuating circumstance that has led to the application.	Must be deemed by Evoenergy to be a reasonable motivation for the application.
The nominated maximum demand during the capacity review period.	Nominated maximum demand during the review period must be less than their maximum allowable capacity included in the customer's connection agreement.
Inclusion of previous applications for capacity charge review.	Customer must not have been the subject of a capacity review event in the previous 24 months.
Application must be submitted to Evoenergy at least 6 weeks before commencement of the capacity charge review period.	Customer has submitted a completed application at least 6 weeks before the commencement of the capacity charge review event.

Notwithstanding these four criteria, Evoenergy retains absolute discretion to accept or reject a capacity charge review. However, provided a customer meets the above criteria, Evoenergy will endeavour to approve the capacity charge review event.

Further, Evoenergy will endeavour to confirm whether a customer has met the criteria for a 'capacity charge review' in advance of the event to provide certainty to the customer and, if necessary, to work together to arrange a different capacity review window.

Charging arrangements

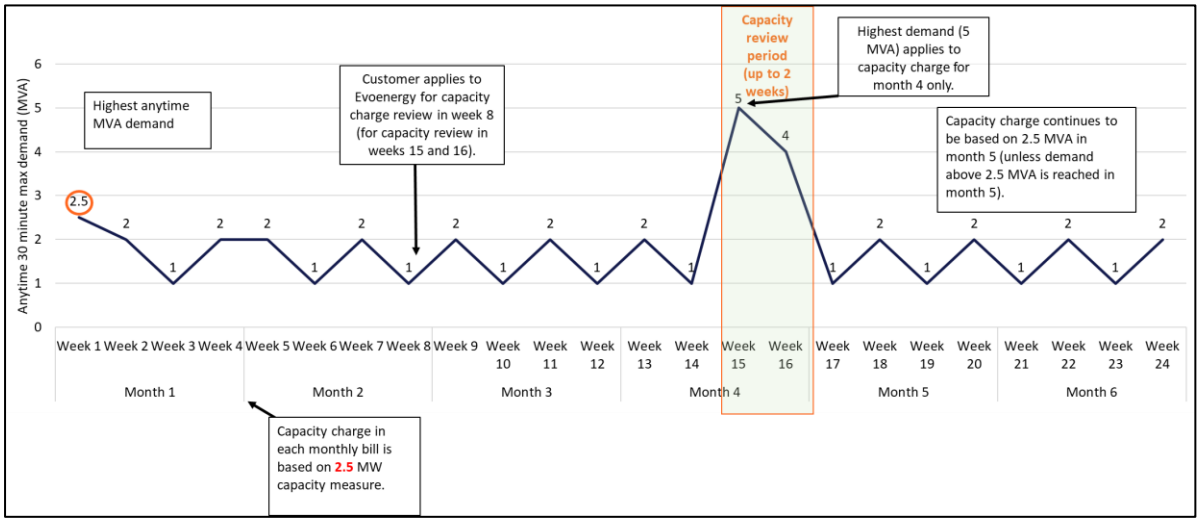
If Evoenergy approves an application for a capacity charge review, the capacity charge that applies to the customer during the review period will be based on the customer's highest half-hourly demand recorded (by the customer) during the review period. In the month following the capacity review period, the customers' capacity charge will revert to their maximum demand in the previous 13 month period, *including* the month following the review period and *excluding* the review period. In this way, the maximum demand level that is reached during the review period only applies to the capacity charge during the month of the review period. It does not continue to apply for the following 13 months (as per the current arrangements).

In the approved capacity review period (shaded in weeks 15 and 16), the hypothetical customer's maximum demand reaches 5 MVA. In month four, the customers' capacity charge is based on 5 MVA. After the review period (from month five), this customer's capacity charge reverts to being based on 2.5 MVA until a higher peak demand occurs.

Figure 4 shows an illustration of how the capacity charge mechanism could work for a hypothetical customer. In this example, a customer reaches a maximum demand of 2.5 MVA in week one, so their capacity charge is based on this level of demand in months one, two, and three. This customer intends to test new equipment in month four, which will cause a spike in their demand; hence, they apply to Evoenergy for a capacity charge review. Evoenergy reviews the customer's application against the eligibility criteria (see Table 8) and approves the application.

In the approved capacity review period (shaded in weeks 15 and 16), the hypothetical customer's maximum demand reaches 5 MVA. In month four, the customers' capacity charge is based on 5 MVA. After the review period (from month five), this customer's capacity charge reverts to being based on 2.5 MVA until a higher peak demand occurs.

Figure 4 Capacity charge review example



The two-week review period may occur across two calendar months. In this case, the date on which the highest demand occurs (within the review period) will determine which month the capacity charge review is based on. In the example above, if the capacity review period occurred during weeks 16 and 17 (rather than weeks 15 and 16), the capacity charge in month four would be based on 5 MVA, and the capacity charge in month five would be based on 2.5 MVA.

Removing network access charge for streetlighting and small unmetered loads

The Streetlighting tariff (code 080) and Small unmetered loads tariff (code 135) both currently include a network access charge and anytime energy consumption charge. For both tariffs, Evoenergy proposes to remove the network access charge from 1 July 2024.

The network access charges are applied per the National Metering Identifier (NMI). Each streetlighting and small unmetered load NMI may have multiple (possibly thousands) connection points. The number of connection points varies significantly for each NMI. Hence, applying a network access charge does not capture the true connection costs. For example, one unmetered load NMI may have 10 connection points, while another may have 10,000 connection points. Yet, all NMIs on these tariffs currently pay the same network access charge, resulting in an inequitable tariff outcome. Assigning all revenue recovery to the energy consumption charge will resolve this.

Evoenergy has reviewed the network revenue recovered from these tariffs (Table 9) and finds the network access charge is less than one per cent of the total revenue recovered from these tariffs. In light of this revenue analysis, Evoenergy expects the customer impact associated with the removal of the network access charge to be trivial. Furthermore, Evoenergy has discussed this proposal with retailers and consulted via the draft EN24 plan and has not received any negative feedback about this proposal.

Table 9 Revenue forecast analysis for 2022/23

Tariff	Forecast revenue from fixed charge	Forecast revenue from consumption charge	Fixed charge as a percentage of total tariff revenue
Streetlighting tariff (080)	$2,737	$2,413,309	0.1%
Small unmetered loads tariff (135)	$4,187	$767,364	0.5%

Source: Evoenergy 2022/23 annual pricing proposal.

New individually calculated tariffs for sub-transmission customers

Evoenergy proposes to introduce new individually calculated customer (ICC) tariffs for new customers that connect to its 132kV sub-transmission network. These ICC tariffs will be available for new customers with a network connection at 66kV or above.

Their introduction reflects Evoenergy's recent engagement with very large, relatively unique customers that are seeking to connect to Evoenergy's sub-transmission assets, but for whom Evoenergy's existing HV tariffs would be inefficient and prohibitively expensive.

Evoenergy's existing HV tariffs reflect the efficient cost of using both HV and sub-transmission assets. Therefore, the HV tariffs reflect more than the efficient cost of providing network services to customers using only sub-transmission assets. It is for this reason that Evoenergy proposes to develop new tariffs for these customers.

Customers that connect to Evoenergy's sub-transmission network will inevitably be very large, sophisticated network users with unique characteristics. For instance, a data centre may have a large flat load, whereas a large battery is likely to have a very peaky load. They may connect in different areas of the network, with different implications for our network costs, and they may or not export to the network. There is also likely to be significant variation in the extent to which these customers own and operate dedicated connection assets, and therefore use the shared network.

In light of these considerations, Evoenergy's view is that a one-size-fits-all approach will not promote efficient connection decisions and the efficient use of the network by sub-transmission customers. Consequently, Evoenergy proposes to apply ICC tariffs for sub-transmission customers.

Evoenergy's ICC tariffs for sub-transmission customers will be highly efficient, reflecting that these customers are very sophisticated network users and are able to accept advanced, cost-reflective price signals.

These ICC tariffs will comprise the tariff components described in Table 10.

Table 10 Proposed tariff structure for sub-transmission customers

Tariff component	Description
Peak demand charge	The peak demand charge will be based on the import LRMC of providing network services to the particular customer. It will apply to a customer's maximum demand (kVA) in a 30 minute interval in the billing period (typically one calendar month). The peak period for the peak demand charge (i.e. the times it will apply) will depend on the nature of peak demand in the specific location that the customer connects to the network. The peak demand charge may apply during critical peak events or during pre-defined time windows, dependent on the customer's preferences and the need for a strong price signal in that location (i.e. if the network is approaching constraint).
Capacity charge	The capacity charge will be used to recover residual costs in a way that is both efficient and equitable. It will be applied to a customer's maximum half-hourly demand (kVA) over the previous 13 months, including the current billing month.
Net consumption charge	Applied to total electricity imported less total electricity exported
Peak export rebate	This rebate will be based on import LRMC and will apply to a customer's exports, measured in kVAh, within the peak demand period described above.
Peak export charge	Evoenergy expects that exports from sub-transmission customers will generally not impose costs on the shared sub-transmission network, owing to the prevalence of load and the corresponding absence of low load events. However, if a particular customer's exports are expected to impose costs on the sub-transmission network, Evoenergy will apply a LRMC-based peak export charge, measured in kVAh. The export charge will apply to exports within the periods when peak export events are expected to occur in that particular location. Consistent with the storage tariffs, Evoenergy will apply a BEL that is equivalent to 1 kVAh per hour of the applicable peak export charging period.
Peak import rebate	If imports from a customer connected to the sub-transmission network can help to avoid future costs, Evoenergy will provide a customer with a peak import rebate, measured in kVAh, for imports during low load events. This rebate will be based on the applicable export LRMC.

Evoenergy will allocate residual costs to ICC tariffs, for recovery using the capacity charge, by reference to:

- the shared sub-transmission assets used by the customer, while accounting for the connection assets that the customer will own, operate and maintain, and any upgrades to shared network assets that the customer has already funded;
- the efficient cost of providing network services using those sub-transmission assets; and
- a customer's relative use of those sub-transmission assets, in comparison to other customers.

5.3. Evoenergy's proposed tariffs and structure

The two tables below summarise Evoenergy's current and proposed tariffs for residential and commercial customers, along with the structure applying to each tariff. The shaded rows shown the new tariffs Evoenergy proposes for the 2024−29 regulatory period.

Table 11 Proposed residential tariffs and structures

				Consumption charges (kWh)							Demand charges (kW)	
Tariff class	Tariff	Tariff code	Fixed	Any time	Block tariff	Peak	Shoulder	Off-peak	Solar Soak	Controlled load off-peak	Peak demand	Off-peak demand
Residential	Basic*	010	✓	✓								
	TOU	015	✓			✓	✓	✓				
	Demand	025	✓	✓							✓	
	New TOU	017	✓			✓		✓	✓			
	New Demand	023	✓					✓	✓		✓	✓
	Res 5000*	020	✓		✓							
	Res heat pump*	030	✓		✓							
	Off-peak (1) Night^	060								✓		
	Off-peak (3) Day & Night	070								✓		

*Closed to new customers.
^ The Off-peak (1) night network tariff is also available to LV commercial customers on the General, General TOU, or LV kW demand tariffs.
Table does not show metering capital and non-capital charges.

Table 12 Proposed LV and HV commercial tariffs and structures

Tariff class	Tariff	Tariff code	Fixed	Consumption charges (kWh)						Demand (kW)	Demand (kVA)	Capacity (kVA)	Export reward and/or charge (kVAh)
				Any time	Block tariff	Peak	Shoulder	Off-peak	Net consumption				
LV commercial	General*	040	✓		✓								
	General TOU	090	✓			✓	✓	✓					
	LV TOU kVA demand	101	✓			✓	✓	✓			✓		
	LV TOU kVA capacity	103	✓			✓	✓	✓			✓	✓	
	LV kW demand	106	✓	✓						✓			
	Streetlighting	080	✓	✓									
	Small unmetered loads	135	✓	✓									
	*LV Battery (Residential area)^*	108							✓		✓	✓	✓
	*LV Battery (Commercial area)^*	109							✓		✓	✓	✓
HV Commercial	HV TOU demand	111*	✓			✓	✓	✓			✓	✓	
	HV TOU demand network – Customer LV	121*	✓			✓	✓	✓			✓	✓	
	HV TOU demand network – Customer LV & HV	122	✓			✓	✓	✓			✓	✓	
	*HV Battery (Residential area)^*	123							✓		✓	✓	✓
	*HV Battery (Commercial area)^*	124							✓		✓	✓	✓
	Individually calculated tariffs								✓		✓	✓	✓

*Closed to new customers.
^ For the avoidance of doubt, these tariffs apply to large-scale, stand-alone batteries and other large-scale, stand-alone storage technologies.
Table does not show metering capital and non-capital charges

6. Tariff assignment

This section outlines the proposed tariff assignment policy for Evoenergy's network tariffs in the 2024–29 regulatory period. The proposed policy for residential customers is followed by the proposed policy for LV and HV commercial connections.

6.1. Residential

Primary tariff assignment

In the 2019–24 regulatory control period, residential ACT consumers with a smart meter were assigned by default to the residential demand tariff and can opt-out to the residential TOU tariff.

In the 2024–29 regulatory period, Evoenergy proposes to continue the theme of this assignment policy with the proposed residential demand and proposed TOU tariffs. Specifically, residential consumers with smart meters will be assigned by default to the proposed residential demand tariff (023, 024), with the choice to opt-out to the proposed residential TOU tariff (017, 018).

From 1 December 2017, the Residential Basic, Residential 5000, and Residential with Heat Pump tariffs have been closed to new Evoenergy customers because these tariffs are not sufficiently cost-reflective. Customers assigned to these tariffs can remain on them until they have a smart meter installed.[18]

From 1 July 2024, the existing residential demand tariff (025, 026) and TOU tariff (015, 016) will also be closed to new Evoenergy customers. Customers assigned to these tariffs can remain on them or can opt-in to the newly proposed residential demand (023, 024) or TOU tariff (017, 018). Given the Australian Energy Market Commission (AEMC) proposed roll out of smart meters, all Evoenergy residential customers will eventually be assigned to a residential demand tariff or TOU tariff.

Secondary tariff assignment

In the 2024–29 regulatory period, residential customers can continue to opt-in to one of the two controlled load ('off-peak') network tariffs. The off-peak tariffs (codes 060 and 070) apply to controlled loads to encourage electricity usage at off-peak times.

Summary of assignment policy for residential customers

Table 13 outlines Evoenergy's proposed residential tariff assignment policy for the 2024–29 regulatory period.

[18] Customers who receive a smart (Type 4) meter in circumstances where this was not customer-initiated (e.g. replacement due to meter failure) can wait up to 12 months before being assigned to the proposed residential demand tariff. This initiative was introduced through the AER's final determination for Evoenergy in the 2019–24 regulatory period.

Table 13 Residential tariff assignment policy

	Default	Opt-out options	Opt-in options
Residential – primary tariff			
New connection Customer initiated meter replacement Replacement meter customers (e.g., due to meter failure)*	Proposed residential demand tariff (codes 023, 024)	Proposed residential TOU tariff (codes 017, 018)	
Residential – secondary tariff			
All residential customers			Off-peak 1 and 3 (codes 060, 070)

Notes: Customers are ineligible to switch to one of these tariffs if they have been on the tariff in the previous 12 months.

When requested by retailers, under specific scenarios, Evoenergy offers to backdate a proposed demand tariff to a proposed TOU tariff once per connection in a 12-month period. Evoenergy reverses and reissues the network bill for no more than 120 calendar days for residential sites. This process applies to the proposed residential demand tariff only.

*Customers who receive a smart (Type 4) meter in circumstances where this was not customer-initiated (e.g. replacement due to a meter failure) can wait up to 12 months before being assigned to the proposed residential demand tariff. This initiative was introduced through the AER's final determination for Evoenergy in the 2019–24 regulatory period.

Consistent with the AER's decision for Evoenergy in the 2019–24 regulatory period,[19] customers who receive a smart meter as a replacement for a Type 5 or 6 meter can remain on their existing tariff for 12 months before moving to a more cost-reflective network tariff.[20]

Under this arrangement, customers with new connections or customer-initiated meter replacements will be assigned to the proposed residential demand tariff when their smart meter is installed (with the option to opt-out to the proposed residential TOU tariff). However, when a smart meter is installed for any other reason, the shift to a more cost-reflective tariff (i.e., the proposed residential demand tariff) will be delayed by 12 months. These customers are able to opt-in to the proposed demand or proposed TOU residential tariffs within the first 12 months of their smart meter installation.

19 AER, *Draft Decision – Evoenergy Distribution Determination 2019 to 2024*, Attachment 18, September 2018, pp 18-17 to 18-18

20 After the 12-month period, customers will default to the proposed demand tariff with the option to opt-out to the proposed TOU tariff.

6.2. LV Commercial

Evoenergy implemented refinements to the LV commercial tariff assignment policy in 1 July 2019. Specifically, customers with CT meters[21] are assigned by default to the LV kVA TOU demand tariff, while customers without a CT meter (i.e., with a whole current meter) are assigned by default to the LV kW demand tariff. Both customer types (those with and without CT meters) have cost-reflective opt-out options, as shown in Table 14.

The LV kW demand tariff is designed for smaller commercial customers (i.e., generally customers without CT meters) who share common assets. These customers tend to have peakier loads than large commercial customers, but because of the diversity of their peaks, these customers are expected to have a lower demand charge. The LV kW demand tariff is better suited to small-medium commercial customers.

LV commercial customers without smart meters can remain on their existing tariff until their meter is replaced with a smart meter. The General Network tariff closed to new connections from 1 December 2017 and will eventually become obsolete as customers receive smart meters and are placed onto more cost-reflective tariffs.

The exception to the above assignment policy is for small unmetered loads (code 135) and streetlighting (code 080). Customers on these tariffs generally have very stable and flat loads. Therefore, there is no need to transition these loads onto a more cost-reflective tariff as the customers are unlikely to respond.

For the 2024–29 regulatory period, Evoenergy proposes removing the provision for LV commercial customers with a CT meter to opt-out to the General TOU tariff. This is because it is not designed for large LV commercial customers. The provision to opt-out to the General TOU tariff was a transitionary measure in the 2019–24 period because all LV commercial customers were assigned by default to the General TOU tariff before the commencement of that regulatory period. Hence, the option to return to the General TOU tariff was still available during the 2019–24 regulatory period. Evoenergy now proposes to close the General TOU tariff to new LV commercial customers with a CT meter in the 2024–29 regulatory period.

Large-scale, stand-alone batteries (and other large-scale, stand-alone storage technologies) connected to Evoenergy's distribution LV network will be assigned to tariff code 108 or 109 based on where they are located as follows:

- ~~large-scale batteries~~Customers located in predominantly residential areas will be assigned to tariff code 108; and
- ~~large-scale batteries~~Customers located in predominantly commercial areas will be assigned to tariff code 109.

Evoenergy will determine whether the ~~battery's~~ location is defined as residential or commercial on a case-by-case basis. This will ensure that the price signals faced by the large-scale ~~battery~~ storage customer reflect the circumstances that apply in the particular area of the network to which it connects. For example, an area covered by a zone substation that serves primarily residential customers may include pockets of the network with commercial customers and commercial load characteristics.

To be eligible for an LV large-scale battery tariff (codes 108, 109), a customer must:

- be an LV commercial customer;[22]
- have a stand-alone grid-connected battery or other energy storage technology; and

[21] CT meters are used to measure a proportion of the current passing through a connection. A multiplier is then applied to estimate the total kWh. Connections to Evoenergy's network that are rated at 100Amps or greater have CTs and the appropriate compliant metering installed.
[22] As defined under Evoenergy's Statement of Tariff Classes and Tariffs.

- have a minimum ~~battery~~ storage size of 200kVA.

For completeness, Table 14 shows Evoenergy's proposed LV commercial tariff assignment policy for the 2024–29 regulatory period.

Table 14 LV commercial tariff assignment policy

	Default	Opt-out
LV commercial without a CT meter	LV kW Demand (106, 107)	• LV kVA TOU Demand (101, 104) • LV kVA TOU Capacity (103, 105) • General TOU (090, 091)
LV commercial with a CT meter	LV kVA TOU Demand (101, 104)	LV TOU kVA Capacity (103, 105)
LV commercial operating a large-scale battery (or other storage technology) in a residential area*	Large-scale battery – residential area (108)	None – mandatory default
LV commercial operating a large-scale battery (or other storage technology) in a commercial area*	Large-scale battery – commercial area (109)	None – mandatory default

Notes: Customers are ineligible to switch to one of these tariffs if they have been on the tariff in the previous 12 months.

LV commercial customers with a replacement smart meter can remain on their existing network tariff until 12 months after their smart meter is installed; however, they can opt-out to a cost-reflective LV commercial tariff according to the assignment policy shown in Table 14 above.

*Residential and commercial areas are determined by Evoenergy.

Consistent with the approach for residential customers, customers who have their Type 5 or 6 meter replaced by a smart (Type 4) meter may remain on their existing tariff for 12 months before moving to a more cost-reflective network tariff.[23]

Under this arrangement, customers with new connections or customer-initiated meter replacements continue to be assigned to their existing tariff. These customers are able to opt-in to more cost-reflective LV commercial tariffs within the first 12 months of their Type 4 meter being installed. When a smart meter is installed for any other reason, the customer is assigned to the default tariff, as per Table 14.

[23] AER, *Draft Decision – Evoenergy Distribution Determination 2019 to 2024, Attachment 18*, September 2018, pp 18-17 to 18-18.

6.3. HV commercial

Evoenergy proposes to assign all new HV commercial connections – with the exception of large-scale stand-alone batteries or storage and new customers that connect at or above 66kV – to the HV TOU demand network tariff (code 122) by default.[24] On this tariff, the customer owns and is responsible for the LV and HV assets at their premises, which are on the customer side of the connection point to the network.

Tariff 111 and tariff 121 have been closed to new connections since 1 July 2019. Existing customers assigned to those tariffs can remain on them or switch to tariff 122 following consultation with Evoenergy.

Large-scale, stand-alone batteries (and other large-scale, stand-alone storage technologies) connected to Evoenergy's distribution HV network will be assigned by default to tariff code 123 or 124 based on where they are located, as follows:

- Customers located in predominantly residential areas will be assigned to tariff code 123.
- Customers located in predominantly commercial areas will be assigned to tariff code 124.

Evoenergy will determine whether the ~~battery~~ customer is located in a residential or commercial area.

To be eligible for an HV large-scale battery tariff (codes 123, 124), a customer must:

- be an HV commercial customer;[25]
- have a stand-alone grid-connected battery or other energy storage technology; and
- have a minimum ~~battery~~ storage size of 200kVA.

New customers with a network connection at 66kV or above will be assigned by default to a new ICC tariff, as described in section 5.2, and may opt-out to the HV TOU demand tariff (122) or, ~~for batteries,~~ to the applicable tariff for large scale batteries and other storage technologies~~y tariff~~ (123 or 124).

Table 15 HV commercial tariff assignment policy

	Default	Opt-out
HV commercial	HV TOU demand network – Customer HV and LV (122)	None – mandatory default
HV commercial operating a large-scale battery (or other storage technology) in a residential area*	Large-scale battery – residential area (123)	None – mandatory default
HV commercial operating a large-scale battery (or other storage technology) in a commercial area*	Large-scale battery – commercial area (124)	None – mandatory default
New customers with a network connection at 66kV or above	Individually calculated customer (ICC) tariffs	Opt-out to tariff 122 or, for ~~batteries~~battery/storage, to tariffs 123 or 124

*Residential and commercial areas are determined by Evoenergy.

[24] HV TOU Demand Network – Customer LV & HV (Code 122).
[25] As defined under Evoenergy's Statement of Tariff Classes and Tariffs.

6.4. Tariff assignment summary

Table 16 below summarises the assignment criteria that applies to each of Evoenergy's tariffs, with default tariffs shaded blue.

Table 16 Summary of tariff assignment criteria

Tariff class	Tariff	Tariff code	Assignment Criteria for customers in each tariff class
Residential	Basic	010	Closed to new customers*
	TOU	015	Closed to new customers*
	Residential 5000	020	Closed to new customers
	Residential heat pump	030	Closed to new customers
	Demand	025	Closed to new customers*
	New TOU	017	Opt-out from tariff 023
	New Demand	023	Default for customers with a type 4 meter
	Off-peak (1) Night	060	Secondary tariff, opt-in for residential and commercial customers (tariff 040, 090 and 106 only) with a controlled load element.
	Off-peak (3) Day & Night	070	Secondary tariff, opt-in for residential customers with a controlled load element.
LV Commercial	General	040	Closed to new customers
	General TOU	090	Opt-in from any tariff, except battery / storage tariffs
	LV TOU kVA demand	101	Default for customer with a type 4 meter and a current transformer meter
	LV TOU kVA capacity	103	Opt-in from tariff 101
	LV kW demand	106	Default for customer with a type 4 meter
	Streetlighting	080	Eligibility determined by Evoenergy
	Small unmetered loads	135	Eligibility determined by Evoenergy
	New LV Battery (Residential area)	108	Default for LV battery / storage customers in residential areas
	New LV Battery (Commercial area)	109	Default for LV battery / storage customers in commercial areas
HV Commercial	HV TOU Demand	111	Closed to new customers
	HV TOU Demand – Customer LV	121	Closed to new customers
	HV TOU Demand – Customer LV & HV	122	Default for new customers, except for batteries and connections at 66kV or above
	New Battery (Residential area)	123	Default for HV battery / storage customers in residential areas
	New Battery (Commercial area)	124	Default for HV battery / storage customers in commercial areas
	New Individually calculated tariffs, as required		Default for customers that connect at 66 kV or above. (can opt-out to 122, 123 or 124 as applicable)

*Assigned to tariff 023 twelve months after a type 4 meter installation.

7. ACT export tariff transition strategy

In recent years, the imbalance between the supply and demand of electricity has been widening. This typically arises in residential areas in the middle of the day when electricity demand is relatively low, and exports from rooftop solar PV are typically high. As the imbalance continues to widen (primarily due to increased uptake of solar), additional network investment may be required to manage voltage fluctuations on the network in the future.

Network tariffs can play a role in responding to these challenges by ensuring, where appropriate, that the costs and benefits of exports on the network are shared across customers in a way that promotes fairness and efficiency. At the same time, Evoenergy is cognisant that community expectations for export services, and their important role in the energy transition, are very different from expectations for traditional import-based uses of the network. This includes differences in how customers perceive the role of solar PV on the network, customers' ability to respond to export-based price signals, and considerations of fairness and equity relating to not all customers having export capabilities. In light of this, there is a need to carefully balance the benefits of network tariff options for managing exports against the costs and the expectations of the ACT community.

Crucially, electricity retailers also play an important role as the primary interface between customers and their electricity supply. Accounting for if and how retailers pass-through network price signals to customers will be a strong determinant of the success of network tariff reform to support the integration of consumer energy resources (CER) in the ACT.

In recent years, the AEMC made changes to the NER that aim to integrate CER more efficiently into the network and provide greater opportunities for distribution businesses to explore new options for pricing export services.[26] Among other things, this NER change:

- clarified that networks can use negative prices to reward customers for decisions that reduce network costs;
- removed the former prohibition on charging customers for exporting energy onto the network; and
- provided that export charges can be levied only on exports above a BEL set by the network.

Evoenergy's TSS for the 2024−29 regulatory period sets a pathway to prepare the network for the accelerating uptake of CER in the ACT. This includes introducing customers to pricing concepts that reflect some of the impacts exports can have on the distribution network. A key focus of Evoenergy's tariff strategy is to introduce these new price signals in a gradual and measured way that avoids unnecessary tariff complexity and implementation cost at a time when it is not yet needed.

In the 2024−29 regulatory period, Evoenergy proposes to introduce export charges and rebates only within the proposed new tariffs for large-scale batteries (and other large-scale storage technologies) ~~(~~in residential areas~~)~~. This recognises that, in contrast to residential customers, large-scale battery and storage operators are commercial customers who actively participate in energy markets and are positioned to respond to more advanced network price signals. Large-scale batteries and storage also can export energy at a much higher rate than residential customers and hence provide a targeted focus area for introducing network tariffs to manage export-related costs.

[26] AEMC, *Access, pricing and incentive arrangements for distributed energy resources, Rule determination*, 12 August 2021.

Evoenergy does not propose to introduce export charges for residential customers during the 2024−29 period. The revised TSS departs from the approach in Evoenergy's initial TSS, which included a proposed residential export tariff to prepare the ACT network tariff structure for the anticipated future increase in export costs. Evoenergy's withdrawal of the residential export tariff reflects new information and stakeholder feedback received on Evoenergy's proposed TSS, which is explained in sections 5 and 9 of its TSES. This includes:

- Feedback from customers indicating a strong preference for simple tariffs and concerns about the mixed signals sent by export charges in relation to the uptake of CER on the network.
- Feedback from retailers, which included that Evoenergy's initially proposed export tariff was difficult to implement, and there was a low likelihood it would be widely adopted in retail tariffs offered to ACT customers.
- Feedback concerning the significant costs[27] and implementation complexity of residential export tariffs within Evoenergy's billing system, including the finding that implementation of a residential export tariff by 1 July 2024 is not possible based on current market availability and constrained resourcing.

Evoenergy has carefully considered the stakeholder feedback, along with the high costs and complexity of implementing export tariffs, and has weighed this against the relatively small network impacts expected from small-scale residential solar in the 2024−29 regulatory period. Evoenergy notes that additional investment will be required in its billing system to implement a residential export tariff, which includes the development of new, custom capabilities that are not currently available to Evoenergy. In the revised TSS, Evoenergy has concluded that the pre-emptive introduction of residential export tariffs in 2024−29 does not reflect prudent and efficient investment that is in customers' best interests at this time.

Instead, Evoenergy proposes a more gradual, measured, and responsible transition pathway to begin introducing residential customers to export-related pricing concepts in the 2024−29 regulatory period. This will be achieved through the 'solar soak' charges on Evoenergy's proposed residential TOU and Demand tariffs. These charges reward customers with a lower price for 'soaking up' energy between 11am–3pm AEST when solar exports are typically highest. Solar soak charges have the potential to reduce export-related costs on the network while also being simple for customers to understand and simple for retailers to implement in retail tariffs. Importantly, the proposed solar soak charges provide a much stronger price incentive, and are expected to cover a much larger number of customers, than the initially proposed export tariff.

Under the proposed gradual transition, Evoenergy will fully explore the role that solar soak charges can play in managing exports on the network before considering residential export tariffs again in future periods. This will provide more time for customers and retailers to become familiar with Evoenergy's other residential tariff reforms (including the new residential demand and TOU tariffs), and avoids introducing additional tariff complexity at a time when it is not yet required.

Sections 5 and 9 of Evoenergy's TSES explain in detail why Evoenergy is not pursuing a residential export tariff in the revised TSS for the 2024−29 regulatory period.

In contrast to residential customers, Evoenergy proposes to introduce export charges and rewards for large-scale batteries (and other large-scale storage technologies) in residential areas, which will apply during critical peak events. These price signals encourage large-scale battery and storage proponents to make efficient investment decisions that incorporate the costs of CER integration and recognise ~~batteries'~~ their ability to shift export loads in response to network and other market price signals. Evoenergy found, through the development and operation of its tariff trials, that large-scale battery customers were receptive to export charges and rewards and were well-positioned to respond to highly cost-reflective price signals.

[27] The costs of implementing the tariff would have been incurred in the 2019−24 regulatory period, and do not form part of Evoenergy's expenditure forecasts for the 2024−29 regulatory period.

7.1. Large-scale battery tariffs

This subsection explains that Evoenergy's newly proposed LV and HV ~~large-scale battery~~ tariffs for large-scale batteries (and other large-scale storage technologies) include the following.

- In predominantly residential areas:
  - a critical export charge that applies for a maximum of three hours, up to six times a year; and
  - a critical export reward that applies for a maximum of three hours, up to six times a year; and
- In predominantly commercial areas:
  - a critical export reward that applies for a maximum of three hours, up to six times a year; and
  - no export charge.

The export reward component of these tariffs depends on whether the large-scale battery (or other large-scale storage technology) is connected in predominantly residential or commercial areas of the network, as determined by Evoenergy. In both cases, all charges and rewards will be based on the applicable LRMC estimates.

Export charges do not apply in predominantly commercial areas due to the lower levels of rooftop solar PV and higher levels of commercial load during the middle of the day when solar irradiance is typically highest. This means that exports to the network during the middle of the day are generally consumed by (commercial) connections in these areas.

As described in section 5.2, the export charge will be subject to a Basic Export Level of 2 kVAh per critical peak event. Exports below the Basic Export Level will not incur an export charge during the critical peak event.

7.2. Summary of the basis for export prices

Table 17 contains a summary of the basis on which each export charge and reward is to be determined in Evoenergy's commercial export tariffs.

Table 17 Basis of export charges and rewards

Tariff	Export charge	Export reward	Comments
LV large-scale battery (Residential area) Tariff code 108	Export LRMC	Import LRMC (LV residential)	Export charge subject to a Basic Export Level of 2 kVAh per critical peak event.
LV large-scale battery (Commercial area) Tariff code 109	None	LV import (LV commercial)	No export charge due to no low-load events in commercial areas
HV large-scale battery (Residential area) Tariff code 123	Export LRMC	Import LRMC (HV)	Export LRMC used because managing exports may involve HV investments in the future. Export charge subject to a Basic Export Level of 2 kVAh per critical peak event.
HV large-scale battery (Commercial area) Tariff code 124	None	Import LRMC (HV)	No export charge due to no low-load events in commercial areas

For the avoidance of doubt, the tariffs shown above apply to large-scale, stand-alone batteries and other large-scale, stand-alone storage technologies.

8. Alternative Control Services

The AER has classified Evoenergy's ancillary network services, Type 5 and Type 6 metering services[28], Public Lighting Service[29], Enhanced connection service, and Connection and application management services as Alternative Control Services (ACS) for the 2024–29 regulatory period.[30] Evoenergy has continued with this classification for its revised regulatory proposal.

The form of control mechanism applied to ACS under the NER must have a basis stated in the distribution determination. It may (but need not) use elements of Part C of clause 6.26 of the NER (with or without modification).

Evoenergy's ACS proposal will benefit consumers through cost-reflective prices, set transparently and subject to a defined price path over the regulatory period. Customers will only bear the costs of these services if and when they are required. ACS are often customer specific or requested services that are billed on a per service basis to individual customers.

Evoenergy accepts the AER's determination in its framework and approach paper that the form of control mechanism for ACS will be price caps on individual services. Clause 6.2.6(b) of the NER provides that the control mechanism must have a basis stated in the distribution determination.

Evoenergy proposes the following basis for the control mechanisms:

- for metering services, a limited building block approach, consistent with the approach in the 2019–24 regulatory period; and
- for network ancillary services, a cost build-up approach, consistent with the approach in the 2019–24 regulatory period.

Evoenergy considers this to be the most appropriate basis when assessed against the criteria set out in clause 6.2.5(d) of the NER (discussed further below).

A detailed explanation of ACS is included in section 8.8 of Evoenergy's revised regulatory proposal.[31]

Metering services (Types 5 and 6)

For the 2024–29 regulatory period, Evoenergy proposes to retain the ACS classification and the individual price cap form of control for metering services. Evoenergy proposes a classification of the following metering services as ACS:

- Types 5 and 6 metering data services, which includes collection, processing, storage and delivery;
- scheduled meter reads;
- maintaining and repairing meters and load-control equipment;
- meter testing during business hours (refunded to the customer if the meter proves faulty); and
- special meter reading or check (refunded to the customer if the original reading was incorrect).

Evoenergy proposes to apply a building block approach to determine the price caps for all metering services. Evoenergy's proposed approach to metering is effectively a continuation of the approach

28 The AER's draft decision found the AEMC's Final Report for its review of the regulatory framework for metering service constituted a material change in circumstances and that Type 5 and Type 6 metering services may be better classified as a Standard Control Service. Evoenergy's revised proposal seeks to maintain the ACS classification for Type 5 and Type 6 metering services but classify any new obligations that may arise from the review and subsequent rule change as a Standard Control Service.
29 Note Evoenergy doesn't provide a public lighting service.
30 AER, Framework and Approach for Evoenergy, July 2022, p. 6
31 Evoenergy, Revised regulatory proposal, ACT electricity distribution network 2024–29, 30 November 2023.

used in the 2019–24 regulatory period, with the same post-tax revenue model (PTRM), roll-forward model (RFM), and tax asset base in place. These have been updated to reflect the AER's inflation review final position[32] and the AER's regulatory tax approach review findings.[33]

Under clause 6.8.2(c)(3)) of the NER, Evoenergy is required to include in its regulatory proposal "for direct control services classified under the proposal as alternative control services – a demonstration of the application of the control mechanism, as set out in the framework and approach paper, and the necessary supporting information". The formula for metering services, as set out in the Framework and Approach paper, is set out in Box 1.

Box 1 Formula for metering services

$\bar{p}_t^i \geq p_t^i$ i=1,...,n and t=1, 2, ... ,5

$$\bar{p}_t^i = \bar{p}_{t-1}^i \times (1 + \Delta CPI_t) \times (1 - X_t^i) + A_t^i$$

where:

$\bar{p}_t^i$ is the cap on the price of service i in year t.

p_t^i is the price of service i in year t. The initial value is to be decided in the distribution determination.

$\bar{p}_{t-1}^i$ is the cap on the price of service i in year t–1.

t is the regulatory year with t = 1 being the 2024/25 financial year.

ΔCPI_t is the annual percentage change in the Australian Bureau of Statistics (ABS) Consumer Price Index (CPI) All Groups, Weighted Average of Eight Capital Cities from the December in year t–2 to the December in year t–1. For example, for the 2024/25 year, t-2 is December 2022 and t-1 is December 2023. If the ABS do not or ceases to publish the index, then CPI will mean an index which the AER considers is the best available alternative index.

X_t^i is the X-factor for service i in year t. The X-factors are to be decided in the distribution determination.

A_t^i is the sum of any adjustments for service i in year t and is to be decided in the distribution determination.

Source: AER, *Final framework and approach for Evoenergy*, July 2022, Figure 3.2, page 34.

Evoenergy will demonstrate compliance with the control mechanism by multiplying the price for each service in the previous year by CPI–X (rounded to the same number of decimal places as currently applied) and comparing that to the proposed price. Prices equal to or less than equal to the calculated price are compliant. Evoenergy will demonstrate this compliance in its annual network pricing proposals to be submitted to the AER in each year of the 2024−29 regulatory period.

Ancillary services

In the Framework and Approach paper, the AER classified Evoenergy's ancillary services as ACS for the 2024–29 regulatory period. It determined that the control mechanism would be price caps on individual services. Evoenergy accepts this classification and proposes to adopt a cost build-up approach to determining the price caps for individual ancillary services.

32 AER, *Final position paper: Regulatory treatment of inflation*, December 2020
33 AER, *Final report: Review of regulatory tax approach*, December 2018

In most cases, the cost of ancillary services largely comprises labour, with limited use of materials, equipment, and vehicles. Evoenergy proposes increasing the labour rates per the escalation rates sourced from BIS Oxford Economics.

Evoenergy proposes to set the prices for quoted services using the formula in Box 2.

Box 2 Formula for quoted services

Price = Labour + Contractor services + Materials + Margin + Tax

Where:

- **Labour** (including on-costs and overheads) – consists of all labour costs directly incurred in the provision of the service which may include but is not limited to labour on-costs, fleet on-costs and overheads, and other associated delivery costs including overheads. The labour cost for each service is dependent on the skill level and experience of the employees involved, time of day the service is undertaken, travel time, number of site visits, and crew size required to complete the service.
- **Contractor services** – reflect all costs associated with the use of external labour including overheads and any direct costs incurred. The contracted service charge applies the rates under existing contractual arrangements. Direct costs are passed on to the customer.
- **Materials** (including overheads) – reflects the cost of materials directly incurred in the provision of the service, material storage, and logistics on-costs and overheads.
- **Margin** – reflects a return commensurate with the regulatory and commercial risks involved in the provision of a service.
- **Tax** – reflects taxation costs arising from the provision of services that are capitalised for accounting purposes.

Source: AER, Final framework and approach for Evoenergy, July 2022, Figure 3.3, page 35.

Price caps apply to the labour rates used in this formula. Evoenergy will demonstrate compliance with the formula by providing its annual calculation of labour rates to the AER in its annual pricing proposals. The AER will review the rates as part of the annual network pricing approval process each year.

Price caps only apply to labour costs, rather than all cost inputs, which helps reduce administrative costs. Evoenergy will not be required to identify, for AER approval, every input cost that may be required to perform a quoted service. This approach will also result in cost-reflective charges.

Inclusion of a margin component in the quoted services price cap formula

Evoenergy proposes to include a margin component in the quoted services price cap formula for the 2024–29 regulatory period. The inclusion of a margin is consistent with the principle of competitive neutrality, as margins are included in prices that would be observed for similar services in a competitive market.

The AER's final Framework and Approach paper included a margin component for quoted services, which has been accepted in recent regulatory determinations for other jurisdictions.[34]

[34] AER, *Framework and approach for Evoenergy*, July 2022, p. 36.

Including a margin is consistent with the revenue and pricing principles in the National Electricity Law (NEL), where 'a price or change for the provision of a direct control network service should allow for a return commensurate with the regulatory and commercial risks involved in providing the direct control network services to which that price or change relates'.[35]

Inclusion of a tax component in the quoted services price cap formula

Evoenergy proposes to include a tax component in the quoted services price cap formula for the 2024–29 regulatory period. Including a tax component will allow quoted services to be more cost-reflective and is consistent with the approach outlined by the AER in its Framework and Approach paper.[36]

When providing quoted services, Evoenergy often incurs tax obligations arising from the capital-intensive nature of the work undertaken for customers. Costs to cover these tax obligations have not been recovered from customers because they have not been included in the quoted services pricing formula approved by the AER. Evoenergy proposes to estimate the tax component in the same way it is estimated for standard control services. That is, the tax component reflects an estimate of the tax payable based on revenue minus expenses and applying the company tax rate. Currently, the company tax rate applied to Evoenergy is 30 per cent.

Itemised quotes for customers

Evoenergy supports greater transparency of quoted services. As is current practice, Evoenergy will continue to provide customers with itemised quotes showing each cost component to demonstrate compliance with the control mechanism formula.

This approach will allow customers to compare price offerings across providers over time and provide transparency in the pricing of quoted services.

[35] NEL section 7A (5)
[36] AER, *Framework and approach for Evoenergy*, July 2022, p. 37.

Glossary

Term	Meaning
ABS	Australian Bureau of Statistics
ACS	Alternative Control Services
ACT	Australian Capital Territory
AEMC	Australian Energy Market Commission
AER	Australian Energy Regulator
AEST	Australian Eastern Standard Time
BEL	Basic Export Level
c	Cents
Capex	Capital Expenditure
CER	Consumer Energy Resources
CP	Critical Peak
CPI	Consumer Price Inflation
CT	Current Transformer
DER	Distributed Energy Resources
DNSP	Distribution Network Service Provider
DUOS	Distribution Use of System Charges
EN24	Electricity Distribution Network Determination 2024-29

Term	Meaning
EV(s)	Electric Vehicle(s)
FCAS	Frequency Control Ancillary Services
HEMS	Home Energy Management Systems
HV	High Voltage
ICT	Information Communication Technology
kVA	Kilo Volt Ampere
kVAh	Kilo Volt Ampere hour
kW	Kilo Watt
kWh	Kilo Watt Hour
LRMC	Long Run Marginal Cost
LV	Low Voltage
MVA	Mega Volt Ampere
MW	Mega Watt
MWh	Mega Watt Hour
NEL	National Electricity Law
NER	National Electricity Rules
NMI	National Metering Identifier
NSW	New South Wales

Term	Meaning
Opex	Operating Expenditure
PV	Photovoltaic
QoS	Quality of Supply
TOU	Time of Use
TSES	Tariff Structure Explanatory Statement
TSS	Tariff Structure Statement
TUOS	Transmission Use of System