

Planning for the future

Essential Energy 2024–29 Revised Tariff Structure Statement



November 2023

Our Vision, Purpose & Values

empowering
you



Our Vision

What we want to be

Empowering communities to share and use energy for a better tomorrow.

Our Purpose

What we stand for

To enable energy solutions that improve life.

Our Values

What we care about



Make safety
your own



Be easy to do
business with



Make every
dollar count



Be courageous,
Shape the future



Be inclusive,
supportive and
honest

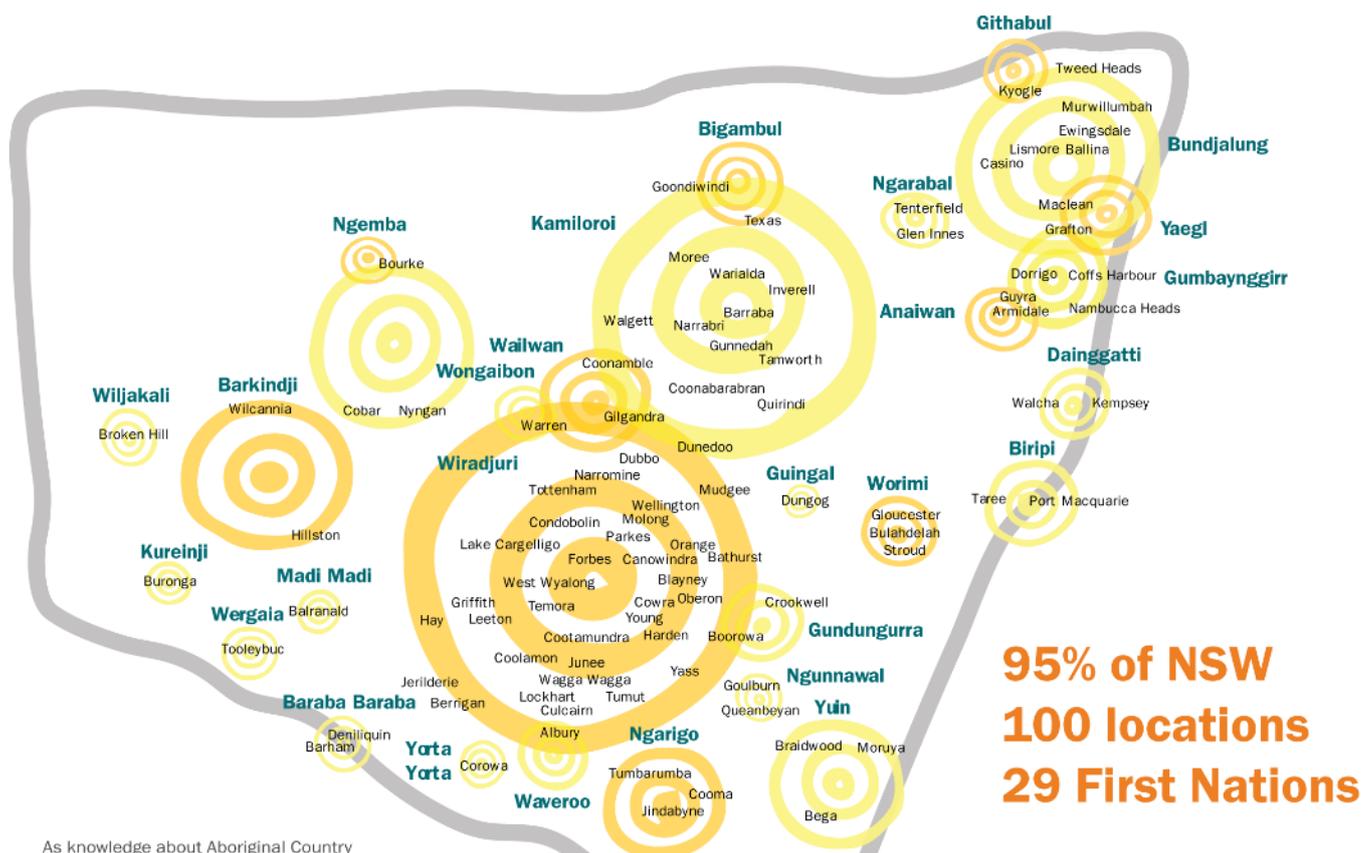
Acknowledgement of Country

Our depots and offices across regional New South Wales are located on the Country of 29 First Nations – from Wiljakali Country on the plains of Far Western New South Wales (NSW), to Ngarigo Country in the high Snowy Mountains and Bundjalung Country on the sub-tropical North Coast, and more First Nations across the diverse landscape that is regional, rural and remote NSW and parts of southern Queensland.

We acknowledge the Traditional Custodians of the lands on which our company is located and where we conduct our business, and we acknowledge all Aboriginal and Torres Strait Islander peoples across Australia. We pay our respects to ancestors and Elders, past, present and emerging.

We are committed to honouring Aboriginal and Torres Strait Islander peoples’ unique cultural and spiritual relationships to the land, waters and seas and their rich contribution to society.

Our network area



As knowledge about Aboriginal Country borders increases, this map is subject to change. Spellings of Aboriginal countries and locations of depots and offices within Aboriginal countries have been made from desktop research conducted on each site (town or city) and correlation with the AIATSIS map of Indigenous Australia by David R Horton (creator), © Aboriginal Studies Press, AIATSIS, and Auslig/Sinclair, Knight, Merz, 1996. This is an estimate only based on desktop research and the AIATSIS map.

This map shows the First Nations upon whose land Essential Energy's regional NSW depots and offices are located and our beyond depots and offices. Our network area overlaps with the Country of these additional First Nations. These additional First Nations will be added to the map in the Action Plan for Reconciliation, which is being developed during 2023.

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01

Introduction and overview



A message from Essential Energy's Chair and Chief Executive Officer



This document has been prepared in response to the Australian Energy Regulator's (AER's) Draft Decision on our proposed business plans for operating and maintaining NSW's largest electricity distribution network from 1 July 2024 to 30 June 2029 (2024–29). This Revised Tariff Structure Statement (Revised TSS) which sets out our proposed network charges structure is an important part of the overall Revised Regulatory Proposal (Revised Proposal).

Listening to our customers is at the heart of everything we do as we work to empower communities to use and share energy to make life better today and tomorrow.

After extensive consultation with customers and stakeholders, in January 2023 we submitted our plans for 2024–29. They were reviewed by the AER, which also took on board community feedback, before they issued a Draft Decision on 28 September 2023.

The AER largely accepted our plans and our TSS, although changes were needed to reflect the engagement with customers, stakeholders and the AER on a variety of topics that continued throughout 2023.

Customers made it clear that they wanted and needed a safe, reliable and affordable network. One that is both resilient and flexible enough to accommodate new and emerging technologies, with pricing structures that keep pace with the changing energy market – particularly the increasing volume of consumer energy resources (CER) connected to and exporting into the network.

We believe the Revised Proposal and this Revised TSS continue to reflect the views of our customers and what they want Essential Energy to focus on.

NEXT STEPS

Our customers' views helped shape our Revised Proposal and Revised TSS – and we're always here to listen.

We invite you to read this information and the full documents, and provide your feedback to the AER by 19 January 2024 via the [AER's website](#).

You can also contact us directly at:

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Essential Engagement forum: engage.essentialenergy.com.au

Thank you

Doug Halley
Chair

John Cleland
Chief Executive Officer



About this Revised Tariff Structure Statement

Essential Energy is submitting this Revised TSS for assessment and approval by the AER in conjunction with our Revised Proposal and **Attachment 9.02 – Revised Tariff Structure Explanatory Statement (TSES)**. We submit this Revised TSS for the 2024–29 period to the AER in accordance with the requirements of the National Electricity Rules (NER).

Essential Energy’s role in the electricity process

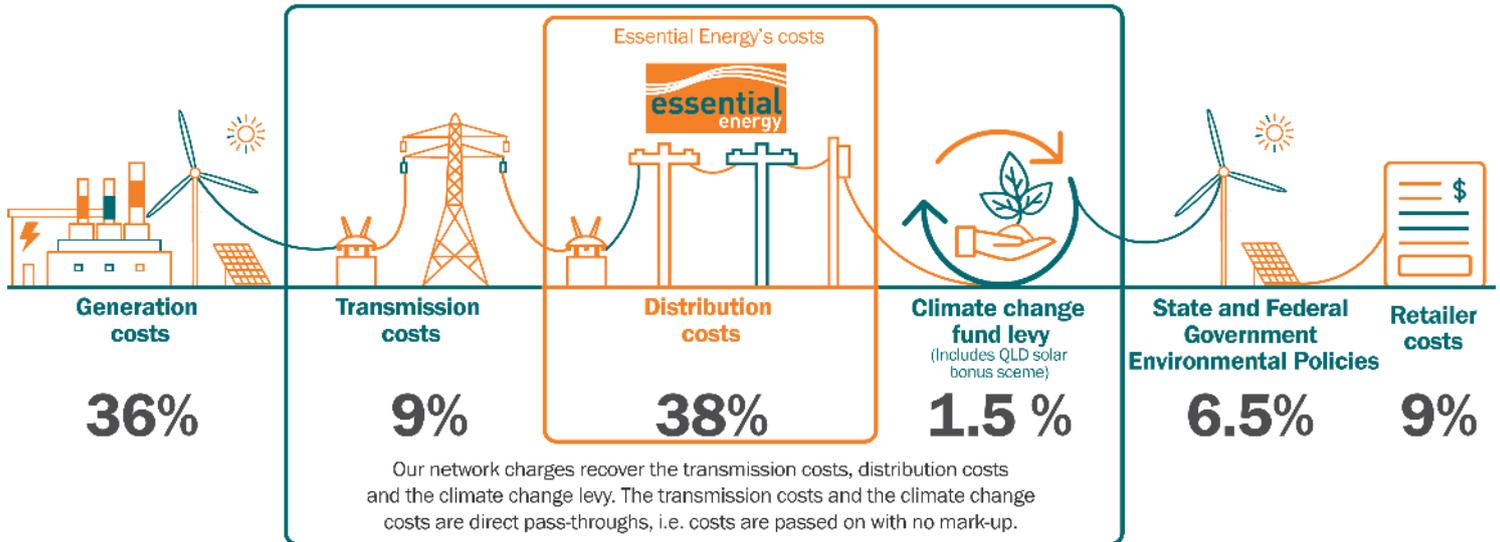
As an electricity distributor, our TSS addresses only distribution network tariffs, costs and revenues. These are just one part of the total retail bill that our customers pay.

Our distribution network tariffs represent our costs to operate and maintain the distribution network and are the subject of the Proposal of which this Revised TSS is a part.

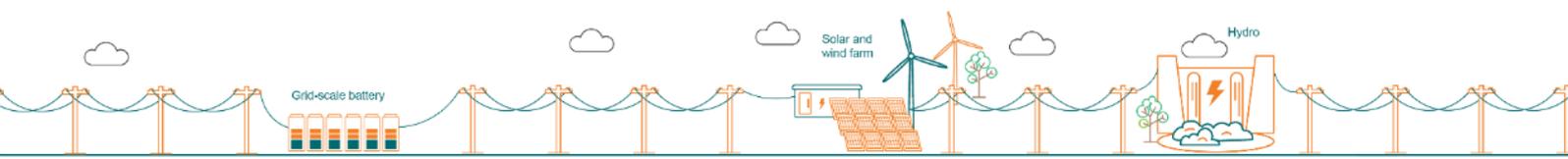
On a customer’s bill, our charges are bundled with:

- > transmission tariffs, which are regulated by the AER – these are passed on by TransGrid and Powerlink, the operators of the transmission networks that our distribution network connects to
- > the NSW Government’s Climate Change Fund levy, contributions to the Queensland Government’s Solar Bonus Scheme, and contributions to the costs of the *NSW Electricity Infrastructure Roadmap* (NSW Roadmap).

The costs we recover through our network charges

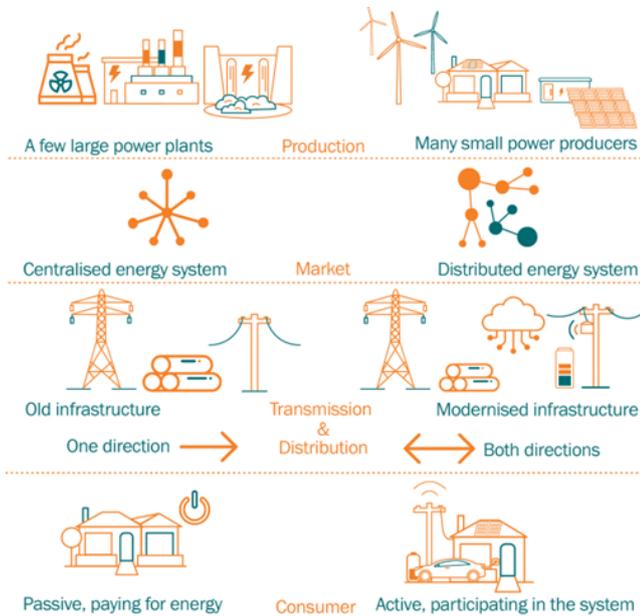


Based on the 2021–22 forecast, Australian Energy Market Commission, Residential Electricity Price Trends 2021, 25 November 2021 p. 10. Note that recent energy market conditions may significantly alter these percentages in the future.



Essential Energy’s role in the energy market transition

This TSS will apply during a pivotal period for our energy market. We are transitioning to both greater levels of renewable energy and higher levels of consumer energy resources (CER).



The amount of renewable energy in the network at any one time varies in response to available sunlight and wind.

The amount of CER varies based on:

- > energy usage and energy equipment – investment decisions made by our customers
- > equipment-coordination decisions made by our customers’ energy suppliers, including retailers.

Unlike traditional large-scale generation that connects to the transmission system, our customers are increasingly connecting CER, like solar panels, batteries, demand management systems and electric vehicles (EVs), to our distribution network.

Our network is now servicing energy flowing both to and from our customers. The scale, timing and location of these two-way flows presents both costs and opportunities for savings on our network, depending on how well the flows are coordinated to coincide with the time of peak solar export and peak energy demand.

For this TSS, we have worked with our customers and trialled new tariff structures to give us a pricing approach that helps improve this coordination. These innovations mean our customers can save money by:

- > using more energy in the peak solar export period or ‘Sun Soaker period’
- > using less energy in our evening peak demand period 5pm–8pm
- > exporting their excess solar energy in this peak demand period.

Our co-designed principles for pricing the network of the future

With our customers, we co-designed five principles to inform the development of our new tariffs for our tariff trials and for this TSS.

Using feedback gathered through the ‘Talking Tariffs’ web pages, the five tariff design principles shown in this diagram were presented to participants in the ‘Choosing trial tariffs and structures’ Round 1 workshops.

Over subsequent engagement activities through the balance of 2021 and throughout 2022, we retained these principles and refined them when required. The principles have been tested with the large customer working group for our peaky load customers and our Stakeholder Collaboration Collective (SCC). We then used them as the assessment framework for presenting TSS issues and options to our Pricing Collaboration Collective (PCC) and in customer deep dives. These were key informers of the export tariff transition strategy (ETTS) set out in this Revised TSS.

The guiding principles we follow to set our prices

Principle	What this means
 Avoid bill shock	> Tariffs minimise the risk of bill shock for customers (especially vulnerable customers)
 Easy to understand	> Tariffs are relatively simple to interpret
 Fair	> Customers pay their fair share of network costs (cost-reflective)
 Integrate renewables and new technologies	> Tariffs accommodate changing technology, energy flows and greener customer choices
 Effective	> Tariffs do the job - they solve network issues and don’t create new ones

Following the publication of our Draft TSS in 2022 we consulted our PCC on the principles to guide our January 2023 proposed TSS decisions where we had received diverse views from different parties. This consultation agreed that:

- > the starting point is advancing the National Electricity Objective (NEO) and the network pricing objective from the NER, then
- > advancing the above pricing design principles, then
- > considering impacts on retailers and other market players who develop products and services for electricity consumers, while not losing the existing focus on consumers’ interests.

This Revised TSS advances these same principles.

02

List of tariff classes
and allocations

Chapter summary

-How we allocate customers into
groups for pricing



Tariff classes for our standard control services

Customers for Essential Energy’s services are allocated into service groups and classes for the purposes of assigning distribution network charges. These are called tariff classes.

We have retained our existing tariff classes for standard control services (SCS) in this Revised TSS. We established these by considering:

- > historical pricing structures
- > existing metering capability and the cost-effectiveness of metering options
- > the connected voltage level of customers
- > the cost-benefit of providing further disaggregation into additional tariff classes.

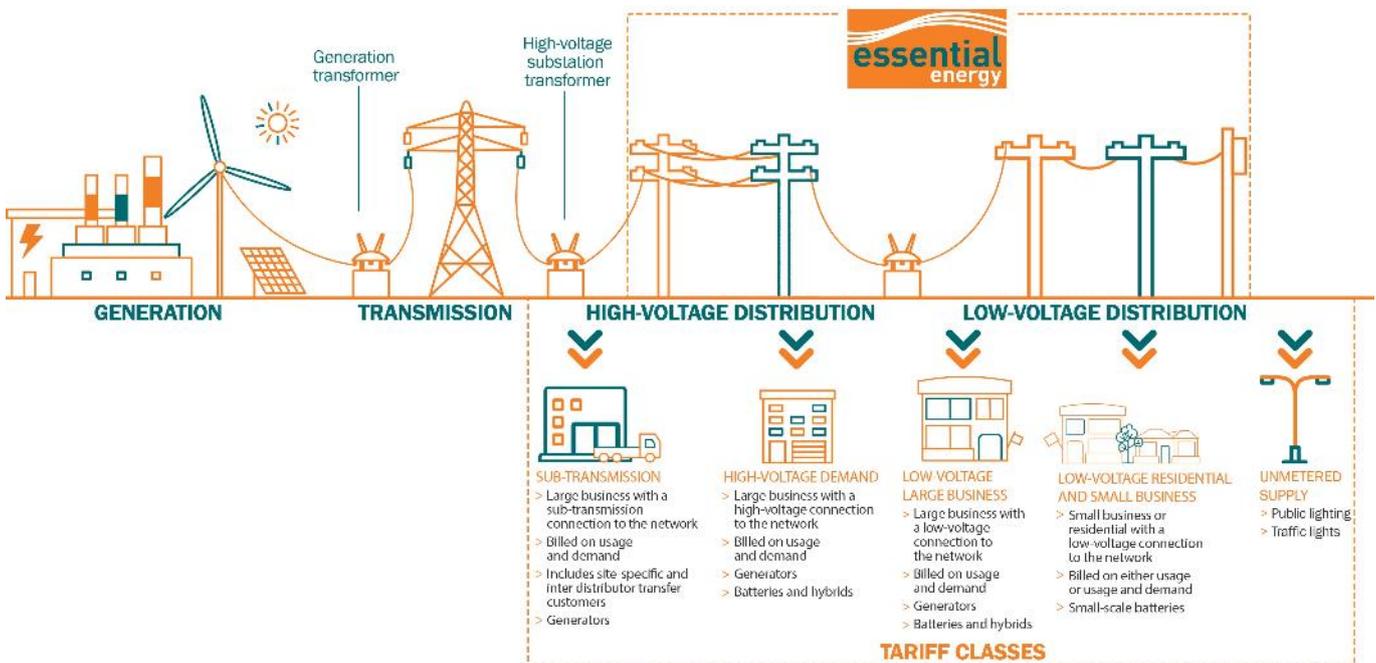
There are five tariff classes:

1. sub-transmission (including inter-distributor transfers)
2. high-voltage demand
3. low-voltage large business
4. low-voltage residential and small business
5. unmetered supply.

The energy consumption threshold for the large business customer class is 160 MWh a year.

Two-way services are applicable to classes 1 to 4.¹ Customers exporting into the grid cannot do so without a meter, so class 5 is only available to consumption-only customers like councils that manage public lighting.

Standard control service tariff classes



We charge for our alternative control services (ACS) on a user-pays basis – as explained in Chapter 7.

¹ Transitional measures for export pricing explains how we will phase in two-way pricing of these services to tariff classes 2, 3 and 4.

03

Approach to setting tariffs and the basic export level



Chapter summary

- How we convert our costs into prices
- Our current and future required levels of export-hosting capacity
- Our relevant costs, including calculation of avoided and standalone costs and estimation of long run marginal cost (LRMC) as well as our total revenue allowance from the AER

Our approach is consistent with the pricing principles

The approach we have used in this Revised TSS, and which we will use for our annual Pricing Proposals in 2024–29, accords with clause 6.18.5 of the NER.

Rule requirements

The tariff structures and indicative tariffs for this Revised TSS have been developed following the pricing principles set out in the NER, particularly the principles relating to cost reflectivity, customer impact and ease of understanding.

The National Electricity Rules – principles

Clause	Principles
6.18.5(e)	For each tariff class, the revenue expected to be recovered must lie on or between: (1) an upper bound representing the standalone cost of serving the retail customers who belong to that class; and (2) a lower bound representing the avoidable cost of not serving those retail customers.
6.18.5(f)	Each tariff must be based on the long run marginal cost (LRMC) of providing the service.
6.18.5(g)	The revenue expected to be recovered from each tariff must reflect the total efficient costs of serving the retail customers, permit recovery of the expected revenue for the relevant services and minimise distortions to the price signals for efficient usage.
6.18.5(h)	Consideration must be given to the impact on retail customers of changes in tariffs from the previous regulatory year.
6.18.5(i)	Tariff structures must be reasonably capable of being understood by retail customers or being directly or indirectly incorporated by retailers or Market Small Generation Aggregators in contract terms.
6.18.5(j)	A tariff must comply with the Rules and all applicable regulatory instruments.

In applying the above pricing principles, we must also address transitional arrangements in clause 11.141.13 of the NER that accompany the introduction of export pricing. These require that we propose a basic export level that our customers can access without incurring an export charge, or a method for determining this. Our approach to meeting this requirement is discussed below.

This TSS also gives effect to the NSW Government’s Green hydrogen electricity concessions for producers. We will administer this through site specific tariffs for producers who have been approved by the NSW Government.

We are also required to pay contributions to the costs of the NSW Roadmap each year once these contributions have been determined by the NSW Government’s Scheme Financial Vehicle. Our recovery of these contributions does not fall under the above pricing principles.

Standalone and avoidable cost

In relation to clause 6.18.5(e), our estimates of the standalone and avoidable cost for each customer class are included in our economic costs model. The estimation method we have used to identify these efficient pricing bounds is the same as for our previous TSS, with updates to the cost inputs to account for new export service costs incurred after 1 July 2024 under our new two-way service obligations.

Our calculations show that, for each tariff class, the proposed revenue lies between the lower bound (avoidable cost) and upper bound (standalone cost).

How our forecast 2024–25 revenue (\$ million, Real 30 June 2024) by customer class complies with the National Electricity Rules

Tariff class	Avoidable	Standalone	Proposed	Proposed revenue lies between standalone and avoidable cost?
Low-voltage residential and small business customers	367	2,179	873	Yes
Low-voltage demand	68	630	176	Yes
High-voltage demand	24	240	62	Yes
Sub-transmission	43	419	111	Yes
Unmetered	3	413	7	Yes

Long run marginal cost of peak demand

In relation to clause 6.18.5(f), our approach to estimating the LRMC across our network is explained in **Attachment 9.02 – TSES**. We have used the Average Incremental Cost (AIC), which was agreed with our PCC and used to estimate the LRMC values in our previous TSS.

Our LRMC estimates and current AIC estimation approach reflect the AER’s prior feedback on replacement expenditure forecasts, our current cost forecasts and a 10-year forecasting horizon.

How different expenditures contribute to our long run marginal cost of peak demand at each voltage level (\$/kVA, Real, 30 June 2024)

Voltage level	Connection capital expenditure	Growth capital expenditure	Replacement capital expenditure	Growth operating expenditure	Voltage level component of LRMC	Total LRMC at voltage level
CONSUMPTION						
Sub-transmission	37	10	4	2	55	54
High-voltage	38	50	47	11	145	200
Low-voltage	2	8	7	2	19	218

Numbers may not add up due to rounding

Essential Energy calculates LRMC at a voltage level for all customers, with an LRMC estimate for low-voltage, high-voltage, and sub-transmission customers. The LRMC estimate is not specific to location or feeder, but an average for all customers connected at the same voltage level within the same customer class using an AIC approach.

Because these costs are all variable over time, the variable components of our distribution network charges are set to at least reflect our LRMC estimates. This is consistent with our tariff classes having tariffs that are averaged across those classes and with our customers’ strong preference for postage stamp pricing.

Long run marginal cost for peak exports

Consistent with the 2021 rule change and the AER’s subsequent guideline for export tariff setting, in preparing this Revised TSS we have calculated the LRMC of peak export services by voltage level.

How different expenditures contribute to our long run marginal cost of peak exports at each voltage level (\$/kVA, Real, 30 June 2024)

Voltage level	Growth capital expenditure	Replacement capital expenditure	Growth operating expenditure	Voltage level component of LRMC	Total LRMC at voltage level
EXPORT					
Sub-transmission	2	0	0	2	2
High-voltage	8	0	3	11	13
Low-voltage	1	0	1	2	15

Numbers may not add up due to rounding

When calculating the above LRMC estimates, we have had regard to the basic export level of 1.5 kW or 1.5 kW per hour that we have identified as our existing intrinsic hosting capacity. A maximum of 1.5 kW is available free to all customers with solar panels on a postage stamp pricing basis during the 10 year transition period set out in the NER. Only future peak export costs incurred after 1 July 2024 have been included in the calculations to account for this. We explain how we established our basic export limit below.

Distribution network charges are cost-reflective and minimise price-signal distortions

In relation to clause 6.18.5(g), if we based our distribution network charges solely on our LRMC, we would not recover all our required revenue. The NER require us to consider how to best recover the remaining costs (residual costs) in a way that is efficient and minimises distortions to price signals. Our revenue cap ensures that our tariffs recover no more revenue than what the AER has approved for us.

Efficient pricing

In the process of pricing reform, and to support the transition to cost-reflective prices, our prior TSSs have allocated more residual costs to less efficient distribution network tariffs and charging parameters, and fewer residual costs to the more efficient distribution network tariffs and charging parameters. In this way, customers on more efficient prices pay a smaller quantum of residual costs. This approach was aimed at encouraging more customers to take up more efficient price options.

Current AER pricing policy preferences and the scale of customers who will be assigned to cost reflective prices during the 2024-29 TSS period mean that we cannot continue this approach. For this Revised TSS, all tariffs - be they legacy tariffs or cost reflective tariffs - will contribute sustainably to our residual cost recovery. This approach to the relative allocation of residual costs accounts for the fact that a greater share of our customer base will receive a smart meter and be assigned to more efficient distribution network tariffs during the 2024-29 period. It also avoids the need to substantially increase the prices on our cost reflective tariffs in future, which was a key concern of retailers in our engagement with them.

Price distortion

Variable pricing parameters set closer to the LRMC generally have a smaller distortion on efficient energy usage or export decisions than those set further above the LRMC. All our distribution network tariffs are at least at the estimated LRMC recovery levels.

Fixed charging parameters, like our network access charge, are unlikely to distort energy connection and usage decisions and are therefore an efficient way to recover more of our residual or fixed costs.

For this Revised TSS, we have considered both efficient pricing and price distortion in conjunction with the customer impact of the distribution network charge changes requirement in NER clause 6.18.5(h).

We have also followed the AER's guidance for recovering legacy metering costs from low voltage customers' fixed charges.²

Impact of price changes on customers

In relation to clause 6.18.5(h), we have further transitioned our approach to managing the impact of charges on existing customers and new customers in this Revised TSS to encourage increased progress towards cost reflectivity.

Our legacy pricing structures for accumulation meter customers do not support the NER requirements to provide efficient pricing signals. Many customers remain on accumulation meters that impede our ability to offer them cost-reflective prices. However, we forecast that most customers will receive a smart meter by the end of this regulatory control period because of new requirements on energy retailers.

If the meter type allows it, our legacy distribution network charges will no longer be the default and some are now closed to new customers.

We have considered the impact of price changes in our ETTS (refer [Customer bill impact modelling](#)). This is reflected by our future two-way tariff structures, the pace of tariff assignment to two-way tariff structures, and the way we let customers choose to opt-in early to this tariff or opt-out of it to another cost reflective tariff option. These changes are designed to empower our customers to save money through their decisions about when they consume or export energy.

New customers will be assigned to our default cost-reflective charges, as set out in [Assigning customers to standard control services tariff classes](#). We have also structured our most cost-reflective distribution network charges to encourage customers to opt-in to them and save money through the Sun Soaker time of use (TOU) savings opportunities.

Making our distribution network charge structures understandable

During our consultation process, customers, retailers, and other stakeholders told us that our tariffs need to be 'easy to understand' and 'relatively simple to interpret'. In relation to clause 6.18.5(i), we have endeavoured to ensure our proposed tariff structures achieve this. Part of our approach was to trial our new tariff structures to test ease of understanding and consult with our customers and retailers on the new tariff structures.

We have undertaken several measures to aid the simplicity and understandability of our tariffs:

- > retaining postage stamp pricing
- > not implementing seasonal tariffs
- > simplifying our charging windows for the new default Sun Soaker tariff, which only has two consumption rates (peak and off-peak) instead of three (peak, shoulder and off-peak)
- > simplifying our Sun Soaker tariff to be an energy based kWh tariff instead of a monthly demand based kW tariff

² AER, Legacy metering services – Guidance note, November 2023, p.4.

- > simplifying our export tariffs to only have 1 export pricing band above the basic export level
- > allowing existing residential and small business customers who want to select the new Sun Soaker tariff to opt-in, so that existing customers who understand two-way charging can also be assigned to this pricing
- > we will prepare fact sheets explaining how our export tariffs will work, and these will be available on our website.

Our approach to setting prices

Each year we must set our price levels to ensure we recover the revenue requirement approved by the AER for that year. These price levels will apply to each of the charging parameters in the tariff structures shown in this Revised TSS. This section explains how we will do this, as well as the approach we have used to develop the indicative tariffs that inform the bill impacts analysis presented in this Revised TSS.

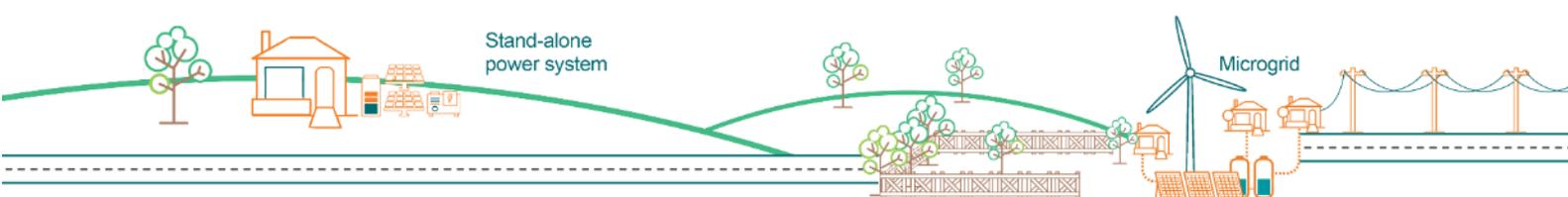
Explaining the link between long run marginal cost, residual costs and our tariffs

Our proposed distribution network tariffs are designed to reflect our LRMC estimates, while also recovering our residual costs. A graphical overview of our approach to determining our network charge structures can be found on the following page.

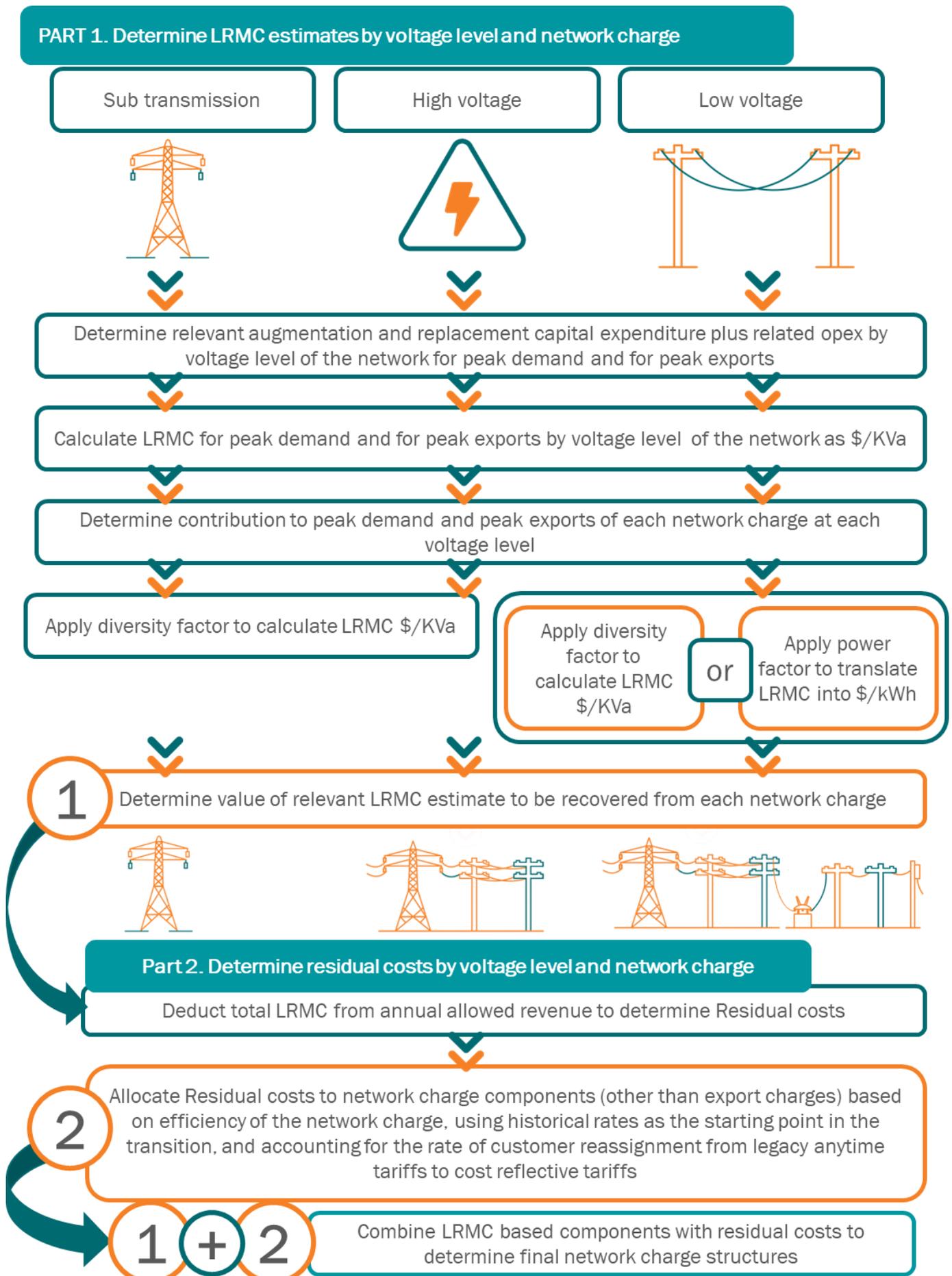
We are improving price signals to encourage more efficient use of our network, while managing bill impacts for customers as we transition to more cost-reflective charges.

In addition, when calculating our proposed distribution network tariffs for each year of this Revised TSS, we have:

- > ensured the expected revenue for each customer class lies between our estimates of the standalone cost of serving customers in that class and the avoidable costs of not serving them (as discussed above)
- > assessed the relevant variable components of each customer class to test that these are at least recovering the LRMC contributions of customers on those tariffs
- > sought to align peak demand charges and peak export charges with our estimates of LRMC for relevant voltage levels
- > sought to align the LV tariff export rebate with the equivalent peak consumption charge in the same time window to provide a symmetrical reward to customers and encourage reductions in peak demand
- > allocated residual costs in a way that minimises distortion to customers' usage decisions by recovering more residual costs from fixed distribution network charges that are less efficient or less responsive to price changes and ensuring an equitable contribution to residual costs from all tariffs, including our ones with cost-reflective tariff structures
- > considered customer bill impacts.



Our approach to determining network charge structures



Residual cost allocation

We have sought to allocate residual costs (the difference between LRMC-driven costs and our AER-allowed revenues) in a way that:

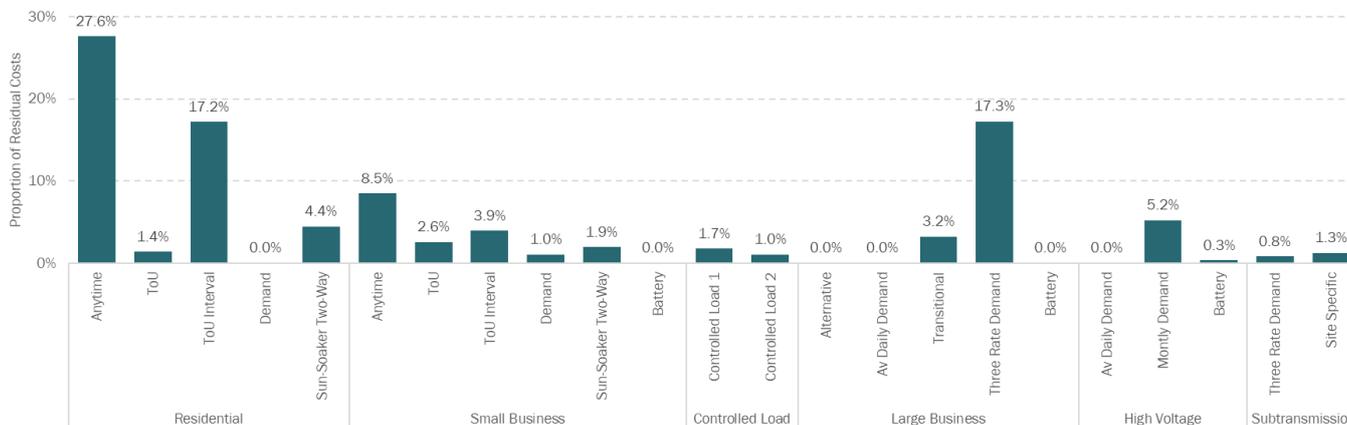
- > allows us to create distribution network charges that more accurately reflect the cost of providing network services at different times of the day
- > supports cost-reflective tariffs for low-voltage customers that are designed for a future state and are technology agnostic, meaning these customers can access the same tariffs and opportunities for savings or rebates irrespective of the new energy technologies they choose to invest in and connect to our grid
- > accounts for the fact that a greater share of our customer base will receive a smart meter and be assigned to more efficient distribution network tariffs during the 2024–29 period
- > encourages customers to take up and respond to our new Sun Soaker tariff
- > provides opportunities for our customers to save money through decisions about when they use energy and when they export energy.

This approach means that:

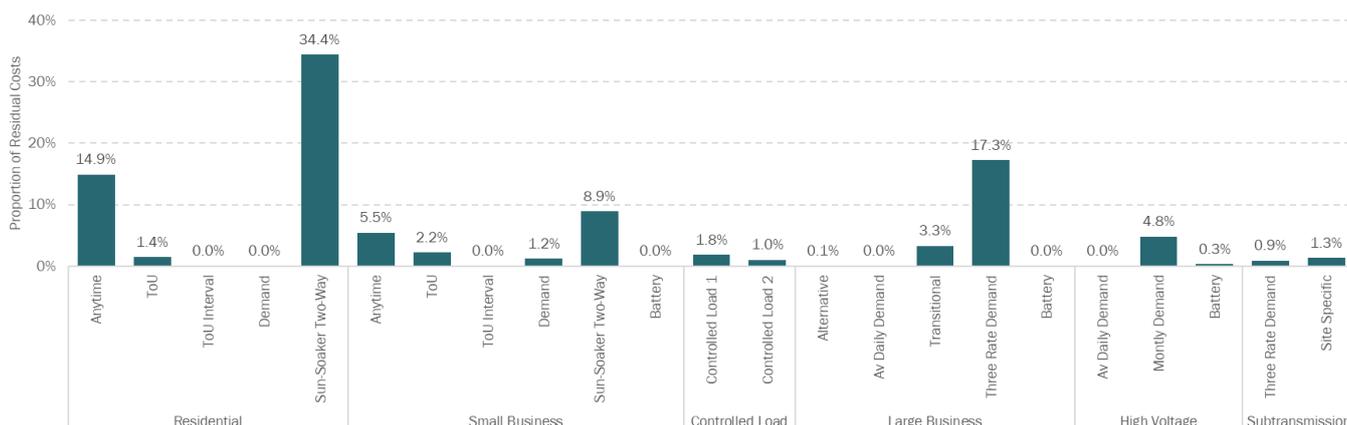
- > our most efficient charging types (peak demand and peak exports) most closely reflect their associated LRMC estimates
- > our relatively more efficient charging types (Time of Use [ToU] charges and rebates) reflect pricing levels that support incentives for efficient use
- > our daily network access charges make a stable contribution to our fixed residual costs without distorting energy usage decisions – specifically, we have aimed to keep fixed charges:
 - equal across all open tariffs by customer type
 - stable by applying the inflation element of our allowed revenue growth to this fixed charge in the first instance, though by no more than 2.5 per cent per annum. Where inflation exceeds 2.5 per cent in any year, the balance will be recovered through consumption charges
 - consistent with the AER’s legacy metering pricing guidance
- > we can minimise pricing volatility amid the transition of a greater share of our customer base to more efficient tariff structures enabled through the accelerated deployment of smart meters.

This method of allocating our residual costs across different pricing types is the best way to encourage customers to choose cost-reflective tariffs.

Allocation of residual costs between distribution network charges and customer types - 2025



Allocation of residual costs between distribution network charges and customer types – 2029



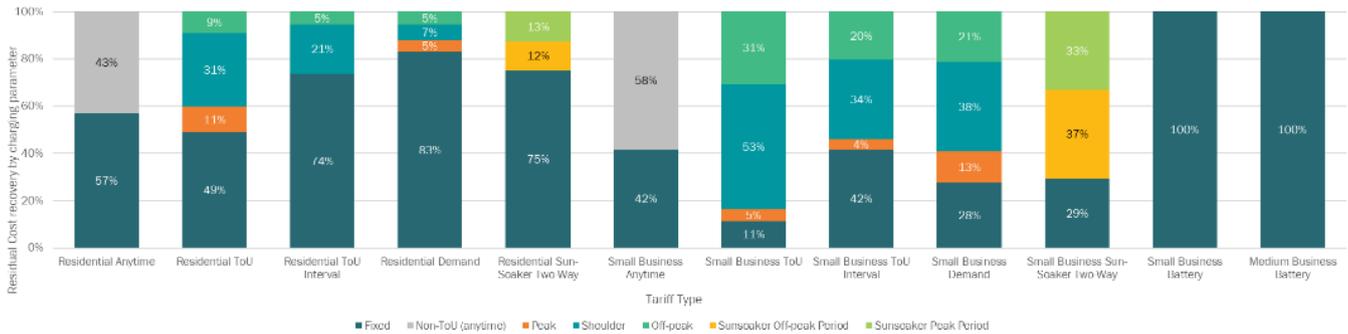
Charging parameters

We have continued this principled approach when allocating residual costs within distribution network charges, based on the various charging parameters for each tariff.

We have allocated a higher share of residual costs to charging parameters that are not closely linked to our LRMC cost drivers (e.g., fixed and usage charges). Our demand charging does not attract significant residual costs. This approach is more cost-reflective and more likely to change customers’ consumption behaviour. Our export tariffs have been based on the LRMC for peak exports with no residual costs on these tariffs.

To put the split of residual costs for ToU and demand pricing in perspective, it is important to consider the allocation of residual costs in conjunction with the actual residual dollars allocated to each pricing component.

Residual Cost recovery by charging parameter - 2025



Setting export prices

Our approach to the basic export level

For the next two regulatory periods, we are required to provide a basic export level for any customer on an export tariff that is free. This is the threshold up to which a customer may export without charge. In exceptional circumstances a customer may be subject to an export constraint or dynamic control that may be set below 1.5 kW.

For the 2024–29 period we propose that any customer who has an export tariff will be entitled to the same basic export level. This will comprise both:

- > a basic export level of 1.5 kW (or 1.5 kWh per hour³) that will attract no export charge between 10am and 3pm daily
- > no export charges at all between 3pm and 10 am daily (that is, 19 hours a day).

This approach will support:

- > simplicity and clarity for our customers and for retailers
- > fairness in the export tariff transition – a customer faces the same basic export level regardless of when they are assigned to an export tariff, or to what voltage level they connect
- > equality in network access – we have identified a basic export level that can be available to any customer on our network, consistent with our customers’ strong preference for postage stamp pricing arrangements.

We set about identifying the universal basic export level by having regard to:

- > the export capacity of our distribution network to the extent it requires minimal or no further investment – the network’s intrinsic hosting capacity for the most constrained sections in our network
- > expected demand for export services in the distribution network, and
- > our customer and stakeholder engagement outcomes.

This is explained in **Attachment 9.02 – TSES**.



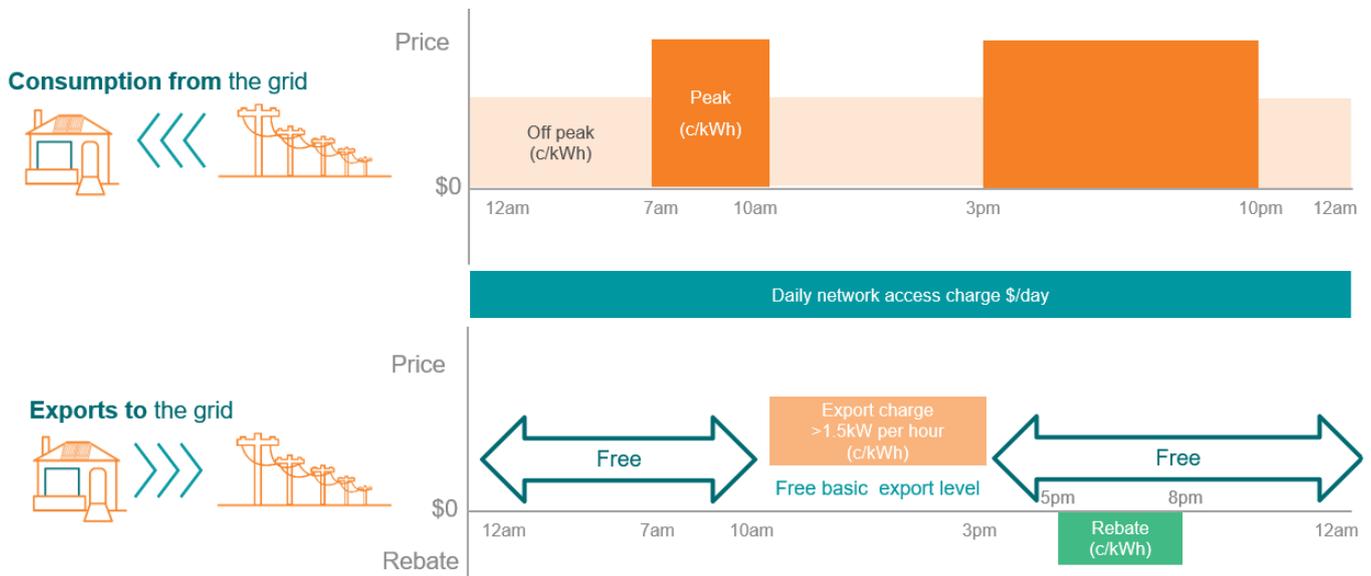
³ This will be billed as 7.5kWh per day monthly based on the number of billing days in that month.

Our approach to setting export tariffs and rebates

We have designed our Sun Soaker export tariffs with reference to:

- > parent tariffs for relevant existing energy consumption, daily access and export rebate charging parameters
- > our estimates of peak export LRMC by voltage level
- > an energy-based export tariff and basic export level to support customer understanding, behavioural reward and retailer pass through for these customers.

The design of Essential Energy's residential and small business export tariffs



The approach for the export tariff and rebate components of our low-voltage large business tariff adopts the same export tariff and rebate approach as above but retains a demand-based kW export tariff and basic export limit. This kW basis of export pricing recognises that these customers are accustomed to demand tariffs and managing their peak capacity use and can manage the pace of their exports in the same way.

Our low-voltage and high-voltage storage and hybrid tariffs and our LV small scale storage tariff also have the demand-based kW tariff for the exports to the grid. The rebate only applies to LV tariffs because this is where avoiding evening peak demand warrants a rebate based on our peak capacity constraints.

This approach has been informed by:

- > the tariff structures we co-designed with our customers for our tariff trials, and lessons from those trials
- > our network cost drivers, peak demand and peak export forecasts, the costs of system minimum demand and, therefore, our separate estimates of LRMC for peak demand and peak exports
- > our customers' preference for postage stamp pricing – this has driven us to adopt no locational pricing and to use the same basic export level for all customers based on our most constrained locations
- > adopting either demand based (kW) or energy based (kWh) export tariffs and basic export levels for different customer types based on their expected ability to understand and respond to those tariff types
- > benchmarking the tariff structures and basic export service thresholds that other distribution networks are trialling with their customers and proposing in the TSSs and harmonising with these where suitable for our network and customer types as we have been encouraged to do by the AER
- > testing bill impacts with our PCC by building a bill impacts tool for them to assess different customer circumstances and abilities to consume and export energy
- > feedback on our Draft TSS, January 2023 TSS proposal, AER Draft Decision feedback and subsequent further engagement with our PCC, Essential People's Panel, retailers and new tech forum.

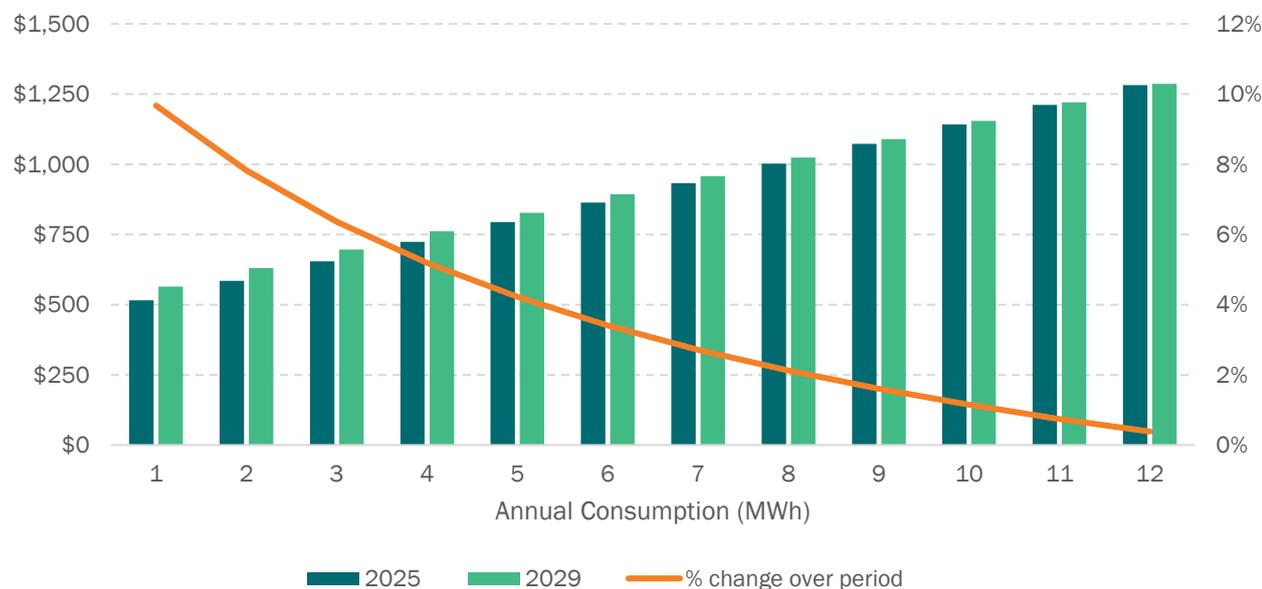
Customer bill impacts

Our proposed network charging approach is different for the 2024–29 regulatory period and will lead to changes in customers’ tariffs. Residential and small business customers will have lower network charges under our Sun Soaker tariff, as shown in the *Customer bill impact modelling* section, **Appendix A– Customer bill impacts**, and in the modelling provided in **Attachment 9.02 - TSES**.

Of course, average price changes may vary for each customer, depending on their consumption level and peak exports. Given the number of tariffs and the various iterations of bill impacts possible, we illustrate below only the bill impacts for a residential customer without rooftop solar on our Sun Soaker tariff. Further tariffs and customer types are shown in **Appendix A – Customer bill impacts** and a full list of our indicative prices is included as **Attachment 9.04 – Indicative NUoS Pricing Schedule**.

All impacts shown below assume that retailers pass our tariff signals on in full – they do not assume any customer response to our price signals. This means that customers who move their energy consumption in response to our Sun Soaker price discounts, or their exports in response to our export prices and rebates, will face lower bills than shown below and in **Appendix A– Customer bill impacts**.

Residential customer without solar Sun Soaker network charge including metering – estimated annual DUoS charge based on customer usage (\$, real 2023–24)



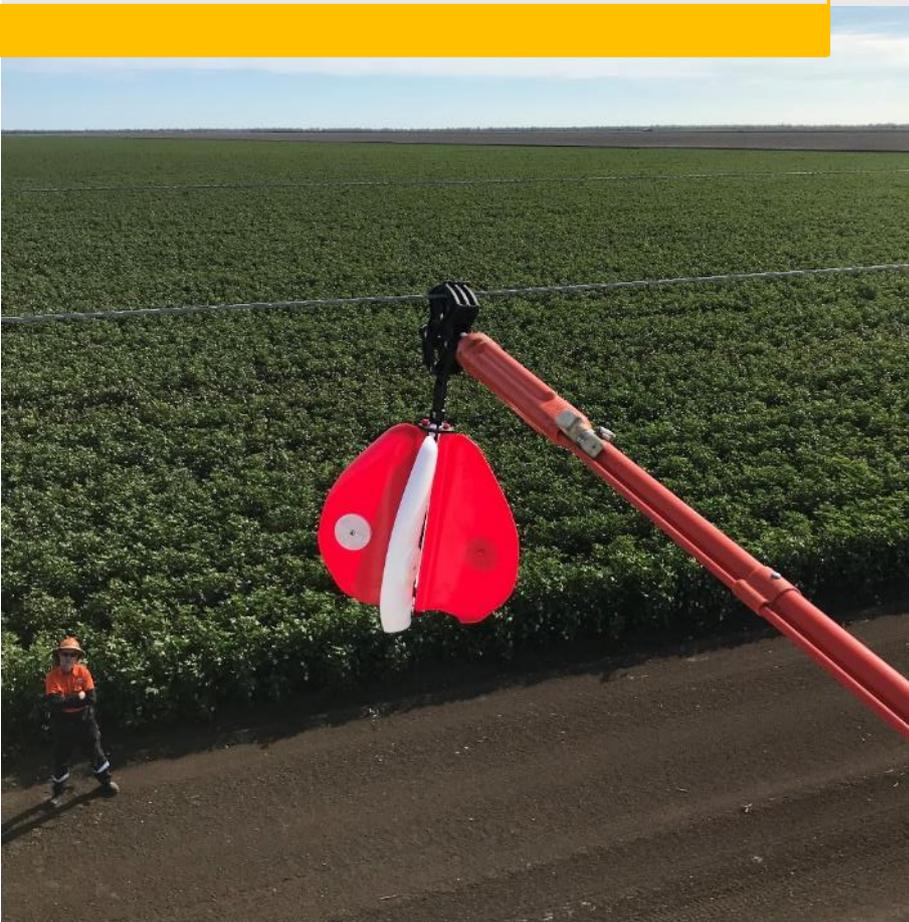
Annual customer usage	2024–25	2025–26	2026–27	2027–28	2028–29	Total \$ change over the period	% Change over the period
1 MWh	\$515	\$527	\$539	\$552	\$565	\$50	9.7%
2 MWh	\$585	\$594	\$606	\$617	\$631	\$46	7.8%
3 MWh	\$654	\$662	\$672	\$683	\$696	\$42	6.4%
4 MWh	\$724	\$729	\$738	\$748	\$762	\$38	5.2%
5 MWh	\$794	\$796	\$805	\$814	\$827	\$34	4.2%
6 MWh	\$863	\$864	\$871	\$879	\$893	\$29	3.4%
7 MWh	\$933	\$931	\$937	\$944	\$958	\$25	2.7%
8 MWh	\$1,003	\$999	\$1,004	\$1,010	\$1,024	\$21	2.1%
9 MWh	\$1,072	\$1,066	\$1,070	\$1,075	\$1,090	\$17	1.6%
10 MWh	\$1,142	\$1,134	\$1,136	\$1,141	\$1,155	\$13	1.1%
11 MWh	\$1,212	\$1,201	\$1,203	\$1,206	\$1,221	\$9	0.7%
12 MWh	\$1,282	\$1,268	\$1,269	\$1,272	\$1,286	\$5	0.4%

04

Explanation of tariff structures, charging parameters and classes

Chapter summary

- The structure and charging parameters of our tariffs
- Our policies and procedures for assigning customers



Our distribution network charge structures

Distribution network tariff structures by customer class

Residential and small business customers are assigned to different distribution network tariffs based on their meter type. There are three categories of meters that define our distribution network tariffs: manually read accumulation meter (Type 6 meter), manually read interval meter (Type 5 meter), and remotely read smart meters (Type 1 to 4 meters).

Charging windows

Our ToU charging windows for consumption, demand and export charges are set to different time windows, according to the meter type and the assigned tariff.

Type 5 meters cannot be cost-effectively reprogrammed, so they still record a morning peak between 7am and 9am on weekdays.

Contingent trigger to maintain peak period alignment

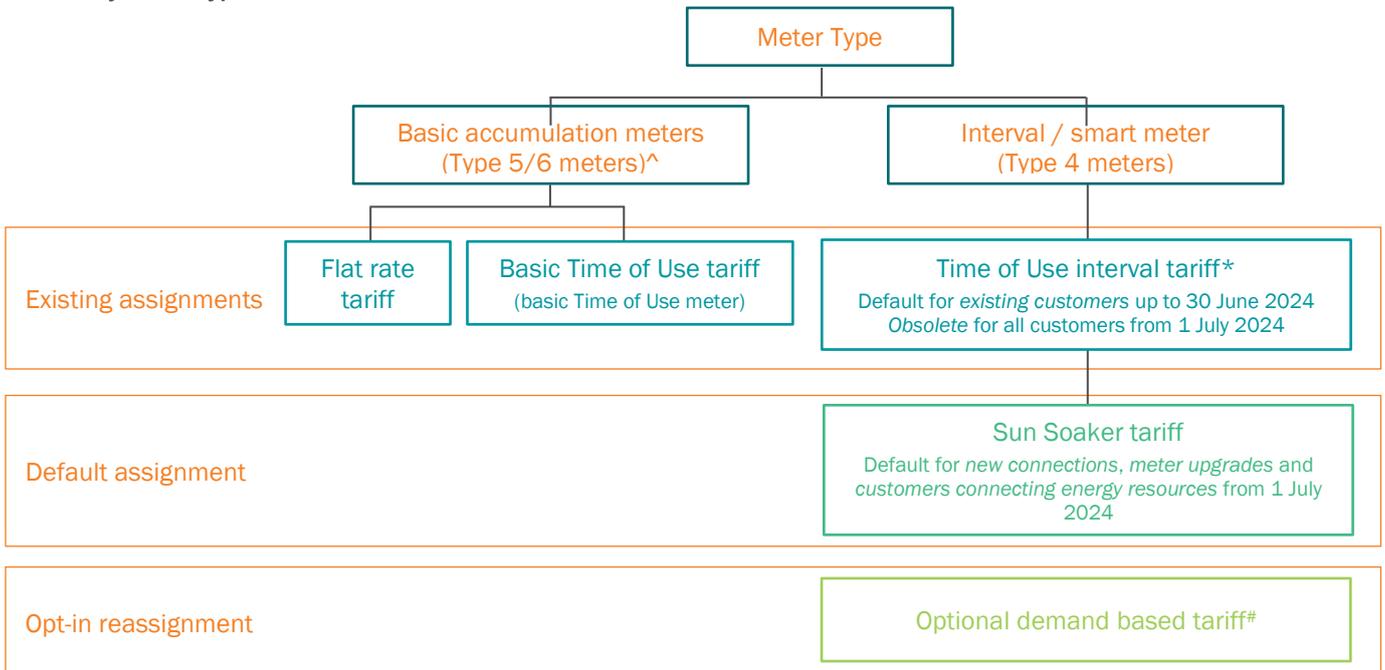
Our 2024–29 TSS includes a contingent trigger for adapting the TOU charging windows to maintain peak period alignment. This will be used if:

- > data shows that this is required to maintain the alignment of our relevant peak, shoulder or off-peak TOU windows with the observed system peak demands in the 12 months preceding the date of lodging the annual pricing proposal
- > that peak demand outcome was not caused by what Essential Energy considers to be an anomalous event.

This trigger has been included following consultation with our PCC and concerns from the AER given the rapid transformation occurring in the energy system. If triggered, the number of hours in the peak TOU windows would not change, just the timing for when it commences and finishes.

This trigger does not apply to controlled load tariffs which already operate dynamically to efficiently maximise the amount of discounted controlled consumption time.

Tariffs by meter type for residential and small business customers



[^] Type 5 and 6 meter type customers can request a reassignment, but their retailer will need to install a smart meter to enable this. They will then have access to the assignments for interval/smart meters. Customers are permitted a single opt-in reassignment every 12 months per retailer.

* Customers on this tariff will default to the Sun Soaker tariff from 1 July 2028 or the pricing year immediately following Essential Energy establishing its new billing process capabilities.

Export charge and rebate will be included in this tariff from 1 July 2028 or the pricing year immediately following Essential Energy establishing its new billing process capabilities.

The distribution network charge structures for each of our tariff types are shown on the following pages.

Low-voltage distribution — Residential and Small Business

Eligibility: Residential premises wholly used as private dwelling and business premises where business consumption does not exceed 160 MWh a year)

 DISTRIBUTION NETWORK CHARGE	 NETWORK ACCESS Fixed dollar per day charge	 CONSUMPTION Cents per kWh rate	 DEMAND Dollars per kVA per month	 EXPORT Cents per kWh charge, cents per kWh rebate
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Anytime <100 MWh	Applies	Flat rate regardless of time of day				
ToU (basic Type 5 meter) < 100 MWh	Applies	Peak weekdays 7-9am and 5-8pm	Shoulder weekdays 9am - 5pm and 8-10pm	Off-peak All other times	Does not apply	Does not apply
ToU (interval/smart meter)#	Applies					
ToU with demand component	Applies	Peak weekdays 5-8pm	Shoulder weekdays 7am - 5pm and 8-10pm	Off-peak All other times	One charge for maximum demand during the peak period in the month	Applies from 1 July 2028^ (as per below)
Sun Soaker	Applies	Peak everyday 7-10am and 3-10pm		Off-peak All other times	Does not apply	Cents per kWh charge* for exports during the 10am and 3pm peak period Cents per kWh rebate for any energy exported between 5pm and 8pm

^ Or the pricing year immediately following Essential Energy establishing its new billing process capabilities. Once added, these opt in demand customers will have a demand-based export price and basic export level charged in kW per month.
 * Charge is based on two pricing bands: 0-1.5kW per hour free basic export level; Band 1 >1.5kW per hour
 # Customers on this tariff will default to the Sun Soaker tariff from 1 July 2028 or the pricing year immediately following Essential Energy establishing its new billing process capabilities

Low-voltage distribution — Controlled Load (Residential and Small Business)

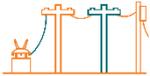
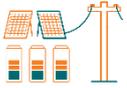
Eligibility: Premises has another primary metering point at the same metering point as the secondary load and the load is remotely controlled. Load is permanently connected or on a dedicated power circuit with indicators to show when supply is available. The load types can be for any controlled customer device (e.g. hot water, floor heating or a single phase EV charger) so long as the load connected does not exceed the 25 Amps resistive capacity of the load control device. Other conditions apply, as detailed in the Network Pricelist and Explanatory Notes published as part of our annual pricing proposal.

 DISTRIBUTION NETWORK CHARGE	 NETWORK ACCESS Fixed dollar per day charge	 CONSUMPTION Flat cents per kWh rate
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Controlled Load 1	Applies	Consumption charging flat cents per kWh rate between five and nine hours on weekdays and extra hours at the weekend, except where the load is controlled by a clock
Controlled Load 2	Applies	Consumption charging flat cents per kWh rate between 10 and 18 hours a day on weekdays and extra hours at weekends, except where the load is controlled by a clock

Low-voltage distribution — Small Scale Storage (Small Business)

Eligibility: New customers connected to the low-voltage distribution network whose sole purpose is to operate commercial storage with no co-located load or generating units behind their meter. Eligible storage are up to and including 250kW.

				
DISTRIBUTION NETWORK CHARGE	NETWORK ACCESS	DEMAND	EXPORT	
	Fixed dollar per day charge	Dollars per KVA per month based on time of day	Dollars per KW per month charge, cents per kWh rebate	
		<p>Peak 5-8pm</p> <p>Shoulder 7-10am, 3-5pm and 8-10pm</p> <p>Off-peak All other times</p>		
Low-voltage – Small storage two-way	Applies	Applies	Applies	Dollars per KW charge* for maximum export during the 10am and 3pm peak period in the month Cents per kWh rebate for any energy exported between 5pm and 8pm

* Charge is based on two pricing bands: 0-1.5kW free basic export level; Band 1: >1.5kW

Low-voltage distribution — Large Business

				
DISTRIBUTION NETWORK CHARGE	NETWORK ACCESS	CONSUMPTION	DEMAND	EXPORT
	Fixed dollar per day charge	Cents per kWh rate based on time of day	Dollars per kVA per month	Dollars per kW per month charge, cents per kWh rebate
		<p>Peak weekdays 5-8pm</p> <p>Shoulder weekdays 7am-5pm and 8-10pm</p> <p>Off-peak All other times</p>		
	Eligibility			
Low-voltage – ToU three rate demand	Business premises with a low-voltage connection where consumption exceeds 160 MWh a year		Charge based on the highest measured half-hour kVA demand registered in each of the peak, shoulder and off-peak periods during the month	Applies from 1 July 2028^ Dollars per KW charge* for maximum export during the 10am and 3pm peak period in the month
Low-voltage – ToU demand alternative	Business premises with a low-voltage connection where consumption exceeds 160 MWh a year		One charge based on the highest measured half-hour kVA demand registered in either the peak or shoulder periods during the month	Cents per kWh rebate for any energy exported between 5pm and 8pm

^ Or the pricing year immediately following Essential Energy establishing its new billing process capabilities

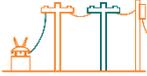
* Charge is based on two pricing bands: 0-1.5kW free basic export level; Band 1 >1.5kW

Low-voltage distribution — Large Storage and Hybrid (Large Business)

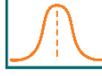
Eligibility: New customers connected to the low-voltage distribution network who operate commercial scale storage and or generation units with no co-located load behind their meter that is not ancillary to the operation of those batteries or generation units. Eligible storage are >250kW.



DISTRIBUTION NETWORK CHARGE



NETWORK ACCESS



DEMAND



EXPORT

Fixed dollar per day charge

Dollars per KVA per month based on time of day

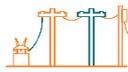
Dollars per KW per month charge, cents per kWh rebate

Peak 5-8pm
Shoulder 7-10am, 3-5pm and 8-10pm
Off-peak All other times

Low-voltage - Storage two-way	Applies	Applies	Applies	Applies	Dollars per KW charge* for maximum export during the 10am and 3pm peak period in the month Cents per kWh rebate for any energy exported between 5pm and 8pm
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* Charge is based on two pricing bands: 0-1.5kW free basic export level; Band 1: >1.5kW

High-voltage distribution — High-voltage Demand

	 DISTRIBUTION NETWORK	 NETWORK ACCESS	 CONSUMPTION	 DEMAND
		Fixed dollar per day charge	Cents per kWh rate based on time of day Peak weekdays 5-8pm Shoulder weekdays 7am-5pm and 8-10pm Off-peak All other times	Dollars per kVA per month based on time of day
		Eligibility		
High-voltage – ToU monthly demand	> Business premises connected and metered at high-voltage network			Charge based on the highest measured half-hour kVA demand registered in each of the peak, shoulder and off-peak periods during the month
High-voltage – ToU average daily demand	> Not available to new customers > Business premises connected and metered at high-voltage network > Monthly load factors greater than 60% for at least four of the most recent 12 months coinciding with a minimum on-season Anytime monthly demand of 1500 kVA. The minimum demand and load factor requirements will be waived where a generator supports a substantial part of the load on the load side of the meter > Intended for customers with seasonal demand			Demand charge calculated on the average daily ToU demand for peak, shoulder and off-peak periods for the month

High-voltage distribution — Storage and Hybrid

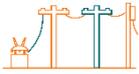
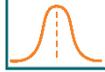
Eligibility: New customers connected to the high-voltage distribution network who operate commercial scale storage and or generation units with no co-located load behind their meter that is not ancillary to the operation of those storage or generation units.

	 DISTRIBUTION NETWORK CHARGE	 NETWORK ACCESS	 DEMAND	 EXPORT
		Fixed dollar per day charge	Dollars per KVA per month based on time of day Peak 5-8pm Shoulder 7-10am, 3-5pm and 8-10pm Off-peak All other times	Dollars per KW per month charge
High-voltage – Storage two-way	Applies	Applies	Applies	Applies
				Dollars per KW charge* for maximum export during the 10am and 3pm peak period in the month

* Charge is based on two pricing bands: 0-1.5kW free basic export level; Band 1: >1.5kW

Sub-transmission

Eligibility: Connected at a sub-transmission voltage network (as defined by Essential Energy), not applicable for connection to dual purpose sub-transmission/distribution circuits. Inter-distributor transfer customers. Site specific large business customers assessed on a case-by-case basis by application to Essential Energy.

	 DISTRIBUTION NETWORK CHARGE	 NETWORK ACCESS	 CONSUMPTION			 DEMAND
	Fixed dollar per day charge	Cents per kWh rate based on time of day			Dollars per kVA per month based on time of day	
		Peak weekdays 5-8pm	Shoulder weekdays 7am-5pm and 8-10pm	Off-peak All other times		
Sub-transmission – ToU monthly demand	Applies	Applies	Applies	Applies	Charge based on the highest measured half-hour kVA demand registered in each of the peak, shoulder and off-peak periods during the month	
Site specific	Applies	Various combinations of fully cost-reflective structures with individually calculated tariffs as explained in our tariff structure explanatory statement.				

Unmetered Supply

Eligibility: Type 7 metering installation. Applies to loads detailed in the Australian Energy Market Operator National Electricity Market Load Tables⁴).

	 DISTRIBUTION NETWORK CHARGE	 NETWORK ACCESS	 CONSUMPTION		
			Cents per kWh rate based on time of day		
	Eligibility				
Low-voltage unmetered supply	All new unmetered supply connections will have this pricing	Fixed dollar per day charge	Flat rate not based on time of day		
Low-voltage public lighting ToU	All new public street lighting connections will have this pricing	Does not apply	Peak weekdays 7-9am and 5-8pm	Shoulder weekdays 9am-5pm and 8-10pm	Off-peak All other times

⁴ https://www.aemo.com.au/-/media/Files/Electricity/NEM/Retail_and_Metering/Metering-Procedures/NEM-Load-Tables-For-Unmetered-Connection-Points.pdf

05

Tariff assignment procedures and policies



Chapter summary

- How customers are assigned and reassigned to customer groups for pricing

Assigning customers to standard control services tariff classes

Network tariff assignment determines which network tariff a customer is charged. It is based on the eligibility criteria for our default tariffs or the choices by customers or their retailers to opt-in to a non-default tariff. This differs from retail tariff assignment which reflects a customer’s choice of retailer and retail tariff offering. The retail tariff a customer chooses may or may not include tariff structures that reflect the default network tariff to which the customer is assigned.

All new customers have a default network tariff assignment for their customer type. New and existing customers who have a smart meter can also choose other cost reflective option(s) if they meet the eligibility criteria. We reassign customers if their characteristics change.

Tariff assignment approach for the 2024–29 regulatory period

Low-voltage – Residential and small business				
		TYPE 5 AND 6 METERS*	TYPE 4 METER	
MANDATORY	Network access charge			
DEFAULT	Anytime charge	ToU charge (basic-ToU meter type)	ToU interval charge#	For existing connections up to 30 JUNE 2024
			Sun Soaker~	For new greenfield connections, meter upgrades, or customers connecting energy resources from 1 JULY 2024
			Small storage two-way	For new small storage connections
OPTIONAL			ToU charge with demand component^	Available as opt in for all Type 4 meters at any time
			Sun Soaker	

* No opt-in tariffs are provided for small customers with Type 5 and 6 meters. These customers can still request a reassignment, but their retailer will need to install a Type 4 meter to enable this. They will then have access to the assignments for Type 4 meters. Customers are permitted one opt-in reassignment every 12 months per retailer.

From 1 July 2028, or the pricing year immediately following Essential Energy establishing its new billing process capabilities, Type 4 meter customers on the ToU tariff will be reassigned to the Sun Soaker consistent with our export tariff transition strategy.

~ From 1 July 2024 to 30 June 2025 the export tariff and rebate will be set at zero.

^ From 1 July 2028, or the pricing year immediately following Essential Energy establishing its new billing process capabilities, a kW export tariff will be added to the demand-based tariff along with an equivalent export rebate.

		Low-voltage – Large Business		High-voltage	
		INTERVAL/SMART METER	INTERVAL/SMART METER –STORAGE	INTERVAL/SMART METER	INTERVAL/SMART METER –STORAGE
MANDATORY	Network access charge	Network access charge	Network access charge	Network access charge	Network access charge
MANDATORY	ToU charge with demand component^	LV large storage two-way	ToU charge with demand component	HV storage two-way	

^ From 1 July 2028, or the pricing year immediately following Essential Energy establishing its new billing process capabilities, the kW export tariff will be added to the large business demand-based tariffs along with an equivalent export rebate.

Our broad policies for network tariff assignment and reassignment are outlined below. More details, including our notification and objection processes, can be found in **Appendix B – Network charge assignment and reassignment**.

Default assignment

Default distribution network tariff assignment happens when a customer starts consuming electricity from a new connection point (greenfield site), or they receive a meter upgrade. We assign each customer to their appropriate default tariff class based on technical properties, such as their estimated load (demand and/or usage), the voltage level at which they are connected to the network, and their meter type.

To assign (or reassign) customers to an appropriate tariff class, we combine our own information with information from the retailer's service to:

- > assign the customer to the appropriate tariff class, based on the class criteria
- > assign the customer to an appropriate distribution network tariff within that class, based on their connection, load and metering characteristics, and customer type such as residential or business.

If there is a change of occupancy, we will assign the new customer to the most appropriate default distribution network tariff, depending on the type of meter and customer.

Large business customers that consume over 160 MWh a year do not have the option to opt-out of a demand-based charge.

For large business customers who consume >10MW / 40GWh pa, we may provide a site-specific customer tariff which is a cost reflective network tariff applicable to the location of the customer's connection point and the characteristics of the customer's connection requirements (which may include whether the connection requirements provide for dynamically controlled exports). We may confidentially determine such individually calculated tariffs in accordance with the eligibility arrangements and tariff setting approach set out in this TSS and would seek AER approval of these in the annual tariff variation process.

Assigning or reassigning customers to an export tariff

Our policy and procedure for assigning customers to an export tariff is the same as outlined above for our default and opt-in tariffs. This is because our engagement showed that our customers favoured a technology-agnostic approach to tariff assignment for low-voltage customers who invest in different forms of CER, and a specific targeted approach that supports the project economics of grid-scale batteries and hybrid energy systems. The eligibility criteria for an export tariff and rebate are that:

- 1) the customer has a smart meter; and
- 2) that any CER installed at their connection point is compliant with the current Australian Standard for inverter technologies (AS/NZS 4777.2:2020).⁵

Tariff reassignment

Customers will remain on their current distribution network tariff unless:

- > their meter is upgraded, e.g. through solar install or by request (although they may opt to move to a different cost reflective distribution network charge)
- > the customer or their retailer requests reassignment
- > we request reassignment.

Reassignment to a different tariff can be requested by a customer or retailer as a result of:

- > a customer request, for example, if they want to move to an opt-in, demand-based charge or the Sun Soaker tariff
- > a change in the customer's load, connection and/or metering characteristics.

Reassignment can also occur through Essential Energy's review process if we identify that a customer's load, connection and/or metering characteristics have changed and it is no longer appropriate for them to be assigned to their current tariff. A customer or retailer may only seek reassignment once a year unless they can prove mitigating circumstances or change retailer.

Customer classes assigned to export tariffs

Export tariff charging and rebate parameters have been included in our Sun Soaker tariffs and Storage two-way tariffs. These are set on either kW or kWh based on matching how the customer on that tariff pays for their energy imports from the grid.

From 1 July, or the pricing year immediately preceding Essential Energy establishing its new billing process capabilities, our export tariff and rebate will be included in the default and opt in tariffs for remaining low-voltage customers.

Two-way tariffs are available to the low-voltage large business tariff class and the low-voltage residential and small business tariff class.

⁵ AEMO, '[AS/NZS – 477.2 Inverter Requirements Standard](#)'.

06

Export tariff transition strategy

Chapter summary

- Outlines how we will phase in two-way pricing for customers



About this export tariff transition strategy

Our ETTS has been prepared in accordance with the requirements of the NER and the AER's guideline. This strategy provides transparency around our long-term plan to phase in export pricing over time. It is intended to provide customers who are considering investing in CER, including roof-top solar, clarity around their rights to access export services.

Our transition strategy has been informed by multiple factors, which are explained further in **Attachment 9.02 – TSES**, including:

- > the NER requirements and AER guideline
- > our network characteristics
- > our customers' CER and demand characteristics (see chapter 11, Energy and demand forecasts of our January 2023 Proposal and **Attachment 11.01** from the January submission)
- > our Future Networks Strategy (see chapter 4 of our Proposal, Network of the future and Resilience)
- > our DER integration strategy (see **Attachment 7.02** to our January 2023 Proposal) Demand management plan (see **Supporting Document 10.01.02** to our January 2023 Proposal)
- > our customer engagement across a diverse range of stakeholders on two-way pricing, both before and after publication of TSS in January 2023 (see **Chapter 2 – Our customer engagement, Appendix A, and Attachments 4.01 to 4.15** of our January 2023 Proposal, as well as **Chapter 2 – Our customer engagement** and **Attachments 2.01 and 2.03** in our Revised Proposal)
- > our trial tariff development and trialling lessons to date
- > feedback received on our Draft TSS and January 2023 TSS proposal.

The AER guideline requires that this ETTS should:

- > outline the pace and form of transitional measures for two-way pricing
- > explain how customer bill impact modelling has informed our transition strategy
- > explain how export tariff trials have influenced our transition strategy
- > describe how our transition strategy was developed in consultation with or, where appropriate, co-designed with our stakeholders.

The following sections address each of these requirements.

Transitional measures for export pricing

Timeframes for moving customers onto export tariffs

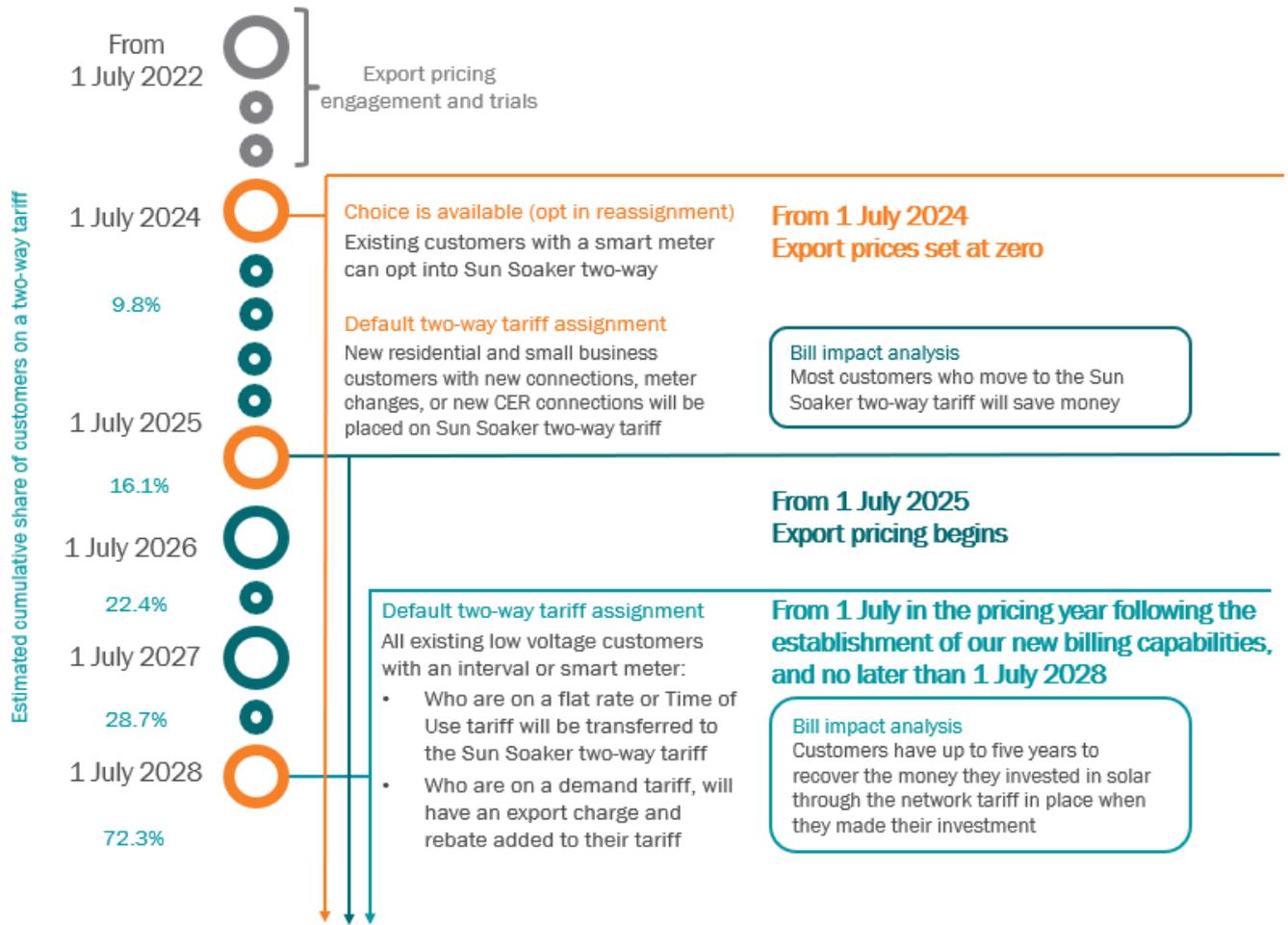
The figure below shows our staged approach to the transition to export pricing. This approach enables us to adopt cost-reflective export charges (based on our LRMC estimates for peak exports), and to achieve a gradual export transition through:

- > default assignments informed by bill impact analysis and customer engagement
- > opt-in reassignments for customer and retailer choice
- > empowering our customers to save money by encouraging them to choose
 - when to use energy via our Sun Soaker discounted midday consumption charges, and
 - when to export energy by aligning our export rebates to exports in the evening peak export

Customers assigned to the Sun Soaker tariff will have the ability to opt-out and use the demand-based tariff. From 1 July 2028, or the pricing year immediately following Essential Energy establishing its new billing process capabilities, a demand-based export tariff and rebate structure similar to that applying to the Sun Soaker tariffs will be included in the default and opt-in tariffs for low-voltage customers.

Our low-voltage and high-voltage grid-scale two-way storage tariffs will apply to all new grid-scale batteries from 1 July 2024. These will all be new greenfield connections or trial customers from the 2019-24 TSS period.





Our tariff trials and customer engagement have informed our export pricing

Designing our Sun Soaker tariff structure

Our PCC encouraged us to adopt an ‘end state’ tariff structure for our Sun Soaker tariff. Through consultation with our customers, retailers and energy intermediaries, we co-designed a series of tariffs to trial. We then notified the AER of these in our 2021–22, 2022–23 and 2023-24 annual pricing proposals.

We designed and trialled a range of tariffs that could be applied on a standalone basis or in conjunction with our existing consumption tariffs.

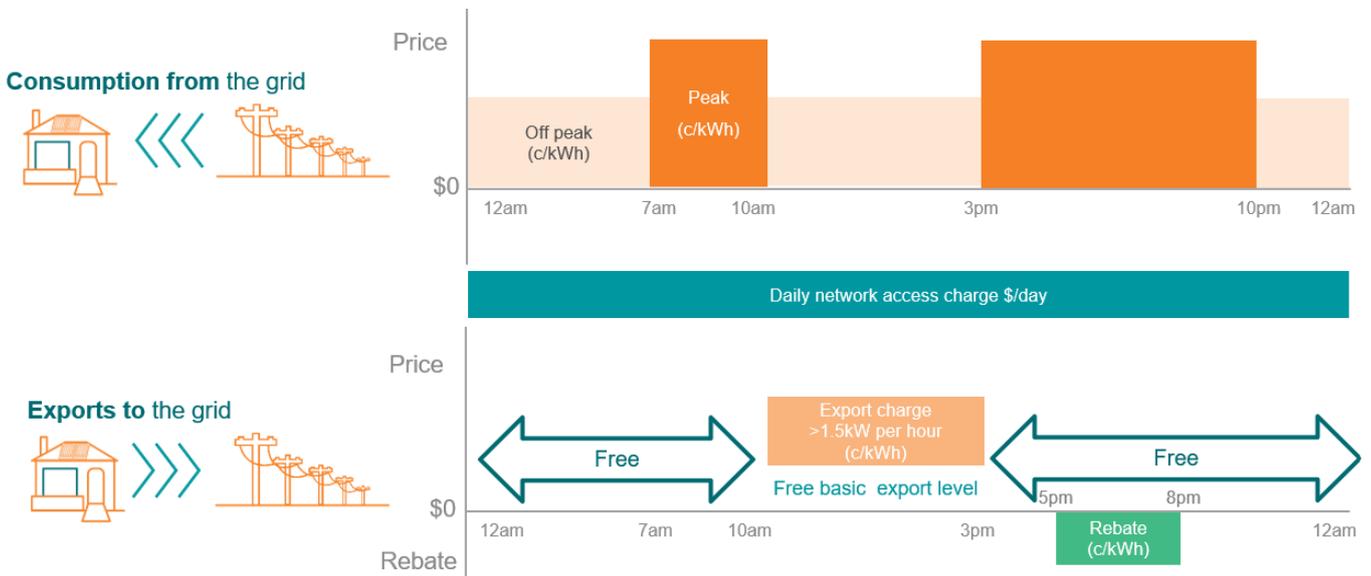
The 2024–29 export tariff structures that we settled on will differ depending on how the customer pays for their energy imports and the voltage level they connect to.

Residential and small business customers on our Sun-Soaker will pay an energy-based kWh export tariff consistent with the time of use kWh energy charges they pay for their consumption.

Customers on our storage tariffs, LV large business and opt in LV demand tariffs will pay a demand-based kW export tariff consistent with the demand charges they pay for their maximum energy imports.

All LV customers on two-way tariffs will also be eligible for a rebate on their energy in kWh exported during the 5pm-8pm evening network peak.

Our 2024–29 export tariff structure (Sun Soaker)



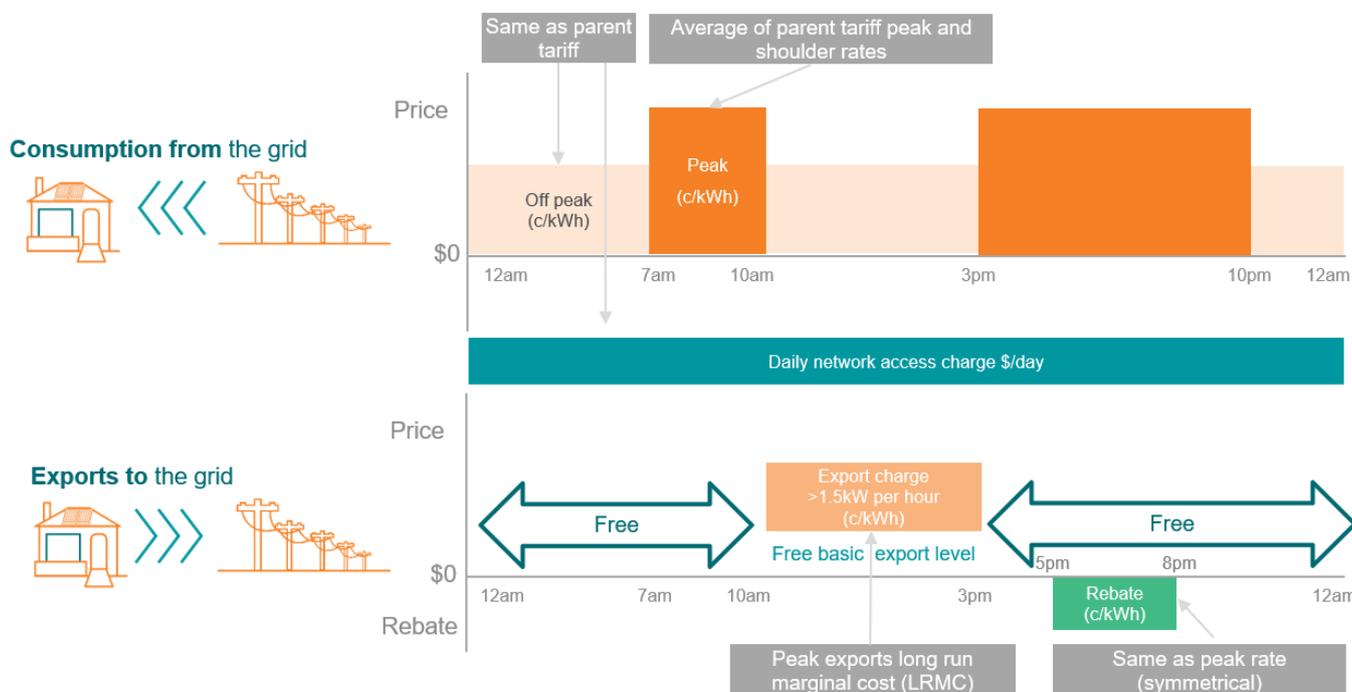
Setting our Sun Soaker tariff levels

After establishing the export tariff structure, we then worked to set the tariff levels (prices for each charging parameter) with regard to the following design considerations:

- > supporting an equitable transition and technology neutrality by setting charges the same as, or by reference to, the relevant parent tariff (where possible)
- > addressing network cost drivers arising from peak demand and peak exports by calculating separate LRMC estimates for peak demand and peak exports, and using these to inform our consumption and export charging parameters
- > supporting postage stamp pricing and equity in our basic export level by establishing a basic export level of 1.5 kW or 1.5kW per hour, which we have identified as our existing intrinsic hosting capacity currently available to all solar customers on our network
- > supporting a fair transition by ensuring that only future peak export costs incurred after 1 July 2024 have been included in our peak export charges
- > addressing our customers' preference for postage stamp pricing by not including locational pricing and using the same basic export service for all customers, based on our most constrained locations and network hosting capacity
- > considering customer bill impacts and testing bill outcomes with our PCC and customer deep dives.

The resulting approach to setting our Sun Soaker tariff levels is shown below.

Our approach to setting our Sun Soaker tariff levels



Export tariff level

The export tariffs for all our tariffs that have export charges have been set at our estimate of the LRMC of providing peak export services.

Export rebate level

The Sun Soaker tariff export rebate has been set symmetrically based on the peak consumption charge of the parent tariff. That is the rebate is the negative value of the peak energy charge. This tariff design decision was made having regard to:

- > Our co-designed principles for pricing that prices are *easy to understand*. This is the first time we have applied a rebate, and with the goal of behavioural change, our PCC agreed that a symmetrical tariff was simple to explain and would be perceived as fair
- > Our peak charges are calculated based on LRMC of providing distribution services at times of peak demand. While our peak charge on some tariffs include a contribution to residual costs, we assessed the materiality of the expected rebate and found this to be an immaterial amount relative to the expected benefits of having a simple message of symmetrical reward of peak charge to rebate value to support retailer uptake and customer response.

The export rebate for other low voltage customers who will have two-way pricing, including our low voltage small storage tariff and our low voltage large storage and hybrid tariff, has been set at 5 cents per kWh. This tariff design decision was made with regard to:

- > the fact that these customers have a demand-based kW charge for their peak consumption and a demand based export tariff, so they either have no relevant parent tariff peak energy charge or that charge is recovering residual not marginal costs.
- > assessing the level of rebate that other networks have proposed.
- > a lack of trial data for these customer types.
- > the energy arbitrage opportunities available to batteries that we expect will motivate desirable battery cycling behaviours.

Export tariff trials

Our small customer trials continue. Early implementation learnings that were available to inform this Revised TSS are:

- > Inconclusive demand response results. Data so far does not make a strong case that the complexity of export pricing bands and demand-based (kW) export pricing is warranted for residential and small customers
- > Residential and small customers with solar are already conscious about and showing evidence of load shifting for self-consumption. An energy-based (kWh) export price will better reward these behaviours than a monthly demand-based (kW) export charge
- > Critical peak prices and critical peak rebates have shown minimal financial benefit to customers from trial results while imposing a large administrative burden on Essential Energy.

Customer bill impact modelling

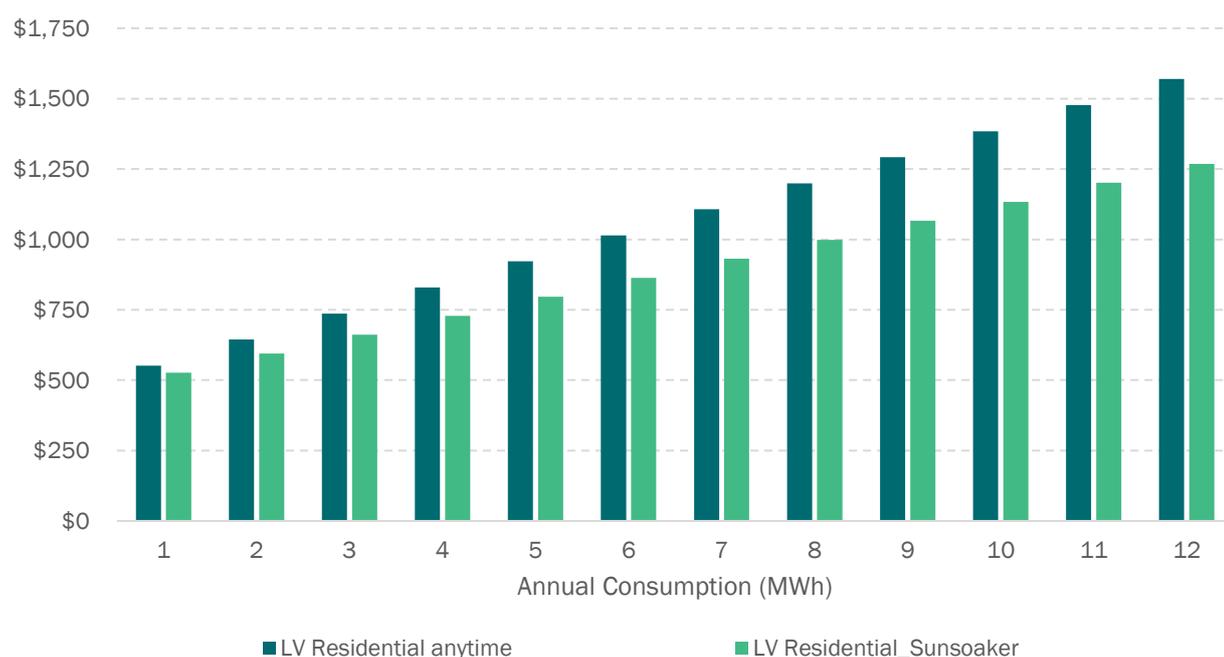
As noted above, we conducted extensive bill impact testing, including with our PCC and customer deep dives. This impact testing informed the transition strategy – our staged approach to export tariff assignment, our tariff structure and our tariff-level design decisions.

Customers are better off on our proposed Sun Soaker tariff as shown in the following charts that compare the Sun Soaker charges to our Anytime flat rate tariffs for residential and small business customers. These are shown for no solar, average existing solar installations and large solar installations across a range of annual consumption scales. You can read more about these customer bill impacts in **Appendix A – Customer bill impacts**.

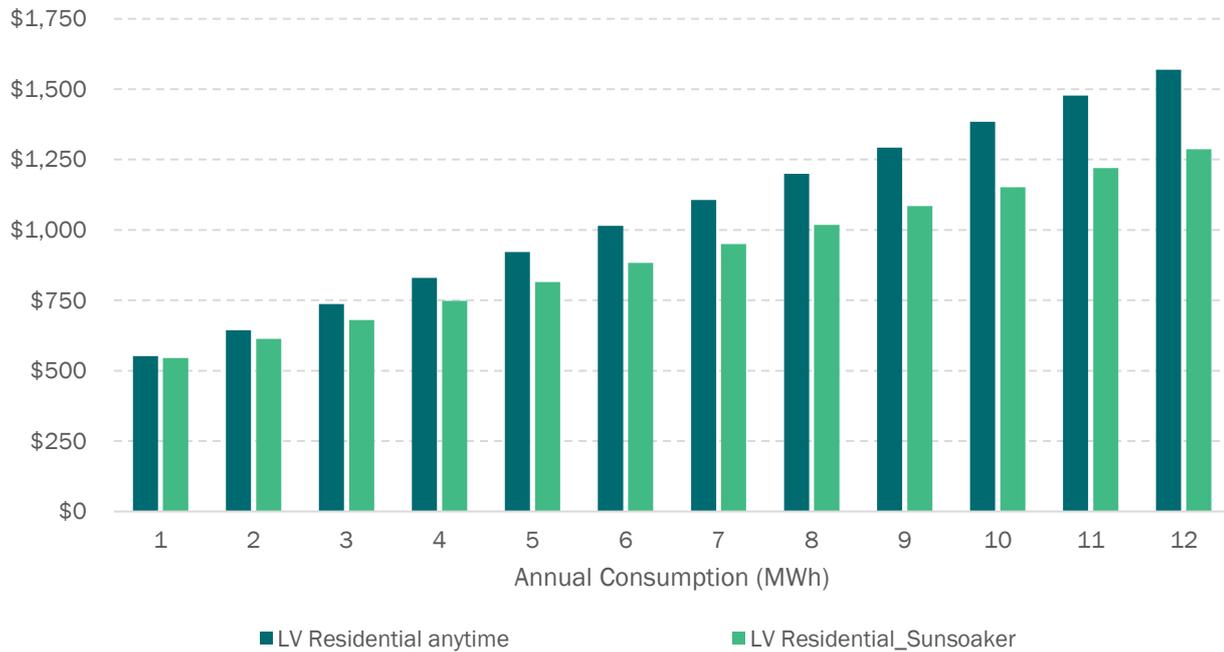
Residential customer bill impacts (\$, real June 2024)

Moving from our anytime flat rate tariff (BLNN2AU) to our Sun Soaker tariff (BLTTSS2), 2024-25 year

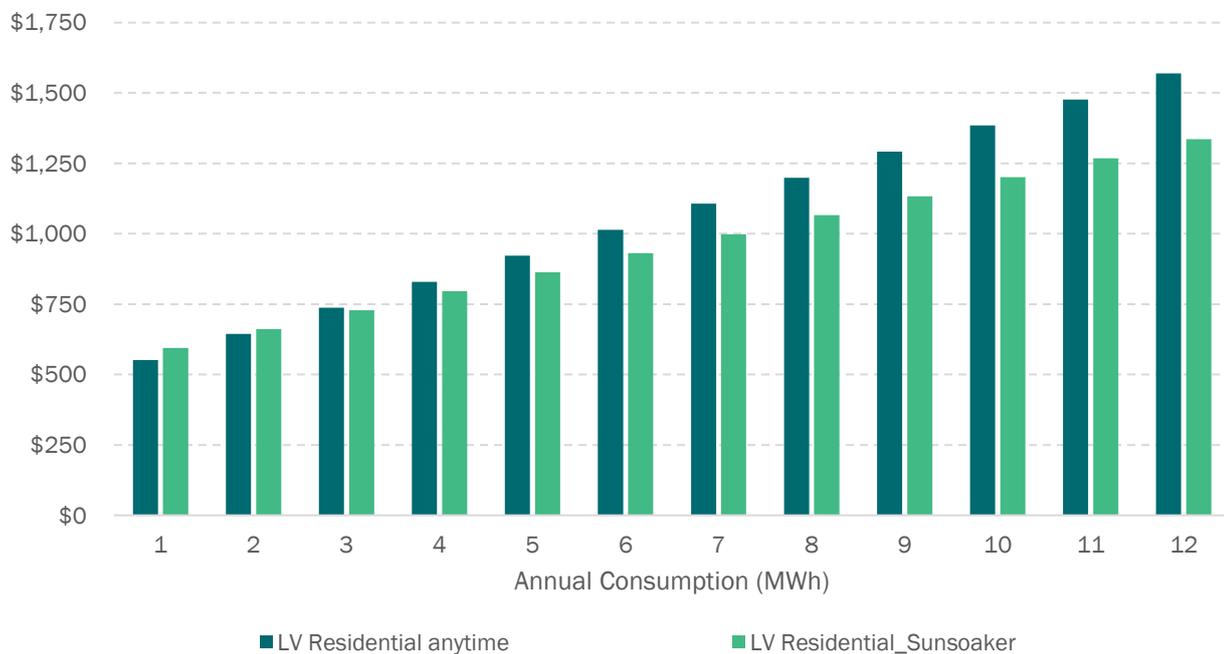
Estimated DUoS charges for a residential customer with no solar in 2025–26 ((\$, real June 2024)



Estimated DUoS charges for a residential customer with an average solar system (2.9kW) in 2025–26 ((\$, real June 2024)



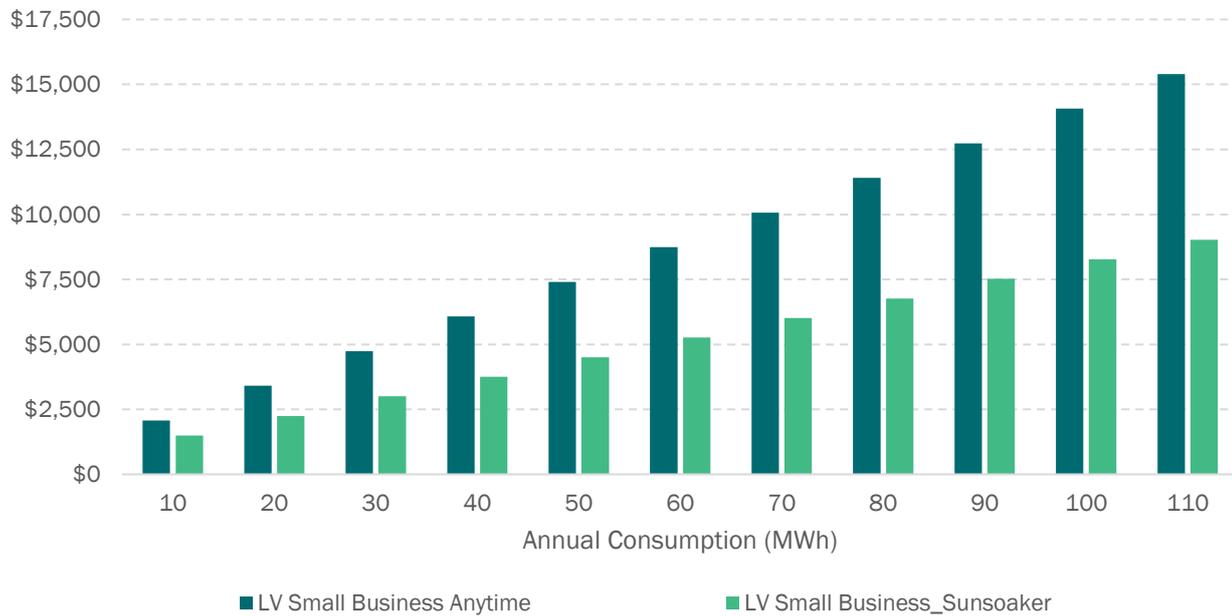
Estimated DUoS charges for a residential customer with a large solar system (6.5kW) in 2025–26 ((\$, real June 2024)



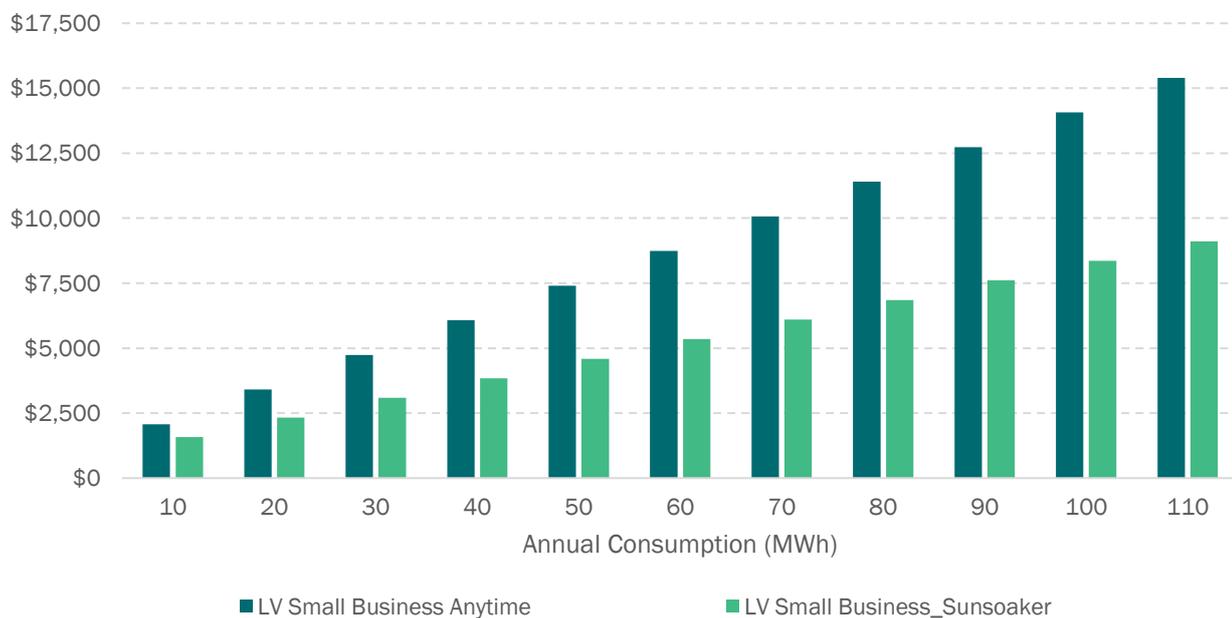
Small business customer bill impacts (\$, real June 2024)

Moving from our anytime flat rate tariff (BLNN1AU) to our Sun Soaker tariff (BLTTSS1), 2024-25 year

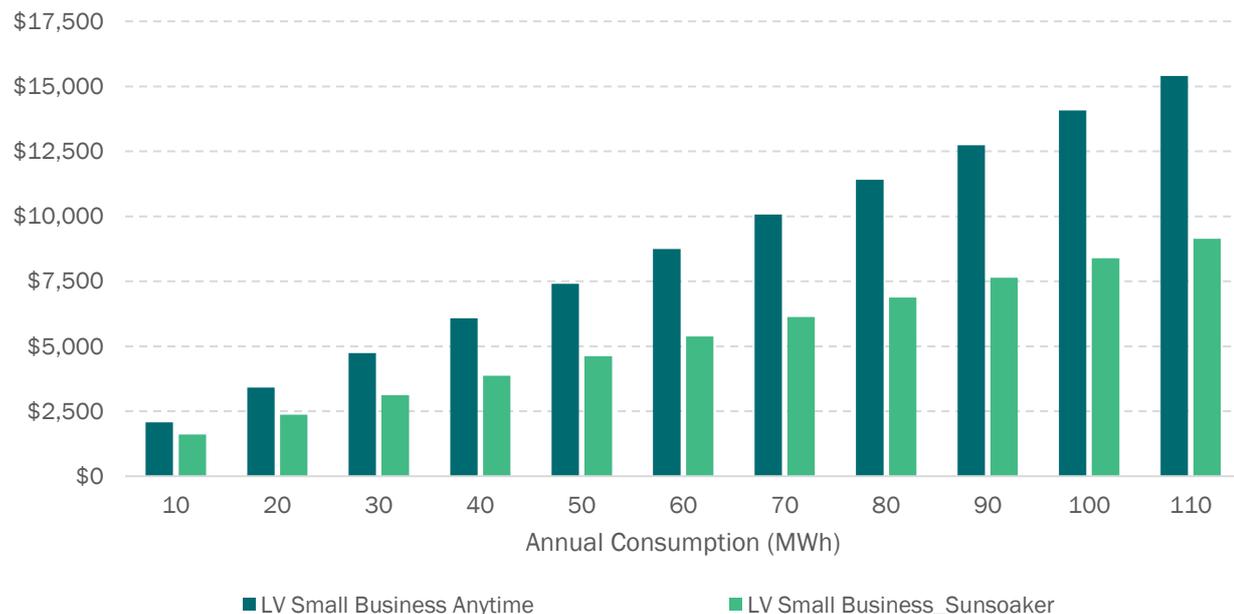
Estimated DUoS charges for a small business customer with no solar in 2025-26 ((\$, real June 2024)



Estimated DUoS charges for a small business customer with an average solar system (7.9kW) in 2025-26 ((\$, real June 2024)



Estimated DUoS charges for a small business customer with a large solar system (10.0kW) in 2025-26 (\$, real June 2024)

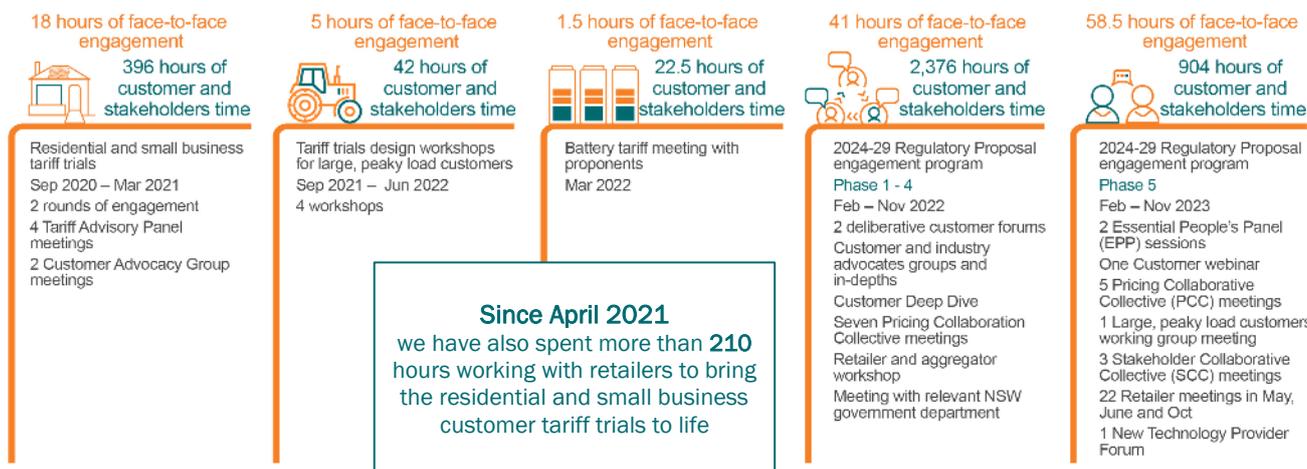


How we engaged with stakeholders on export pricing

Process of engagement

We engaged early, deeply and broadly with many different customers and stakeholders to develop our TSS.

Our customer engagement in relation to pricing

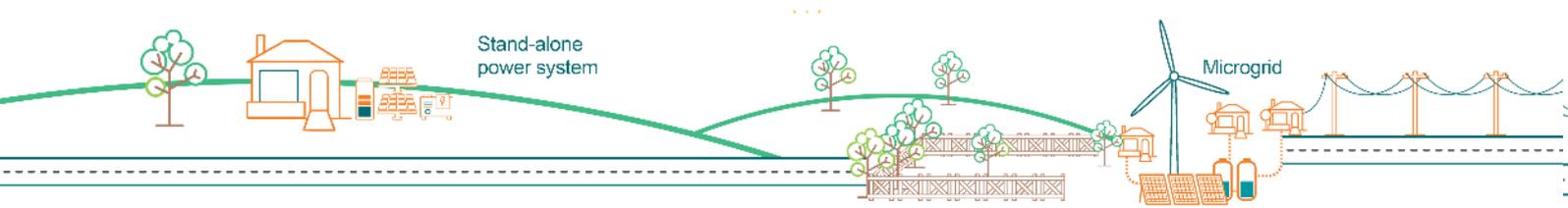


A lot of this engagement was specifically in relation to our ETTS. Engagement began when we embarked on the design of our trial tariffs for residential and small business customers – a key aspect of which was agreeing an export charge to trial over the remainder of the 2019-24 regulatory period. We have also engaged with a wide range of stakeholders, including aggregators, grid scale battery proponents, retailers and the NSW Government.

The following pages provide a high-level summary of what we heard and how we have responded in subsequent engagement steps and in this ETTS. For a summary of our entire engagement program and findings, please see **Chapter 4 – Our customer engagement, Appendix A and Attachment 4.02** in our Regulatory Proposal submitted in January 2023, as well as **Chapter 2 – Our customer engagement and Attachments 2.01 and 2.03** in our Revised Proposal.

Summary of our engagement process and its results

Who we heard from	What we heard	What we did
Tariff trial design for residential and small business customers		
Round 1 engagement		
96 customers and 16 stakeholders Our Tariff Advisory Panel that consisted of a sub-set of stakeholders (retailers, customer advocates, industry groups and the AER as observers) Our Customer Advisory Group	<p>The principles that are important to customers from a pricing perspective</p> <p>Initial thoughts on export prices, which was a divisive topic with the political and societal push for renewables clashing with pricing fairness given the increasing role of two-way energy flows within the distribution network</p> <p>Ideas for alternative tariffs, one of which was a capacity-based export charge</p> <p>The need for consumer education was widely raised, along with the suggestion as to whether simple messaging and education may provide sufficient behavioural change without the need to overly complicate network tariffs</p>	<p>These formed our pricing principles to be tested in the next round of engagement</p> <p>Given their divisive nature, we saw merit in trialling an export price, as tariff trials provide the opportunity to gather data on the true impacts on customer behaviour and bills</p> <p>Used this idea to shape a proposed export charge for discussion in the next round of engagement</p> <p>Agreed with this idea and as a concept to engage on in Round 2</p>
Round 2 engagement		
82 customers and 21 stakeholders Our Tariff Advisory Panel Survey of 617 residential customers and 162 small business customers	<p>Participants overwhelmingly agreed that we should include a trial to test whether simple communication and education material, results in sufficient behavioural change without the need for significant changes to network tariffs</p> <p>Of the three proposed export prices presented, the kW based capacity charge was the most preferred option. Despite being more complex, the free threshold was attractive, and it would send an appropriate investment signal to future exporting customers. Customers and stakeholders did, however, like the rebate payments offered for Time of Use exports between 5pm and 8pm.</p> <p>A more detailed summary of our export tariff design phase can be found in Attachment 4.02 of our January 2023 Proposal.</p>	<p>This trial has begun. The results will be monitored and shared with customers and stakeholders over the next 12-15 months and built into the Revised TSS, that will be lodged with the AER in late 2023</p> <p>Based on feedback and alignment to the tariff trial design principles, the proposed form of export price we are trialling is the 'kW Based Capacity Charge', with the additional overlay of a c/kWh rebate for customers exports into the network during the evening peak period (5pm to 8pm) from the 'Time of Use' export charge option.</p>



Proposal engagement program

- > Over 350 customers and business partners in each Phase of engagement
- > Our PCC
- > Customer and industry advocates
- > Deep dive sessions and survey with customers, retailers and aggregators and the relevant NSW government department

What we heard

How we are responding and balancing divergent views

How this is reflected in our Revised Proposal and TSS

Two-way prices

(i) Introduction of two-way prices

The majority of customers agree that two-way pricing will solve some of the network issues arising from integrating new technologies and improve fairness. There is support for export charges being applied on a postage stamp basis. Our trial Sun Soaker tariff paired with an export charge is the preferred default tariff for residential and small business customers. Stakeholders support export prices being applied to large customers connected to the low-voltage network and to the small business and residential demand tariffs but have recommended we also communicate these changes to business customers several years prior to allow them to consider in their investment decisions.

Following further feedback and the preliminary findings of our tariff trial, we are proposing our trial Sun Soaker consumption charge will be our proposed default consumption tariff for residential and small business customers (with a smart meter), paired with a kWh export charge and rebate. An equivalent kW export charge structure will be applied to the large business low-voltage customers and our tariffs for storage and hybrid customers. For residential and small business LV customers, the rebate amount for exports between 5pm and 8pm will be aligned to the peak rate of the parent consumption tariff. Retailers are not obliged to replicate our network charge structure in their retail tariffs.

We are proposing to introduce two-way prices for low-voltage connected customers in the 2024-29 regulatory period in line with our ETTS. Our proposed two-way prices will be applied on a postage stamp basis for both consumption and export elements.

Export tariff transition strategy

(i) Ability to opt in to two-way prices

Customers and stakeholders support customers being able to opt-in to the Sun Soaker price from 1 July 2024

Our ETTS includes opt-in ability for residential and small business customers from 1 July 2024.

Our ETTS allows residential and small business customers to opt-in to our default two-way tariff from 1 July 2024.

(ii) Transition date for existing smart meter customers

There was support for export prices to be applied to all exporting residential and small business customers from 1 July 2025. However, in the Phase 2 forum, participants seemed resigned to this rather than enthusiastic. Stakeholders and those customers who attended the deep dive session were supportive of two-way prices and supported them being implemented as early as possible. After presenting the Sun Soaker price and the expected network bill savings in our Phase 4 engagement, customers still preferred an earlier transition date. Our PCC and SCC supported the inclusion of a contingent trigger to allow for a faster transition should billing capabilities be available earlier. With the AEMC's decision to accelerate the smart meter deployment for small LV

Based on the consistent desire we heard for an earlier transition, we will endeavour to implement billing capabilities to allow us to do this and include a contingent trigger in the TSS for this circumstance.

Our TSS includes a contingent trigger for the reassignment of existing smart meter customers connected to the low-voltage network in the pricing year following the establishment of our new billing capabilities. Should an earlier transition eventuate, we will provide retailers and other market participants with at least six months' notice of the new transition date. Our revised TSS has zero export tariffs and rebates in 2024-25 on our Sun Soaker tariffs.

What we heard	How we are responding and balancing divergent views	How this is reflected in our Revised Proposal and TSS
<p>customers, our PCC, the Essential People's Panel and retailers supported our simplified transition approach of having zero export tariffs and rebates in 2024-25 on our Sun Soaker tariffs until the 1 July 2025 rule milestone is reached.</p>		
<p><u>(iii) Grace period for new meter changes</u></p> <p>One retailer would prefer a one-year grace period before two-way prices are applied to existing customers following a faulty meter change or a retailer led move to a smart meter.</p> <p>Customers also supported this concept, though discussion indicated that this was again about choice and the desire for customers to be able to opt-in to the two-way price earlier if they wanted to.</p> <p>Our PCC's view is that two-way prices should be automatically applied to customers who would be better off on them.</p> <p>As part of Phase 5 engagement, we shared the bill impacts with our Essential People's Panel and sought their views on a grace period. Their view was that, given the bill impacts show the vast majority of customers benefit from moving from a flat-rate tariff onto two-way prices, a grace period is not required.</p>	<p>As part of our Phase 4 engagement we specifically asked the PCC to help develop the principles against which divergent views, such as these, should be assessed. They agreed with our existing focus on customers' interests and alignment to the national electricity objective, the network pricing objective and our pricing principles and suggested that we also consider the impact of any change on retailers and other market players who develop products and services for electricity consumers, to the extent that this can be done without obstructing customers' interests.</p> <p>Using this lens, we are not proposing to implement a one year grace period before moving customers who receive a new smart meter to the appropriate default cost-reflective price. This is because:</p> <ul style="list-style-type: none"> > It is not consistent with customers' and stakeholders' preference for a faster transition to two-way prices > Deferring its application is not in customers' best interests given the significant administrative burden and the fact that: <ul style="list-style-type: none"> • our modelling indicates that most small customers are better off on the Sun Soaker price • the change will be revenue neutral for large, low-voltage connected customers in the first year they are introduced. > Retailers' concern in this area arises when customers are moved to demand charges, which we are not proposing to do > Retailers have no obligation to pass on our network tariff to customers in their retail offers, and can implement a grace period for customers themselves > Solar installers may inadvertently model their propositions on the tariff offered in the grace period, which could provide an inaccurate price signal and lead to customers over-sizing their system or facing it in a less 'valuable' direction. > The AEMC can implement such a policy in its metering contestability review, and associated rule changes and Essential Energy would comply with any such rule change through the 2024-29 TSS period. 	<p>We are not proposing a grace period before applying our default cost-reflective tariff to new smart meter installations.</p>

<p>What we heard</p>	<p>How we are responding and balancing divergent views</p>	<p>How this is reflected in our Revised Proposal and TSS</p>
<p><u>(iv) Proposed ETTS</u> Takes all the above elements into account.</p>	<p>We are proposing a staggered, but partially delayed transition to two-way prices compared to what customers and stakeholders preferred. We feel our approach provides a fair time for customers who have already invested in solar panels to recover the costs of their investments. It also aligns the transition date for most customers with the expected 'go live' date for our new billing capabilities, which is key enabler for moving large numbers of customers to two-way prices. It also allows retailers and customers to opt-in to two-way prices as early as possible.</p>	<p>Our proposed ETTS is outlined in the graphic in the <i>Timeframes for moving customers onto export tariffs</i> section.</p>
<p>Flexible connection agreements Customers and stakeholders (including our new tech forum) support the business transitioning to flexible connection agreements for new and upgraded solar connections. It was recognised that flexible connection agreements will work with our smarter network investments to enable increased customer exports and help to share the export capacity of our network fairly between customers.</p>	<p>We are developing trials for Flexible Connection Agreements and aim for deploying these by 2027. With customers' agreement, these flexible agreements would allow us to reduce customers' exports for the few hours on the handful of days where we are exceeding the limits of our network. For most days of the year, customers are able to export the full amount – usually higher than they would be able to under our existing fixed limits.</p>	<p>Flexible connection agreements will be introduced by the business prior to 2027 and will allow customers to export more energy than they otherwise could.</p>

What we heard

How we are responding and balancing divergent views

How this is reflected in our Proposal and TSS

Ability to opt-out from cost-reflective network tariffs

There is support to move towards more cost-reflective tariffs so long as customers continue to have a choice of tariff options. Retailers support cost-reflective pricing, but highlight that tariffs need to be simple for customers to understand and respond to.

Our PCC sees choice and tariff simplicity occurring at the retail level.

Again, using the principles we agreed with the PCC to balance diverse views, we are proposing to remove the ability for customers to opt-out to a non-cost reflective network tariff, including a flat rate tariff, because:

- > It is not consistent with customers' and stakeholders' preference for a faster transition to two-way prices
- > Retailers have no obligation to pass on the network tariff in their retail offers, so offering multiple network tariffs adds complexity and administrative costs that deliver no real benefit
- > Customers exercise choice at the retail level and we expect retailers to offer customers a choice of retail tariffs, including a flat rate option.
- > It avoids 'gaming' of network tariffs by large exporters who could immediately opt-out to a network tariff that does not include an export price.

Low-voltage connected customers with smart or interval meters will only be able to opt-out from the default tariff to another cost-reflective tariff.

In line with our ETTS, the alternative tariffs will have an export charge and rebate applied to them from 1 July 2028, or the pricing year immediately following Essential Energy establishing its new billing process capabilities.

Education was highlighted as a key requirement for introducing two-way prices and pairing the introduction of such prices with a positive outcome, like peer-to-peer trading, could help alleviate the perceived pain to customers.

We will undertake extensive marketing and education around two-way prices in the lead up to their introduction and throughout the 2024–29 regulatory period in relation to:

- > the current and emerging network challenges
- > how smart meters can help customers lower their electricity bills
- > the importance of shopping around for a retail offer
- > the introduction of two-way network prices and how this may impact customers' solar panel installation decisions.

We are also testing some of the education ideas in our trial that is currently underway.

In addition, we will look to pair two-way pricing with a positive outcome to help avoid negative perceptions and consider whether there are further education opportunities arising from the results of the AEMC's metering review.

These costs are included in our proposed operating expenditure and fact sheets available.

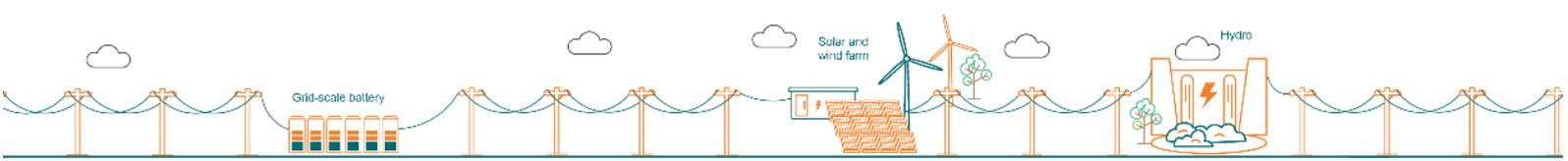
Pricing Collaboration Collective

Our PCC was our primary input group for the co-design of our TSS and ETTS. We began engaging with this group more or less on a monthly basis and used their knowledge:

- > to inform the pricing-related topics and materials that we engaged with customers on, and
- > apply a principled approach to making decisions on topics where there were divergent views between or amongst customers and stakeholders.

A summary, of how the PCC informed our TSS and topics that interact with the ETTS, is shown below. More details can be found in Appendix C of **Attachment 4.02 – How engagement informed our Proposal** from our January 2023 Proposal, as well as in **Attachments 2.01 and 2.03** of our Revised Proposal.

Topic	What we heard	What we did
Tariff design decisions	<p>The PCC considered the tariff design process must consider two broad pricing decisions:</p> <ol style="list-style-type: none"> 1) changing behaviour, and 2) changing who pays what relative shares of your total revenues. 	<p>We have considered both these decisions and our TSS seeks to change behaviour for low-voltage connected customers through introducing two-way consumption and export savings opportunities, whilst not changing the total shares of our revenue recovered from different tariff classes.</p>
Long-run marginal cost	<p>The PCC agreed that we should seek to estimate long-run marginal costs separately for peak demand and for peak exports.</p> <p>Given the newness of the obligation for two-way services and the evolving technologies and behavioural tools for integrating flexible demand and flexible exports, the PCC considered we should adopt a 10 year forecasting horizon.</p>	<p>We estimated long-run marginal costs using a 10 year forecasting window from July 2024 and did so separately for peak demand and for peak exports at each voltage level. Our relevant tariffs are based on these estimates.</p>
Export pricing – timing considerations	<p>There was unanimous support for starting cost recovery of energy export enablement costs from the start of the next regulatory period rather than the date of the rule change.</p>	<p>Our TSS bases our export tariff on the long run marginal cost of peak exports calculated over the 10 years from July 2024.</p>
Tariff structures	<p>The PCC suggested we need to get ahead of the curve when designing tariffs, not just focus on what works now. The focus should go to where we want to be.</p> <p>The PCC also suggested that:</p> <ul style="list-style-type: none"> > peak and minimum demand in the design for each customer cohort should be considered, and > Tariff structures and assignment should seek to support device neutrality for residential and small business customers. <p>The PCC agreed that export prices should be applied to all low-voltage connected customers, using the same charge structure and tariffs for exports and a rebate equivalent to the distribution peak charge.</p>	<p>By the end of the TSS period, all our default cost reflective tariffs for low-voltage connected customers will include two-way prices designed for a future state that:</p> <ul style="list-style-type: none"> > will work with different energy using or producing technologies that customers connect to our network > empower our customers to save money through choosing when to use and export energy by pairing our export charges with an evening peak export rebate incentive payment and Sun Soaker discounted midday consumption charges for residential and small business customers > recover sustainable levels of cost from each customer.



Topic	What we heard	What we did
Tariff assignment <u>(i) Opt out optionality</u>	<p>Prior to publishing the Draft TSS in September 2022, the PCC was presented with two opt-out tariff options from the Sun Soaker:</p> <ul style="list-style-type: none"> > option 1 - legacy anytime tariff is available for opt-out; and > option 2 - legacy anytime tariff is not available for opt-out, only to other cost-reflective tariffs. <p>The PCCs preference was for option 2 i.e., not making the legacy anytime tariff available for opt-out. However, the PCC noted that the principle guiding tariff assignment should be “what is in customers’ long-term interests?”. As such, a third option was identified which is providing customers with no network tariff choice, only retail choice.</p>	<p>Following Phase 4 engagement, opt out ability was again revisited by the PCC using the PCC agreed principles (these are outlined in the ETTS section of the <i>Proposal engagement program</i> table above). With this lens, it was agreed to remove the ability for customers to opt out from cost reflective network charges.</p> <p>This means that by the end of the 2024–29 regulatory period, low-voltage connected customers with smart meters will have a choice of just two cost-reflective two-way tariffs.</p>
<u>(ii) Discretionary reassignment</u>	<p>The PCC also supported customers and their retailers only having one discretionary opt-in reassignment per 12 months to avoid seasonal tariff changes that undermine cost reflective tariff signals.</p>	<p>Our TSS assignment policy maintains our current policy of allowing one discretionary opt in reassignment per 12 months.</p>
<u>(iii) Grace period</u>	<p>The PCC was never supportive of applying the retailer requested one year grace period before applying a cost-reflective network tariff.</p>	<p>Again using the PCC agreed principles in a final meeting with the group, it was agreed not to include a one year grace period before moving customers who receive a new smart meter to the appropriate default cost-reflective price.</p> <p>More details are included in the outlined in the ETTS section of the <i>Proposal engagement program</i> table above.</p>
<u>(iv) Export tariff transition strategy</u>	<p>The PCC supported the export tariff transition strategy:</p> <ul style="list-style-type: none"> > They liked the phased approach to assigning residential and small business customers to the default Sun Soaker tariff, and the inclusion of a provision for customers to opt in early. > For low-voltage connected large customers, the PCC supported applying export prices to large customers when our billing capabilities allow, and no later than 1 July 2028. Some PCC members advised we should undertake educational engagement with large customers prior to the introduction of export pricing. > Responding to the AEMC’s decision to accelerate the smart meter deployment for small LV customers by simplifying our transition approach using zero export tariffs and rebates in 2024-25 on our Sun Soaker tariffs until the 1 July 2025 rule milestone is reached. 	<p>Our TSS has a phased transition to move low-voltage connected customers to two-way prices.</p>
Charging windows	<p>The PCC agreed that our charging windows align with daily profiles of demand and exports, and so there is no need to change them from our trial tariffs for the Sun Soaker or the introduction of an export price.</p> <p>Despite this, it was agreed that a contingent trigger should be included in the TSS in case data indicates that our charging windows need to be changed.</p>	<p>We have maintained our charging windows for existing tariffs and adopted the time windows from our trial tariffs for the Sun Soaker and the export price to be applied to large low-voltage connected customer tariffs and the residential and small business customer demand tariff.</p> <p>We have included a contingent trigger in our TSS for adapting the charging windows in our two-way default prices if the network load profile data shows that this is required before 1 March 2027.</p>

Export Charge design	<p>One PCC member expressed concerns about our decision to move to a kWh export charge for residential and small business customers, reasoning that:</p> <ul style="list-style-type: none"> > a kWh export charge is not as cost reflective as a kW export charge > it should be the role of retailers, not networks, to develop customer-friendly pricing products. <p>Remaining PCC members supported the simplification of adopting a kWh export tariff for small customers who face kWh consumption tariffs.</p>	<p>We have continued with our revised proposal to move to a kWh export charge for residential and small business customers on our Sun Soaker tariffs because:</p> <ul style="list-style-type: none"> > several retailers have indicated their billing systems would be unable to process a kW export charge > our tariff trials found customers prefer simpler tariffs > our customers in our Essential People's Panel supported moving to a kWh export charge for small customer due to concerns about: <ul style="list-style-type: none"> • the ability for customers to understand and respond to a kW charge; and • customers would not receive a signal to change behaviours once their monthly peak export had been reached. > the AER's Draft Decision asked us to consider a kWh export charge.
Sun Soaker risks	<p>One PCC member was concerned that our Sun Soaker tariff:</p> <ul style="list-style-type: none"> > may create a new network peak in the middle of the day, and so may not have longevity. > may create problems if many instances of higher demand on our network during solar times coincide with lower volume in the network or higher cost generation > is not cost-reflective because it rewards the beneficiary rather than penalising the causer of the problem. 	<ul style="list-style-type: none"> > We do not expect the Sun Soaker to create a new peak given that many customers have limited discretionary load. > While our trials have the Sun Soaker as a standalone tariff, we are pairing it with our export price in our TSS to address the export demand problem from both sides. > We will use the results of the trials in relation to these factors to inform our re-engagement in 2023 prior to submitting our Revised TSS to the AER in late 2023. > As mentioned above, we have included a contingent trigger in our TSS for adapting the charging windows in our two-way prices if the network load profile data shows that this is required before 1 March 2027.



07

Alternative control services

Chapter summary

- Outlines the alternative control services (ACS) that are regulated by the AER



Alternative control services customer classes

We charge for our ACS on a user-pays basis. For this reason, they are organised into groups based on the type of service provided rather than customer characteristics.

Alternative control services customer classes



There may be some level of competition for these types of services, but the market is not yet fully competitive. Therefore, costs are attributable to specific customers who pay for the service.

Please refer to **Attachments 9.05** and **9.06** for our Indicative ACS Pricing Schedules for the above services – we are seeking your feedback on these.



08

Compliance with the Tariff Structure Statement rules

Chapter summary

- Identifies where each TSS Rule Requirement is met



Compliance checklist

Section 6.18 of the NER sets out the requirements for preparing and submitting a TSS to the AER. This table shows these requirements and how we have complied with them.

How to find where Essential Energy has addressed the National Electricity Rules' Tariff Structure Statement requirements

Relevant requirement	Rule reference	Location in the TSS
The TSS must include customer classes	6.18.1A(a)(1)	Section 2 – List of tariff classes and allocations
The TSS must include the policies and procedures for assigning and reassigning customers to network charges	6.18.1A(a)(2)	Section 5 – Tariff assignment procedures and policies
The TSS must include a description of the strategy or strategies adopted for the introduction of export tariffs (export tariff transition strategy)	6.18.1A(a)(2A)	Section 6 – Export tariff transition strategy
The TSS must include the structures for each network charge	6.18.1A(a)(3)	Section 4 – Explanation of tariff structures, charging parameters and classes
The TSS must include the charging parameters for each network charge	6.18.1A(a)(4)	Section 4 – Explanation of tariff structures, charging parameters and classes
The TSS must include a description of the approach we will take in setting each network charge in each pricing proposal during the regulatory period	6.18.1A(a)(5)	Section 3 – Approach to setting tariffs and the basic export level
The TSS must comply with the pricing principles for Direct Control Services	6.18.1A(b)	Section 3 – Approach to setting tariffs and the basic export level

09

Glossary

Chapter summary

– Definitions of key terms



TERM	MEANING
2024–29 regulatory period	The regulatory control period beginning 1 July 2024 and ending 30 June 2029
ACS	Alternative control services – specific user-requested services: public lighting; Type 5 and Type 6 metering (generally residential and small business customer meters); and ancillary network services
AER	Australian Energy Regulator – the regulator for our distribution business
B2B	Business-to-business procedures created pursuant to Chapter 7 of the National Electricity Rules and published by the Australian Energy Market Operator, which are applicable in NSW.
B2B service order	The customer’s retailer sends the B2B service order to Essential Energy requesting specific service(s) on behalf of the customer.
business day	Unless otherwise indicated, a day that is not: <ul style="list-style-type: none"> > a Saturday or Sunday > observed as a public holiday on the same day in each of the participating jurisdictions (except the Commonwealth).
CER	Consumer energy resources – decentralised small-scale local energy generation, located ‘behind the meter’ of a customer
charging parameters	The specific charging characteristics of a component within the pricing structure
connection characteristic	The supply voltage level as either low-voltage (LV), high-voltage (HV) or subtransmission
CPI	Consumer Price Index – a measure of inflation
customer	Means, in relation to the retailer, a person: <ul style="list-style-type: none"> > who has a connection point in Essential Energy’s distribution area or is seeking to establish a connection point in Essential Energy’s distribution area > whose National Metering Identifier is allocated to the retailer under the National Electricity Code.
customer class	A group of customers that share a common set of characteristics that allow them to be grouped together to ensure similar customers pay similar charges
customer class	A group of customers who have common characteristics that allow them to be grouped together to ensure similar customers pay similar charges
demand charge	The charge based on the maximum amount of electricity a customer uses at any one time, measured in kW
DER	Distributed energy resources – decentralised local energy generation, a broad term that encompasses generation often located ‘behind the meter’ of a customer – which we are now referring to as consumer energy resources (CER) – as well as large scale generation such as solar farms and grid-scale batteries
Direct Control Services	Services regulated by the Australian Energy Regulator under the National Electricity Rules, comprising Standard Control Services and Alternative Control Services
DLF	Distribution Loss Factor – describes the average energy lost when electricity flows between transmission and distribution networks
DNSP	Distribution Network Service Provider
DUoS	Distribution Use of System – a charge for using the distribution network
HV	High-voltage – Nominal voltage levels of 11, 22, 33 or 66 kilovolts.
IDT	Inter-distributor transfer – payments to other network distribution businesses
kVA	Kilovolt ampere
kW	Kilowatt
kWh	Kilowatt hour
load characteristic	A customer’s electricity consumption in kWh and their maximum demand.
LRMC	Long run marginal cost – the cost of adding one more unit of demand to the network
LV	Low-voltage – Nominally voltage levels of 230/400 volts.
maximum demand	The highest amount of electrical power delivered in a 30-minute period, or forecast to be delivered, over a defined period (day, week, month, season or year) either at a connection point, or simultaneously at a defined set of connection points.

TERM	MEANING
metering characteristic	The type of meter installed at the customer's premises. For example, basic accumulation meter, Time of Use (ToU) or an interval or smart meter.
MWh	Megawatt hour – unit of energy equivalent to 1,000 kilowatt hours
NEL	National Electricity Law
NER	The National Electricity Rules that govern the operation of the National Electricity Market
new customer	A customer who has commenced to consume electricity from a new connection point in Essential Energy's distribution area.
NMI	A National Metering Identifier, as defined in the National Electricity Code.
NPV	Net Present Value
NSW	New South Wales
NUoS	Network Use of System – the charge for using our distribution network, as well as transmission-related pass-through costs and jurisdictional scheme costs such as the Climate Change Fund
peak demand/peak load	The maximum electricity demand customers place on the electricity network
prices/pricing	The charges to network customers for providing cost-efficient network services – commonly referred to as a 'tariff'
pricing components	The combination of elements – including network access, and consumption and demand charges – that reflect the efficient costs of providing network services to customers
pricing schedule	An annually published list of prices and pricing structures for each network charge – also referred to as the 'Network Price List and Explanatory Notes'
pricing structure	The combination of pricing components that make up the network charge
Proposal	Our Regulatory Proposal for the 2024–29 regulatory control period, submitted under clause 6.8 of the National Electricity Rules
real	Dollars before factoring in inflation
repex	Replacement expenditure
residual	Those costs recovered annually that are above our Long Run Marginal Cost
retailer	A person who holds a retail licence in New South Wales to sell electricity to customers.
SCS	Standard control services – our core activities for enabling customers to access our network and for supplying them with electricity
smart meter	A digital device that measures and records a customer's electricity usage every half-hour and transmits the data to their electricity provider
Solar PV	Solar photovoltaic
Subtransmission	The voltage defined by Essential Energy that interconnects subtransmission or zone substations.
Sun Soaker	A modern Time of Use consumption tariff, it aims to encourage customers to use more power during peak solar PV export times (between 10am & 3pm) and less at other times (7-9am and 5-8pm). It can help manage both evening peak demand issues on the network and power quality issues from increasing levels of solar PV exports.
tariff	See 'prices/pricing'
tariff class	A group of customers who have similar connection, load and/or metering characteristics and who pay similar prices
ToU	Time of Use – a meter or charging parameter that varies according to whether electricity is consumed in a peak, shoulder or off-peak period
TSES	Tariff Structure Explanatory Statement
TSS	Tariff Structure Statement
TUoS	Transmission Use of System – charges for using the transmission network that are a component of NUoS charges (see NUoS)

A

Customer bill impacts

Appendix summary

- Provides more examples of bill impacts for different types of customers including those with and without rooftop solar
- It is important to note that the impacts shown assume:
 - that retailers pass our tariff signals on in full
 - no customer response to our price signals – this means that customers who move their energy consumption in response to our Sun Soaker price discounts, or their exports in response to our export prices and rebates, will face lower bills than shown
- A full list of our indicative prices is included as **Attachment 9.04 – Indicative NUoS Pricing Schedule.**

Our Sun Soaker tariff offers savings to customers

The table below shows the estimated bill impacts for different customers who move on to a Sun Soaker tariff from an existing Anytime tariff or our current ToU tariff.

The estimated effect on bills of moving from one tariff to another in 2025–26 (real, \$ June 2024)

Annual consumption	Residential			Small business			
	2 MWh	2 MWh	5 MWh	5 MWh	5 MWh	20 MWh	
Size of solar system (max. export)	0 kW	2.9 kW	6.5 kW	0 kW	7.9 kW	10 kW	
	No solar	Average solar	High solar	No solar	Average solar	High solar	
From Anytime (accumulation meter customers)	\$ annual	-50	-11	-96	-290	-184	-1,025
	% on retail	-3.0%	-0.7%	-3.4%	-7.8%	-5.0%	-11.4%
From ToU (interval/smart meter customers)	\$ annual	9	48	96	-9	139	264
	% on retail	0.6%	3.1%	4.2%	-0.3%	4.9%	4.7%

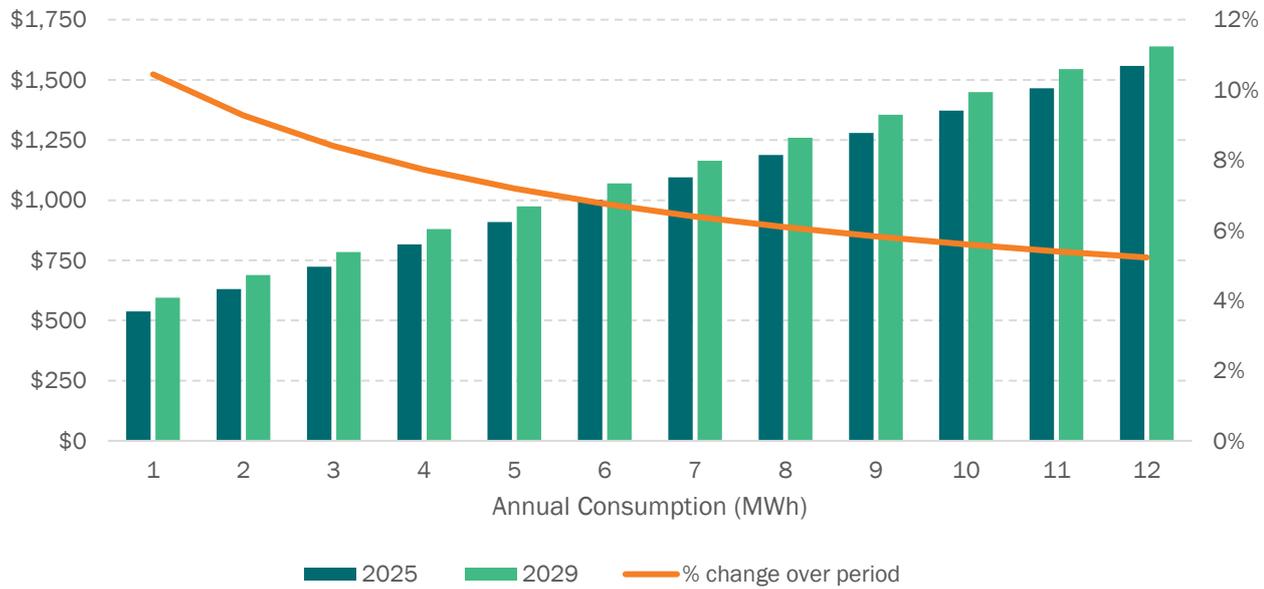
Note: we have assumed that DUoS charges make up 38% of the retail bill.

More detailed bill impacts for these tariffs can be found in the following pages.

For the bill impacts for large business and other low-voltage customers, refer to the appropriate chart in this Appendix.

Residential customer with or without solar

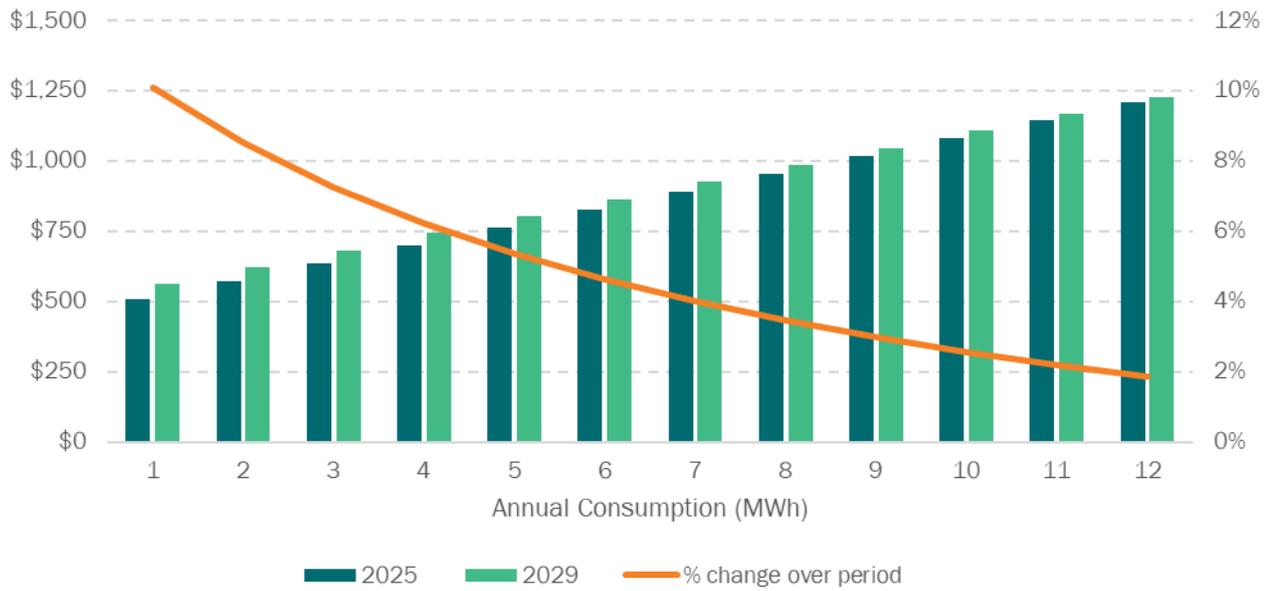
On our Anytime flat rate network charge – estimated annual Distribution Use of System (DUoS) charge based on customer usage (\$, real 2023–24)



Annual customer usage	2024-25	2025-26	2026-27	2027-28	2028-29	Total \$ change over the period	% Change over the period
1 MWh	\$538	\$552	\$565	\$578	\$594	\$56	10.4%
2 MWh	\$631	\$644	\$657	\$670	\$689	\$58	9.3%
3 MWh	\$724	\$737	\$749	\$763	\$784	\$61	8.4%
4 MWh	\$816	\$829	\$841	\$855	\$879	\$63	7.7%
5 MWh	\$909	\$922	\$933	\$947	\$974	\$65	7.2%
6 MWh	\$1,002	\$1,014	\$1,025	\$1,039	\$1,069	\$68	6.8%
7 MWh	\$1,095	\$1,107	\$1,117	\$1,131	\$1,164	\$70	6.4%
8 MWh	\$1,187	\$1,199	\$1,209	\$1,223	\$1,259	\$72	6.1%
9 MWh	\$1,280	\$1,292	\$1,301	\$1,315	\$1,354	\$75	5.8%
10 MWh	\$1,373	\$1,384	\$1,393	\$1,407	\$1,450	\$77	5.6%
11 MWh	\$1,465	\$1,477	\$1,485	\$1,500	\$1,545	\$79	5.4%
12 MWh	\$1,558	\$1,569	\$1,578	\$1,592	\$1,640	\$81	5.2%

Residential customer with or without solar

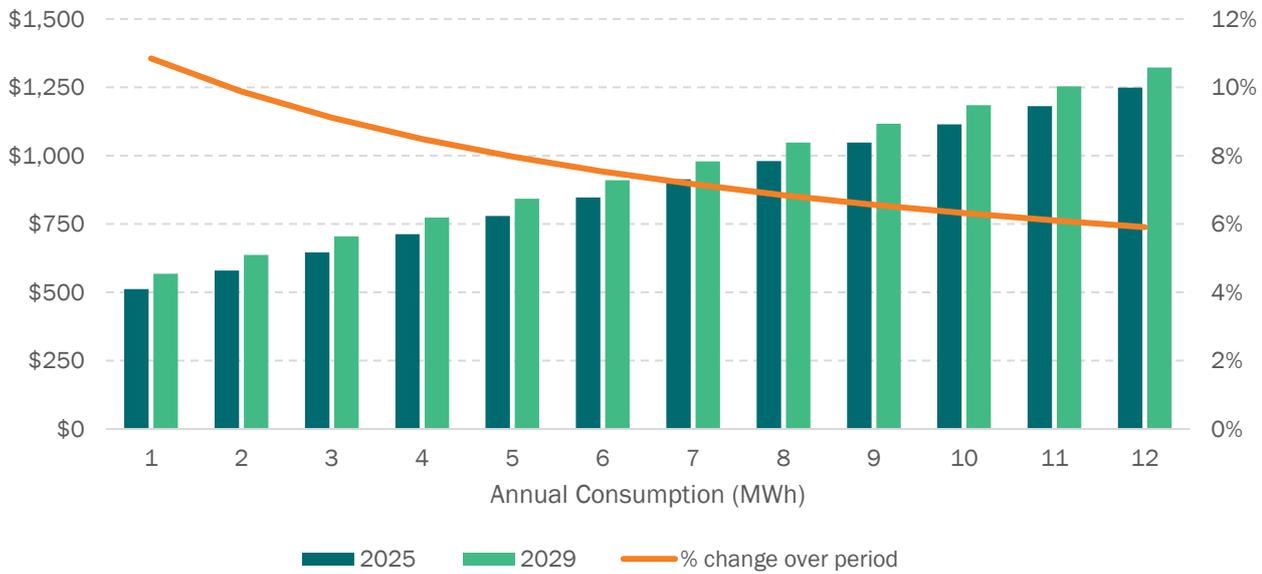
On our ToU interval network charge estimated annual DUoS charge based on customer usage (\$, real 2023–24)



Annual customer usage	2024–25	2025–26	2026–27	2027–28	2028–29	Total \$ change over the period	% Change over the period
1 MWh	\$509	\$522	\$534	\$547	\$560	\$51	10.1%
2 MWh	\$572	\$584	\$596	\$607	\$621	\$49	8.5%
3 MWh	\$635	\$647	\$657	\$668	\$681	\$46	7.2%
4 MWh	\$699	\$709	\$719	\$729	\$742	\$43	6.2%
5 MWh	\$762	\$771	\$780	\$789	\$803	\$41	5.3%
6 MWh	\$826	\$834	\$841	\$850	\$864	\$38	4.6%
7 MWh	\$889	\$896	\$903	\$910	\$924	\$36	4.0%
8 MWh	\$952	\$959	\$964	\$971	\$985	\$33	3.5%
9 MWh	\$1,016	\$1,021	\$1,026	\$1,032	\$1,046	\$30	3.0%
10 MWh	\$1,079	\$1,083	\$1,087	\$1,092	\$1,107	\$28	2.6%
11 MWh	\$1,142	\$1,146	\$1,148	\$1,153	\$1,167	\$25	2.2%
12 MWh	\$1,206	\$1,208	\$1,210	\$1,213	\$1,228	\$22	1.9%

Residential customer with or without solar

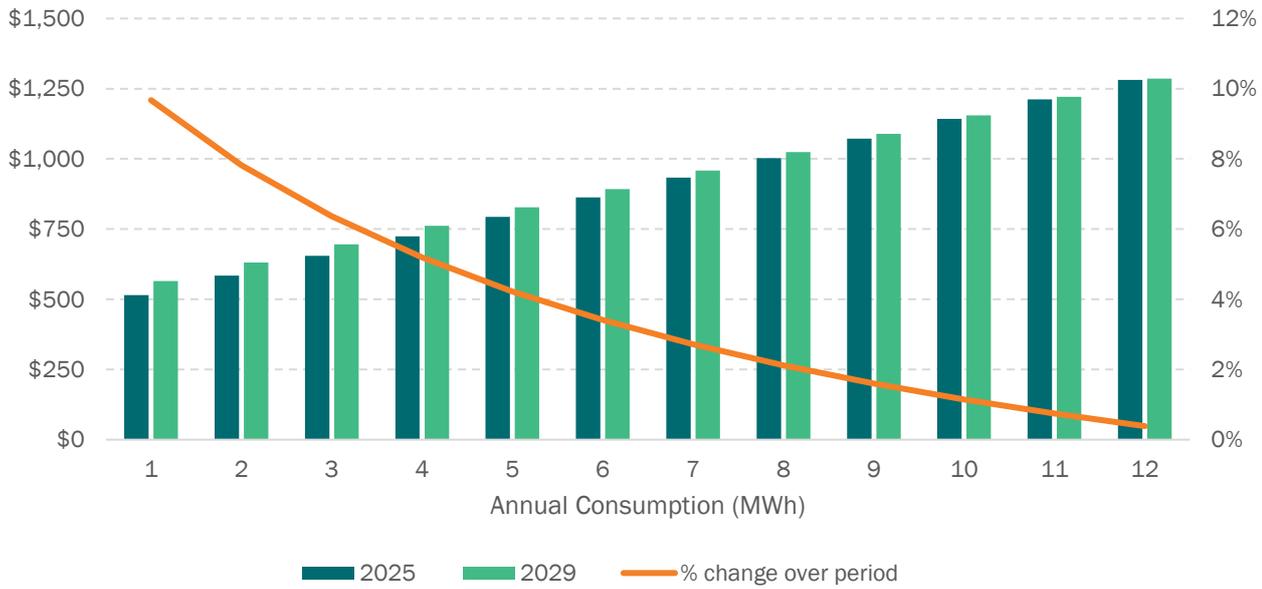
On our ToU (basic ToU meter) network charge – estimated annual DUoS charge based on customer usage (\$, real 2023–24)



Annual customer usage	2024-25	2025-26	2026-27	2027-28	2028-29	Total \$ change over the period	% Change over the period
1 MWh	\$512	\$526	\$539	\$553	\$568	\$56	10.8%
2 MWh	\$579	\$593	\$606	\$619	\$636	\$57	9.9%
3 MWh	\$646	\$660	\$672	\$686	\$705	\$59	9.1%
4 MWh	\$713	\$726	\$739	\$752	\$774	\$61	8.5%
5 MWh	\$780	\$793	\$805	\$819	\$842	\$62	8.0%
6 MWh	\$847	\$860	\$871	\$885	\$911	\$64	7.5%
7 MWh	\$914	\$927	\$938	\$952	\$979	\$65	7.2%
8 MWh	\$981	\$993	\$1,004	\$1,018	\$1,048	\$67	6.8%
9 MWh	\$1,048	\$1,060	\$1,071	\$1,085	\$1,116	\$69	6.6%
10 MWh	\$1,115	\$1,127	\$1,137	\$1,151	\$1,185	\$70	6.3%
11 MWh	\$1,181	\$1,194	\$1,204	\$1,218	\$1,254	\$72	6.1%
12 MWh	\$1,248	\$1,260	\$1,270	\$1,284	\$1,322	\$74	5.9%

Residential customer without solar or with solar where peak exports are less than 7.5kWh per day

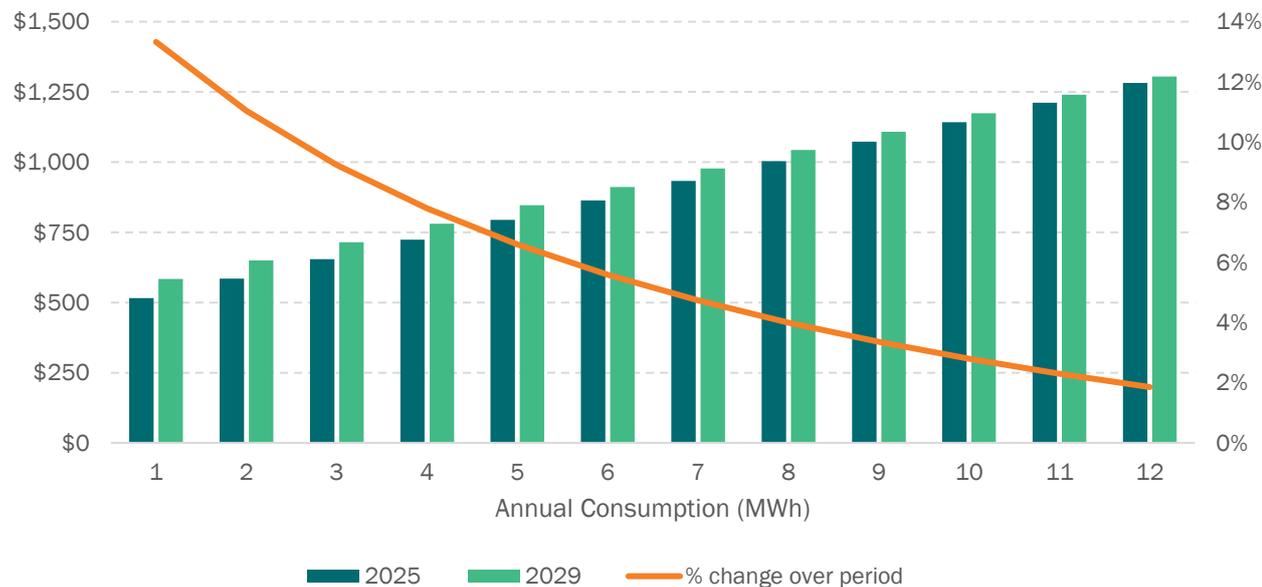
On our Sun Soaker network charge – estimated annual DUoS charge based on customer usage (\$, real 2023–24)



Annual customer usage	2024–25	2025–26	2026–27	2027–28	2028–29	Total \$ change over the period	% Change over the period
1 MWh	\$515	\$527	\$539	\$552	\$565	\$50	9.7%
2 MWh	\$585	\$594	\$606	\$617	\$631	\$46	7.8%
3 MWh	\$654	\$662	\$672	\$683	\$696	\$42	6.4%
4 MWh	\$724	\$729	\$738	\$748	\$762	\$38	5.2%
5 MWh	\$794	\$796	\$805	\$814	\$827	\$34	4.2%
6 MWh	\$863	\$864	\$871	\$879	\$893	\$29	3.4%
7 MWh	\$933	\$931	\$937	\$944	\$958	\$25	2.7%
8 MWh	\$1,003	\$999	\$1,004	\$1,010	\$1,024	\$21	2.1%
9 MWh	\$1,072	\$1,066	\$1,070	\$1,075	\$1,090	\$17	1.6%
10 MWh	\$1,142	\$1,134	\$1,136	\$1,141	\$1,155	\$13	1.1%
11 MWh	\$1,212	\$1,201	\$1,203	\$1,206	\$1,221	\$9	0.7%
12 MWh	\$1,282	\$1,268	\$1,269	\$1,272	\$1,286	\$5	0.4%

Residential customer with an average size solar system (2.9kW peak export)

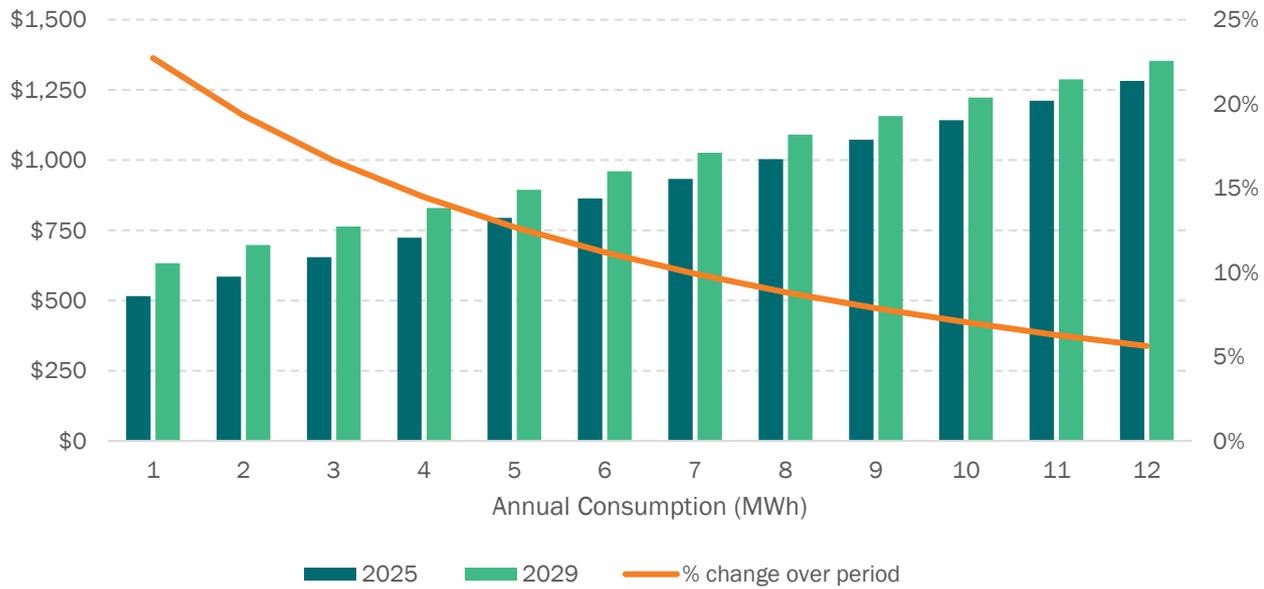
On our Sun Soaker network charge – estimated annual Distribution Use of System (DUoS) charge based on customer usage (\$, real 2023–24)



Annual customer usage	2024–25	2025–26	2026–27	2027–28	2028–29	Total \$ change over the period	% Change over the period
1 MWh	\$515	\$546	\$558	\$571	\$584	\$69	13.3%
2 MWh	\$585	\$613	\$624	\$636	\$649	\$65	11.0%
3 MWh	\$654	\$680	\$691	\$701	\$715	\$60	9.2%
4 MWh	\$724	\$748	\$757	\$767	\$781	\$56	7.8%
5 MWh	\$794	\$815	\$823	\$832	\$846	\$52	6.6%
6 MWh	\$863	\$883	\$890	\$898	\$912	\$48	5.6%
7 MWh	\$933	\$950	\$956	\$963	\$977	\$44	4.7%
8 MWh	\$1,003	\$1,018	\$1,022	\$1,029	\$1,043	\$40	4.0%
9 MWh	\$1,072	\$1,085	\$1,089	\$1,094	\$1,108	\$36	3.4%
10 MWh	\$1,142	\$1,152	\$1,155	\$1,160	\$1,174	\$32	2.8%
11 MWh	\$1,212	\$1,220	\$1,221	\$1,225	\$1,240	\$28	2.3%
12 MWh	\$1,282	\$1,287	\$1,288	\$1,291	\$1,305	\$24	1.9%

Residential customer with a large size solar system (6.5kW peak export)

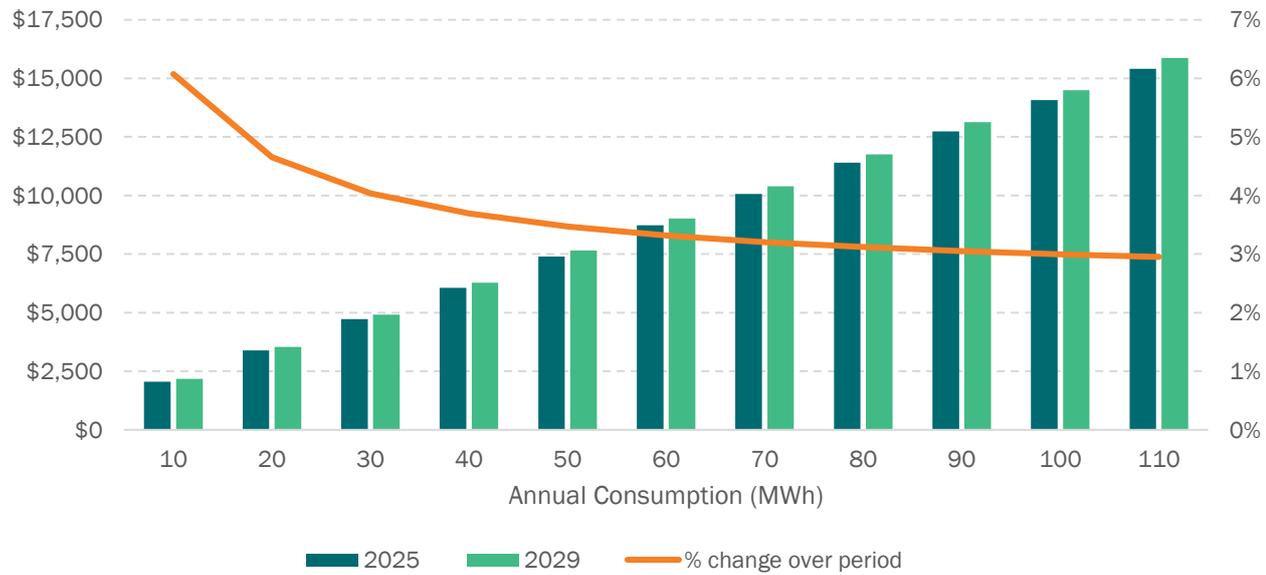
On our Sun Soaker network charge – estimated annual Distribution Use of System (DUoS) charge based on customer usage (\$, real 2023–24)



Annual customer usage	2024–25	2025–26	2026–27	2027–28	2028–29	Total \$ change over the period	% Change over the period
1 MWh	\$515	\$594	\$606	\$619	\$632	\$117	22.7%
2 MWh	\$585	\$661	\$673	\$684	\$698	\$113	19.3%
3 MWh	\$654	\$729	\$739	\$750	\$763	\$109	16.6%
4 MWh	\$724	\$796	\$805	\$815	\$829	\$105	14.5%
5 MWh	\$794	\$864	\$872	\$881	\$894	\$101	12.7%
6 MWh	\$863	\$931	\$938	\$946	\$960	\$97	11.2%
7 MWh	\$933	\$998	\$1,004	\$1,012	\$1,026	\$93	9.9%
8 MWh	\$1,003	\$1,066	\$1,071	\$1,077	\$1,091	\$88	8.8%
9 MWh	\$1,072	\$1,133	\$1,137	\$1,143	\$1,157	\$84	7.9%
10 MWh	\$1,142	\$1,201	\$1,203	\$1,208	\$1,222	\$80	7.0%
11 MWh	\$1,212	\$1,268	\$1,270	\$1,273	\$1,288	\$76	6.3%
12 MWh	\$1,282	\$1,336	\$1,336	\$1,339	\$1,354	\$72	5.6%

Small business customer with or without solar

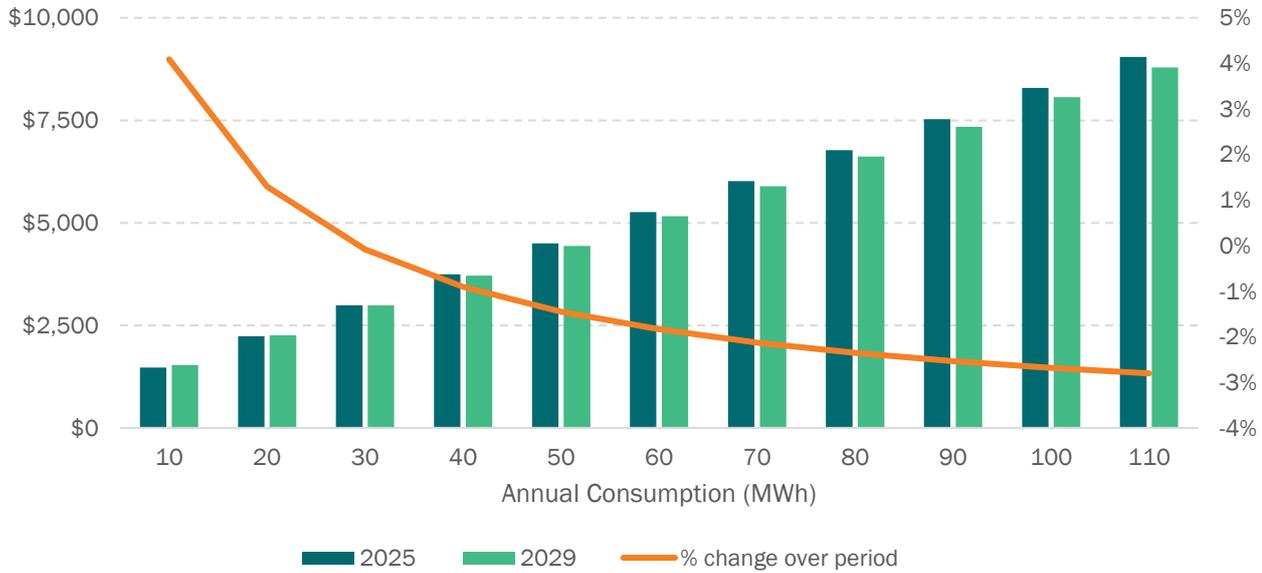
On our Anytime flat rate network charge – estimated annual DUoS charge based on customer usage (\$, real 2023–24)



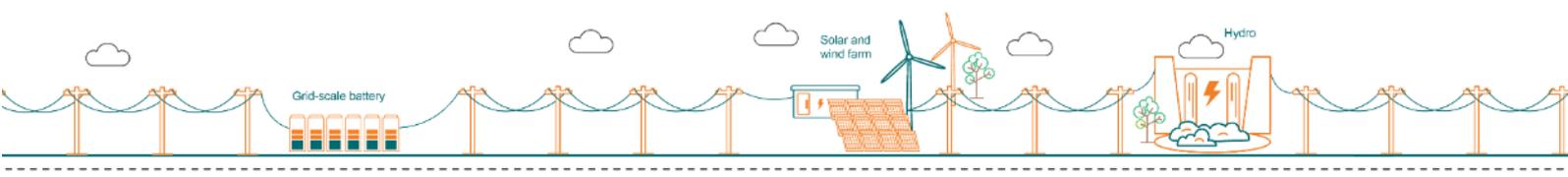
Annual customer usage	2024-25	2025-26	2026-27	2027-28	2028-29	Total \$ change over the period	% Change over the period
10 MWh	\$2,053	\$2,073	\$2,090	\$2,113	\$2,177	\$125	6.1%
20 MWh	\$3,389	\$3,406	\$3,416	\$3,441	\$3,546	\$158	4.7%
30 MWh	\$4,725	\$4,739	\$4,742	\$4,768	\$4,915	\$191	4.0%
40 MWh	\$6,061	\$6,072	\$6,068	\$6,095	\$6,285	\$224	3.7%
50 MWh	\$7,397	\$7,405	\$7,395	\$7,423	\$7,654	\$257	3.5%
60 MWh	\$8,733	\$8,738	\$8,721	\$8,750	\$9,023	\$290	3.3%
70 MWh	\$10,069	\$10,071	\$10,047	\$10,077	\$10,392	\$323	3.2%
80 MWh	\$11,405	\$11,404	\$11,374	\$11,405	\$11,761	\$356	3.1%
90 MWh	\$12,741	\$12,737	\$12,700	\$12,732	\$13,130	\$389	3.1%
100 MWh	\$14,077	\$14,070	\$14,026	\$14,060	\$14,499	\$422	3.0%
110 MWh	\$15,413	\$15,403	\$15,353	\$15,387	\$15,868	\$455	3.0%

Small business customer with or without solar

On our ToU interval network charge – estimated annual DUoS charge based on customer usage (\$, real 2023–24)

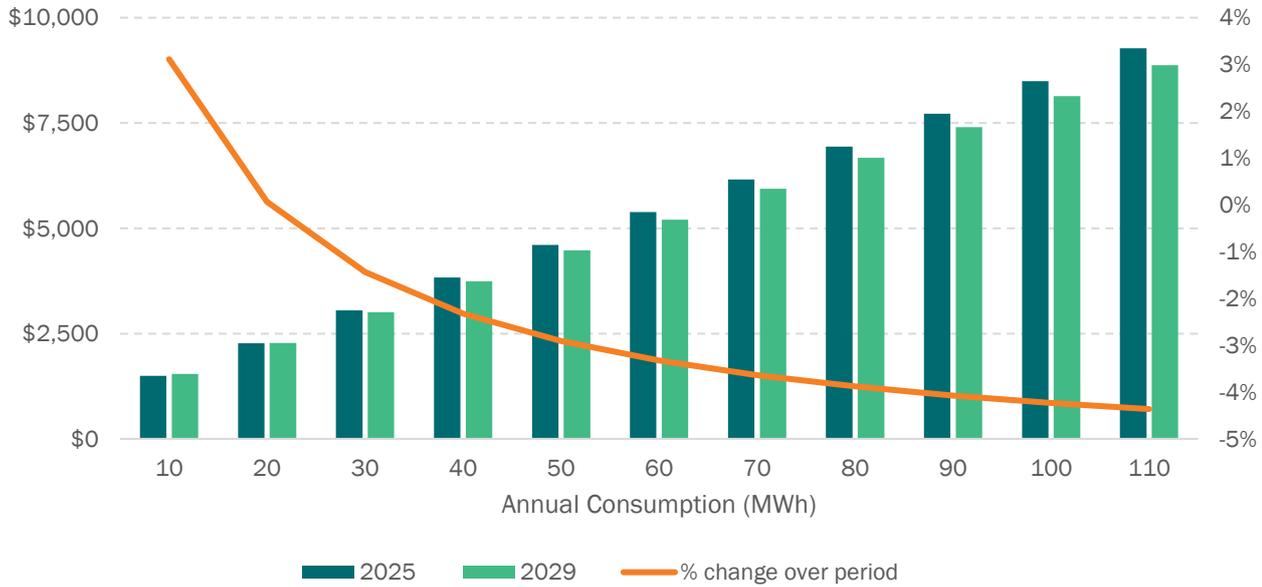


Annual customer usage	2024-25	2025-26	2026-27	2027-28	2028-29	Total \$ change over the period	% Change over the period
10 MWh	\$1,474	\$1,486	\$1,497	\$1,510	\$1,534	\$60	4.1%
20 MWh	\$2,231	\$2,232	\$2,231	\$2,235	\$2,260	\$29	1.3%
30 MWh	\$2,988	\$2,978	\$2,965	\$2,959	\$2,986	-\$3	-0.1%
40 MWh	\$3,746	\$3,724	\$3,699	\$3,683	\$3,712	-\$34	-0.9%
50 MWh	\$4,503	\$4,471	\$4,433	\$4,408	\$4,437	-\$65	-1.5%
60 MWh	\$5,260	\$5,217	\$5,168	\$5,132	\$5,163	-\$97	-1.8%
70 MWh	\$6,017	\$5,963	\$5,902	\$5,856	\$5,889	-\$128	-2.1%
80 MWh	\$6,775	\$6,709	\$6,636	\$6,581	\$6,615	-\$160	-2.4%
90 MWh	\$7,532	\$7,455	\$7,370	\$7,305	\$7,341	-\$191	-2.5%
100 MWh	\$8,289	\$8,201	\$8,104	\$8,029	\$8,067	-\$222	-2.7%
110 MWh	\$9,046	\$8,947	\$8,838	\$8,754	\$8,793	-\$254	-2.8%



Small business customer without solar or with solar where peak exports are less than 7.5kWh per day

On our Sun Soaker network charge – estimated annual DUoS charge based on customer usage (\$, real 2023–24)

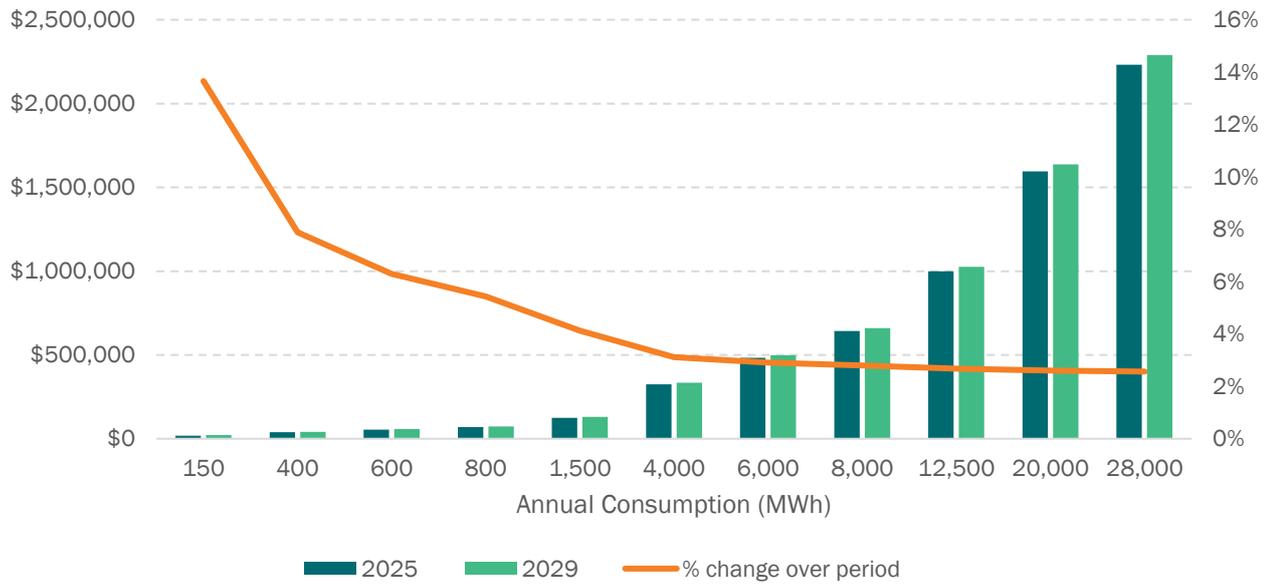


Annual customer usage	2024-25	2025-26	2026-27	2027-28	2028-29	Total \$ change over the period	% Change over the period
10 MWh	\$1,494	\$1,493	\$1,504	\$1,517	\$1,541	\$47	3.1%
20 MWh	\$2,272	\$2,247	\$2,245	\$2,249	\$2,274	\$1	0.1%
30 MWh	\$3,050	\$3,000	\$2,986	\$2,980	\$3,007	-\$44	-1.4%
40 MWh	\$3,828	\$3,753	\$3,728	\$3,711	\$3,739	-\$89	-2.3%
50 MWh	\$4,606	\$4,506	\$4,469	\$4,442	\$4,472	-\$134	-2.9%
60 MWh	\$5,384	\$5,259	\$5,210	\$5,174	\$5,205	-\$179	-3.3%
70 MWh	\$6,162	\$6,013	\$5,951	\$5,905	\$5,938	-\$224	-3.6%
80 MWh	\$6,940	\$6,766	\$6,692	\$6,636	\$6,671	-\$269	-3.9%
90 MWh	\$7,718	\$7,519	\$7,433	\$7,367	\$7,403	-\$314	-4.1%
100 MWh	\$8,496	\$8,272	\$8,174	\$8,099	\$8,136	-\$360	-4.2%
110 MWh	\$9,274	\$9,026	\$8,915	\$8,830	\$8,869	-\$405	-4.4%



Medium business customer with or without solar

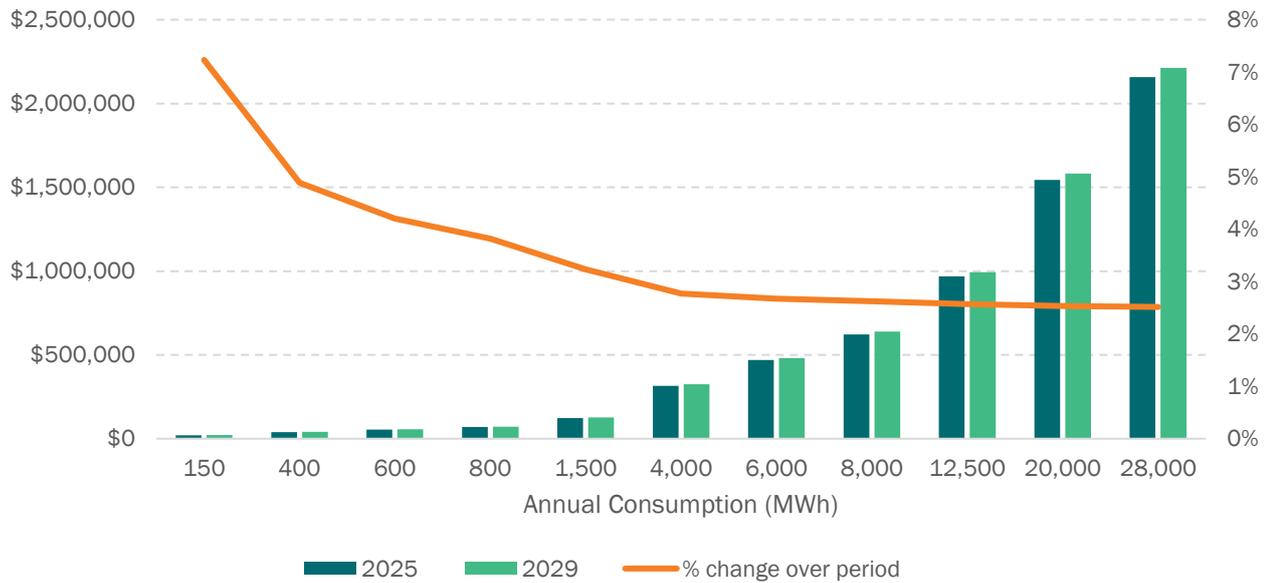
On our LV Demand network charge – estimated annual DUoS charge based on customer usage (\$, real 2023–24)



Annual customer usage	2024–25	2025–26	2026–27	2027–28	2028–29	Total \$ change over the period	% Change over the period
150 MWh	\$18,592	\$18,802	\$18,975	\$19,212	\$21,131	\$2,539	13.7%
400 MWh	\$38,453	\$38,618	\$38,691	\$38,944	\$41,484	\$3,030	7.9%
600 MWh	\$54,342	\$54,471	\$54,464	\$54,729	\$57,766	\$3,423	6.3%
800 MWh	\$70,231	\$70,323	\$70,236	\$70,515	\$74,047	\$3,816	5.4%
1,500 MWh	\$125,843	\$125,807	\$125,441	\$125,764	\$131,034	\$5,191	4.1%
4,000 MWh	\$324,456	\$323,965	\$322,601	\$323,081	\$334,557	\$10,101	3.1%
6,000 MWh	\$483,346	\$482,491	\$480,329	\$480,935	\$497,376	\$14,030	2.9%
8,000 MWh	\$642,237	\$641,017	\$638,057	\$638,788	\$660,194	\$17,958	2.8%
12,500 MWh	\$999,740	\$997,701	\$992,945	\$993,959	\$1,026,536	\$26,797	2.7%
20,000 MWh	\$1,595,578	\$1,592,174	\$1,584,425	\$1,585,911	\$1,637,106	\$41,528	2.6%
28,000 MWh	\$2,231,140	\$2,226,279	\$2,215,336	\$2,217,326	\$2,288,380	\$57,241	2.6%

Large business customer with or without solar

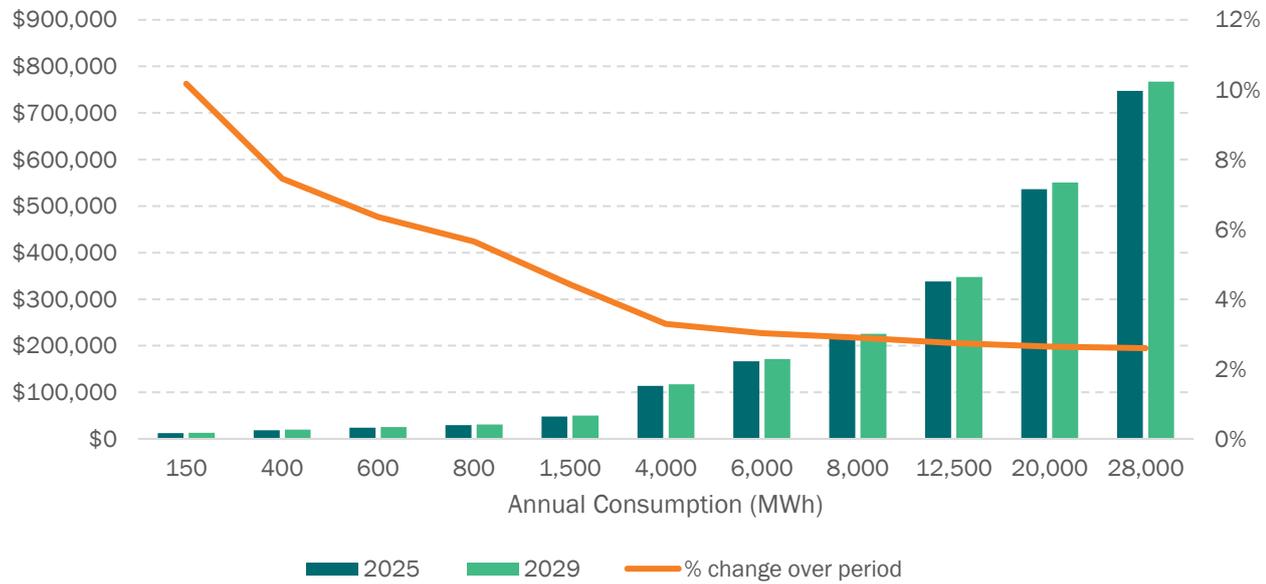
On our HV Demand network charge – estimated annual DUoS charge based on customer usage (\$, real 2023–24)



Annual customer usage	2024–25	2025–26	2026–27	2027–28	2028–29	Total \$ change over the period	% Change over the period
150 MWh	\$19,706	\$19,974	\$20,204	\$20,495	\$21,131	\$1,425	7.2%
400 MWh	\$38,899	\$39,123	\$39,256	\$39,563	\$40,798	\$1,899	4.9%
600 MWh	\$54,253	\$54,441	\$54,498	\$54,816	\$56,532	\$2,279	4.2%
800 MWh	\$69,607	\$69,760	\$69,740	\$70,070	\$72,266	\$2,659	3.8%
1,500 MWh	\$123,346	\$123,376	\$123,086	\$123,459	\$127,334	\$3,987	3.2%
4,000 MWh	\$315,272	\$314,862	\$313,607	\$314,133	\$324,004	\$8,732	2.8%
6,000 MWh	\$468,813	\$468,051	\$466,025	\$466,672	\$481,341	\$12,528	2.7%
8,000 MWh	\$622,353	\$621,240	\$618,442	\$619,211	\$638,678	\$16,324	2.6%
12,500 MWh	\$967,820	\$965,914	\$961,381	\$962,423	\$992,685	\$24,865	2.6%
20,000 MWh	\$1,543,597	\$1,540,372	\$1,532,947	\$1,534,445	\$1,582,698	\$39,100	2.5%
28,000 MWh	\$2,157,760	\$2,153,127	\$2,142,616	\$2,144,601	\$2,212,044	\$54,285	2.5%

Sub-transmission customer with or without solar

On our Sub-transmission Demand network charge – estimated annual DUoS charge based on customer usage (\$, real 2023–24)



Annual customer usage	2024–25	2025–26	2026–27	2027–28	2028–29	Total \$ change over the period	% Change over the period
150 MWh	\$12,093	\$12,375	\$12,641	\$12,924	\$13,322	\$1,230	10.2%
400 MWh	\$18,696	\$18,963	\$19,196	\$19,485	\$20,089	\$1,393	7.5%
600 MWh	\$23,979	\$24,234	\$24,440	\$24,733	\$25,502	\$1,524	6.4%
800 MWh	\$29,261	\$29,504	\$29,684	\$29,981	\$30,915	\$1,654	5.7%
1,500 MWh	\$47,750	\$47,951	\$48,038	\$48,349	\$49,862	\$2,111	4.4%
4,000 MWh	\$113,783	\$113,833	\$113,588	\$113,951	\$117,527	\$3,744	3.3%
6,000 MWh	\$166,609	\$166,538	\$166,027	\$166,433	\$171,659	\$5,050	3.0%
8,000 MWh	\$219,435	\$219,243	\$218,467	\$218,914	\$225,791	\$6,356	2.9%
12,500 MWh	\$338,294	\$337,829	\$336,456	\$336,998	\$347,589	\$9,295	2.7%
20,000 MWh	\$536,392	\$535,473	\$533,105	\$533,804	\$550,584	\$14,192	2.6%
28,000 MWh	\$747,697	\$746,294	\$742,864	\$743,730	\$767,113	\$19,416	2.6%

B

Network charge assignment and reassignment

Appendix summary

- Provides more details around our network charge assignment and reassignment policy



This appendix sets out our policies and procedures governing assignment or reassignment of Essential Energy's retail customers for direct control services.

Procedures for assigning and reassigning retail customers to customer classes

1 The procedure outlined in this section applies to direct control services.

Assignment of existing customers to customer classes at the commencement of the regulatory control period

- 2 Essential Energy's existing customers will be taken to be assigned to the customer class in which their existing network tariff sits prior to 1 July 2024, if:
- o They were a customer prior to 1 July 2024, and
 - o Continue to be a customer as at 1 July 2024.

Assignment of new customers to a network charge class during the regulatory control period

- 3 New connection or a change of occupancy will trigger assignment.
- 4 For new connections, Essential Energy will use the estimated information collected from the retailer's B2B service order, in conjunction with the system of assessment as described in the *Assigning customers to standard control services tariff classes* section of the TSS, to assign the new customer to the appropriate network charge.
- 5 New residential and small business customers connecting to the network, will be assigned to the default cost-reflective network charge relevant to their metering technology.
- 6 Change of occupancy will lead to assignment to the default cost-reflective network charge where the appropriate metering technology is available at the premises. If the premises do not have a smart or interval meter, the customer will be assigned the network charge that previously existed at the premises. Where a network price change is required in connection with a change of occupancy, the retailer must request a network charge reassignment in accordance with the *Reassignment triggered by the customer or customer's retailer* **Error! Reference source not found.** section below.
- 7 These customers will have the choice to opt out to an alternative network charge if they satisfy the necessary eligibility requirements.

Reassignment of existing customers to another existing or a new customer class during the regulatory control period

- 8 Reassignment can be triggered when an existing customer's load, connection and/or metering characteristics have changed such that it is no longer appropriate for that customer to be assigned to the network charge to which the customer is currently assigned. Existing residential and small business customers who:
- o upgrade their connection, through installing three-phase power or embedded generation, or upgrading an existing embedded generation connection, will be assigned to the default cost-reflective network charge relevant to their metering technology.
 - o have a change to their meter characteristics with the installation of a smart meter, with no other change to their connection, will be assigned to the default cost-reflective network charge relevant to their metering technology
- 9 Reassignment can be triggered by Essential Energy or a customer's retailer.
- 10 Customers may notify their retailer or Essential Energy if they identify that their current assignment is no longer appropriate.
- 11 If notified by a customer directly, Essential Energy is obliged to investigate, and where it finds the assignment is no longer appropriate, to initiate reassignment. In these instances, Essential Energy is obliged to provide all notifications otherwise only sent to the customer's retailer, to both the customer's retailer and the customer directly.
- 12 In general, customers or their retailer may make one application for reassignment in any 12-month period per connection point. Essential Energy will consider exceptions on a case-by-case basis.
- 13 Whether the customer's retailer or Essential Energy initiates a network charge reassignment, Essential Energy will use the system of assessment described above to reassign the customer to the appropriate network charge.
- 14 The network charge change will be applied from the last actual meter read date. For Smart Meters, where daily reads occur, the last meter read date will be taken as the last invoiced meter read date (therefore end of month).
- 15 Any request for a mass re-assignment of customers will be dealt with on a case-by-case basis – taking into account Essential Energy's billing system capabilities.

Reassignment triggered by the customer or customer's retailer

- 16 Customers and the customer's retailer should monitor the suitability of the network charge applied. Where a customer or customer's retailer identifies the existing network charge is not suitable, they must advise Essential Energy of the need for reassignment. Additionally, where it identifies a need for reassignment, Essential Energy can initiate reassignment – see the *Reassignment triggered by Essential Energy* section below.

- 17 Where the customer's retailer requests a network charge reassignment (on its own initiative or at the customer's request):
- the customer's retailer applies in writing by submitting the Supply Service Works Service Order (SSW-SO) for Network Charge Change via the Energy Market B2B processes, or
 - if the request requires a metering configuration or update the customer's retailer would need to raise the appropriate B2B service order (Metering Service Works Service Order MSW-SO).

Reassignment triggered by Essential Energy

- > Where Essential Energy initiates the network charge reassignment, it will provide a notice to the customer's retailer prior to the actual network charge reassignment. Essential Energy will also advise the customer prior to the assignment if they are a business customer.
- > The obligation to notify a customer's retailer does not apply if the customer has agreed with its retailer and Essential Energy that its network charges are to be billed by Essential Energy directly to the retail customer, in which case Essential Energy must notify the customer directly.

Obsolete network charge

- 18 An obsolete network charge is a network charge that may apply to existing Essential Energy customers but is not available to new customers. Customers who choose to transfer off an obsolete network charge will lose all rights to all obsolete network charges on that premises, therefore the entire site will be required to move onto a currently available network charge. Exceptions apply when customers connect to additional services. Refer to Essential Energy's Network Price List and Explanatory Notes which is available on www.essentialenergy.com.au for further details in relation to obsolete network charge.
- 19 Customers may not go back onto an obsolete network charge once they have transferred off it.

Controlled load

- 20 Where a customer wishes to change from Controlled Load 1 to Controlled Load 2 (or vice-versa) the customer must notify their retailer.
- 21 To change Controlled Load network charge, the customer's retailer is required to submit the relevant Metering Service Works (Meter reconfiguration) B2B service order to trigger the necessary meter/relay reconfiguration. Once the meter/relay reconfiguration has taken place, Essential Energy will perform the appropriate network charge reassignment without requiring the retailer to submit a SSW-SO.
- 22 The network charge will be changed as at the date of the Meter reconfiguration (therefore Frequency Injection Relay channel change).

Notifications

- 23 Essential Energy will notify the customer's retailer in writing of the network charge to which the customer will be assigned or reassigned prior to the network charge assignment or reassignment occurring:
- in the event Essential Energy initiates the network charge reassignment, Essential Energy will notify the customer's retailer in writing prior to the actual network charge reassignment occurring.
 - in the event the customer's retailer initiates the network charge reassignment, Essential Energy will notify the retailer in writing of the success or otherwise of the application. Where the application is not successful or where Essential Energy has decided to assign a network charge other than that proposed by the retailer, Essential Energy will advise the retailer of the reasons for the decision.
 - The obligation to notify a customer's retailer does not apply if the customer has agreed with their retailer and Essential Energy that their network charges are to be billed by Essential Energy directly to the retail customer, in which case Essential Energy must notify the customer directly.
- 24 As part of our notification procedures, Essential Energy will advise the retailer that they can request further information from Essential Energy and that they may object to the network charge reassignment decision made by Essential Energy. Essential Energy encourages retailers to request further information or clarification of its network charge reassignment decision before an objection is lodged.
- 25 If, in response to a notice issued in accordance with paragraph 24 above, Essential Energy receives a request for further information from a customer's retailer or customer, then it must provide such information. If any of the information requested is confidential, then it is not required to provide that information to the retail customer.
- 26 The customer's retailer is wholly responsible for conveying the correct information to Essential Energy and communicating any further requests and decisions made by Essential Energy to the customer.

Objections

- 27 Essential Energy must allow retailers to object to a network charge reassignment decision made by Essential Energy. The objection procedure allows retailer's to formally request a review of the network charge reassignment decision.
- 28 The following steps will be applied as part of the objection procedure:
- (a) Retailers must submit an objection in writing using Essential Energy's Network Charge Reassignment Objection form. Supporting evidence or documentation related to the decision being reviewed must be provided by the retailer. Retailers should make reference to their customer's load, connection and metering characteristics as part of the network charge reassignment objection. The completed form and supporting information and documentation will be emailed to networktariffchange@essentialenergy.com.au.
 - (b) Essential Energy's Network Pricing Manager must review the objection, including any documentation provided. In reviewing the objection, the Network Pricing Manager must assess if the original decision complies with this network charge assignment and reassignment policy and any regulatory obligations and will consider any supporting evidence and documentation provided.
 - (c) Within 20 days of receiving the completed Network Charge Reassignment Objection form, Essential Energy must notify the customer's retailer, and where appropriate the customer, in writing of the outcome of the Network Pricing Manager's review and reasons for accepting or rejecting the objection. If Essential Energy believes the objection review process will take longer than 20 business days, Essential Energy must advise the retailer, and where appropriate the customer, accordingly.
- 29 If an objection to an assignment or reassignment is successful:
- (a) If the completed objection form is received within 20 business days from the date the retailer was advised of the original network charge reassignment decision, Essential Energy will apply the changes from the last actual meter read date taken before the original network charge reassignment application.
 - (b) If the completed objection form is received after 20 business days from the date the retailer was advised of the original network charge reassignment decision, Essential Energy will apply the changes from the last actual read date taken before the completed objection form is received.
 - (c) if Essential Energy requests further information from the retailer pertaining to the objection application, and such information is not provided within 20 business days from the date requested, Essential Energy will apply the changes from the last actual read date taken before the additional requested information is received.
- 30 Essential Energy will make any adjustment to network charges billed to retailers or directly to customers in relation to a successful objection as part of the normal billing process, including any compensation relating to the time value of money.
- 31 If an objection to a network charge class assignment or reassignment is upheld, then any adjustment which needs to be made to network charge levels will be done by Essential Energy as part of the next annual review of prices.
- 32 If the customer or retailer isn't satisfied with the objection response from Essential Energy, the customer or retailer may escalate the matter to the Energy and Water Ombudsman (NSW), or to any other relevant external dispute resolution body that has jurisdiction over such matters. If the customer or retailer is still not satisfied with the external party's assessment, the customer or retailer may seek a decision from the Australian Energy Regulator using the dispute resolution process available under Part 10 of the National Electricity Law.