

Demand Management Innovation Allowance Mechanism Report 2021-22



October 2022

Table of Contents

Introduction and purpose	3
Small Customer Tariff Trials project	3
Project partners	4
Tariffs expected to be trialled	4
Education only trial	4
Project eligibility criteria	5
Actual and projected costs for the project.....	5
Lessons learned to date	5
Summary of the small customers tariff trials project ‘Trial Design’ phase	6

Introduction and purpose

In line with the 2019-24 determination, Essential Energy provides its Demand Management Innovation Allowance Mechanism (DMIAM) Report for the 2021-22 regulatory year.

The purpose of this report is to allow the Australian Energy Regulator (AER) to:

- > assess Essential Energy's DMIAM initiatives
- > confirm Essential Energy's compliance with the annual reporting requirements of the AER's Regulatory Information Notice (RIN).

DMIAM expenditure for 2021-22

Project	Amount
Small customer tariff trials project	\$250,969

Small Customer Tariff Trials project

The electricity industry is undergoing a rapid transformation driven by changes in the way customers source and use energy, the push to decarbonise energy supply, and the increased decentralisation of the energy supply chain. Tariff trials are essential to Essential Energy successfully designing and testing network charges that consider the network challenges and how customers interact with the network both now and into the mid-term.

As part of the 2019-24 Tariff Structure Statement (TSS) Essential Energy committed to undertaking small customer tariff trials to determine customers' response and the associated bill impacts. This tariff trials project aligns with the tariff strategy and pricing principles outlined in Essential Energy's 2019-24 TSS.

In particular, Essential Energy's 2019-24 TSS specifically identified several factors to encourage the adoption of more cost-reflective network charges including the need for education, collaboration, trials and technology, all of which feature within the proposed tariff trials.

Ahead of the project, the business established its network challenges, four of which can be assisted by tariffs and customers shifting their energy use.

The aim of this project is to test whether new tariffs:

- > change how residential and small business customers (small customers) use electricity
- > help solve the business' network challenges
- > improve fairness between the relative prices that different small customers pay
- > can be implemented on a broad scale in a cost-effective manner for the 2024–29 regulatory period.

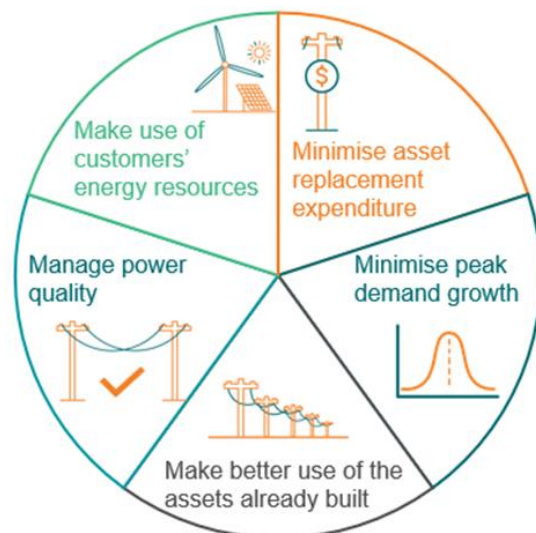
An education only trial will also be undertaken to determine:

- > the extent that customers in these areas change their energy use through educational material alone
- > whether sufficient change can be achieved to avoid the need for more complex network tariffs
- > which marketing channels and messages work the best for different customer cohorts

The trials will confirm which aspects best assist with shifting customers' energy use, such that network investment can be deferred or even avoided over the short to medium-term. This will deliver lower customer bills than would otherwise have been the case. The results will directly inform Essential Energy's TSS for the 2024-29 regulatory period.

The four tariff components that will be trialled (Sun Soaker tariff, export price, peak time rebate and critical peak price) and the idea for an education only trial were devised through a dedicated engagement program with customers and stakeholders. More information about this program can be found in Attachment 1.

Essential Energy's network challenges



Project partners

Essential Energy has partnered with the University of NSW (UNSW) to undertake the data analysis and demographic and behavioural insights research. Trial customers will receive incentives for participating in the UNSW research. UNSW is also creating a peak event forecasting model for the business and will weather correct usage data as part of the analysis.

The business has also partnered with three retailers for the tariff trials. Two retailers will alter their virtual power plant algorithms to operate customers energy resources to also consider the trial network tariffs. The third retailer will offer a traditional retail model.

Tariffs expected to be trialled

The four different trial components (Sun Soaker tariff, export price, peak time rebate and critical peak price) will be paired with each other, as well as the business' existing network tariffs to provide a range of different tariffs to be trialled. The tariffs preferred by the retail partners to date are:

- > Peak time rebate applied to the existing flat rate network tariff
- > Sun Soaker
- > Sun Soaker plus export price plus peak time rebate
- > Sun Soaker plus export prices plus critical peak price
- > Export price applied to the existing Time of Use network tariff

Customer's smart meter data as well as distribution and sub-station transformer data will be used to determine the success of the various tariff components at solving network challenges. In addition, demographic data and the lived experience of customers will be captured by the UNSW and provide depth to the customer impact analysis.

Expected success/non-success of the various tariff components

Sun Soaker and export price

Based on the implementation experience to date, Essential Energy sees both the Sun Soaker and export price successfully being adopted into the TSS. Retailers are very supportive of the Sun Soaker tariff, given its broad alignment with wholesale prices. Whilst the final form of the export price will be shaped from the trial outcomes, an export price is expected to be successful.

In practice, the final export price will be paired with a consumption price to form a two-way tariff. As such, the implementation of two-way tariffs will need to be in accordance with the AEMC's 'Access, pricing and incentive arrangements for distributed energy resources' (12 August 2021) rule determination and consider the transition preferences of customers and stakeholders. At this stage, the business expects to offer a two-way tariff on an opt-in basis from 1 July 2024.

Peak time rebate and critical peak price

Neither the peak time rebate nor the critical peak price are expected to be successful. They are unlikely to be able to be cost-effectively rolled out on a broad scale, as significant systems work would be required for these components to be automatically applied at specific locations based on the results of a peak event forecasting model and then billed and paid/charged accordingly. Given the number and scale of peak events would vary from year to year, including these components in tariffs would also increase the risk of over or under-recovering revenue.

Rather, the use of network support payments for customers in constrained areas of the network would provide a targeted, less risky and more cost-effective means of lowering demand on peak event days. Regardless of this expectation, the trial results will help inform the value of network support payment required to encourage customers to reduce their energy use.

Education only trial

The education trial, 'Timing is Everything', began in May for customers in Broken Hill, Bungendore, Sutton and Queanbeyan (postcodes 2880 and 2620). Customer's smart meter data (compared to their weather corrected historical usage and to the control areas of Bathurst and Cobar, postcodes 2795 and 2835), along with distribution and sub-station transformer data will be used to determine the extent to which customers alter their energy use. Demographic data and customers lived experience will also captured by the UNSW and will inform the success of the various messages and marketing channels across different customer cohorts.

Identifying different customers' preferred channel and the relative success of different channels will help inform how the business communicates with customers going forward. This will be especially relevant given the need to educate customers about two-way prices in the lead up to the implementation in the 2024-29 regulatory period.

Project eligibility criteria

The elements of this project that differentiate it from tariff trials projects undertaken by other networks to date are:

- > The tariffs are designed to specifically address network challenges that were identified before the project was started – see attachment 1.
- > The trials have been co-designed with customers and stakeholders – see attachment 1.
- > The business has partnered with retailers to ensure the network tariff is considered in the virtual power plant algorithm and/or mirrored in the associated retail tariff.
- > The stepped capacity form of the export charge is unique – other networks are trialling basic cents per kilowatt charges.
- > The partnership with the UNSW to capture demographic and lived experience data will add significant depth to the trial results, especially around how the trials impact different types of customers.
- > A critical peak price has not been applied to small customers – this component is being trialled at the express request of stakeholders to test whether customers respond better to a reward (peak time rebate) or a penalty and also whether different types of customers fair better under one component compared to the other.
- > Whilst peak time rebates have been trialled by networks in the past, most offers now only exist at a retail level.

Actual and projected costs for the project

2021-22	2022-23E	2023-24E	2024-25E	Total estimated project cost	Total expected to be claimed in the regulatory period	
					2019-24	2024-29
250,970	747,611	551,902	253,456	1,803,939	1,550,483	253,456

Lessons learned to date

Building the tariffs into existing billing systems

The complexity of building new tariffs into Essential Energy's existing meter data and billing systems has also been a challenge. The existing systems do not accommodate the building of bespoke, multi-component tariffs that are required for the modern distribution network. On top of this, recruiting development staff was difficult given the tight labour market. This added significant development time to the process. Both these systems are due to be replaced in the next regulatory period and are imperative to Essential Energy's ability to roll-out tariffs that are fit for the future on a broad scale.

Not surprisingly, this problem has also impacted some retail partners and will be an inhibitor to mainstream retailers adopting more complex tariffs. Essential Energy commenced the project with a fourth, very large retailer. After a year of discussions, the retailer had to drop out as they were unable to manage the additional work of building new tariffs at the same time as implementing a major billing system upgrade.

Working with retailers

Working with retailers has added significant time to the project given their participation is voluntary and not critical to their business. This is especially the case where retailers are building new retail tariffs to align with network tariffs. There are costs in developing new tariffs and retailers are understandably unwilling to invest in tariffs they do not see as having a role in their business.

Partnering with retailers has also limited the size of the trials given the retail effort and cost in training staff and recruiting and managing customers for the duration of the trials.

Recent volatility in the wholesale and retail markets has impacted the ability of retailers to recruit customers for the tariff trials. Retailers are experiencing significant churn rates and customers are calling them and making enquiries and complaints given the recent price increases arising from changing wholesale market conditions. With staff resources being tied up with these calls, selling products and recruiting customers for the trials was delayed for some months.

Summary of the small customers tariff trials project 'Trial Design' phase

Essential Energy undertook a dedicated engagement program with small customers and stakeholders to co-design acceptable tariffs to take to trial.

In the wake of COVID-19, the program was successfully conducted on-line using the Essential Engagement website and the Zoom application and has resulted in five customer and stakeholder supported concepts to take to trial

Essential Energy would not have landed on these concepts in the absence of such an engagement process.

Overview of the tariff trials project

In its 2019-24 Tariff Structure Statement, Essential Energy committed to undertaking tariff trials to ensure any fundamental changes to tariffs were properly assessed from a customer response and impact perspective. The tariff trials will take place across three phases:



<p>AIM: To design tariffs that are supported by stakeholders & customers.</p>	<p>AIM: To test the tariffs and see whether they:</p> <ul style="list-style-type: none"> > change how customers use electricity; > help solve our network problems; > improve fairness between customers; and > can be implemented on a broad scale in a cost-effective manner. 	<p>AIM: To present data and learnings to gain stakeholder support for any new tariff structures for Essential Energy's next regulatory period, which runs from 1 July 2024 through to 30 June 2029.</p>
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Ahead of the engagement process, Essential Energy defined the network problems that tariffs may be able to help solve. These are shown in the following table. The relative success of the associated tariffs in solving these network problems will be a key measurement outcome from the trials.

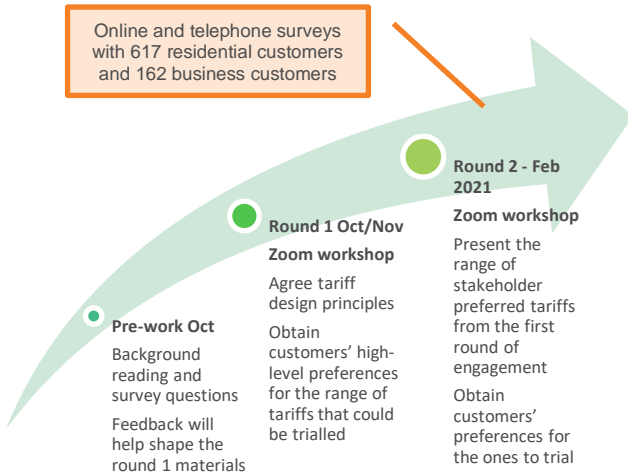
The network problems that tariffs may help 'solve'

Issue	Potential tariff solution
Some areas of our network suffer from voltage and/or thermal constraints (minimise peak demand growth and manage power quality issues)	Pay customers to provide support services to the network to address: <ul style="list-style-type: none"> > Capacity issues > the widening of the voltage envelope; and
The level of replacement capex will cause issues <ul style="list-style-type: none"> > Costs to replace ageing assets will push the Regulated Asset Base (RAB) value higher > Postage stamp pricing means there is cross-subsidisation between high and low cost-to-serve customers 	<ul style="list-style-type: none"> > Transition uneconomic customers to Stand Alone Power System (SAPS) solutions with efficient SAPS pricing (part of a separate SAPS tariff trials project) > Locational tariffs - but recognising that our stakeholders are against this proposal consider semi-locational like urban/rural, climatic zones or nodal pricing.
Our network experiences demand peaks and troughs – utilisation is uneven	Reward customers for shifting demand to other times of the day or for reducing demand at peak times
We are not able to make efficient use of customer's Distributed Energy Resources (DER)	<ul style="list-style-type: none"> > Reward DER customers for providing network support > Facilitate customers participation in peer-to-peer trading & virtual net metering

Engagement approach

Woolcott Research & Engagement facilitated the Tariff Trial Design engagement program in adherence with the Research Society and International Association of Public Participation (IAP2) Core Values and Codes of Ethics and the techniques spanned the range of the IAP2 engagement spectrum.

Overview of the 'Trial Design' engagement phase



A **Tariff Advisory Panel** consisting of a sub-set of stakeholders (retailers, customer advocates, industry groups and the AER as an observer) was assembled to assist with:

- > Developing the content for the pre-workshop 'Talking Tariffs' engagement website
- > Shaping and refining the workshop agendas and associated materials
- > Interpreting customer and stakeholder feedback.

Ahead of the Round 1 workshops, small customers were directed to pre-read the material on the Essential Engagement 'Talking Tariffs' web pages. The materials queried customers as to what principles they thought were important to consider in designing tariffs, introduced the concept of an export tariff and presented the five innovative tariff concepts and gathered initial views on each one.

Round 1 of the engagement program included three Zoom workshops with 96 small customers, including observers from the Australian Energy Regulator (AER) and the Australian Energy Market Commission (AEMC). There were also eight small customer in-depth interviews. In addition, 17 one-on-one Zoom meetings were held with 16 key stakeholders and Essential Energy's Customer Advisory Group (CAG).

The Round 2 engagement consisted of three small customer Zoom workshops (with 82 of the original 96 small customer participants) and a joint stakeholder workshop, as well as surveys from 617 residential customers and 162 small business customers.

The workshops consisted of a mix of presentations from Essential Energy staff with participants given the chance to ask questions, 'breakout' discussions facilitated by Woolcott to ensure that everyone's views were heard and captured, and polling sessions with participant's responses captured in real-time.

The objectives for each engagement phase were:

Pre-work	<ul style="list-style-type: none"> > Query customers as to what principles they thought were important to consider in designing tariffs > Introduce the concept of an export charge > Present five innovative tariff concepts and gather initial views on each one
Round 1	<ul style="list-style-type: none"> > Agree on the principles that customers and stakeholders think Essential Energy should consider when designing tariffs for the future > Gain reactions to the idea of an export charge > Gain reactions to the five innovative tariff options > Gather ideas for other tariff options
Round 2	<ul style="list-style-type: none"> > Communicate the revised pricing principles that customers and stakeholders think Essential Energy should consider when designing tariffs for the future > Gain reactions to the idea of taking an export charge to trial and three options for such a charge > Gain reactions to four innovative tariff options developed from the Round 1 feedback > Gather ideas for other tariff options

Summary of Round 1 engagement

TARIFF TRIAL DESIGN PRINCIPLES

Using feedback gathered through the 'Talking Tariffs' web pages, five tariff design principles: Fair, Simple, Affordable, Adaptable and Efficient were presented to participants in the Round 1 workshops.

Overall, there was general agreement with the principles presented and it was considered that they were on the right track and required only minor wordsmithing.

Of the five principles presented, 'Fair' was one that created much discussion as it was thought to be quite subjective and perhaps 'Equitable' was a better term. Some of the principles were also thought to be more relevant to retailer tariffs ('Simple' and 'Affordable'), whereas others were more network focussed ('Adaptable' and 'Efficient').

'Affordability' and 'Simplicity' were considered the most important principles from a customer perspective.

Closing the loop – tariff trial design principles






Based on feedback, the main changes to the principles were:

- > The principles are shown in descending order of importance to customers and stakeholders.
- > 'Affordable' was changed to 'Avoid bill shock' to better represent what 'Affordable' means to customers in terms of changing network tariffs.
- > 'Simple' was changed to 'Easy to understand'. This factors in the role of technology in interpreting tariffs and helping customers to make behavioural changes and recognises that retailers are ultimately responsible for setting prices that are 'Simple'.

- > 'Fair' has been maintained over the use of the word 'Equitable'. Whilst 'Fair' can mean different things to different people, 'Equitable' was thought to be more confusing and less 'plain English'. The term 'suitably cost-reflective' now also sits under this principle.
- > 'Adaptable' has been changed to "Facilitate green energy" to reflect customer and stakeholder views on what 'Adaptable' means to them.
- > 'Efficient' has been changed to 'Effective' to more accurately summarise the intent of this pricing principle.

The final agreed tariff trial pricing principles are shown below.

Tariff Trial Design Principles (in order of importance to customers and stakeholders)

Principle	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 (tariffs are suitably cost-reflective)
 FACILITATE GREEN ENERGY	> Tariffs accommodate changing technology, energy flows and greener customer choices
 EFFECTIVE	> Tariffs do the job - they solve network issues and do not create new ones

EXPORT CHARGES

In terms of export charges, it was explained that such a charge reflects the network investment required to accommodate exports and that the network could also pay customers for their exports, when those exports have a value that will help to lower network costs e.g., helping to manage the network in times of excessive exports or assisting with managing peak demand.

There were mixed reactions from participants on this concept. Export tariffs were a divisive topic with political and societal perceptions and expectations clashing with pricing fairness and the increasing role of two-way energy flows within the distribution network.

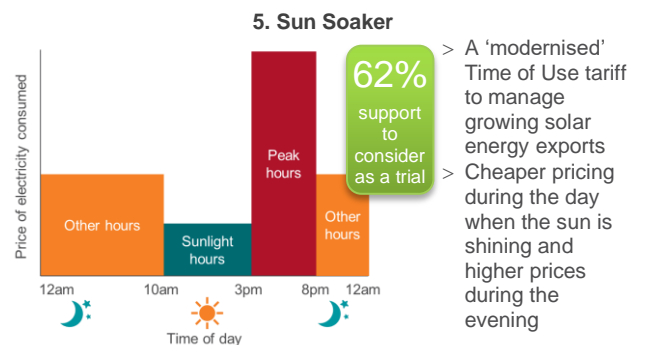
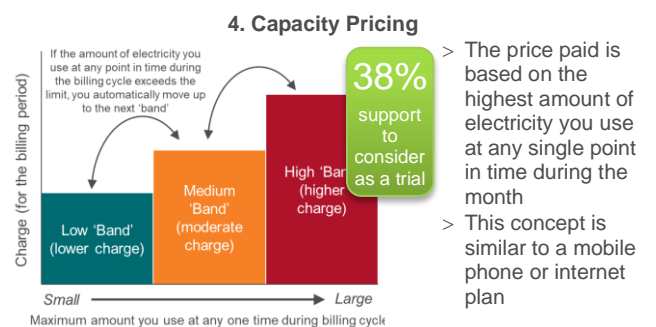
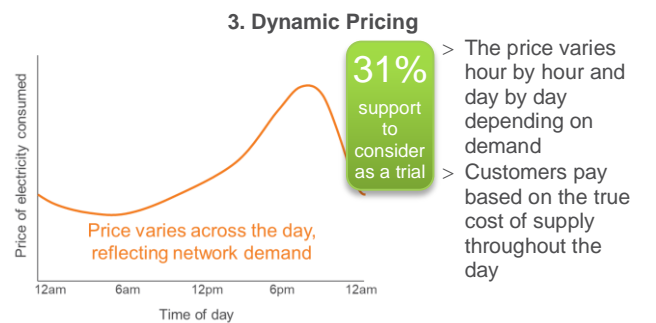
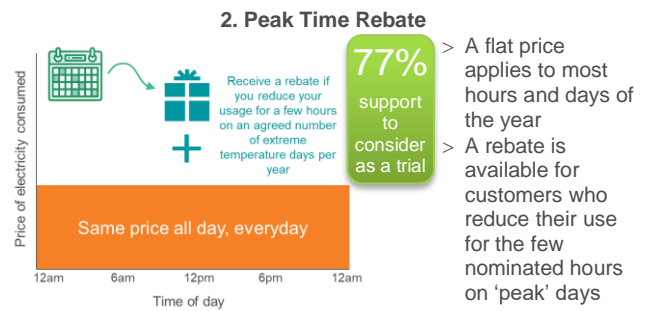
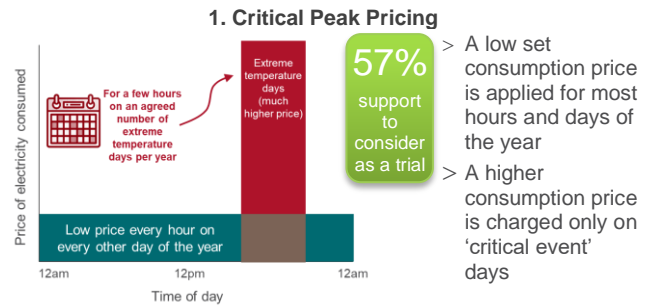
More detail on the feedback in relation to export charges can be found in the [Export charge findings from the 'Trial Design' phase](#) summary document.

Closing the loop – export charges

Given their clearly divisive nature, Essential Energy sees merit in trialling an export charge. Tariff trials will provide the opportunity to gather data to assess the true dollar and behavioural impact of an export charge on customers. This approach will allow for evidence, rather than perceptions or beliefs, to determine whether an export charge delivers a better and fairer customer outcome.

PROPOSED TARIFF OPTIONS

Five tariff options were presented in detail to participants. These concepts are shown below, along with the associated level of customer support they each received.



Most customers and stakeholders agreed that tariffs need to change and that a choice of tariffs is preferable to suit different types of customers.

There was a high level of support from participants for the Peak Time Rebate and Sun Soaker pricing. The Peak Time Rebate was appreciated for being a 'carrot' rather than 'stick' approach and the Sun Soaker was seen as being one of the easiest tariffs to implement.

There was a moderate level of support for Critical Peak Pricing, with many concerns alleviated if it was to be an 'opt-in' tariff.

There was low support for the Capacity and Dynamic Pricing options. Capacity Pricing was seen as being complex and anxiety provoking, and Dynamic Pricing was really seen as a tariff for the future.

The need for consumer education was also widely raised, and a proposition was raised as to whether simple messaging and education may provide sufficient behavioural change without the need to overly complicate network tariffs.

Closing the loop – Response to tariff options

Given the lack of support from all engagement groups to Dynamic Pricing and Capacity Pricing, neither of these tariffs was taken forward beyond Round 1 consultation.

Based on the strong support from all engagement groups, both the Critical Peak Pricing and the Sun Soaker tariff were taken forward to round 2 consultation.

Whilst Critical Peak Pricing was not as palatable a tariff to small customers and retailers, it was still generally supported by most stakeholder groups. Some stakeholders and the CAG also saw it as a good complement to the Peak Time Rebate.

On this basis, Essential Energy will take the Critical Peak Pricing through to Round 2 consultation but in an alternative form - overlaid on a Sun Soaker with just two charging windows in line with stakeholder suggestions to make the Sun Soaker tariff easier for customers to remember.

In addition, the concept of a trial based on simple messaging and education will also be included in Round 2 consultation.

Summary of Round 2 engagement

IDEA OF AN EDUCATION TRIAL

Participants were asked to what extent they agreed or disagreed that Essential Energy 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.

There was overwhelming support for such a trial.

Support for a simple communication and education trial

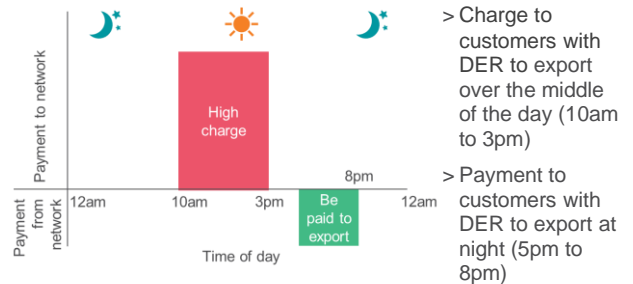
Small Customer Workshop	Residential Survey	Small Business Survey	Stakeholder Workshop
85%	74%	85%	16/17 (94%)

Small customers and stakeholders also believe that broader community education is required to teach customers about high energy use appliances and how customers can use these appliances differently to reduce their bills as well as how customers' energy use impacts network costs and customer bills.

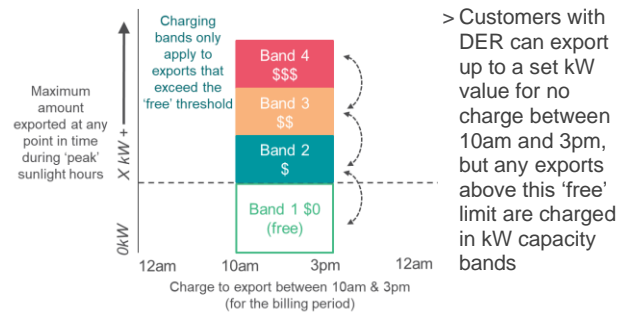
EXPORT CHARGES

In this round, three different concepts to recover the costs related to Distributed Energy Resources (DER) were presented to customers and stakeholders, along with their relative alignment (pros and cons) to the agreed tariff trial design principles and an overview of the bill impact on different types of customers.

1. Time of Use export charge



2. kW Based Capacity charge



3. Green Network Contribution



> Not an export charge, but an alternative means to fund the network costs required to facilitate customers' DER

> A fixed fee paid by all network users, regardless of whether they have DER.

Export charges remained a contentious and divisive topic in the Round 2 engagement. Even after the network issues were understood, many customers and stakeholders remained reluctant to endorse export charges given such a charge goes against the societal push towards renewable energy and may deter people from installing solar panels.

In general, those *without* solar were more supportive of export charges and felt that it was 'fair' for exporting customers to be paying to cover their share of network costs whilst those *with* solar were against export charges, even after it was made clear that any export charge would be only a portion of the current feed-in tariff customers receive from retailers.

The level of support across the different engagement touchpoints is shown in the following table.

Support for the proposed options to recover network costs related to exports

Charging option	Small Customer Workshop	Residential Survey ¹	Small Business Survey ¹	Stakeholder Workshop
1. Time of Use export charge	57%	51%	44%	55%
2. kW Based Capacity Charge	71%	54%	49%	65%
3. Green Network Contribution	49%	25%	17%	30%

REVISED TARIFF OPTIONS

Four tariff options based on the Round 1 feedback were also discussed with customers. These options were designed to assess whether there was a preference for a rewards-based approach (rebate) over a penalties-based approach (extreme prices during critical peaks).

Table 1: Support for the proposed tariff options

	Small Customer Workshop	Residential Survey ¹	Small Business Survey ¹	Stakeholder Workshop
1. Flat Rate + PTR* overlay	66%	56%	51%	94%
2. Flat Rate + PTR + Export Charge overlay	67%	32%	34%	66%
3. Sun Soaker	56%	43%	50%	100%
4. Two window Sun Soaker + CPP** overlay	72%	28%	23%	78%

* PTR: Peak Time Rebate
 ** CPP: Critical Peak Pricing

Of the four tariff options presented, the 'Flat rate + PTR overlay' had the highest level of support amongst customers and stakeholders. It was seen as being easy to understand and respond to as well as low risk to customers (a reward rather than a punishment).

The 'Sun Soaker' also had quite a good level of support across the engagement, particularly amongst small and medium businesses with 9am-5pm working hours. It was thought to be a simple tariff but not easy for some residents to take up if they are out during the day and use most electricity during the evening. It was also viewed as a bit one dimensional as it only really tackles one of the network issues.

There were mixed views regarding the other two tariff options, namely 'Flat Rate +PTR + Export Charge overlay' and 'Simplified Sun Soaker + CPP overlay', with those in

the workshops being far more receptive to these options than those in the surveys. These two options were more complex than the others presented and, therefore, likely harder for survey respondents to grasp given they did not have the benefit of Essential Energy staff presenting them or the ability to have any of their questions answered.

CLOSING THE LOOP

Based on criteria set in Essential Energy's letter to the AER advising the intention to make use of sub-threshold tariffs in the 2021-22 year, the following criteria were used to determine the tariffs to trial.

Criteria used to determine the tariffs to take to trial

	Customer & stakeholder feedback	Alignment with the tariff trial design principles	Ease of trial
Form of export charge	60%	40%	-
Tariffs to trial	45%	45%	10%

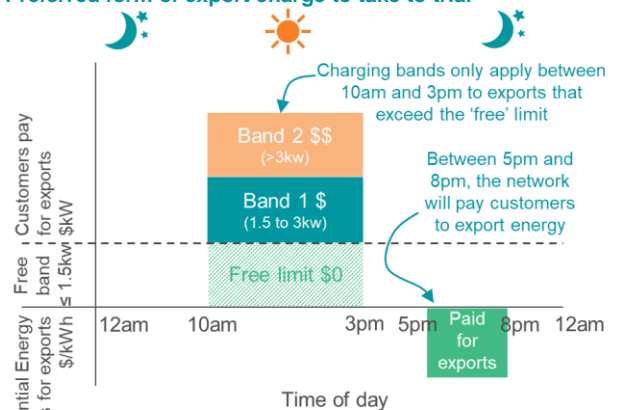
- > 60% weighting on customer and stakeholder feedback
- > 40% weighting based on alignment with the tariff trial design principles.

Export charges

Despite its divisive nature, Essential Energy still sees merit in trialling an export charge, especially given the recent draft determination from the AEMC in relation to [Access, Pricing and Incentive Arrangements for DER](#) that will allow networks to charge customers for exports.

Considering customer and stakeholder feedback and alignment to the tariff trial design principles, the proposed form of export charge to take to trial is the 'kW Based Capacity Charge' with the additional overlay of the network paying customers for exports into the network during the evening peak period (5pm to 8pm) from the 'Time of Use' export charge option.

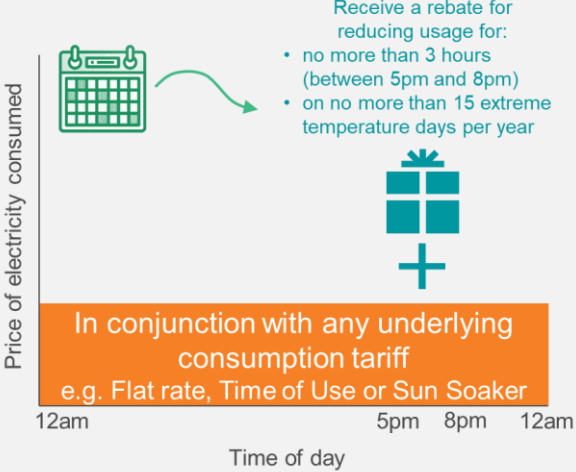
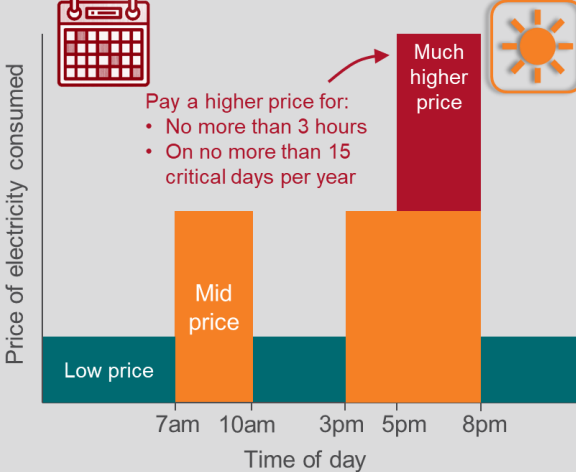

Preferred form of export charge to take to trial



Tariffs to take to trial

Recognising customer and stakeholder preferences, but also considering alignment with the tariff trial design principles and, to a lesser degree, the ease of undertaking of the trial the four proposed tariffs to be scoped for trial are shown in the following table.

The tariffs to be scoped to take to trial

Proposed Tariff	Rationale	
<p>1. Flat rate + PTR</p>	<p>This tariff option garnered the highest level of support from customers and stakeholders. Despite having the lowest alignment with the Tariff Trial Design Principles, especially the Effective one, it is still a more cost-reflective tariff than the existing Flat Rate tariff.</p> <p>Most importantly, it will allow the customer response and bill impacts of a PTR to be separately identified. In this respect, it is acting more as a control tariff for the trials.</p> <p>This tariff is also fairly easy to implement, with only the rebate calculation requiring manual intervention.</p> <p>Since the engagement phase was undertaken, we have decided to trial the PTR in conjunction with any underlying consumption tariff.</p>	 <p>Price of electricity consumed</p> <p>12am 5pm 8pm 12am</p> <p>Time of day</p> <p>Receive a rebate for reducing usage for:</p> <ul style="list-style-type: none"> • no more than 3 hours (between 5pm and 8pm) • on no more than 15 extreme temperature days per year <p>In conjunction with any underlying consumption tariff e.g. Flat rate, Time of Use or Sun Soaker</p>
<p>2. Simplified Sun Soaker + CPP (+ export charge overlay for customers with DER)</p>	<p>This was the second most supported tariff option, and it scores highly against the Tariff Trial design Principles, particularly the Effective principle as it helps with solving all four network problems.</p> <p>The visual of this concept has been adjusted since it was presented in the Round 2 engagement materials to recognise that the existing overnight off-peak period would remain, with the Sun Soaker effectively introducing a new 'middle of the day' off-peak period.</p> <p>The Sun Soaker part of this tariff is very easy to implement for a trial, though applying the CPP price would be a manual operation.</p> <p>Applying the export charge for customers with DER directly picks up on suggestions from customers and stakeholders.</p>	 <p>Price of electricity consumed</p> <p>7am 10am 3pm 5pm 8pm</p> <p>Time of day</p> <p>Pay a higher price for:</p> <ul style="list-style-type: none"> • No more than 3 hours • On no more than 15 critical days per year <p>Much higher price</p> <p>Mid price</p> <p>Low price</p>
<p>3. Simplified Sun Soaker + PTR (+ export charge overlay for customers with DER)</p>	<p>This was a suggested tariff from a number of workshop participants and picks up on stakeholder suggestions that trialling a CPP and PTR tariff together would be interesting as it is likely that different customer types will prefer one over the other.</p> <p>This tariff would score equally with the above option against the Tariff Trial design Principles and it will also help with solving all four network problems.</p> <p>The results from this trial will provide a useful comparison to the 'Simplified Sun Soaker + CPP' noted above with the data informing whether customers really do prefer 'rewards based' tariffs to 'punitive' tariffs, but also whether each tariff can actually deliver the desired level of customer response.</p> <p>Once again, the Sun Soaker part of this tariff is very easy to implement but calculating whether a rebate applies and paying the rebate would be more difficult.</p>	 <p>Price of electricity consumed</p> <p>7am 10am 3pm 5pm 8pm</p> <p>Time of day</p> <p>Receive a rebate if you reduce your usage for:</p> <ul style="list-style-type: none"> • no more than 3 hours • on no more than 15 'extreme temperature' days per year <p>Mid price</p> <p>Mid price</p> <p>Low price</p>
<p>4. Time of Use (ToU) (+ export charge overlay for customers with DER)</p>	<p>Essential Energy stated throughout the tariff trials engagement that the preferred form of export charge would be applied to both the existing ToU tariff structure, as well as an innovative tariff option.</p> <p>Applying an export charge to an existing suitably cost-reflective network tariff will allow the customer response and bill impacts of applying an export charge to be determined.</p>	

SIMPLE MESSAGING AND EDUCATION TRIAL

The Round 2 feedback demonstrated overwhelming support for a trial based on simple messaging and education with the aim of testing whether sufficient customer response can be achieved without the need to over-complicate network tariffs.

As such, a simple messaging campaign consisting of three key messages around energy use will also be trialled. These messages are:

1. Use energy when the sun is shining (generally between 10am and 3pm)
1. Reduce energy use between 5pm and 8pm
2. Don't ever put your health at risk to reduce your electricity bill

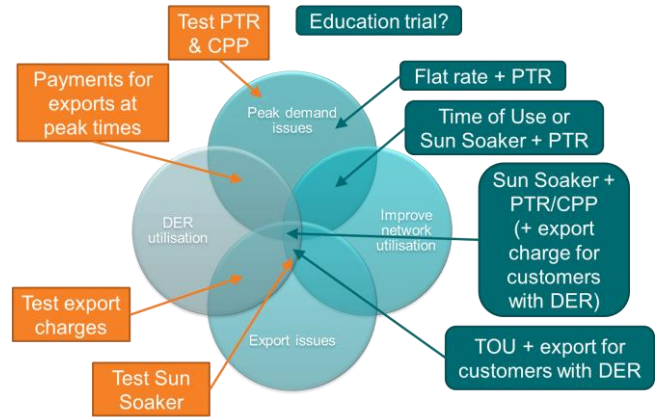
In addition, educational materials will be developed around:

- > Customers high energy use appliances, and how to use them differently to reduce costs
- > How customers can understand their energy use
- > How customers energy use impacts network costs and bills.

Such a trial will take place in set locations around the network (outside of the proposed tariff trials) and the results will be determined by comparing smart meter data prior to the trial with smart meter data after the trial to determine whether an average customer response was observable. Customer demographic and values data will also be gathered and used in assessing the results of the trial on customer types and their bills.

PROPOSED TRIALS ALIGNMENT WITH THE NETWORK PROBLEMS

Each of the proposed trials will test customer how customers respond to the price signals of the various tariff components. The figure below indicates the network problems the proposed tariff components aim to address as well as the network problems the proposed trials should help alleviate.



KEY:

- The network problems are summarised in the blue circles. The problems do overlap with each other.
- The orange boxes and associated arrows highlight the tariff components and the various network problems they target.
- The Teal boxes and associated arrows indicate the network problems that each should help alleviate.

NB. The impact of the Education/simple messaging trial is not yet known so it has not been aligned with any of the network problems.

Next Steps

The next phase of the project entails Essential Energy working with trial partners (retailers, university researchers and consultants) on the implementation of the trials themselves. This will entail:

- > detailed scoping and refinement of the tariff concepts and developing the associated charges
- > identification and recruitment of customers
- > locations for the trials
- > development of the trial education and simple messaging materials
- > determining the framework to measure the trials success, including the triggers that will give rise to any refinements
- > implementation of processes to manage and report on the trials through to 30 June 2024.

¹In assessing feedback, the results from the residential and small business surveys were given less weight than the feedback received from customers and stakeholders who participated in the workshops. This is because survey participants only had access to summarised information from the workshops and the on-line survey offered no ability to ask questions. This resulted in a much higher percentage of 'Undecided' ratings in assessing the various options, relative to those small customers who attended and participated in the workshops.

Interestingly, a similar level of indecision was experienced from the small customers who completed the pre-reading and engagement materials on the Essential Engagement 'Talking Tariffs' website, ahead of the Round 1 workshops. However, after participating in the workshops, listening to staff presentations, having the ability to ask questions and being involved in discussions and deliberations with other customers, the level of 'Undecided' ratings from these customers was markedly lower.

The findings from these different engagement streams (qualitative and quantitative) demonstrate the important role of education in 'bringing customers along on the tariff journey' - ensuring customers understand why network prices need to change and what any tariff changes mean for them cannot be overlooked and will be imperative to gaining customer support for any changes. Essential Energy will need to provide education through a range of mediums and strike the right balance between 'short and simple' and providing enough detail, such that very few customer questions remain unanswered.