Attachment 4.02 – How engagement informed our Proposal
2024–29

essential energy

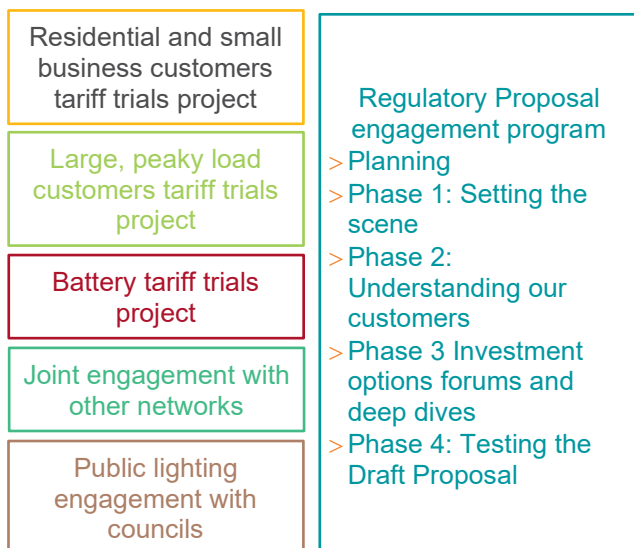# Table of contents

Executive summary

Our business has been engaging closely with customers and stakeholders since our 2014–19 remittal decision. This was followed by our industry leading 2019–24 Regulatory Proposal engagement program, our small customer tariff trials design project and our cost pass through application for the 2019–20 bushfires and critical infrastructure costs.

Our continuous engagement journey means that when we set out to develop our engagement program for the 2024–29 Regulatory Proposal (Proposal), we did not have to start from scratch – we already had a good understanding of some aspects, like our customers priorities. This doesn't mean that these areas weren't revisited and tested, but it did provide us with a head start when it came to engaging.

Led from the top, we aimed to 'raise the bar' of our engagement as assessed under the International Association for Public Participation (IAP2) and appointed an engagement partner to assist us to turn complex topics into plain English concepts, ask the right questions of customers and provide the skills and experience to delve deeper where required. After co-designing a program with customers and stakeholders, we created two stakeholder advisory groups whose members represented the diversity of our customers. The main group guided the development of the regulatory proposal, while the second group was dedicated to pricing matters.

The resulting engagement program reached our aspiration to collaborate with customers and stakeholders on key topics. as well as satisfy the breadth and depth of the AER's Better Resets Handbook. Each phase of the program was carefully designed with feedback from each phase informing the next and subsequent phases. In line with our collaborative approach, the engagement program was flexible and resulted in eight major shifts in approach and design.

In total, six engagement streams have informed this Proposal, the earliest of which began in late 2019.

Residential and small business customers tariff trials project	Regulatory Proposal engagement program
Large, peaky load customers tariff trials project	> Planning
Battery tariff trials project	> Phase 1: Setting the scene
Joint engagement with other networks	> Phase 2: Understanding our customers
Public lighting engagement with councils	> Phase 3 Investment options forums and deep dives
	> Phase 4: Testing the Draft Proposal

In total, we have undertaken 417 hours of face-to-face engagement, which equates to more than 7,800 hours of customers' and stakeholders' time. We have gained an understanding of our customers' priorities and their expectations of Essential Energy in relation to the services we provide today, but also into the future.

After publishing and testing a Draft Proposal with customers and stakeholders, we are confident that the strategies, investments and activities outlined in this Proposal and Tariff Structure Statement (TSS) reflect customers' preferences and priorities, while also meeting our regulatory obligations and business requirements.

What we heard from customers is that, after safety, affordability and reliability remain the next most important priorities. However, recent bushfires and floods have led to an increased desire for new investment to build up the resilience of our network and the communities we serve, so that response and recovery efforts following extreme weather events are improved.
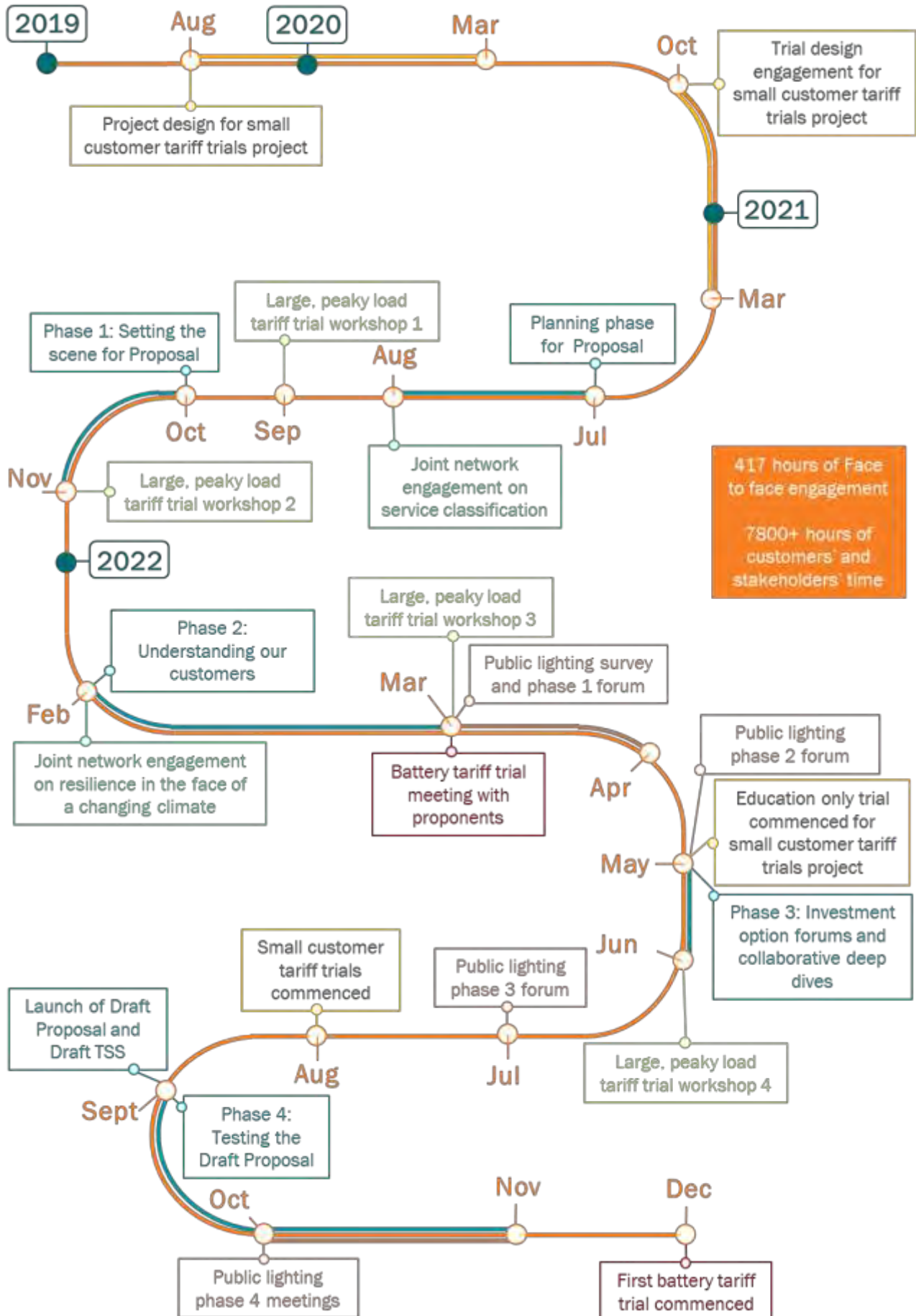
In addition, customers support changes to our connection agreements to improve fairness in how the export capacity of our network is shared, as well as investments in real-time network monitoring and dynamic assets to maximise customers' exports and ensure they have access to future markets.

When it comes to incentivising customer service., providing communication around unplanned outages, improving complaint resolution times and being easy to deal with are customers preferred metrics. Finally, customers support the implementation of two-way prices – those that charge for both consumption and exports – and would like to see the transition to such prices as soon as possible.

This report outlines our engagement journey across our six streams and how they have built together to form the Proposal we are putting forward to the Australian Energy Regulator (AER). It summarises what we heard, how we responded and how diverse opinions were balanced. It is worth noting that as customers' priorities and the proposed customer service incentive scheme measures were developed across multiple phases of engagement, these two topics are addressed separately.

But our engagement journey does not end here. We will continue to engage with customers and stakeholders over the next year, ahead of submitting our Revised Proposal in late 2023. Importantly, this process has highlighted a gap in our business-as-usual engagement where, despite having a Customer Advisory Group (CAG) comprising customer and industry advocates, we are not hearing from everyday customers. We are rectifying this gap and are in the process of recruiting our Peoples' Panel, that will meet quarterly from early 2023.

Summary of our Regulatory Proposal engagement program

2019

Aug — Project design for small customer tariff trials project

2020

Mar

Oct — Trial design engagement for small customer tariff trials project

2021

Mar — Planning phase for Proposal

Jul — Planning phase for Proposal

Aug — Large, peaky load tariff trial workshop 1 / Joint network engagement on service classification

Sep

Oct — Phase 1: Setting the scene for Proposal

Nov — Large, peaky load tariff trial workshop 2

2022

Feb — Phase 2: Understanding our customers / Joint network engagement on resilience in the face of a changing climate

Mar — Large, peaky load tariff trial workshop 3 / Public lighting survey and phase 1 forum / Battery tariff trial meeting with proponents

Apr — Public lighting phase 2 forum

May — Education only trial commenced for small customer tariff trials project / Phase 3: Investment option forums and collaborative deep dives

Jun — Large, peaky load tariff trial workshop 4

Jul — Public lighting phase 3 forum

Aug — Small customer tariff trials commenced

Sept — Launch of Draft Proposal and Draft TSS / Phase 4: Testing the Draft Proposal

Oct — Public lighting phase 4 meetings

Nov

Dec — First battery tariff trial commenced

417 hours of Face to face engagement

7800+ hours of customers' and stakeholders' time

Our engagement program built on our previous knowledge and each phase of engagement built on the previous phase to distil customers values and preferences

ENGAGEMENT FOUNDATION

Existing knowledge and desktop review

- 2014-19 Remittal Proposal
- 2019-24 Regulatory Proposal & Tariff Structure Statement
- Cost Pass Through Application
- Tariff Trials project

OUTCOME

A leading-edge engagement plan - Who we engage with; what we engage on; and how we engage with them

PLANNING

PHASE 1: SETTING THE SCENE

Co-design workshop with stakeholders	Meeting with 'Essential Connectors'
Test relevance of existing customer priorities	Identify customers' preferred customer service (CSIS) measures
Test alignment of project risks with customers priorities	Develop customers' future network vision

OUTCOME

Informed customers and identification of what's important to them in terms of their priorities, risk assessment, customer service measures and the future network

PHASE 2: SETTING THE SCENE

Cost of living pressures and NSW Roadmap	Outline the emerging network challenge - power quality
Refine and rank customer priorities	Begin fairness discussions in relation to pricing
Customers views on reliability, their experience and priorities in extended outages	Introduce the concept of two-way prices
High-level pace of change and willingness to pay for resilience and smarter network	Identify preferences around locational and seasonal prices

OUTCOME

Participants informed at a higher level

An understanding of customers' views and priorities in relation to the key issues

PHASE 3: INVESTMENT OPTION FORUMS

Cost of living pressures and NSW Roadmap	Discussion for investments that deliver customers priorities in alternative ways
Outline our costs and how they are recovered from customers	Willingness to pay for varying levels of customer value and investment
Trade-off discussions around the pace of change to build resilience	

PHASE 3: COLLABORATIVE DEEP DIVE

Network solutions toolkit and customer outcomes	Preferred transition to two-way prices
Preferred default 'future proof' two-way tariff	Ideas for educating customers about two-way prices

OUTCOME

Willingness to pay trade-offs are understood

Identification of program and pricing preferences

Publish Draft Proposal and Draft TSS

PHASE 4: TESTING THE PROPOSAL

Acceptance of proposed CSIS measures and weightings	Should opt-out to flat rate be offered
Cost of living pressures and NSW Roadmap	Preferred transition to two-way prices
Willingness to pay for slightly increased investment	Should a grace period apply
	Support to move to flexible connection agreements
Support for the proposed Sun Soaker two-way as the default tariff	Shared our free export limit findings

OUTCOME

Refinements to deliver a Regulatory Proposal developed collaboratively and supported by customers and stakeholders

Our Proposal and TSS represent the views of our customers and stakeholders

86% of customers supported the proposed investments despite increases in interest rates and inflation

96% of customers agreed that customers' views had been taken into account in the Draft Proposal

90% of customers agreed that the Draft Proposal reflected their views and priorities

97% of customers agreed that Essential Energy had collaborated with customers to make key investment and pricing decisions

98% of customers agreed that events like our customer forums were a good way of consulting with the public about issues

'I still don't like the Sun Soaker two-way, but that won't change. But yeah I understand why they're going to introduce it.'

Bega participant, Phase 4

'I think the process is involved – it is a step-by-step process, we may not agree with everything, it's ok because the process has been followed. They can't just cater for me, they have to cater for everybody.'

Inverell participant, Phase 4

'We see the same Essential Energy people each time so we can see how it has evolved…there's evidence they have listened to and developed what we have thought. We have been taken seriously.'

Wagga Wagga participant, Phase 4

'I feel that my community's views have been taken into account and I have been engaged throughout the whole process.'

Culturally and linguistically diverse participant, Phase 4

'It is so good to be asked – they did listen to what we said, I think they covered everything'

Broken Hill participant, Phase 4

'I wondered at first if it was just a tick box, but hearing that it's helped them – I'm surprised, it's Interesting to see that they have rejigged things.'

Bega participant, Phase 4

'I think the way that the information is presented is really good because you get to see the different options, you had time to discuss and then make your own vote… you can see the personal votes of the room, and see if we are on the same page.'

Taree participant, Phase 4

'I'm happy with it, it all makes sense. It's been good going all the way along and I think it matches what I expected. It's good that they asked our opinion.'

Aboriginal and/or Torres Strait Islander participant, Phase 4

'I'm happy with what's going to be put forward and seeing our feedback reflected in how they've identified things. It's very complex and work has been put in.'

Inverell small business participant, Phase 4

'There wasn't anything in there that hasn't been mentioned… and it's transparent. People might be mad that the price is changing but it was transparent and they explained where it was going.'

Broken Hill participant, Phase 4

'It's been a really good process. My opinion and perspectives match nicely with what you went through.'

Aboriginal and/or Torres Strait Islander participant, Phase 4

'It reflects the customers' views wholly. Yes, I'm happy with the engagement process, it makes me feel like a shareholder.'

Inverell small business participant, Phase 4

'Overall I'm very supportive of the process. There's nothing I would change or remove.'

Culturally and linguistically diverse participant, Phase 4

'I think they've done extremely well – from the very first forums to the last sessions they've sort of all brought it together to make sense. They've got opinions from lots of different households and different areas, not just one demographic.

Dubbo participant, Phase 4

Summary of engagement outcomes

The tables on the following pages summarise the results of our customer and stakeholder engagement across our four engagement themes.

The views of customers and stakeholders were aligned across most of the topics, however, where there were divergent views, this is mentioned in the tables, along with a summary of how we have balanced those views to land on our proposed approach.

Resilience and reliability

how risk appetite shapes our investment decisions

What we heard from customers and our response	Customer support	Alignment to customer priorities
Risks we consider in assessing and prioritising projects Participants agreed that the main risks we should consider slotted into five categories: safety, reliability, bushfire risk, ecology and heritage, and customer experience. Their average weighting for these risks were: reliability 26%, safety 25%, bushfire risk 20%, ecology and heritage 17%, and customer experience 12%. This is in line with how we rate risk and what we value. However, some participants identified that climate change was missing from our risk approach. We have overlaid a climate change 'lens' to assess the risk it poses to proposed projects based on our detailed climate change modelling that was completed in September. > This has required a minor adjustment to the number of proactive composite pole replacements that we will undertake over 2024–29. We had proposed 15,000 proactive replacements in Phase 4 of our engagement, but our climate change modelling indicates that we have around 11,000 positive net present value sites. > We have also reduced the number of microgrids down from the seven indicated in our Phase 4 engagement to six, as one of the seven microgrid sites will be built in the current regulatory period.	n/a	Safety Affordability Reliability & Resilience Good customer service and communication Future focused 'I feel that there needs to be a macro level climate change impact included.' *Council participant, Phase 1*
Reliability > Participants support maintaining the current level of reliability. > There is also support for us to continue to improve reliability for our worst-served customers. We've incorporated both these priorities into this Proposal.	87% 91% *Phase 2 report*	Affordability Reliability & Resilience
Community resilience versus strengthening the network Most participants agreed that strengthening the network is slightly more important than combining our efforts to strengthen the network with efforts to assist communities to build up their resilience. This Proposal incorporates investments to do both. 'If you strengthen the network first you don't need to support the communities as much.' *Broken Hill participant, Phase 2*	51% network strength-ening 40% do both *Phase 2 report*	Safety Affordability Reliability & Resilience Good customer service and communication Future focused

What we heard from customers and our response	Customer support	Alignment to customer priorities
Community resilience Participants support investments in generators, portable stand-alone power systems (SAPS), portable solar streetlights, a portable community hub, a portable depot and three new staff to work with councils, communities and critical infrastructure asset providers to help them develop resilience plans.	90% *Phase 3 report*	Safety Affordability Reliability & Resilience Good customer service and communication Future focused

'I can do without a lot of these but not without the community hub.'

Ballina participant, Phase 3

'Having the backup generators for critical infrastructure is a no brainer.'

Dubbo participant, Phase 2

'The portable solar lights would be great to light up roads. The drive through was deadly after the flooding when all the lights went out.'

Ballina participant, Phase 3

'We are not experts on electricity so Essential Energy should be doing the education on electrical matters.'

Council participant, Phase 2

What we heard from customers and our response	Customer support	Alignment to customer priorities
Network strengthening Participants support strengthening network resilience through: > broad and proactive investments in composite poles > the conversion of 40 km of poor-condition overhead powerlines to underground powerlines in very high-risk areas > a high level of investment in SAPS and microgrids > investments in batteries and solar panels at our key telecommunications and zone substation sites to provide a source of backup power. As mentioned previously, we have had to reduce the number of proactive investments in composite poles to consider the results of our recently completed climate change modelling. This lower level of investment has been reflected in our Proposal.	*Phase 3 report* 67% 66% 91% 87%	Safety Affordability Reliability & Resilience Future focused

'Having SAPs and microgrids helps community recover more quickly. This is the future for lots of smaller towns .... The faster we can roll them out the better.'

Advocate participant, Phase 3

'If they're not going to burn down and they're easier to install, it's just a logical position.'

Aboriginal or Torres Strait Islander participant, Phase 3

What we heard from customers and our response	Customer support	Alignment to customer priorities
Disconnecting parts of the network on high-risk days We did not receive clear support to disconnect high-risk areas of the network on total fire ban days to limit the risk of our network starting a fire. As such, we are not proposing to implement such a process.	42% supportive 31% against *Phase 2 report*	Safety Reliability & Resilience

'I mean if it's going to save homes and lives sure - but holey moley!'

Broken Hill participant, Phase 2

Network of the future

delivering the services customers want today and into the future

What we heard from customers and our response	Customer support	Alignment to customer priorities
Making the network smarter and ready for the future There is strong support for us to invest in real-time monitoring of the network. This would involve investing in a fully integrated data management system and investing in network sensors and meter data across the broader network. 'Proactively monitoring is great, a good benefit for everyone. If we can pay a bit extra, it would be well worth the investment.' *Dubbo participant, Phase 3*	77% *Phase 3 report*	Future focused Collective benefit 'Investing in assets to actively manage the network is good because its preventative.' *Bega participant, Phase 2*
There is support for us to invest in 100 dynamic assets to mitigate existing power quality issues and pre-empt future issues. In Phase 4 of our engagement, we indicated that the costs of this investment had increased above our initial expectations. This increase was considered acceptable given the significant role this investment plays in delivering customers' future vision.	87% *Phase 3 report*	'Fix the problem before it happens. Be proactive.' *Ballina participant, Phase 3* 'There will be a payoff to having a better, smarter system.' *Bega participant, Phase 4*
In relation to sustainability and lowering our environmental impact there is: > support for us to enhance our sustainability and go above and beyond regulatory requirements > strong support for us to invest in electric vehicles (EVs) and solar panels for our depots. This Proposal incorporates investments to do both. 'Essential Energy has a corporate responsibility to walk the talk.' *Advocate participant, Phase 3*	66% *Phase 2 survey* 93% *Phase 3 report*	Affordability Future focused 'Lowering bill costs and lower environmental impact is key.' *Advocate participant, Phase 3*
Funding connections to the network Participants agreed that we should continue to fund a suitable portion of network upgrades related to new connections that will increase revenue or improve the utilisation of our network. This would lead to reduced charges for existing customers given they would be shared across new loads and a greater number of users.	72% *Phase 2 survey*	Affordability Collective benefit
Introducing flexible connection agreements Customers and stakeholders support the introduction of flexible connection agreements for new or upgraded solar connections. Flexible connection agreements will be introduced by the business within the next year and will work with our smarter network investments to allow customers to export more energy than they otherwise could and share the export capacity of the network fairly between customers. 'If I was buying new panels, I would rather the flexible approach.' *Broken Hill participant, Phase 4*	77% *Phase 4 report*	Affordability Collective benefit Future focused 'It has got to be the flexible it can't be the fixed one – that is not fair for anyone. So, it is how you implement it.' *New technology provider, Phase 4*

Pricing

fairness and affordability

What we heard from customers and our response	Customer support	Alignment to customer priorities
Consumption prices There is a clear preference for: > the continuation of postage stamp pricing 'Postage stamp pricing is the most controversial thing you can do, but I love it.' *Aggregator, Phase 2* 'I don't like the idea of charging different rates for different places.' *Bega participant, Phase 2*	75% *Phase 2 report and Deep dive report*	
> prices that do not change with the seasons. 'No to seasonal pricing. When I heard that it sounded like when you get hot, we're going to charge you more and when you get cold, we're going to charge you more.' *Broken Hill participant, Phase 2* Our Proposal and TSS retain postage stamp consumption prices with no seasonal overlay.	62% *Phase 2 report and Deep dive report*	'If it changes all the time, you don't know what to expect in your bill. You want a stable bill.' *Taree participant, Phase 2*
Two-way prices (prices that charge for both consumption and exports) Most customers agree that: > two-way pricing will solve some of the network issues arising from integrating new technologies – with this support growing between Phases 2 and 4 and a further 17% in Phase 2 and 22% in Phase neither agreeing nor disagreeing 'When they started talking about charging me for my exports that turned me off but looking at the big picture, I'm supportive of it.' *Taree participant with solar, Phase 2*	56%/68% *Phase 2/4 reports*	'Your bill goes up, but it's still a lot less than if you didn't have solar.' *Youth group participant, Phase 2*
> two-way pricing will improve fairness– though with support dropping between Phases 2 and 4, but with the proportion of customers neither agreeing or disagreeing growing from 16% in Phase 2 to 24% in Phase 4.	62%/49% *Phase 2/4 reports*	'It seems like the government is attacking people after years of encouraging people to get solar.' *Dubbo participant with solar Phase 2*
> export charges and rebates should be applied on a postage stamp basis. "I think democratically it's best to share the cost and have the same pricing for everyone." *Ballina participant, Phase 2*	69% *Phase 2 report*	
However, a minority of participants do not agree with the concept as: > charging for exports seems to discourage renewables and goes against the vision for the future > it is seen as shifting the goal posts for customers who have invested in energy resources.	*Phase 2 report*	'I'm not looking at the cost factor, I spent $10K on a system to make the best future for my children because cost is not the main thing.' *Deep dive customer participant, Phase 3*
After further education in the deep dive engagement session, participants believed that two-way pricing would have a minimal impact on solar customers and understood its role in the future vision for the network.	*Deep dive report*	

What we heard from customers and our response	Customer support	Alignment to customer priorities
Default 'future-proof' tariff Our trial Sun Soaker tariff paired with our trial export charge is the preferred placeholder default tariff for residential and small business customers for now. This was supported by customers in the Phase 4 engagement forums. One stakeholder remains concerned that the tariff may not have longevity and that there is a need to balance the peak and off-peak prices to change behaviour enough, but not inadvertently create a new peak. With this in mind, 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. We will re-engage on the final structure of this tariff next year, once we have results from our tariff trials, and ahead of submitting our Revised Proposal.	*Deep dive report* 54% *Phase 4 report*	 'It's a no brainer, you'd go with Sun Soaker.' *Deep dive customer participant, Phase 3*
Free export limit There was no clear finding on the free export limit from the customer forums. Stakeholders thought we should base this on the technical limits of the network. Our future network business case indicates that our network can accommodate 1.5 kilowatts (kW) of exports from each customer across our network on a postage stamp basis and this has been incorporated into this Proposal.	*Phase 2 report*	
Export prices for large customers connected to the low voltage network We are proposing to also apply an export price to the tariffs for large customers connected to our low voltage network no later than 1 July 2028, as these customers are having an export impact on our network, especially on weekends. This change that was not included in our engagement program, where the focus was educating customers about the need for two-way prices, but the question as to why these customers did not also have an export tariff was raised in response to our Draft TSS. We assessed the need and options for applying an export tariff to large business, low voltage customers and presented a paper on this to our PCC. They agreed that adding an export price would improve fairness by ensuring our tariffs reflect the efficient costs of providing our services and is, therefore, in the long-term interests of customers. They also agreed that the structure of the export charge should mirror that in the Sun Soaker two-way tariff and the rebate amount for exports between 5pm and 8pm be aligned to the peak distribution network rate of the parent consumption tariff. Given this is a late change to our Proposal, we are not proposing to introduce an export charge for these customers until we have the billing capabilities for a mass transition – see the export tariff transition strategy section below – and we will ensure the new tariff is revenue neutral in the first year it is introduced. We will engage on this change as part of our Revised Proposal in 2023.	*Not applicable*	'I'd be open to that, if I got lower charges. Just depends on how much control they have.' *Taree participant, Phase 2*
Dynamic management of customer assets We also asked customers whether they would be willing to allow some of their appliances, such as their EV, to be controlled by Essential Energy in return for cheaper network charges. We are not yet able to control or charge in this manner, so this question was to get a taste for customers' appetite for such a service. This is a concept we intend to trial in relation to both consumption and exports in the 2024–29 period.	28% very willing or quite willing *Phase 2 report*	'I think there needs to be a gentle benefit to both the network and the customer. It can't all be in the favour of the network.' *Dubbo participant, Phase 2*

What we heard from customers and our response	Customer support	Alignment to customer priorities

Export tariff transition strategy

There was support for customers to be able to opt into two-way pricing early, from 1 July 2024 onwards. Our Proposal contains this option.

> 'I would opt-in early. I want to rip the band aid off.'
>
> *Deep dive customer participant, Phase 3*

74%
Phase 2 and Deep dive reports

Affordability   Future focused

> 'We understand that it has to happen so you may as well just do it'
>
> *Dubbo participant, Phase 2*

Transition date for existing smart meter customers

There was support for export prices to be applied to all exporting customers from 1 July 2025. However, in the Phase 2 forum participants seemed resigned to this rather than enthusiastic.

> 'I think 2025 is a fair outcome.'
>
> *Council participant, Phase 2*

> 'I'd prefer never.'
>
> *Wagga Wagga participant, Phase 2*

60%
Phase 2 report

> 'Might as well do the whole lot in 2025 because to me, the sooner we get this done and sorted, the better off we'll be.'
>
> *Broken Hill participant, Phase 2*

Those customers who attended the deep dive session were supportive of two-way prices by the end of the session and supported them being implemented as early as possible. Most stakeholders also supported this view, with the main concerns being around education, system changes, addressing export limits and automation to make tariffs easier for customers to live with.

> '… the benefits from solar are always the savings you get from your electricity bill and you're still a long way ahead of the game.'
>
> *Deep dive customer participant, Phase 3*

Deep dive report

> 'I think we should do it straight away.'
>
> *Deep dive customer participant, Phase 3*

After presenting the Sun Soaker two-way price and the expected network bill savings, customers still preferred an earlier transition date (1 July 2026) to the 1 July 2028 date proposed by Essential Energy (30% support).

Based on this consistent desire for an earlier transition, we will endeavour to implement billing capabilities to allow us to do this. To ensure our TSS has this flexibility, we have included a contingent trigger, on the PCC and SCC's recommendations, in the pricing year following the establishment of our new billing capabilities for:

1) the reassignment of existing residential and small business smart meter customers connected to the low voltage network to the Sun soaker two-way tariff, and

2) addition of the export tariff and rebate to our demand-based tariffs for all low voltage customers.

Should an earlier transition eventuate, we will provide retailers and other market participants with at least six months' notice of the new transition date.

49%
Phase 4 report

> 'People are going to be better off under this. If they can do it quicker than they're saying, then they should bring it in sooner.'
>
> *Wagga Wagga participant, Phase 4*

> 'New solar customers will know what they're signing up for.'
>
> *Broken Hill participant, Phase 4*

Grace period for new meter changes

We also heard from one retailer that they would like residential and small business customers to have a one-year grace period before being moved to a more cost-reflective tariff following a faulty meter change or a retailer led move to a smart meter. They are preparing a rule change to this effect on the basis that a year of consumption (and export) data will allow for more informed decision making.

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.

Deep dive report & submission from Red/ Lumo Energy to our Draft Proposal

68%
Phase 4 report

> 'One year will give the option to monitor all of the seasons.'
>
> *Bega participant, Phase 4*

> 'I like that I can opt in, but I also have time to get used to it.'
>
> *Aboriginal and/or Torres Strait Islander participant, Phase 4*

What we heard from customers and our response	Customer support	Alignment to customer priorities

As part of our Phase 4 engagement we specifically asked the PCC to help develop the principles against which divergent views, such as these from customers and stakeholders, 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, but 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.

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

> 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:
  - our modelling indicates that most small customers are better off on the Sun Soaker two-way 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.

As such, our proposed transition to export prices is:

From 1 July 2024

> Existing residential and small business customers with an interval or smart meter can opt into the Sun Soaker two-way price

> New residential and small business connections will be placed on the Sun Soaker two-way price

From 1 July 2025

> Residential and small business customers altering a meter connection or connecting energy resources will be placed on the Sun Soaker two-way price

From 1 July 2028, or the pricing year immediately following Essential Energy establishing its new billing process capabilities

All existing low voltage customers (both small and large customers) with an interval or smart meter:

> who are on a flat rate or Time of Use tariff will be transferred to the new Sun Soaker two-way price

> who are on a demand tariff will have an export charge and rebate added to their tariff.

Ability to opt-out from cost-reflective network tariffs Customers support the move towards more cost-reflective tariffs so long as they continue to have a choice of tariff options. Retailers support cost-reflective pricing, but highlight that tariffs needs to be simple for customers to understand and respond to. Our PCC sees choice and tariff simplicity occurring at the retail level.	Phase 2 and Deep dive reports	Affordability Future focused Transparency and simplicity Collective benefit

'A retailer is doing a really poor job in managing risk if all they're doing is taking the signal and adding on their cost to serve.'
Aggregator, Phase 2

'I think they should have a choice but it should be an informed choice.'
Dubbo participant, Phase 2

'Yes, we have to change the way we use our electricity from how we did it 50 years ago, it's not feasible to do it in the same way anymore. It makes sense to try to get people to use electricity more outside peak times.'
Inverell participant, Phase 2

'Cost reflective pricing is important but you need to give customers a lot of information to make decisions and change their behaviours. The average customer is not switched on.'
Retailer, Phase 2

Most customers also thought that customers with smart meters should continue to be able to opt-out to a flat rate tariff, but whether this choice should occur at the network or retail tariff level was not specifically asked.	56% Phase 4 report	

What we heard from customers and our response	Customer support	Alignment to customer priorities

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 export tariff transition strategy, 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.

Customer education

In line with consistent suggestions from you and other stakeholders, we will undertake marketing and education leading into 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 prices and how this may impact customers' solar panel installation decisions.

We will have the chance to test some of these education ideas in our trial that is currently underway.

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

Phase 2 and Deep dive reports

Affordability   Future focused

Transparency and simplicity   Collective benefit

'Education and information will be the key.'
Deep dive customer participant, Phase 3

'Unlocking peer-to-peer in a real way is the pathway for a positive story.'
New technology provider, Phase 2

Other essential services

customer service and more

What we heard from customers and our response	Customer support	Alignment to customer priorities
Rewards or penalties related to our customer service Participants preferred customer service be measured using both internal data (quantitative) and data related to customer experience (qualitative). Both were seen as equally important. *'Internal collected data is always going to give you the cold hard facts about what's going on internally. But customer feedback is equally important as it gives you customer attitudes towards your service and levels of satisfaction ... I think you have to have both types.'* *Broken Hill participant, Phase 1*	59% *Phase 1 report*	Safety Good customer service and communication *'It's all about communication during an outage. People want to know how long the power is going to be out for. They may not know that sometimes, but they should share what they do know.'* *Broken Hill participant, Phase 1*
Participants supported measuring outcomes in the following areas: > communicating accurate planned outage times and an estimated time to restore unplanned outages (and the accuracy of the timeframe) *'Need communication in all outages, it builds trust. It doesn't matter how short.'* *Inverell participant, Phase 2*	94% *Phase 1 report*	
> the time taken to facilitate connections to the network and the average time to resolve customer complaints *'I think the time taken to resolve a complaint is also an important measure, but maybe not as critical as outages.'* *Taree participant, Phase 1*	85% and 81% *Phase 1 report*	*'To me I'm surprised that the time taken to facilitate a connection isn't already a measure that Essential Energy is being assessed against. It's really a core deliverable for them.'* *Bega participant, Phase 1*
There was limited support for retaining the current measure – the percentage of calls to our fault line answered within 30 seconds.	50% very or quite important *Phase 1 report*	*'I don't think [you] can rely on measuring phone calls anymore. There are so many other ways of interacting with them. I haven't phoned them for years.'* *Taree participant, Phase 1*
Other customer service suggestions Customers in the Phase 1 forum made a few other suggestions and discussed their experiences, in relation to customer service. One of these, measuring customer service immediately following an interaction with the business, has since been implemented and the others have been shared with appropriate teams in the business for consideration outside the Proposal process.	*Phase 1 report*	"What works well I find, is when a service has been provided and a problem resolved to ask people right then to give feedback about their experience ... Then people relate the questions to their experience right then and there." - *Taree participant, Phase 1*

What we heard from customers and our response	Customer support	Alignment to customer priorities
Support for the proposed metrics In our Phase 4 forums, we presented customers with a proposed CSIS measure, comprising three customer service metrics: > Providing an estimated time to restore unplanned outages and updates > How easy it was to deal with us > Average time to resolve customer complaints There was support for these three metrics, though we did hear that the *accuracy* of unplanned outages is important. So, whilst the main business focus for 2024–29 will be implementing the related cultural and process changes, we will track the accuracy of estimated restoration times over the period and consider introducing accuracy into the measure in the next regulatory period.	81% *Phase 4 report*	Safety Good customer service and communication 'They match what we discussed and they make sense' *Ballina participant, Phase 4* 'If it is inaccurate, then the (estimated time to restore) is useless.' *Bega small business participant, Phase 4*

Support for the proposed metric weightings

Customers weightings for the proposed measures in the Phase 4 forums were slightly different from Essential Energy's proposal	Essential Energy proposed weighting	Phase 4 report
Providing an estimated time to restore unplanned outages and updates	50%	50%
How easy it was to deal with us	25%	21%
Average time to resolve customer complaints	25%	29%

'50% weighting for unplanned outages, as it's clearly important.'
Bega participant, Phase 4

'The current rate [to resolve complaints] is appalling/unacceptable. They really need to work on this area, so it is important that it is given more focus'
Taree small business participant, Phase 4

Based on these results, we are proposing the following weightings: 50%, 20% and 30%, to recognise that customer complaints are more important than how easy it was to deal with us.

You can read more detail about our engagement journey to develop the CSIS in the

What matters to our customers

Developing the proposed customer service incentive scheme metrics section of this attachment.

Costs for inspecting and maintaining private assets There was support for continuing to share the costs among all network users for: > inspecting private assets > maintaining vegetation around private assets. Our Proposal includes the continued cost recovery of these services from all our network customers.	46% and 44% *Phase 2 survey*	Good customer service and communication Future focused Affordability
New public lighting services There was support for Essential Energy to provide councils with the ability to 'plug in' additional technologies to streetlighting poles. Our existing inventory listing provides councils with this technology option and this will be retained in our 2024–29 inventory listing.	82% *Phase 2 survey*	
Public lighting services We undertook a survey and three rounds of dedicated engagement with councils in relation to public lighting service offerings, service levels and pricing. This engagement is reflected in our Proposal. You can read more detail about our public lighting engagement in the *Public lighting engagement* section of this attachment.		

What we heard from customers and our response	Customer support	Alignment to customer priorities

New customer service relationship system and online portal or App

There is support for us to offer targeted and real-time information to customers by creating either an online portal or App.

Customers most preferred services for an online portal or App for reporting are:

> an outage and seeing updates on the time to restore
> a faulty streetlight or network issue and seeing updates on when it will be fixed
> vegetation issues and seeing updates on when vegetation will be trimmed.

89%
Phase 2 survey

87%
71%
69%
Phase 2 survey

Safety **Good customer service and communication**

'I want notifications from an app on my phone with a link to more information.'

Wagga Wagga small business participant, Phase 2

'I am a fan of new portals and systems. It definitely improves businesses.'

Taree participant, Phase 3

'It's surprising they don't have this! Everything is online now.'

Broken Hill participant, Phase 3

There is support for us to implement a new customer relationship management system with this online portal capability, but:

> the indicative bill impact shown in the forums was considered by some to be too high as it was thought that this system should largely pay for itself
> the implementation of the portal should not lead to customers losing the ability to talk with someone.

50%
Phase 3 report

"I understand that having a unified system is important – but ideally, I don't think that the customer should foot the bill."

Ballina participant, Phase 3

'I would prefer a portal that tells you what the outage is and how long it would be.'

Wagga Wagga participant, Phase 2

'If they bring it in, are we going to be told to log into the portal? I need to talk to a person.'

Inverell participant, Phase 3

Retailers and councils would like to see the online portal capability extended to serve their needs around development applications and multi-premise sites – some customers and stakeholders suggested this function could be provided on a user-pays basis.

Phase 3 report

'From a Council perspective I would go option D. Council is frustrated with trying to speak to the right person within Essential Energy.'

Council participant, Phase 3

"… businesses should pay for it themselves. We're talking about a fairly substantial difference between option C and D."

Aboriginal or Torres Strait Islander participant, Phase 3

Our Proposal includes customers preferred option from the Phase 3 forums. No allowance has been made to extend the portal application to councils, retailers or more complex business structures. There are additional benefits to customers from the implementation of the new system, for example, freeing up staff so they can deal with complaints faster.

Stakeholder Collaboration Collective

Our SCC was our primary input group for the co-design of our Proposal. We generally engaged with this group on a fortnightly basis and used their knowledge to inform the details of what we engaged on with customers as well as their feedback to inform several other regulatory requirements within our Proposal, including the requirements of the Australian Energy Regulator's (AER's) *Better Resets Handbook*. Many of these topics were deemed to be less important to customers given their impact on our required revenue, the ability for customers to influence the decision or a combination of both. A summary of these topics and how our draft position has been informed by the SCC is shown below.

Topic	Engagement with our Stakeholder Collaboration Collective
Incentive schemes	The SCC supported the continued application of existing incentive schemes and agreed we should replace the customer service measure in collaboration with customers. Following customer feedback, the group was instrumental in shaping the design of our proposed customer service incentive scheme. You can read more detail about our engagement journey to develop the CSIS in *Developing the proposed customer service incentive scheme metrics*
Cost pass through events	The SCC guided the development of our proposed wording around natural disasters and cyber security. On the advice of the group, we also investigated including the impending costs associated with the *NSW Electricity Infrastructure Roadmap*'s (NSW Roadmap's) Renewable Energy Zones (REZs) as a potential pass through, however this was not achievable under the National Electricity Rules (NER).
Control mechanism	It was recognised that the AER has a low appetite to change the current form of control. Applying a different control mechanism to export pricing was considered but was not a possibility under the current NER.
Service classification	We discussed the breadth and depth of our proposed service offering in relation to export services, SAPS and the leasing of spare capacity in network batteries.
Managing risk and value	We presented our risk management approach to the SCC. The group agreed that our proposed risk appetite was appropriate, and that we must remain alert to ensure that our risks are not a static measure.
Future network business case	We provided updates on this project, which is about integrating customers' energy resources into our network, to the SCC and gave them the opportunity to provide input into the design and approach.
Demand and customer forecasts	We presented our forecasting approach and draft results to the SCC for comment and feedback. Our approach is aligned with the Australian Energy Market Operator's methodology and the AER's expectations. The SCC had no issues with our proposed approach and results. NB. It is worth a reminder that our forecasts were undertaken before the AEMC published its Draft Report into metering services that proposes a much faster uptake of smart meters than we have included in this Proposal and TSS. We will monitor the progress of this review and include the proposed changes in our Revised Proposal to the AER in late 2023.
Operating expenditure	We presented our base step trend approach and numbers to the group and it was considered reasonable. The operating expenditure for each of our non-system categories was presented to the group as part of the relevant portfolio presentation.
Information, communication and technology expenditure	The SCC directed us to engage with them rather than customers in relation to options for our cyber security investment and proposed new billing and meter data system. Our Proposal includes investment in the mid-range for both our cyber security and new meter data and billing system. Our presentation on our ICT portfolio to the group was accepted.
Capital expenditure	We presented drafts of each of our capex portfolios to the SCC, explained current period spend and the reason for any under or overspend, as well as how the 2024–29 proposed expenditure had been determined and the reasons for any increases or decreases.
Climate change risk modelling	We presented an overview of our climate change risk modelling and how this has impacted our proposed investments, including the identified microgrid sites and composite pole locations and the associated decrease in the number of proactive composite pole replacements in high-risk areas. The group had no concerns with our approach.

Topic	Engagement with our Stakeholder Collaboration Collective
Regulatory Asset Base (RAB) and depreciation	We shared the options around minimising the growth of our asset base. The group agreed that bringing on more load to increase network utilisation was the preferred option – this aligns with our Corporate Strategy. The SCC supported us creating a new asset category called 'distributed energy resources' (DER) with a standard life calculated on the weighted average cost to appropriately categorise new technologies like solar panels, batteries and generators.
Tariff Structure Statement	The SCC provided feedback on our draft Pricing Principles and Guiding Principles for the 2024–29 TSS. The group also directed us to establish our Pricing Collaboration Collective with whom we engaged with on seven occasions to co-design our TSS. We presented our final TSS changes following the Draft Proposal and subsequent PCC meeting to the group and they agreed with our proposed alterations.

Overall, the SCC was highly complimentary of our collaborative engagement approach, both with the group but also with our customers and stakeholders. They could see that we genuinely listened to feedback and altered our approach and proposal as required. This on-going dialogue and genuine engagement approach meant that when we published our Draft Proposal in September 2022, we received no major pushbacks.

'It shows … the process we've gone through to get here … all the consultation, all the reflection and reconsidering, it was hard work, but it was really good to allow that level of influence …I thought it was a really good example of consultation and engagement that has an impact.'

SCC member, November 2022

You can read more about our SCC in the *Our Stakeholder Collaboration Collective* section of the *Planning phase* chapter.

Pricing Collaboration Collective

Our Pricing Collaboration Collective (PCC) was our primary input group for the co-design of our TSS. We began engaging with this group more or less monthly and used their knowledge to inform the pricing-related topics and materials that we engaged with customers on. Once again, many of these topics were deemed to be less important to customers given their impact on our required revenue, customers' ability to influence the decision, or a combination of both. A summary of these topics and how the PCC informed our draft position is shown below.

Topic	What we (asked and) heard	What we did
Principles for balancing diverse views	In Phase 4 of our engagement program we asked the group what principles we should use to consider and assess divergent views in relation to the TSS. We outlined our existing focus on customers' interests and alignment to the national electricity objective, the network pricing objective and our pricing principles and asked them if there was anything else we should consider. The group 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.	These principles were used to balance the divergent views we heard in relation to: > applying a grace period before moving customers to a cost-reflective network tariff > the ability for customers to be able to opt-out from a cost-reflective network tariff to a flat rate network tariff You can read more about these items in the Pricing section of the main engagement findings table above – they are also touched on in the relevant section below.
Tariff classes	There was support for retaining the existing tariff classes	We have left our tariff classes unchanged in the TSS
Tariff design decisions	The PCC considered the tariff design process must consider two broad pricing decisions: 1) changing behaviour, and 2) changing who pays what relative shares of your total revenues.	We have considered both these decisions and our draft plan 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.
Long-run marginal cost	The PCC agreed that we should seek to estimate long-run marginal costs separately for peak demand and for peak exports. 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.	We estimated long-run marginal costs using a 10 year forecasting window and did so separately for peak demand and for peak exports at each voltage level. Our relevant tariffs are based on these estimates.
Export pricing – timing considerations	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.	Our TSS bases our export tariff on the long run marginal cost of peak exports calculated over the 10 years from July 2024.
Tariff structures	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. The PCC also suggested that: > 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. 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.	Our default cost reflective tariffs for low voltage connected customers include two-way prices and are designed for a future state that: > 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 (asked and) heard	What we did
Tariff assignment (i) Opt out optionality	The PCC was initially presented with two opt out tariff options from the Sun Soaker two-way: > 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. 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 i.e., providing customers with no network tariff choice, only retail choice.	Following Phase 4 engagement, opt out ability was again revisited by the group under the PCC agreed principles. With this lens, it was agreed to remove the ability for customers to opt out from cost reflective network charges. 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 tariffs. More details are included in the *Pricing* table in the *Summary of engagement outcomes* section above.
(ii) Discretionary reassignment	The PCC 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.	Our TSS assignment policy maintains our current policy of allowing one discretionary opt in reassignment per 12 months.
(iii) Grace period	The PCC was never supportive of applying the retailer requested one year grace period before applying a cost-reflective network tariff.. We tested customer support for a grace period in our Phase 4 forums and found it was supported so long as customers' could opt in to the more cost-reflective Sun Soaker two-way tariff earlier if they wanted to.	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. More details are included in the *Pricing* table in the *Summary of engagement outcomes* section above.
(iv) Export tariff transition strategy	The PCC supported the ETTS: > They liked the phased approach to assigning residential and small business customers to the default Sun Soaker two-way 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.	Our TSS has a phased transition to move low voltage connected customers to two-way prices.

Managing cost reflective tariff transition	As more customers continue to transition to cost reflective tariffs, those tariffs should recover a fair share of our total costs.
	
	Current opt in tariffs that have been discounted should also recover a fair share of our total costs in future.
	
	The PCC supported our approach to avoiding price volatility amid tariff transition.
		Our TSS seeks to avoid future price volatility amid cost reflective tariff transition by setting sustainable cost recovery levels on all tariffs supported by:
		
		> Heavily reducing the current discount offered in our low voltage demand charges in the first year of the 2024–29 period and further closing the gap in each subsequent year through to 1 July 2028
		
		> Keeping fixed charges:
		  • equal across all open tariffs by customer type (as we do now)
		  • 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 annum. Where inflation exceeds 2.5% in any year, the balance will be recovered through consumption charges
		
		This has supported us in keeping the relative share of residual costs recovered from each tariff class stable over the 2024-29 TSS period as about 60% of our customers are transitioning from legacy to cost reflective tariffs.

Topic	What we (asked and) heard	What we did
Charging windows	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. 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.	We have maintained our charging windows for existing tariffs and adopted the time windows from our trial tariffs for the Sun Soaker two-way and the export price to be applied to all low voltage connected customer tariffs. 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.
Sun Soaker two-way risks	One PCC member was concerned that our Sun Soaker tariff: > 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.	> 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 stand-alone 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. > 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.
Closing our legacy (obsolete) tariffs	The PCC was supportive of: > removing our legacy tariffs as 90% of the 200 or so affected customers are better off on the default cost reflective tariff. > implementing an engagement approach for the small number of customers (approximately 20) that may be worse off on the default cost reflective plan, including education on how they can seek to save money on the new tariff structures.	Our TSS proposes to remove our non-cost reflective legacy tariffs and implement an engagement plan for affected customers. These tariffs had already been closed to new customers in our current TSS period.
Alternative Control Services prices	We presented our approach to pricing Alternative Control Services and the PCC encouraged us to ensure that we account for diseconomies in our metering costs as the smart meter rollout progresses.	Our Proposal forecasts have considered the impact of decline in number of basic meters on average costs to read each meter.

The full minutes from these meetings can be found in *Appendix C – PCC Minutes* Our PCC also found our engagement process to be genuinely collaborative and demonstrative of the fact that we didn't just listen to feedback, but that we responded to appropriately address and balance concerns in our final TSS.

'Essential Energy's engagement has been exceptionally thorough. The quantitative customer evidence has been garnered from rigorous and deliberative engagement. Essential's engagement in this process has been top-notch.'

PCC member, November 2022

'There has been a genuine intent from Essential Energy to garner customer preferences and to have this conversation in a meaningful way. Essential has really listened to stakeholders and have responded to feedback provided throughout the engagement process.'

PCC member, November 2022

You can read more about our PCC in the *Our Pricing Collaboration Collective* section of the *Planning phase* chapter.

Engagement learnings

SCC engagement material feedback and forum attendance

In future we will:

> Ensure that we ask all members whether they support and agree with the engagement materials we are looking to present so we can:
>
> • rectify any gaps or concerns before engagement occurs
>
> • ensure our engagement has adequate depth and incorporates the right storytelling
>
> • ensure we are adequately distilling complex information into a customer friendly format.
>
> Ask members to attend at least one forum in each phase of future engagement to ensure they get a more rounded view of our customer engagement and improve their input to the independent consumer report. While we gave our SCC members flexibility around attendance – and they previewed and provided feedback on our draft customer engagement materials and heard the results of our engagement – we did not specify that they must attend our engagement forums.

Stakeholder fatigue

We will look to use stakeholders differently in the future as we have struggled to recruit and retain stakeholders for our SCC and to participate in the groups and in-depth engagement discussions in each phase. Many people are too busy, either because of their own workloads or because they are working with other networks and industry groups. Finding the right person in a business can also be difficult.

> This was the case with engaging with ASPs. Our business is already meeting fortnightly with an ASP reference group and they were, understandably, not prepared to give more time to the business.
>
> We lost two SCC members throughout the process and only managed to replace one.
>
> We were also only able to get input from one critical infrastructure provider in Phase 2 with the other entities we contacted not willing to participate.

This difficulty will likely continue as other networks also engage with many of some of the same stakeholders so we will need to rethink this approach for next time.

Joint engagement with other networks

There are only a handful of stakeholders who are interested in multiple networks across the jurisdictions that share our regulatory timeline. We are not convinced that the benefits of the joint engagement we undertook with other networks for this handful of stakeholders, outweighed the significant amount of work that went into developing joint discussion papers and hosting joint public forums. The additional work stretched our limited staff resources even further, at a time when we were also preparing for our own customer and stakeholder engagement activities.

Whilst this approach seems to work well for the Victorian networks, they have the benefit of all being in the same jurisdiction and three of them also share the same ownership and staff resources. They also benefit from having less diversity in the issues they face. Our low customer density and scale means our network faces very different issues to Ausgrid and Endeavour. Tas Networks, Evo Energy and the relatively tiny Power and Water Corporation also face their own unique jurisdictional nuances and challenges.

As such, undertaking joint engagement with other networks is an area we will inquire and determine with stakeholders ahead of our 2029–34 Regulatory Proposal.

Difficulties in trialling new tariffs

It takes a lot of time and effort to bring tariff trials to fruition. Partnering with retailers creates additional challenges, as they are volunteers to the process and have their own competing business activities and interests. Unfortunately, a major retailer had to withdraw from our small customer tariff trials a year into implementation.

Our own abilities to bring the trials to life have also been challenged. Skills shortages in the information technology sphere and the difficulty of building our stepped export capacity charges into our out-of-date billing and meter data systems has greatly impacted the time taken to get the project off the ground.

More recently, wholesale market disruptions have impacted the ability for retail partners to recruit customers onto the trials.

Consumers as partners for the future

We enjoy engaging with our customers – customers learn about our business, and we get to hear the lived experience and views of the people we deliver electricity to. Our deep dive session (see *Phase 3: Deep dive*) worked especially well. Essential Energy and the participants got a lot out of the session, so much so that we subsequently pitched and received approval from our Chief Executive Officer to create an on-going customer panel – Our Peoples' Panel

We intend to create a group of diverse and representative residential and small business customers we will meet with on a quarterly basis. We plan to discuss and share ideas on aspects of our business that affect customers and have them provide input into our decision-making. This will ensure we are listening and delivering on our promised outcomes. That way we can be ready to pivot and adapt to meet changing expectations. The inaugural group is being formed and will begin meeting in the first half of 2023.

Engagement approach

Customer engagement plays a key role in our business. Collaborating with customers and stakeholders allows us to make more informed investment decisions and deliver electricity services that better reflect customer preferences. It also ensures that our plans are supported. Our business-as-usual engagement channels, combined with targeted engagement projects where necessary, ensure we place the customer at the centre of everything we do. This means that our customers and stakeholders have a say in shaping our business decisions every day, not just at the time of developing our Regulatory Proposal.

Our everyday stakeholders

Our Stakeholder Engagement Framework guides our engagement

Our engagement strategy for the 2024–29 Proposal is consistent with our Stakeholder Engagement Framework (Attachment 4.1) and the requirements of the AER's Better Resets Handbook.

Overview of our Stakeholder Engagement Framework

We regularly update our framework and it is about to be refreshed again. It promotes the value of working with diverse stakeholders and the importance of developing engagement programs that support the objectives of our customers and our business. It also helps us to manage material risks and make more informed strategic business decisions.

The framework sets out a clear methodology for how customer and stakeholder research and analysis inform future values, projects and activities.

Through our engagement we aim to

Curious	Engage early, using engagement activities that recognise the needs of our diverse customers, to build respectful, inclusive, and collaborative relationships and actively seek feedback to learn and improve
Accountable	Be transparent and set clear deliverables for measuring and evaluating the quality of our engagement and making those outcomes visible to stakeholders
Courageous	Be action-orientated, open-minded and act with integrity. Our business is continuously informed and shaped by our engagement.

Designing our engagement program

We developed a tailored, comprehensive engagement program for the 2024–29 Proposal. This program shares information in plain English and seeks ideas and feedback from our diverse customers and stakeholders. We wanted to build on the success of our engagement for our 2019–24 Proposal by working with a wider set of stakeholders. We aimed to attain a higher level of engagement on the International Association for Public Participation (IAP2) spectrum.

The highest IAP2 engagement level we achieved in our 2019–24 Proposal was 'Involve' and we wanted to engage at the 'Collaborate' level for some aspects of our 2024–29 Proposal.

	Inform	Consult	Involve	Collaborate	Empower
Goal	To provide balanced and objective information in a timely manner.	To obtain feedback on analysis, issues, and alternatives and decisions.	To work with the public to make sure that concerns and aspirations are considered and understood.	To partner with the public in each aspect of the decision-making.	To place the final decision-making in the hands of the public.
Promise to the public	'We will keep you informed.'	'We will listen to you and acknowledge your concerns.'	'We will work with you to ensure your concerns and aspirations are directly reflected in the decision made.'	'We will look to you for advice and innovation and incorporate this in decisions as much as possible.'	'We will work with you to implement what you decide.'

We engaged independent experts Woolcott Research & Engagement to devise an engagement program and to oversee and facilitate our collaborative engagement with customers and stakeholders for the 2024–29 Proposal and TSS. Together, we devised a five-stage plan that built off our existing knowledge base, beginning with a planning phase, followed by four phases of engagement.

We chose to maintain forums as our main customer engagement channel with the intention of using smaller deep dive sessions as required. Forums allow us to educate a larger number of customers than could ever be achieved through smaller deep dives. They also allow more of our staff to attend and our staff really enjoy attending, answering questions, sharing their knowledge and listening to what customers are saying.

Woolcott Research & Engagement specified six aims for our engagement program. These aims and our associated achievements are summarised on the following page.

Our uplift aims and achievements for the 2024–29 engagement program

	2019–24 engagement program	2024–29 engagement program	What was achieved
Design	We designed the engagement process.	We wanted more input from customers and stakeholders to shape the engagement approach and program.	We held a co-design workshop with stakeholders to identify key themes, topics and stakeholders, as well as appropriate levels of engagement. We met with our Essential Connectors (engaged customers) to get their thoughts on what worked well last time, what could be improved and the topics they thought were important to engage on this time around.
Educate	We provided opportunities for participants to educate themselves on key issues and trade-offs.	We wanted more emphasis on creating informed, educated participants.	We included new and relevant topics for customers and stakeholders and offered pre-reading material ahead of forums by way of an online Virtual Room. We also added an additional phase to the engagement program.
Independent	We provided information to participants.	We wanted independent experts to provide information to participants in addition to what we provided.	We responded to suggestions by our SCC, our primary stakeholder reference group, and had: > the relevant NSW Government department present on the *NSW Electricity Infrastructure Roadmap* and *NSW Electric Vehicle Strategy* > Eurobodalla Shire Council present its recovery experience following the 2019-20 bushfires.
Collaborate	Participants engaged largely at the IAP2 'Involve' level – they affirmed/endorsed the Proposal.	We wanted participants to engage at the IAP2 'Collaborate' level – co-designing the Proposal.	We engaged on numerous topics at the 'Collaborate' end of the IAP2 spectrum for public participation.
Multi-modal	The major component of the engagement was the deliberative forums.	We wanted to include a wider variety of approaches and methods of engagement.	We created dedicated stakeholder guidance groups for: > the Proposal – the SCC > the TSS – the PCC. We created an online Virtual Room that was updated for each phase of engagement. We conducted a radio and print campaign to encourage customers to have their say via the website ahead of Phases 2 and 4 engagement. We conducted a survey to inform decisions in Phase 2. We undertook deep dive sessions with a smaller customer group to collaborate on more technical aspects of the TSS and our strategy to transition to export tariffs.
Stakeholders	Mainly customers	We wanted to involve a wider range of stakeholders.	New stakeholders included a youth group (16–18-year-olds), Accredited Service Providers (ASPs), aggregators, retailers, councils, renewable energy developers, solar installers, new technology providers, critical infrastructure providers, the AER and the relevant NSW Government department. We also undertook in-depth discussions with culturally and linguistically diverse and Aboriginal and Torres Strait Islander representatives. We conducted a series of dedicated workshops with councils over several months on public lighting issues. We engaged with aggregators, retailers and the relevant NSW Government department in relation to our export tariff transition strategy

Our engagement plan was flexible and comprehensive

A key expectation of our collaborative approach was that our engagement plan would flex and morph as required or even as directed by the SCC. Our engagement plan was modified seven times over the course of engagement.

Update 1 (August 2021)	Update 2 (September 2021)	Update 3 (January 2022)	Update 4 (March 2022)	Update 5 (April 2022)	Update 6 (May 2022)	Update 7 (Sep 2022)
Included:	Included:	Included:	Included:	Included:	Included:	Included:
> running a co-design workshop > overseeing SCC meetings > holding three additional in-depth discussions with commercial and industrial customers > engaging with a customer advocates group rather than holding five in-depth discussions with individuals > engaging with councils as a group rather than holding three in-depth discussions with individuals > having two group discussions with renewable developers and ASPs rather than three in-depth discussions with individuals > conducting an additional survey in Phase 2.	> altering Phase 1 to a visioning forum to capture customers' future network vision > adding six in-depth discussions with Aboriginal and Torres Strait Islander people > adding six in-depth discussions with retailers and aggregators in phases 1,2 and 3 > forming a youth group for Phase 1 > holding a group discussion with new technology providers (solar and battery installers) > replacing workshops with Essential Energy subject experts to instead presenting engagement findings to the Project team, Executive, SCC and Customer Advisory Group (CAG).	> having a youth group across phases 2 and 3 > Including in-depths with critical infrastructure providers > holding Phase 2 forums via Zoom instead of in person > holding two Phase 2 Zoom sessions > merging some locations to reduce the number of sessions required from 14 to 10.	> holding PCC meetings > Conducting a public lighting survey to inform council engagement > updating phase 4 engagement channel from conducting an online 'Closing the loop' survey of forum participants to having a public forum with polling.	> adding three public lighting forums.	> adding a collaborative deep dive education session and workshop > adding a retailer and aggregator discussion on our proposed two-way price and export tariff transition strategy > meeting with represent-atives of the relevant NSW Government department on our proposed export tariff transition strategy > recruitment for the new customer panel to be created in early 2023.	> additional group discussion with new technology providers around pricing and flexible connection agreements > adding further public lighting discussion sessions

Topics we engaged on

The following graphic shows our final engagement on Proposal topics relative to the IAP2 spectrum for public participation.

Our final level of engagement by topic

* Including solar PV, batteries and electric vehicles

Our flexible engagement approach meant that our plan was adjusted as required. The changes from our initial engagement plan, as presented to the AER in October 2021, are summarised below.

Our initial engagement plan by topic, with changes highlighted

Our Proposal reporting structure

Our reporting structure demonstrates the breadth and inter-relationship of our Proposal to our advisory groups and business-as usual information sources.

Addressing the requirements of the Better Resets Handbook

The *Better Resets Handbook* outlines the AER's expectations regarding our engagement with customers in developing our Proposal. With the rapid changes taking place in the energy system, it is important that our Proposal appropriately considers customers' preferences – to ensure that we deliver to their current and future needs and expectations.

Essential Energy is participating in the early signal pathway offered under the handbook. As part of this process, an independent consumer report assessing our engagement is required. This report can be found at *Attachment 4.15*.

Consumer engagement expectations

We intentionally engaged with customers on topics they could meaningfully influence and that also had a high impact on prices. The only topic that sat outside this sphere was the NSW Roadmap and the associated REZs. Our SCC made it clear that we should tell customers about the effect of the NSW Roadmap on their electricity bills, as these costs will affect customers' ability to pay and may influence their preferences for our proposed investments. We included this context, along with the rising costs of living at the start of our Phase 3 forums, before asking customers about their preferences for our investment options.

We also intentionally engaged with customers on topics and outcomes, rather than trying to have detailed discussions around operating expenditure, capital expenditure, regulatory depreciation and the TSS.

We also focused on long-term outcomes – hence the importance of our Phase 1 visioning forums. As a stepping stone to a future that is 10 to 15 years away, it was important for customers to understand and be excited about where the industry is heading. In terms of resilience, we also made it clear that the scale of our network meant it would take many regulatory periods before customers would notice any substantial improvement in restoration times. When discussing our options, we also made it clear that bill impacts would be ongoing.

Expenditure, depreciation and Tariff Structure Statement expectations

As mentioned above, we intentionally chose not to engage with customers around the details of operating and capital costs, regulatory depreciation and many aspects of the TSS. We left these granular and more detailed discussions to our SCC and PCC. This allowed us to focus our discussion on topics and how these translate into outcomes and value for customers. Engaging with customers on service outcomes and the value they will get from investments made discussions simpler and avoided getting caught up in the complexities of accounting terminology.

We engaged with a wide range of customer and stakeholder groups

As we have shown in the *Summary of engagement outcomes* table and in the various Phases of engagement chapters following, our engagement was honest. Customers were genuinely able to communicate their desired outcomes and influence the proposed expenditure.

We also used a broad range of engagement channels.

Engagement and communication activities

	Virtual Room and website	Online survey	Deliberative forum	Stakeholder Collaboration Collective meetings	Pricing Collaboration Collective meetings	Stakeholder in-depth interviews/groups	Customer in-depth interviews	Deep dive workshop	Public lighting survey and workshops with councils	Customer Advocacy Group meeting	Stakeholder meeting	Stakeholder forum/event	Social media, phone and email	Newspaper and radio advertising	Tariff trials stakeholder/customer workshops	Tariff trial meetings with retail partners
Planning Phase				✓						✓						✓
Phase 1	✓		✓	✓		✓	✓			✓			✓		✓	✓
Phase 2	✓	✓	✓	✓	✓	✓	✓			✓			✓	✓	✓	✓
Phase 3	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓		✓		✓	✓
Phase 4	✓		✓	✓	✓	✓	✓		✓	✓		✓	✓	✓		✓
Joint work with other networks																
> Service classification												✓				
> Climate resilience												✓				

Planning phase

Engagement activities	July to August 2021	Outcome

Engagement activities
> Co-design workshop with 28 stakeholder groups
> Meeting with eight Essential Connectors
> SCC formed and first meeting held
> CAG meeting

Outcome

A leading-edge engagement plan
> who we engage with
> what we engage on
> how we engage with them.

Findings can be found in *Attachment 4.03 Planning Phase Engagement Report*

'Essential Connectors' meeting

A group discussion was held with eight residential customers who had participated in the engagement for the 2019–24 Proposal. These people are called 'Essential Connectors' because they were some of the most engaged participants from the last period. Many of them also took part in the more recent tariff trials design engagement for residential and small business customers. The group was diverse, with a mix of levels of electricity usage (low, medium and high) as well as a mix of solar and non-solar customers located in towns and more rural areas across our three regions. The meeting was conducted via Zoom and was facilitated by Woolcott Research & Engagement. Two Essential Energy staff attended.

The discussion focused on gathering feedback on their experience of the last engagement program – what they thought worked well; possible improvements; topics that should be discussed in the next engagement program; and who should be involved and how.

Stakeholder feedback	How this was reflected in our engagement program
What worked well	
Group members offered the following as positive points of the engagement: > They enjoyed taking part > The experience was positive, hence their continued engagement > They believed they learned a lot and expanded their perspective – they appreciated learning from us about the issues and hearing other customers' views in the group discussions. > They felt heard and free to say what they thought – they didn't feel judged, and thought all views were accepted. > They liked having information presented in a variety of formats – written, videos, quizzes, presentations and Q&As. > They liked the polling, saying it was interesting to see what others thought about the issue compared to their own views.	We maintained our broad engagement approach. We engaged on topics that interested customers that they could meaningfully influence and that had a greater impact on their prices. We included discussions around the rising cost of living and the impending price rises from the NSW Roadmap. We maintained polling in our forums. Forum participants who disrespected others, even after being told to amend their manner, were not invited to participate again.
They suggested the following improvements to make the experience even better next time: > We should explain some of the more complex concepts and make sure there was no jargon or technical terms used (particularly for tariffs). Some information was thought to be difficult for lay people to understand unless they had a technical background. > We should allow a bit more time for discussions in the Zoom format. > Where engagement was delivered virtually, we should allow participants enough time to absorb the information before asking for their opinions, e.g. have a gap between sessions or provide pre-reading and/or videos. > Have shorter gaps between meetings (it was quite a few months last time) so that participants would be better able to recall the information and outcomes.	Our Virtual Room allowed customers to undertake pre-reading for upcoming topics as well as refresh their memory ahead of each phase of engagement. Our additional phase of engagement allowed us more time to better educate customers on more technical topics. When COVID–19 forced us to undertake our Phase 2 engagement virtually, we ran two rounds of forums to allow sufficient time for the topics we would otherwise have run in one face-to-face forum. We undertook a deep dive session with a smaller set of customers on more technical aspects of our network challenges, the associated solutions, pricing and the export tariff transition strategy.

Stakeholder feedback	How this was reflected in our engagement program
Topics to engage on, ways of engaging and who to engage with	
The priority topics were safety, reliability and affordability. Participants were also interested in innovation and new technologies, and wanted to hear more about what the future might hold in relation to these, including what that might mean for the customer in terms of cost.	While we did not specifically engage on safety, it is a recognised customer priority that underlies many of the topics and investments we did engage on.
In terms of engagement, participants thought it was important to be inclusive and representative. This would allow us to gather feedback from anyone who wanted to take part and mean we capture a cross-section of the community and our network demographics.	We engaged with customers on reliability and affordability – these are two of our Proposal themes and were included as stations in our Virtual Room.
Participants felt the engagement should involve all customer and business partner groups and specific groups that would have important views to consider, such as solar customers, people on life support, remote customers and those who were in financial hardship.	We expanded our engagement program to include more customers and stakeholders including a youth group (16–18 year-olds), ASPs, aggregators, retailers, councils, renewable energy developers, solar installers, new technology providers, critical infrastructure providers, the AER, the relevant NSW Government department, culturally and linguistically diverse and Aboriginal and Torres Strait Islander representatives.
There were concerns that remote customers might have poor internet connections, so they might find it difficult to take part online.	As mentioned earlier, we also conducted a radio and print campaign.

Stakeholder co-design workshop

For the 2024–29 Proposal we introduced a new co-design planning workshop with stakeholders. We wanted to ensure that stakeholders had input into the design of our engagement program. Due to COVID-19, we had to run a virtual Zoom workshop with presentations at a group level followed by four 'breakout rooms' for detailed discussions.

A total of 28 different stakeholder groups attended the session, including representatives for customers, vulnerable customers, food and fibre customers, commercial and industrial customers, industries, councils, retailers, ASPs, renewable developers and new technology providers as well as advocates for sustainable living and the environment. Members of our Board, executive and senior management also attended the event.

Engagement aims and overview of approach	Stakeholder feedback	How this was reflected in our engagement program
Check that all necessary influences had been considered in the current review of the Corporate Strategy		
We provided an overview of our approach to our current corporate strategy review and what we saw as the key influences on the business.	Stakeholders agreed that the changes we identified were important influences. They did, however, suggest other influences to consider in relation to:	These additional influences were fed back into the review of the Corporate Strategy.
Stakeholders discussed these influences and were asked whether they agreed with them, whether any influences were missing, and which were the most important influences for us to consider in developing the 2024–29 Proposal.	> environmental changes – relating to the effect of COVID-19 on consumption and regional growth, as well as climate change and the impact on our emergency response > technological changes – especially the pace of take-up by customers and the use of new technologies to increase the resilience of the network > societal changes – relating to the low energy literacy among many customers, diverse customer needs, increasing social inequity and how industry influences affect the business.	
	It was also recognised that influences overlap and won't all affect the business to the same degree.	

Engagement aims and overview of approach	Stakeholder feedback	How this was reflected in our engagement program

Determine the Proposal's themes and topics

We outlined the potential implications of the influences for the Proposal and how these influences will determine the themes and topics for engagement. We presented three potential themes and asked the groups whether we had identified the correct themes or whether they needed to be changed and to identify the topics to be addressed in our engagement.	Overall, it was agreed that the three themes worked as overarching categories for the topics suggested, along with an 'other' category for any extra topics. These were: > Future network enablement > Risk tolerance, resilience and reliability > Role of tariffs and pricing outcomes The only change suggested was that 'Risk tolerance, resilience and reliability' be amended to 'Risk appetite' to signify that customers and stakeholders should have input into the level of risk that we accept.	Stakeholder mapping of the topics to themes formed the basis for the design of our engagement plan as well as the Virtual Room. The final themes were: > Network of the future – delivering the services customers want today and into the future > Resilience and reliability – how risk appetite shapes our investment decisions > Pricing – fairness and affordability > Other essential services – customer service and more.

Determine who to engage with, at what level on the IAP2 engagement spectrum and by what channel(s)

We provided an overview of the approach and design of engagement for the last regulatory period, our broad customer groups and personas and the stakeholders we thought we should engage with.
 	
The groups then gave input for our approach to the engagement program and identified the appropriate stakeholders for each topic, what level of IAP2 engagement was required and the suggested engagement channel(s).
	In terms of the methodology stakeholders thought we should:
	
	> try to accommodate as many voices as possible using a combination of representative and inclusive approaches
	> use a mix of face-to-face and other channels, such as online, recognising that customers generally prefer face-to-face, but that COVID-19 made online delivery an acceptable alternative.
	> ask customers how they want to be engaged
	> allow time for pre-reading to digest the information
	> have short engagements of 2–3 hours rather than longer all-day meetings
	> ensure people with technology limitations could engage
	> do some joint engagement with other networks and stakeholders on relevant topics
	
	Stakeholders' main feedback regarding customer and stakeholder groups was to ensure we include:
	
	> rural and remote customers
	> locations further up the north coast and further inland
	> young people
	> small and medium businesses, and commercial, and industrial customers, including agricultural customers and multi-site corporates
	> financial hardship customers
	> customers who are from culturally and linguistically diverse backgrounds and Aboriginal and Torres Strait Islander customers
		Our engagement plan was developed with this feedback in mind:
		
		> We held a meeting with our 'Essential Connectors' and asked them how they would like to be engaged.
		> We used a mix of channels including forums, surveys, a Virtual Room, groups and in-depth discussions with young people, customers in hardship, culturally and linguistically diverse and Aboriginal and Torres Strait Islander customers and all business types.
		> Our Virtual Room includes pre-reading to allow customers to digest information ahead of forums.
		> We limited our engagement to:
		  • 2 hours maximum for virtual delivery
		  • 3 ½ hours maximum for face-to-face – including a meal break
		> We undertook extensive print and radio advertising across our network encouraging customers to have their say in the lead up to phases 2 and 4. This included a suggestion to use the local library for those with technology challenges.
		> We pushed our forum locations further north (to Ballina) and south (to Bega) and further inland (to Inverell)
		> We undertook joint engagement with other networks on several topics.

Engagement aims and overview of approach	Stakeholder feedback	How this was reflected in our engagement program
Reference group(s) Agree an appropriate reference group structure for collaboration to develop the Proposal.	> Stakeholders were very supportive of the notion of reference groups. > The ideal scenario was thought to be a larger reference group (8–10 people) that could be broken up into smaller sub-groups to provide feedback on different topics. > The smaller groups could decide that they needed input from stakeholders external to the group, so individuals could be invited to join the meeting on particular issues. > Once the smaller sub-groups had come to some conclusions they could report back to the larger main group. > The number of sub-groups would be determined as required. > The reference group should be independent and able to influence the engagement and Proposal. > Payments to the group were generally supported. It was noted that this might appear to impair independence but this was thought unlikely in reality. > The reference group would need to adequately represent Essential Energy's diverse customer groups and business partners.	Our SCC was formed shortly after the co-design workshop and consisted of nine members representing diverse stakeholders. At the direction of our SCC, we formed our PCC in early 2022 to specifically guide the development of the TSS. A subset of SCC members were also members of the PCC – this assisted with upward reporting. At the request of the SCC, we invited the relevant NSW Government department to present the NSW Roadmap and NSW Electric Vehicle Strategy to the group. Participating stakeholders were paid if they so requested.
Engagement evaluation Identify how we should evaluate our engagement process and what success would look like.	The two main suggestions were: > the level of influence the participants thought they had on the Proposal, i.e. the amount of change made to the Proposal based on feedback from participants > the backing of the Proposal by the reference group noting that it is accepted there will be some elements of the Proposal where everyone agrees, and some elements where there is disagreement, but the group can acknowledge that there was a fair discussion and Essential Energy did listen and consider their views.	We will formally evaluate our engagement process at the conclusion of Phase 4. The independent consumer report prepared on behalf of our SCC (*Attachment 4.15*) assess our engagement. This report will accompany our final Proposal in January 2023.

Our Stakeholder Collaboration Collective

Our SCC stakeholders represented the diversity of our customers.

Interest group	Organisation
Large business	Energy Users Association of Australia
Small business	Council of Small Business Organisations Australia
Vulnerable customers	St Vincent de Paul
Customers	Public Interest Advocacy Centre
Food and fibre customers	NSW Farmers and Cotton Australia
Retailers	Australian Energy Council
Regional communities	Thriving Communities Partnership – withdrew
Environment	Total Environment Centre
Sustainable living	Renew

Up to three Essential Energy executive staff attended each meeting, as well as key project managers overseeing the development of the Proposal. Representatives of the AER, the AER's consumer challenge panel and Woolcott Research & Engagement also attended the meetings as observers.

Recognising stakeholders' workloads, SCC members were not required to attend all SCC meetings but were encouraged to attend sessions where the topics to be discussed were of interest to them or the customers they represented. Unfortunately, a participant from the Thriving Communities Partnership had to pull out of the group in February 2022 as couldn't be replaced due to the entity's staff limitations.

The Terms of Reference for the group were finalised in October 2022 and specified that the SCC was to:

> help us shape engagement materials
> provide timely input into ideas and decision making
> direct us as to when they required independent expert advice – we would pay for any experts they wanted to hear from
> direct us as to when we should form additional sub-committees
> assist in interpreting customer and stakeholder engagement feedback to inform decision-making.

We also had Energy Consumers Australia present twice to the group about their Consumer Empowerment Funding Program which can be used by the group to access a number of services including independent analysis and technical advice.

A staff member who was not involved in the Regulatory Proposal worked with the SCC to develop the request for quote and the procurement of an independent engagement specialist to write the independent consumer report on behalf of the group. This report, which can be found at *Attachment 4.15*, is a requirement to participate in AER's early signal pathway in the *Better Resets Handbook*. SCC members worked directly with this specialist to develop the independent consumer report.

You can read a summary of the topics and engagement outcomes from our SCC meetings in the *Our Stakeholder Collaboration Collective* section. Our learnings in relation to the group are also outlined in the *Engagement learnings* section.

Our Pricing Collaboration Collective

In November 2021, the SCC directed us to form a separate pricing group. We stablished our PCC in early 2022 and met six times between February and August 2022. The role of the PCC was to:

> co-create our TSS to submit to the AER

> focus on tariff outcomes for customers

> help shape the development of our TSS and proposed tariffs for the 2024–29 regulatory period in line with customers' pricing preferences

> guide the development of TSS engagement materials for customer deep dive sessions

> bring high-level decisions back to the SCC where necessary.

Given the complexity of pricing and the development of the TSS, we invited stakeholders to be part of this group. The PCC had 11 members, including four members from the SCC (representing five interest groups). Again, we sought to have diverse members who would represent customer and stakeholder interests.

Interest group	Organisation
Large business	Energy Users Association of Australia
Small business	Council of Small Business Organisations Australia
Vulnerable customers	St Vincent de Paul
Customers	Public Interest Advocacy Centre
Food and fibre customers	Cotton Australia
Retailers and aggregators	Australian Energy Council
	Energy Australia
	Reposit Power
New technology providers	Tesla
	Independent advisor
Sustainable living	Renew

You can read a summary of the topics and engagement outcomes from our PCC meetings in the *Pricing Collaboration* section and the detailed minutes can be found in *Appendix C – PCC Minutes*. The PCC was a highly engaged and interactive group of stakeholders. The group provided an effective means for agreeing the more complicated aspects of the TSS.

Identifying customers' priorities

To ensure our proposed investments target what's important to customers, one of our first engagement aims was to determine customers' priorities for the 2024–29 regulatory period.

As we had engaged with customers to determine their priorities for the 2019–24 Proposal, we did not have to start from scratch. Instead, we presented the 2019–24 customer priorities in an unranked manner to customers in our Phase 1 forums and asked them what was important to them in relation to their electricity supply; where we should focus our service delivery; whether they thought the customer priorities had changed since the last Proposal; and which priorities were most important to them.

Phase 1 presentation of our 2019–24 customer priorities

We adjusted the priorities based on this feedback and presented them to customers in an unranked manner in the first Phase 2 forum. Customers were then asked whether they agreed with the priorities presented and whether any changes were required.

Phase 2, part 1 presentation of our 2024–29 customer priorities

The majority of participants agreed with the revised priorities, but made a few suggestions. We made minor tweaks to incorporate these before they were again presented to customers in an unranked manner in the second Phase 2 forum.

Customers were then asked to put the priorities in order of importance to them. Safety wasn't included because it is 'a given'. We also asked 606 residential and 201 small business customers to rank the same priorities in our Phase 2 quantitative survey.

We identified the following rankings:

Ranking from customer forums	Ranking from quantitiative survey
1. Reliability and resilience	1. Affordability
2. Affordability	2. Reliability and resilience
3. Good customer service and communication	3. Good customer service and communication
4. Collective benefit	4. Transparency and simplicity
5. Future focused	5. Future focused
6. Transparency and simplicity	6. Collective benefit

These results showed the following:

> 'Affordability' and 'Reliability and resilience' were equal top priorities, recognising that these two must always be balanced.

> 'Good customer service and communication' is the next most important priority.

> The remaining three priorities have the same weight, recognising that 'Future focused' is about our network, 'Collective benefit' is about the good of the community and 'Transparency and simplicity' is about individual customers.

Customers' priorities as presented for the Phase 3 forums

We showed this ranking to customers in the Phase 3 forums and illustrated how our proposed investment options tied back to customers' priorities. For our Proposal document, we presented these priorities in a more compressed manner.

What matters to our customers

'Affordability is definitely a priority. As prices rise it becomes hard to prioritise what you want to run in your house. It's a big one to me and I think for a lot of other consumers.'

Broken Hill participant, Phase 1

'Safety is something we take for granted and don't think about, but it is definitely an expectation.'

Taree participant, Phase 1

Safety
Protect workers and the public and maintain assets

Affordability
Keep costs as low as possible for customers and support those in financial hardship

Reliability and resilience
Maintain a consistent supply, plan for and respond quickly to extreme weather events

'Reliability is the critical area here for disaster management. Power is what matters to the whole community.'

Council, Phase 1

'Now encouraging renewables is super important, with climate change and everything, it's on the forefront of people's minds. In the long term, I think that's more important.'

Youth participant, Phase 1

Good customer service and communication
Be easy to deal with and keep customers informed

'They need to put the customer first in all their decisions.'

Retailer, Phase 2

'Innovative technologies create efficiencies and open up opportunities for renewables.'

Dubbo participant, Phase 1

Future focused
Proactively plan and integrate renewables and new technologies in a sustainable way

Collective benefit
Cater to the diversity of customer needs in a fair and inclusive way for all

'Affordability is becoming more of an issue. There is more of a divide between those who can afford renewables and those that can't.'

Bega participant, Phase 1

'Helping people understand the bill – how much electricity they use. People don't understand energy ratings. They need to be informed about how to use electricity better. I know there are brochures but a lot of them don't read them. Better in a community meeting where someone can explain things in person.'

Aboriginal and/or Torres Strait Islander participant, Phase 1

Transparency and simplicity
Make managing electricity clear and simple so customers feel empowered to make informed choices

'Knowledge, so we're able to prepare and organise is the biggest thing.'

Aboriginal and/or Torres Strait Islander participant, Phase 1

'It is excellent. This is a really forward-thinking approach. If things were looked at through this lens going forward, then you would be on the right track.'

New technology provider, Phase 2

Developing the proposed customer service incentive scheme metrics

Customer preferences for measuring customer service

As part of the Phase 1 customer forums, we wanted to understand customers' views on what makes good customer service. The data was intended to inform alternative metrics to replace the existing customer service measure in the STPIS with new measures under the Customer Service Incentive Scheme (CSIS).

'Good customer service from Essential Energy would be never hearing from them.'

Taree participant, Phase 1

Forum participants were asked to reveal what a good customer experience was to them in relation to their dealings with Essential Energy.

The majority of customers and stakeholders (59%) believed measures that rely on internal data and those that relate to customer experience are equally important.

The preferred measures from this phase are shown below

Importance of customer service measure (based on rating of very important or quite important)	
Communicating accurate planned outage timeframes	94%
Communicating an Estimated Time to Restore (ETR) for unplanned outages and the accuracy of the timeframe	94%
Time taken to facilitate connections to the network	85%
Average time to resolve customer complaints	81%
Customer satisfaction results from quarterly surveys	65%
Fault line calls being answered within 30 secs	59%

'I think a text lets us know that they're aware of the problem, that's the most important thing so we're not flooding the phone lines to report the issue.'

Wagga Wagga small business participant, Phase 2'

'The time taken to connect is really only relevant to people who are wanting to connect.'

Inverell participant, Phase 1.

'They should have more surveys, like at the end of phone calls.'

Broken Hill participant, Phase 1

Measuring customer satisfaction immediately after an interaction with Essential Energy was also commonly raised as an additional potential customer service measure we could consider.

These findings were mostly supported by a further 2,505 residential customers who were contacted as part of our quarterly Woolcott Research & Engagement customer satisfaction survey.

Preferred customer service measures from 1,525 residential and 500 small business customers

Measure	Value
Accuracy of ETR for unplanned outages	100
Accuracy of planned outage timeframes	88
Provision of ETR for unplanned outage	83
Respond in a timely, consistent manner and deliver on their promises	68
Speed of complaint resolution	66
Ability to accomplish what is needed with EE	66
Easy to deal with	62
Good customer service	53
Listen and have my interests at heart	42
Interactions leave me feeling positive towards them	41
Connections are quick to the network	33
Costs are as low as possible and they offer value for money	28
Calls are answered within 30 sec	21
Positive reputation in the community	1

Shaping alternative measures

An internal project team examined the effort involved in adopting the above findings as preferred measures. To ensure the potential CSIS reward and penalty is not overly diluted, the project team initially limited the number of CSIS measures to two – one relating to customer experience and the other to internal data, as preferred by customers.

The other measures were ruled out as:

> we already notify customers about planned outages and only cancel if unexpected events, such as storms, divert resources or make operations difficult

> given the low percentage of unplanned outages that we currently provide an ETR for, the accuracy of the ETR is not as important at this stage

> the time taken to facilitate connections affects only a relatively small subset of customers

> they had relatively low support

The project team initially suggested that the CSIS include:

> communicating an ETR for unplanned outages

> customer satisfaction results from quarterly surveys.

The SCC largely agreed with the project team's thinking but thought that resolving customer complaints was equally important and should be included. At a subsequent meeting, the SCC further suggested that the complexity of the complaint should be considered and that the team should be clear about whether the number of days to resolve a complaint were business days or calendar days.

Proposed CSIS for the Draft Proposal

The project team presented a revised CSIS to the SCC.

> As our biggest customer touchpoint, 50 percent weighting was given to the unplanned outages measure

> Where we are unable to provide estimated times to restore and customers want to contact us, then we want to be easy to deal with, so this customer experience measure has a 25 percent weighting.

> Finally, when things do go wrong, we want to ensure complaints are dealt with in a timely manner, so the complaints measure also had a 25 percent weighting.

We did make it clear that complaints sitting with the Energy and Water Ombudsman of NSW (EWON) will be excluded from the CSIS because we can't control EWON timeframes and complaints are measured on a calendar-day basis. This element will incentivise us to address complaints as soon as possible, given the impact that long duration complaints will have on the overall average.

The SCC supported and approved this approach for the Draft Proposal and this was tested with customers in Phase 4 of our engagement.

Customer testing of the measures and weightings in the Draft Proposal

In the Phase 4 forums, we explained how the three measures had been selected and made it clear that whilst the other measures were ruled out from the incentive framework, we would still track them internally, along with a raft of other measures we already track. We also highlighted that the inter-relationship between the measures will strongly encourage us to improve our customer service as poor service in one area will likely pull down the success of other measures.

Customers supported the three measures (81 percent) and were able to provide their own suggested weightings for the three measures.

	Our proposed weighting	Customers' preferred weighting
Estimated time to restore unplanned outages and updates	50%	50%
How easy it was to deal with us	25%	21%
Average time to resolve customer complaints	25%	29%

Changes for the final Proposal

To recognise customers' priorities our proposed CSIS places 20 percent weighting on the 'easy to deal with' measure and 30 percent weighting on the complaints measure.

The project team is now tracking these measures and will report back to customers and the SCC next year, ahead of the Revised Proposal, to determine the appropriate targets that should be set for the CSIS for the 2024–29 regulatory period.

Phase 1: Setting the scene

October to November 2021

Engagement activities

> Launch of our Virtual Room
> Seven SCC meetings
> Customer testing of forum materials
> Seven visioning forums
> Group and in-depth discussions with customers and stakeholders
> Two CAG meetings

Outcomes

We provided customers with information and identified their:

> priorities
> vision for the future network
> views on project risks
> views on measuring customer service

Our findings are available in the *Attachment 4.04 Phase 1 Engagement Report*

Detailed activities in this phase:

> We launched our Virtual Room to provide background information about our business and the themes and broad topics on which we would be engaging. The Virtual Room is part of our Essential Engagement hub - an online forum where people can have 'Your Say' on our Regulatory Proposal

> We held SCC meetings to:
  - Discuss reliability and resilience
  - Get feedback on customer priorities and project risks
  - Present tariff trials work to date, get feedback on the principles for the TSS and generate ideas for the next TSS
  - Discuss potential changes to the classification of services
  - Outline options to address RAB growth and what options Essential Energy should look to pursue
  - Share how we manage network risk and value
  - Obtain SCC feedback on the Phase 1 topics
  - Present the feedback from Phase 1 engagement and get direction on the proposed approach and topics for Phase 2 engagement
  - Get feedback on the draft Phase 2 forum materials

> Following SCC input, we then tested our draft forum materials with a group of customers to ensure they were clear and that customers would feel adequately informed to be able to answer the polling questions

> Seven visioning forums with residents and small to medium businesses across the Essential Energy network area

> One group discussion with young people (16–18 year olds)

> Six in-depth interviews with Aboriginal and Torres Strait Islander customers

> Six in-depth interviews with culturally and linguistically diverse customers who speak a language other than English at home

> Six in-depth interviews with large business/commercial and industrial customers (C&Is)

> Six in-depth interviews with retailers

> One group session with renewable developers

> One group session with new technology providers

> One group session with local councils

> One group session with consumer and industry advocates

A total of 444 connected customers and 46 business partners and stakeholders took part in the Phase 1 engagement forums, groups and in-depth discussions. Two CAG meetings were also held where we shared the Phase 1 findings and provided an update on the Proposal process.

We also launched our Virtual Room to share background reading with customers ahead of the first forums. We updated the Virtual Room ahead of each phase to close the loop on what we had done in the previous phase and to provide new background reading for the next engagement phase. A survey was also embedded in the Virtual Room in Phase 2 to cover off some less important topics that we still wanted customers' views on.

Our Virtual Room

Risks we consider in assessing and prioritising projects

After explaining the three factors that influence our investment decision making (value, service and risk), we explained that the assessment of risk has flexibility depending on what we consider the risks to be and the relative weights placed on them. We wanted to ensure that we are considering, and giving weight to, the risk factors that are important to customers. We then outlined the five broad risks we assess for each project and asked participants if there were any missing factors. After that, we asked what weightings they would place on each of the five risk categories we showed them.

What we heard	How this has been incorporated into our Proposal
Risks presented Customers and stakeholders agreed that the five categories (safety, reliability, bushfire risk, ecology and heritage and customer experience) covered the main risks that should be considered. Customers average weighting for these risks were Reliability 26%, Safety 25%, Bushfire starts 20%, Ecology & heritage 17% and Customer experience 12%.	Based on the customer weightings for our main risks, we are confident that our Value Framework is appropriately considering the risks that are important to customers. 'We've put an emphasis on bushfire starts, that's going to affect reliability, it's going to affect safety, it's going to affect ecology and heritage.' *Wagga Wagga participant, Phase 1*
There was some discussion about how the weightings needed to change based on locations, as in some locations certain risks were perceived to be more important than in others, e.g., bushfire risk.	We already include the likelihood of a risk occurring in a specific location as part of our risk assessment. When making an assessment we consider three factors: the probability of failure, the likelihood of consequences, and the cost of consequences. This means that a location with a high probability of a bushfire would get a higher rating for both the probability of failure, and for associated consequences and costs. In short, we invest earlier in higher risk locations.

A number of other suggestions were put forward:

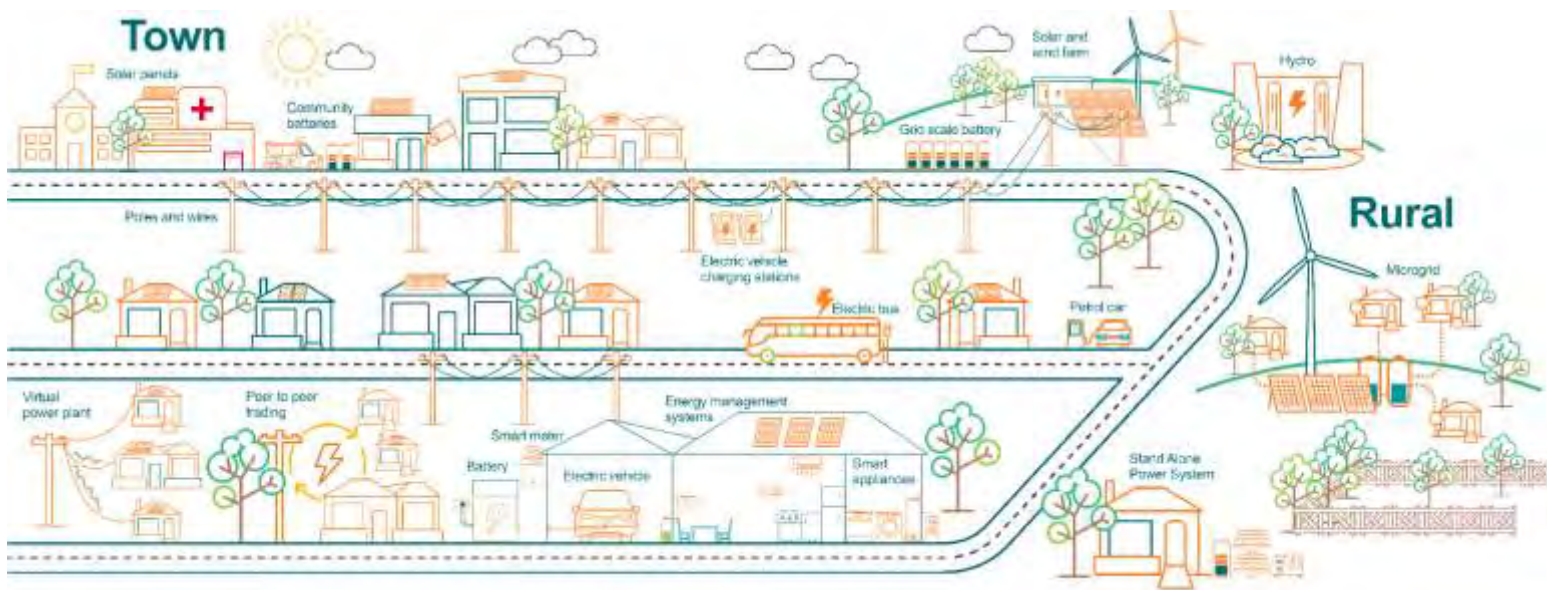| What we heard	How this has been incorporated into our Proposal
> Climate change was identified as a missing factor.	We are aware that climate change was a missing risk in our current value framework. For our Draft Proposal we overlaid a climate change lens on our proposed projects, based on historical evidence and our experience. This overlay was confirmed and revised following the completion of our climate change modelling and is reflected in our Proposal.
> Reducing carbon emissions was also identified as missing. 'Emissions reduction is missing, does this count as ecology and heritage?' *Wagga Wagga participant, Phase 1*	Given there is no industry-agreed approach to valuing carbon emissions, it is difficult to consider this as a separate measurable risk. We will monitor government policy, community sentiment and industry progress towards developing a value for carbon emissions and look to adopt this as a separate measure when appropriate.
> Include a risk related to network utilisation and long-term longevity, including from a resilience perspective.	We agree that these factors are important, but they already form part of our investment decisions and business practices. Improving network utilisation and long-term longevity are key aspects of our Corporate Strategy and will be realised as non-network solutions become increasingly more cost-effective, and new technologies, like EVs, coupled with more cost-reflective pricing are rolled out.
> Some thought safety should be built into every project and therefore shouldn't warrant a high weighting or even a specific piece of the pie.	Safety is a core business and customer priority that we cannot afford to overlook in decision making, so it cannot be excluded from the weighting. Given we undertake many projects each year that are not related to safety, such as increasing the capacity of a transformer, it would also not make sense to build safety into every project.
> Bushfire starts was commonly thought to be an aspect of safety and therefore very closely related. Some thought the two could be combined into one risk factor with a significant weighting.	We do not think we would be able to combine these two factors because the relevant legislation underlying each risk is extensive and distinctly different. In addition, there are also many examples of Safety projects that are unrelated to Bushfire Starts and vice versa.

Customers vision for the future network.

Recognising that this Proposal is a steppingstone to a future that is 10–15 years away we asked participants to imagine potential industry developments and what customers might want and need from us in the future. We informed them (via a video and an accompanying presentation) of the many new ways that electricity might be generated, consumed and managed.

Within the breakout session, an urban and rural landscape was presented to participants on a virtual whiteboard. Alongside the landscapes, a set of icons were offered that represented all the possibilities of generating, consuming and managing energy. Participants were then asked to take part in a future visioning exercise by moving the icons onto the landscape to describe what they wanted as the energy future in 10–15 years' time.

This vision is shown below and was used to frame many of the discussions in subsequent forums.

'I'm thinking about equity and the possibility of rental properties that don't have solar. I'm living on a street at the moment where we share the solar power that goes back to the community battery.'

Bega participant, Phase 1

'Solar panels and batteries on houses everywhere. If only it was that easy.'

Inverell participant, Phase 1

'I would like to see the technology for EVs to improve to the point where it's a possibility and a probability for rural people, but I don't see that being feasible.'

Inverell participant, Phase 1

'Buy, store and resell local energy – that's the future.'

Solar installer, Phase 1

'Grid-scale batteries would be extremely helpful for us.'

Ballina participant, Phase 1

Phase 2: Understanding our customers

January to April 2022

Engagement activities

> Relaunch of our Virtual Room
> Five SCC meetings
> Customer testing of forum materials
> 10 deliberative forums (two in each of five virtual locations)
> Group and in-depth discussions with customers and stakeholders
> PCC formed and first three meetings held
> CAG meeting
> Survey with more than 800 customers
> Radio and print advertising inviting customers to have their say

Outcomes

> More informed customers and a clear understanding of their priorities as well as their views and expectations in relation to key service outcomes around reliability, resilience and the future network.
> Findings can be found in the:
   • *Attachment 4.05 Phase 2 Engagement Report*
   • *Attachment 4.06 Phase 2 Engagement Survey Report*

Detailed engagement activities in this phase:

> We relaunched our Virtual Room to 'close the loop' on what we heard in Phase 1 and provide background information on the topics to be discussed in the Phase 2 forums
> We held SCC meetings to:
   • Share the NSW Energy Roadmap and Electric Vehicle Strategy through presentations from the relevant NSW government department
   • Get direction on the future network business case
   • Gain approval for the continuation of existing incentive schemes
   • Gather feedback and support for the wording of proposed cost-pass throughs
   • Present proposed CSIS measures following customer feedback in Phase 1, address SCC concerns to also include a customer complaints measure and gain approval for the measures to include in the Draft Proposal
   • Obtain SCC feedback on the Phase 2 topics
   • Present the Phase 2 findings
   • Get feedback on the draft engagement materials for Phase 3
> Ten deliberative forums with residents and small to medium businesses across the Essential Energy network area – five on reliability/resilience and five on pricing
> One group discussion with young people (16-18 year olds)
> Six in-depth interviews with Aboriginal and Torres Strait Islander customers
> Six in-depth interviews with culturally and linguistically diverse customers who speak a language other than English at home
> Six in-depth interviews with large business/commercial and industrial customers
> Three in-depth interviews with retailers and two with aggregators
> One in-depth interview with a critical infrastructure provider
> One group session with renewable developers

> One group session with new technology providers
> One group session with local councils
> One group session with consumer and industry advocates
> We tested our draft forum materials with a group of customers to ensure they were clear and that customers would feel adequately informed to be able to answer the polling questions
> We recruited members for our Pricing Collaboration Collective (PCC) and held our first three meetings to:
   • Confirm the PCC engagement plan
   • Confirm support for our approach to calculating long run marginal cost
   • Get feedback on our proposed battery trial tariff and our early thinking on proposed tariffs for large, peaky load customers
   • Test our pricing objectives
   • Test our tariff structuring and assignment approach
   • Confirm support for our proposed charging windows and seasonality
   • The approach for new tariffs and transitions, including the export tariff transition, based on engagement feedback, billing system capability, customers' priorities and bill impact analysis and current and proposed tariff trials.
> Our survey with 606 residential and 201 small and medium business customers obtained customer preferences on topics that did not form part of the engagement forums, namely:
   • support to introduce an on-line customer portal
   • support for the organisation to improve its environmental sustainability
   • support for the business to provide Councils access to new technologies on streetlight columns
   • support for the business funding network upgrades for new connections
   • who should pay for the inspection and vegetation management around private assets.

Six topics were discussed with customers and stakeholders in the second phase of forums:

1. Customer priorities
2. Reliability
3. Power quality (integrating customers' energy resources)
4. Resilience
5. Consumption pricing
6. Two-way pricing.

Given the number of topics and the need for virtual delivery, the content was delivered across two evenings with customers each attending two, two hour engagement sessions. Surveys with 606 residential and 201 small business customers were also undertaken to understand preferences on issues that were unable to be covered in the virtual forums. In total, 1,278 individual customers and 43 business partners and stakeholders took part in the Phase 2 engagement. The Phase 2 findings were also shared with the CAG.

The intention of this phase was to begin educating customers about the three key topics for the Proposal – resilience, a network fit for the future and transitioning to two-way prices. We also wanted to get an understanding of customers' broad appetite and the level of investment they were prepared to fund in relation to:

> improving community and network resilience
> understanding what is happening in real-time on the low voltage network through data procurement and the installation of network sensors along with a system to manage this data (real-time monitoring)
> dynamic network assets.

What we heard and how it influenced our engagement plan and Draft Proposal (and final Proposal)

The following table clearly calls out where we heard diverging views from customers and/or stakeholders and, where applicable, attributes findings to different cohorts. Where, however, the views of customers and stakeholders were aligned, these are written under the one broad finding.

Topic	What we presented, asked and heard	How this influenced the engagement plan, Draft Proposal (and final Proposal)
Reliability	Customers were asked: > to rate their reliability experience > about the impact of unplanned outages and how they would like Essential Energy to communicate with them during these events > their preference around reliability investment > whether the program to improve reliability for the worst served customers should be continued We learned Outages that are under 2 to 3 hours are considered manageable (unless there is a medical need for supply). The impact of an outage is influenced by: the time of day it occurs (evenings and mornings are worse), whether it impacts work (either a business or working from home), the time of year (whether heating and cooling is impacted) and whether electricity is required for the water supply. There was consensus to: > maintain existing reliability levels (87% support) > continue the program to improve reliability for the worst served customers in the network (91% support). 'It depends on the season, worse in the summer when it's real hot...' *Inverell participant, Phase 2* The vast majority of participants wanted to receive text messages from us to: > acknowledge we know about an outage (89%) > provide an estimated time to restore power (91%) and any updates to that estimate if it changed (88%). In addition, more than half (55%) wanted to receive a text to confirm that power had been restored. However, 45% did not indicate that they wanted this type of communication.	Our investments put forward in our Draft Proposal and final Proposal will improve reliability for our worst served customers and maintain reliability for all other customers. We will look to send customers text messages in line with these preferences. In the absence of broad access to smart meter data and an associated data management system, the success of this relies on customers providing their mobile phone number to us. 'It depends on the time of day or night. Different times have different impacts...' *Broken Hill participant, Phase 2* 'Communication is important for all outages; it makes us aware that EE is aware and takes the shock out of it.' *Taree participant, Phase 2*

Topic	What we presented, asked and heard	How this influenced the engagement plan, Draft Proposal (and final Proposal)
Power quality	The concept of power quality was introduced including how future network initiatives, like real-time monitoring and dynamic assets help to manage power quality issues Customers were asked if they had experienced power quality issues in the last 12 months. We also gauged customers' appetite for the broad level of investment we could undertake in relation to these future network initiatives. We learned > While 69% of customers rated their power quality as 9 or 10 out of 10, 50% had experienced a power quality issue in the last 12 months. There was an understanding that in the future power quality may decline, and this was not felt to be an acceptable scenario. > Customers and stakeholders were prepared to fund much higher levels of investment than what we had expected (66% supported us investing $164 million over five years).	In developing investment options for the Phase 3 forums, we made it clear that the pace of change was the key question and so we maintained a wide range of choice –from 'Continue to do the same' as we currently do through to an equivalent high-end option. 'Power quality is the upmost priority, what's the use of having intermittent power that will damage equipment?' *Wagga Wagga participant, Phase*
Resilience	We introduced the concept of resilience in relation to extreme weather events along with methods we might adopt to improve community resilience and strengthen the network. Customers were asked what role Essential Energy should play when extreme events take place and whether investments should focus on improving community resilience, network strength or both. Customers' appetite for our broad level of investment in resilience was gauged. We also asked customers whether they supported us 'turning off' high-risk sections of the network on total fire ban days to reduce the likelihood that our network starts a bushfire. We learned > Outages that last for more than 12 hours and are widespread impact customers in a much more substantial way than 'normal' outages (and the impacts increase further as time goes on and the more widespread they are). > These outages are even more severe for businesses than residents. > Customers see our role following extreme weather events as fixing the outage and keeping customers up to date with expected network restoration times. They also think we have a role in ensuring those with a medical need are provided for and generators are available for critical infrastructure. > Just over half of participants (51%) preferred we invest in strengthening the network over community resilience. > Just 9% supported investments in community resilience alone. > 40% supported equal investments in both. > Customers and stakeholders are prepared to fund much higher levels of investment than what we had expected – between $118 million (Option 3 at 47%) and $500 million (Option 4 at 44%) over five years with many requests for an Option 3.5! > Only 42% of customers were very or quite supportive of de-energising sections of the network on total fire ban days and 31% were against such an idea.	> In developing our resilience investment options for the Phase 3 forums, we made it clear that the pace of change was the key question and maintained a range of choices – from a 'Continue to do the same' (as we currently do) through to an Option 3.5. > We included resilience options aimed at network strengthening and assisting communities to become more resilient (improving their recovery following extreme weather events). > Given the lack of clear support to disconnect high-risk areas of the network on total fire ban days, our Draft Proposal does not include the implementation of such a process. 'If it was a wider footprint, then we'd have additional problems. There'd be no fuel. The shops we can get to couldn't operate, so how would we get food?' *Inverell participant, Phase 2* 'I sell a lot of poles and make a lot of money out of that and I'm prepared to sacrifice that to see a bit more resilience to be honest.' *Taree small business participant, Phase 2*

'We'd like to hope that Essential has a large supply of generators to bring into shops to get essential shops back working, like chemists and supermarkets.'

Dubbo participant, Phase 2

'With microgrids and SAPS you minimise the fallout of outages and the amount of people impacted.'

Ballina participant, Phase 2

Topic	What we presented, asked and heard	How this influenced the engagement plan, Draft Proposal (and final Proposal)
Consumption pricing	We outlined the challenges in relation to prices not reflecting our costs to supply and the new investment required to facilitate two-way flows of electricity. Customers and stakeholders were asked whether they supported: > progressing the move towards cost-reflective pricing > postage stamp versus locational pricing > seasonal prices. We also asked customers whether they would be willing to allow some of their appliances, such as their air conditioner or EV, to be controlled by Essential Energy in return for cheaper network charges. We are not yet able to control or charge in this manner, so this question was asked to get a taste for customers' appetite for such a service. We learned > There is continued support for moving towards cost-reflective prices but there are concerns about customers understanding them and being able to react to price signals. As such a choice of tariffs is considered necessary. > Postage-stamp prices remain a preference (75% against locational prices) > Seasonal pricing remains unsupported (62% against) > A total of 28% of customers were very or quite willing to consider allowing some of their appliances to be controlled in return for cheaper network charges.	We are maintaining postage stamp consumption prices with no seasonal overlay. To progress the transition to cost-reflective pricing, our Draft Proposal removed the ability for customers to opt out to our Anytime flat-rate tariff following a new meter installation or meter change. This was cushioned by our proposal to provide customers who have a faulty meter replaced (and their retailers) with a one-year grace period before moving them to a cost-reflective tariff. This was requested by retailers in the deep dive session. Both these elements were tested in the Phase 4 engagement forums. We intend to trial dynamic prices for customers in relation to both consumption and exports in the 2024–29 period.

'I'd like to see it stay the same across the whole time. When it's hot in summer you already use a lot more electricity and are paying more so you're just going to cop it a lot more now I feel...'

Wagga Wagga participant, Phase 2

'I prefer for costs to stay the same for everybody. I'm not sure what sort of price differential would be imposed on people, but I think it's best to share it equally.'

Dubbo participant, Phase 2

| Two-way pricing | We reintroduced the idea of changing pricing structures to accommodate the expected growth in exporting technologies, like batteries, EVs and solar panels. Currently, customers without these technologies are paying a greater share of the associated network costs to facilitate their integration. In line with this, we proposed introducing two-way prices – those that charge for both consumption from and exports into the network. Customers and stakeholders were asked three key questions vital to the development of the export tariff transition strategy

> Do you prefer postage stamp or locational prices?
> What level of exports should be free of charge? (Three options were presented.)
> How should we transition to two-way prices?

We also asked whether customers thought that export prices were fair and would help solve some of our network challenges.

We learned

There is a real divide in the level of support for two-way prices. Many customers were generally unsupportive of the concept, whilst stakeholders with more knowledge of the sector were more supportive.

Most customers and stakeholders believe that two-way pricing will:
> improve fairness (62% strongly or slightly agree)
> help solve some of the network issues arising from integrating new technologies (56% strongly or slightly agree).
But the concept is also divisive as charging for exports seems to:
> go against customers' vision for the future network
> discourage renewables
> be shifting the goal posts for customers who have invested in energy resources. | > Given the divisive nature of export prices, we decided we would undertake a dedicated deep dive session with a smaller number of customers to revisit the export tariff transition strategy. See the *Phase 3: Deep dive* section. |

'I understand the need to do this. I think we're not grasping that it costs Essential Energy a lot of money to take the electricity back.'

Taree participant, Phase 2

'I'm finding it hard to reconcile the fact that we don't want renewable energy generation. Why would we not be wanting all that energy?'

Dubbo participant, Phase 2

Topic	What we presented, asked and heard	How this influenced the engagement plan, Draft Proposal (and final Proposal)
Two-way pricing continued	Education was seen as imperative to implementing two-way prices especially as: > There was a consensus that there is a lack of understanding as to why governments offer(ed) subsidies for solar investments and why feed-in-tariffs have consistently declined. > There are concerns that feed-in-tariffs will be eliminated entirely > People immediately assume the network export charge to be significant enough that they will need to invest in batteries or an EV, both of which are cost prohibitive to most customers > Given the cost of household batteries, there is an immediate expectation that the government should subsidise household or community batteries. > Customers see the electricity system as one whole 'thing' i.e. they don't see the distribution network as being separate to the generation, transmission or storage components, therefore they expect a holistic solution. One stakeholder suggested we partner with retailers to align the introduction of two-way prices with innovative retail offerings, like peer-to-peer trading, to help alleviate the negative perceptions. There was a customer preference to apply export prices on a postage stamp basis (69%). Stakeholders also supported this approach. We did not receive a clear level of support from either customers or stakeholders in relation to the free export limit: > For example, customer advocates thought the free export limit should be at the lower end of the scale – 1.5kW, and perhaps even lower, to ensure all customers realise the benefits of two-way pricing. Solar installers desired a higher level of free exports on the basis that renewable generation benefits everyone, so the additional network investment costs should be levied across all consumers. > At an SCC meeting on this topic, it was suggested that we use the inherent hosting capacity being derived as part of the future network business case to inform the free export level. We could then ask customers whether they are happy with this level or whether they want a higher level along with the associated cost. Despite the largely negative reception to two-way prices there was strong support to: > offered them on an opt in basis from 1 July 2024 (74%) > apply them to all customers from 1 July 2025 (60%)	> We decided that export prices will be applied on a postage stamp basis. > We decided to wait and use the findings from the future network business case to inform the free export level, and to use the Phase 4 engagement to check whether customers support this level or are prepared to pay more for a higher level. > We will need to invest in customer education in the lead-up to and throughout the 2024–29 period. In doing so we will: • need to make it clear that export prices are 'part of the toolbox' we are using to address increasing amounts of consumer and distributed energy resources • adopt positive language like 'variable time of feed-in' rather than negative terms like 'charge' and 'control' • encourage retailers to offer innovative offerings in the lead-up to the introduction of two-way prices, recognising that the final form of our two-way price is yet to be confirmed and will depend on the success of our tariff trials.

'I think democratically it's best to share the cost and have the same pricing for everyone.'

Ballina participant, Phase 2

'I would support a higher level of upgrade over time to maximise the degree of free export - say 5kW and above, even at slightly higher cost.'

New technology provider, Phase 2

'They'd need to communicate the change and then we'd need a product to support it.'

Retailer, Phase 2

'I think the sooner the better – we want to encourage batteries. This is one way to do that.'

Bega participant, Phase 2

Phase 2 survey results

We also ran a survey in Phase 2 to get customers views on some more minor Proposal topics. A total of 606 residential and 201 small business customers filled in the survey through an online research panel provider.

For residents, quotas were set on location, age, gender and solar penetration to ensure the sample reflected the Essential Energy network area. The surveys were live from 11 March to 24 March 2022.

The survey was also available through our Virtual Room. A further 240 respondents completed the survey this way, most of whom were forum participants.

The results were combined to indicate customers' overall perceptions. The residential panel survey and Virtual Room survey data was weighted to reflect the breakdown of location, age, gender and solar penetration across the Essential Energy network area.

Topic	What we presented, asked and heard	How this influenced the engagement plan or Draft Proposal (and final Proposal)
Customer portal – this question was also asked in a workshop with consumer advocates	We outlined the services we perform and described how we are working towards offering more online information and updates to customers regarding our services. We then asked customers to what extent they supported us creating an online portal where customers could log in to report issues and find updates on service areas (including vegetation, street lighting, new connections, power outages and meter reading). > 89% of customers supported or strongly supported the creation of a portal of some sort. > The majority indicated that reporting an outage and seeing updates on when power would be restored on the portal would be most useful. Reporting a maintenance issue with the network, reporting faulty streetlights/ seeing updates, as well as reporting vegetation that needs trimming/seeing updates, were also frequently selected as useful services. > There wasn't a clear level of support for either option, though small business customers preferred a web-based portal. > Most residential customers interact with Essential Energy about these kinds of issues less than once a year (53% - never or less than once a year). Conversely, small business customers interact more frequently - 29% stated that they interact with Essential Energy about these kinds of issues every few months and 17% at least once a month.	> We incorporated investment options around a customer portal into our customer service topic for the Phase 3 forums.
Environmental sustainability	We asked customers whether they thought we should enhance our sustainability and go above and beyond our compliance requirements. We also asked about their preferred pace for us to invest in EVs as replacements for our old fleet > 65% of respondents felt we should go beyond what is required in legislation. > The majority (42%) felt that Essential Energy should gradually replace our fleet with EVs over the next 10 to 20 years.	We incorporated EV adoption and a move to increase the sustainability of our depots by investing in solar panels in our Phase 3 investment options.
Public lighting	We asked whether customers supported us providing councils with the ability to 'plug in' additional technologies to streetlighting poles. > 82% of respondents supported this option.	Our existing inventory listing provides councils with this option and it will be retained in our 2024–29 inventory listing.
New connections	We asked whether we should fund a suitable portion of network upgrades related to new connections, where doing so would increase our revenue or improve the utilisation of our network. This would enable us to reduce charges for existing customers given that our costs will be shared across new loads and a greater number of users. > 72% of respondents agreed with this approach.	We incorporated a slightly higher level of network funding in our Draft Proposal, especially given the industry's transition to renewable energy. This was maintained for our final Proposal.

Topic	What we presented, asked and heard	How this influenced the engagement plan or Draft Proposal (and final Proposal)
Private assets	We asked whether the costs for inspecting and maintaining vegetation around private assets should be paid for by us or the private asset owner. There was support for us continuing to share the costs among all network users: > 46% supported us continuing to pay for inspections of private assets > 44% supported us continuing to pay to maintain vegetation around private assets.	Our (Draft Proposal and) final Proposal includes the continued cost recovery of these services from all network customers.
Testing and refining customers' priorities and future network vision (panel surveys only)	The *Identifying customers' priorities* section describes how we determined our customers' priorities to better target our Proposal and the survey rankings for these priorities. In terms of the future network vision: > 76% supported or strongly supported us investing in SAPS for customers in remote areas > 74% supported or strongly supported us investing in battery connections to the network. > 64% supported or strongly supported us managing the installation of EV charging stations to the network.	We put forward investment options for SAPS and dynamic assets and for preparing our network for future technologies, like EVs, in our Phase 3 forums.

Phase 3: Investment option forums

May to August 2022

Engagement activities

> Relaunch of our Virtual Room
> Eight SCC meetings
> Customer testing of forum materials
> Seven deliberative customer forums
> Group and in-depth discussions with customers and stakeholders
> Three PCC meetings

Outcome

Identification of customer preferences and the associated bill impacts of the investment options we put forward in the Draft Proposal

Findings can be found in *Attachment 4.07 Phase 3 Engagement Report*

Detailed engagement activities in this phase:

> Virtual drop in website containing information about the findings from Phase 2 and the issues to be covered for Phase 3
> Seven face-to-face deliberative forums with residents and small to medium businesses across the Essential Energy network area
> Six in-depth interviews with Aboriginal and Torres Strait Islander customers (ATSI)
> Six in-depth interviews with culturally and linguistically diverse customers who speak a language other than English at home (CALD)

> Six in-depth interviews with large business/commercial and industrial customers (C&Is)
> One group session with renewable developers
> One group session with new technology providers
> One group session with Local Councils
> One group session with consumer and industry advocates
> Stakeholder and Pricing Collaboration Collective meetings

Purpose

The purpose of this phase was to understand what pace of change customers and stakeholders would like to see take place between 2024 and 2029 and to determine customers' preferences in terms of:

> the range of investments we can undertake to deliver customers' priorities in alternative ways (for example, investing in SAPS where it makes economic sense)
> investment options we can use to improve network and community resilience and prepare for the future network.

The specific investment topics we engaged on were the transition to composite poles, putting powerlines underground (undergrounding), SAPS and microgrids, community resilience, real-time monitoring, dynamic assets, lowering Essential Energy's environmental impact and customer service. We also wanted to identify the priority areas that customers and stakeholders think it is most important to act on first.

A total of 446 customers and 31 business partners and stakeholders took part in the Phase 3 engagement.

In the first part of the forum presentation, we outlined how we recover our costs from customers and the range and quantum of network costs that customers pay for. Context was important here so we explained that energy prices will rise along with other price increases, including those from the NSW Roadmap and cost of living pressures.

What we heard and how it influenced our engagement plan and Draft Proposal (and final Proposal)

The following table clearly calls out where we heard diverging views from customers and/or stakeholders and, where applicable, attributes findings to different cohorts. Where, however, the views of customers and stakeholders were aligned, these are written under the one broad finding.

Topic	What we presented, asked and heard	How this influenced the Draft Proposal (and final Proposal)
Pace of change in relation to resilience	We explained the increasing frequency and intensity of extreme climate events and their effects on our network. We then described how we could plan and use alternative technologies to help communities and the network better withstand, and then more quickly recover from, such events. We also made it clear that there is no affordable fail-proof solution that can resist all climate events. From there, we described how a slower and faster pace of investment will play out from a customer perspective in terms of locations targeted, the time taken to strengthen the network, the speed of recovery, the bill impacts from asset investment and recovery cost perspectives and the number of customers who would benefit. We made it clear that extreme events would still occur under both fast and slow investment scenarios and that customers would still pay for the associated recovery costs. We heard > Some customers expressed real urgency for change while others had a more measured approach. > Disasters are unexpected and may not occur at the same rate as they have in previous years > The impact on customers bills needs to be considered in the current economic environment. > There were concerns that assets might be replaced before their end of life.	This activity was designed to get customers thinking about the trade-offs around the pace of change rather than draw out a particular preference. In this regard, the activity was successful and got them thinking about the pace of change, rather than the desired outcome.

'It's a calculated risk – you're hoping the current rate of disaster will stay what it is. If there [are] more natural disasters in the future, then we need to put them in faster.'

Ballina participant, Phase 3

'If we are talking about extreme weather events, faster and let's do it now. But what concerns me is that everything is changing. If we go faster is there an end or should we go slower and plan over time and take a more measured approach.'

Broken Hill participant, Phase 3

'Slower because at the end of the day, throwing a lot of money [at projects] that can't be implemented in a short period anyway [doesn't allow] you to take advantage of new products and technology.'

Wagga Wagga participant, Phase 3

'I would have thought that they would target oldest first then move to newer infrastructure. We don't want to be mindlessly replacing infrastructure that doesn't require it.'

Wagga Wagga participant, Phase 3

Topic	What we presented, asked and heard	How this influenced the Draft Proposal (and final Proposal)
Composite poles	We outlined the positive and negative aspects of composite poles along with four options to transition from timber to composite poles as part of our current replacement program and in higher-risk areas across our network. We explained that we would struggle to deliver the fastest transition option (Option D), in part because it would require the two composite pole manufacturers to upscale their operations. We heard Overall customers and stakeholders were supportive of a move to composite poles in higher risk areas. Their longer life, fire resistance and Australian manufacture were seen as advantages, though it was recognised that they would not necessarily withstand floods and landslides. There were also concerns with their end-of-life, given the technology for recycling them is still evolving. Option D (composite poles installed in all-high-risk areas by 2040) was preferred (67%). Option C was the next most preferred with 20% support – this option was favoured by commercial and industrial customers who more sceptical of a faster roll-out.	It will be impossible to deliver Option D straight away as composite pole manufactuers will need to upscale their operations. Our Draft Proposal contained an Option C++ that encompasses composite poles in the broader pole replacement program and 15,000 proactive installations in high-risk areas over the five years, rather than the 25,000 included in Option D. This is still 10,000 more proactive installations than Option C. We tested this change with customers in the Phase 4 forums.

'I would support them in high-risk areas as they have already [been] proven.'

Council participant, Phase 3

'There are lots of areas in the state at high risk and we want to make the network as safe as possible without impacting the bill. This amount of money is not a lot in the overall picture for people's safety.'

Advocate participant, Phase 3

'I think they're a great idea. They last a lot longer, cost more to produce, but the length of duration is a cost factor overall – resistibility is a great positive'
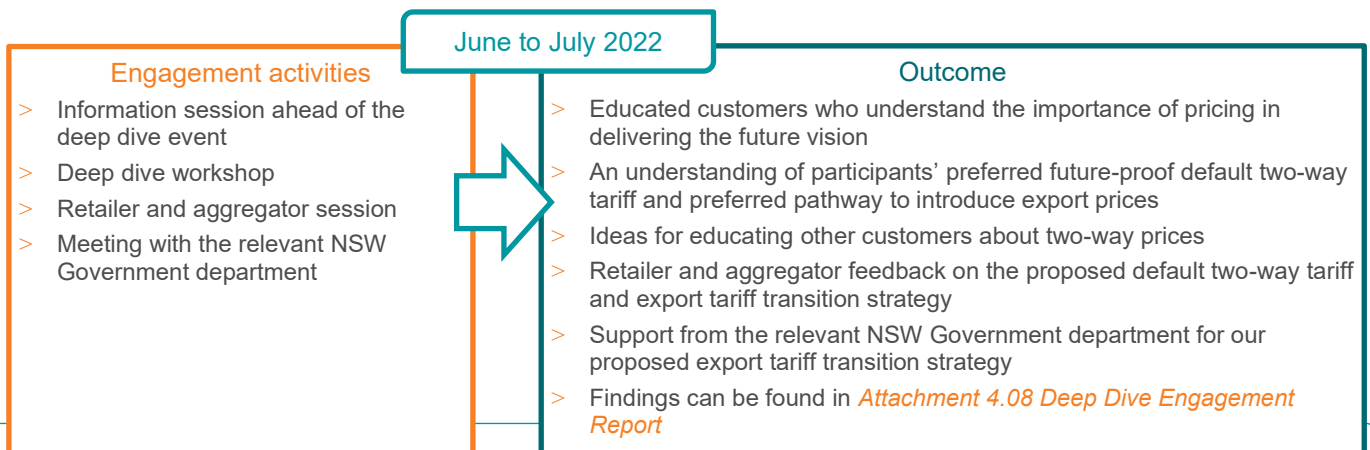
Dubbo participant, Phase 3

Topic	What we presented, asked and heard	How this influenced the Draft Proposal (and final Proposal)
Undergrounding	We outlined the pros and cons of an overhead versus underground network before presenting three options for underground investment in high-risk areas. **We heard** > Undergrounding high-risk areas of the network was appealing given the reduced risk of fires, lower maintenance costs and aesthetic appeal. > It was recognised that undergrounding was not necessarily a solution for flooding and that there would likely be some areas more suitable for composite poles and others for undergrounding. > 66% preferred adopting Option C, the fastest pace, though it was also recognised that the 40 km was too small to make a real difference. Option B was the next most preferred option at 17%, especially by councils who were concerned about cost increases.	Our Draft Proposal contained investment to deliver customers' preferred option – Option C. Continuing with this option was tested in the Phase 4 forums.

'I'd prefer to go with Option C, less deaths with cars hitting poles, and [the network] won't go down once trees fall down.'

Culturally and linguistically diverse participant, Phase 3

'It's horses for courses – in some areas, like Lismore, why would you bother undergrounding, but if you're in the Blue Mountains in a high bushfire area it makes sense.'

Taree participant, Phase 3

'We had landslips, which may affect underground network. The only real advantage for undergrounding is bushfires but we have flooding, which is more of a concern.'

Ballina participant, Phase 3

Topic	What we presented, asked and heard	How this influenced the Draft Proposal (and final Proposal)
SAPS and microgrids	We described the features of SAPS and microgrids and the role they could play in our network. We also played a short video of our prototype SAPS installation site before introducing three options to customers – all of which delivered cost savings. **We heard** > People could see these solutions benefitting downstream communities and customers through improved resilience and reliability > There were some concerns with the environmental impact of batteries given their relatively short-life. > Some participants questioned why something that delivered a bill saving was even part of the forum deliberation and expressed they would happily pay for the privilege to have a SAPS or microgrid solution. > Option C was the most preferred option with 91% support. Only some commercial and industrial customers were less enthusiastic about choosing this option as they did not see the benefits as significant and were concerned about maintenance costs.	We built customers' preferred option (Option C) into our Draft Proposal, though our final assessment identified just seven sites where microgrids stack-up over then potential 10 included in Option C. Continuing with this option was tested in the Phase 4 forums.

'It worries me about what happens once all the technology is old and no longer in use. Where does the wastage go?'

Dubbo participant, Phase 3

'Love it! Off-the-grid living. Reducing the costs and reducing maintenance, increasing reliability. Providing for our more remote customers and taking care of them.'

Ballina small business participant, Phase 3

'Option C – I think we should have an option E. It is exciting to see we are building resilience in the community. This needs to be bigger.'

Inverell small business participant, Phase 3

'I'd even choose Option C if I had to pay for it.'

Inverell participant, Phase 3

Topic	What we presented, asked and heard	How this influenced the Draft Proposal (and final Proposal)
Community resilience	We presented three options for investing in community resilience. **We heard** > Conversations reflected recent disasters such as the floods in the Lismore area and the reality of living through extensive power outages. > Discussions revealed a heightened awareness of the need for communities to be catered for when long outages occur and that customers were happy to support this investment, even though it may not benefit them. > Participants most valued and discussed the community hub (in Option C), with little emphasis placed on the cost. > Option C was the most preferred with 90% support. Again, some commercial and industrial customers favoured Option B as they questioned our ability to reach communities with portable generators and SAPS when access and a safe place to put them is inhibited.	We built customers' preferred option (Option C), into our Draft Proposal and tested this in our Phase 4 forums. 'Option C – altruistic approach – we're happy to pitch in to help everyone as communication is key. 7 days in the floods starts to add up.' *Taree participant, Phase 3*

'I'd pay more than 29 cents for a portable community hub, I'm very supportive of this. I'd pay $10 per day to have everything working properly. We had no internet in the floods, so we drove to Lennox Head to the community hub.'

Ballina participant, Phase 3

'I have been in a tiny community when we've been surrounded by fire when you can't get in or out or communicate with family, so I'd go for Option C.'

Inverell participant, Phase 3

Topic	What we presented, asked and heard	How this influenced the Draft Proposal (and final Proposal)
Real-time monitoring	We reintroduced the benefits of real-time monitoring and dynamic assets and their role in delivering customers' future vision. These were presented as one topic in the last forum. We then presented three options around real-time monitoring: do the same as we currently do; staged investment; and high and early investment. **We heard** > The strong consensus was for Option C (77% support), given the benefits of doing the work up-front. It was thought this would avoid higher costs down the track and deliver better customer outcomes as it would give us better visibility of when and where outages occur. > Customers could also see the benefits of real-time monitoring for maximising the value of their energy resources. > Whilst the costs presented were on the higher side compared to the other topics already addressed, it was seen to deliver commensurate value. > Commercial and industrial customers stressed the importance of staying ahead of the technology curve and being able to adopt new technologies as they become available. > Option B had 21% support and was seen by some as a more staged approach.	We included Option C in our Draft Proposal, however, the costs of a fully intergrated data management system are more than we had forecast. This increased the annual average bill by $1.74 compared to the $3.76 we presented in the Phase 3 forums. We tested whether customers were happy with this higher investment cost in the Phase 4 forums.

'If we do it now it will be much more cost effective than doing it after another 5 years.'

Broken Hill participant, Phase 3

'It's better to get in with a pre-emptive strike even though it's more expensive over the long run but in the short term I feel like it's the better option.'

Inverell participant, Phase 3

'What is the cost of an outage for a business? It can have a massive impact for some businesses. So, if you put the $16 increase in that context, it's not much at all.'

Wagga Wagga small business participant, Phase 3

Topic	What we presented, asked and heard	How this influenced the Draft Proposal (and final Proposal)
Dynamic assets	We introduced three dynamic asset options: > Maintain the status quo > mitigate existing problems and pre-empt some future ones > mitigate existing problems and pre-empt a larger number of future problems. We also asked customers to choose between three options to invest in solar panels and batteries at our zone substation and telecommunications sites – ranging from zero investment to investments at 25 sites and 50 sites respectively. We heard > The costs were seen as insignificant compared to the costs associated with real-time monitoring. > Customers believed Option C was the best value because it would enhance the network and improve power quality. Customers also thought it would support households with solar systems. > The back-up power at key sites would result in shorter outages for customers. > Option C was the most preferred with 87% support. It was considered to provide more certainty for customers in the future.	We included customers' preferred option (Option C) in our Draft Proposal and tested this in our Phase 4 forums. 'Option C is not that much of a bigger increase but you're getting a bigger outcome.' *Inverell participant, Phase 3* 'Shorter outages for a larger number of people is a real positive. Power quality will improve more under Option C as well.' *Ballina participant, Phase 3*

'Option C is going to improve things. Building capacity in the system. Power quality is going to improve for businesses. That would be good. Less impacts to business then.'

Broken Hill small business participant, Phase 3

'It's going to be more and more important as more and more people get solar.'

Dubbo participant, Phase 3

Topic	What we presented, asked and heard	How this influenced the Draft Proposal (and final Proposal)
Lowering our environmental impact	Two options regarding our environmental impact were presented. The first was to make no investment in this area, and the second was to invest in installing solar panels at depots and transitioning a portion of our fleet to EVs. The second option delivered a bill saving. We heard Option B was an obvious choice (93% support) given it would benefit the planet and deliver cost savings. This option was seen to have many advantages with no obvious downsides and was considered to be the only way forward.	We included customers' preferred option (Option B) in our Draft Proposal and tested this in our Phase 4 forums. 'It is a no brainer.' *Ballina small business participant, Phase 3* 'There is no reason to do anything else.' *Council participant, Phase 3*

'Option B is a no brainer, I think there's an ongoing benefit of this as the service cost for a vehicle with a combustion engine is really high compared to an electric vehicle where the cost is minimal.'

Aboriginal and Torres Strait Islander participant, Phase 3

Topic	What we presented, asked and heard	How this influenced the Draft Proposal (and final Proposal)
Customer service	We explained that customer data is currently stored across several systems, slowing down our call response times.	We included customers' preferred option (Option C) in our Draft Proposal and tested this in our Phase 4 forums.

We then outlined four options:

> continue with the status quo
> invest in a new customer interaction system
> invest in a new system and introduce a customer portal
> invest in a new system, introduce a customer portal and extend the portal to councils, retailers and more complex business structures.

We heard

> There were mixed views, with some keen for a portal and others happy with the current service level
> There was surprise that we did not already offer a customer portal
> Some commented that the extra functionality for councils, retailers and complex business structures should be paid for by those businesses
> Some thought that customer service improvements should be paid for by us, not our customers, and that the efficiencies of a new system would likely pay for itself.
> Option C was the preferred option with 50% support, followed by option B with 21% support.
> Councils were in favour of the extended portal, whilst commercial and industrial customers were happy with the basic portal, with phone contact remaining their preferred method of communication
> Customer advocates preferred Option B given the computer literacy required in Option C and the fact that most customers interact infrequently with Essential Energy

'If I was a small business owner I'd go D, but I'm not so they can pay for that.'
Dubbo participant, Phase 3

'Option B covers a new system without the big expense.'
Taree participant, Phase 3

'I do like the ability to go online …Option C gives you more flexibility and it's quicker.'
Aboriginal and Torres Strait Islander participant, Phase 3'

'Any improvements to Customer Service is good … Option D would be good. I am all for better systems. Let's go for a vast improvement.'
Council participant, Phase 3'

'An online portal is not easy to manage for the elderly and the Aboriginal Community.'
Advocate participant, Phase 3'

Topic	What we presented, asked and heard	How this influenced the Draft Proposal (and final Proposal)
Importance ranking	Finally, we asked customers to identify the three topics that they felt were most important for us to invest in for 2024–29. The rankings were:	This question was included for interest should customers be unwilling to accept bill increases. As we discovered in this phase, there was real customer appetite for additional expenditure where it was seen to provide value to customers.

> 69% SAPS and microgrids
> 53% community resilience
> 52% composite poles
> 40% environmental impact
> 36% real-time monitoring
> 17% dynamic assets
> 14% customer service
> 8% undergrounding

We retested this willingness to pay, in light of rising inflation and interest rates, in the Phase 4 forums.

These rankings were quite different to what we heard from culturally and linguistically diverse and Aboriginal and Torres Strait Islander participants, councils, renewable developers and customer advocates, who included environmental impact, real-time monitoring, dynamic assets and customer service in their top three priorities.

Phase 3: Deep dive

June to July 2022	
Engagement activities	**Outcome**
> Information session ahead of the deep dive event > Deep dive workshop > Retailer and aggregator session > Meeting with the relevant NSW Government department	> Educated customers who understand the importance of pricing in delivering the future vision > An understanding of participants' preferred future-proof default two-way tariff and preferred pathway to introduce export prices > Ideas for educating other customers about two-way prices > Retailer and aggregator feedback on the proposed default two-way tariff and export tariff transition strategy > Support from the relevant NSW Government department for our proposed export tariff transition strategy > Findings can be found in *Attachment 4.08 Deep Dive Engagement Report*

Detailed engagement activities in this phase:

> 90 minute Zoom information session with 21 customers held 5 days before the deep dive event. The slide pack was shared with participants for them to consider ahead of the workshop.
> Six hour deep dive workshop with 19 customers – unfortunately two participants were unable to attend the deep dive event
> We held a 90 minute session with retailers and aggregators to specifically capture their thoughts on our proposed export tariff transition strategy
> We held a two hour session with the relevant NSW government department to take them through our engagement process and how it informed our proposed export tariff transition strategy

Purpose

The purpose of this phase was to:

> delve more deeply into the role of pricing as a complement to other forms of investment
> discuss the pros and cons of our Time of Use and Sun Soaker consumption tariffs
> select a future-proof default tariff for the 2024–29 regulatory period
> confirm a preferred pace of transition and whether this should differ between customers who have already invested in energy resources and those who have not
> gather ideas for educating customers about two-way prices
> share our proposed two-way tariff and export tariff transition strategy with retailers, aggregators and the relevant NSW Government department

Information session ahead of the deep dive workshop

This session was designed to share key information and get customers thinking ahead of the deep dive session.

We revisited customers' future vision and how the forecast change in consumption over the next 15 years, especially with the uptake of new technologies, will impact our network.

We outlined our five network challenges, four of which can be assisted, at least in part, by pricing. We then spoke to each of the four pricing-related challenges, described considerations on the horizon that could further exacerbate the network challenge and explained the various solutions we could use to solve the challenge.

We revisited our current pricing challenges and our customer personas from the Phase 2 pricing forums and showed how the bill disparity between customers with and without energy resources would grow over the same 15-year period.

We then addressed the pros and cons of the five solutions we can use to solve our network challenges. The 2037 network bill for our two personas was shown for each solution.

Our network challenges

Our five proposed solutions were:

1. Build up the network
2. Limit exports – first in, first served
3. Invest in a smarter network to allow for dynamic management
4. Government subsidised household batteries
5. Pricing

Finally, we asked customers if they could think of any other solutions we had not considered that they thought should be in the mix. Microgrids were put forward as a proposed solution by a customer who lived in a town of 3,500 people with a high level of solar panel uptake.

Deep dive sessions

Initial support for the solutions

After briefly reintroducing our network challenges, we explained why the proposed microgrid solution put forward in the information session was not yet cost-effective for managing power quality alone. With batteries costing about $1 million dollars per megawatt (MW) hour, a 1 MW battery would last 15 to 30 minutes in a town of 3,500 people. We made it clear that, at this stage, significant reliability and resilience benefits are also required for a microgrid project to 'stack up'.

Customers were able to ask questions before the first discussion session, when the three smaller groups in the session were asked to rate their support for each solution.

What we heard

Participants understood our challenges. Some discussed who should be considered responsible given these issues could have been predicted years ago. Some considered a lack of government direction a likely cause.

Participants also recognised that increasing exports present network challenges.

> Participants were most interested in the smart network.
> There was initial support for battery subsidies.
> There was early acknowledgement that pricing is a successful driver.
> Limiting exports was the least popular scenario.
> Customer education was considered vital with Essential Energy considered best placed to take ownership or a strong guiding role.

'There has been a lack of government direction. They are now struggling against government policy. It has been very short term whereas we need to be looking 50 years ahead. It would be best if we had a whole of government approach. I feel for Essential Energy, they are in the middle.'

'I'm concerned about the macro, I'm not sure we've got the best solution from the start. Everyone thinks the answer to climate change is to put solar on, but now there's a panic which doesn't solve the original problem.'

'There's a lack of understanding about solar – education is not there and it's needed so much. It might be an area that doesn't require the biggest system and we're sold things that we don't need. Knowledge is a major challenge.'

Decision-making criteria

Next, we presented participants with:

> our customers' priorities, as developed through the forums
> the pricing principles developed through the tariff trials project and SCC

We then asked them to work on groups to develop their own decision-making criteria against which the solutions should be ranked.

What we heard

The three most popular decision-making criteria were fairness, investing in renewables and effectiveness.

Support following detailed explanation of the solutions

We then stepped through each of the five solutions in turn and outlined in more detail how each might help us solve our network challenges. Issues considered were:

> cost
> integration of renewable energy
> implications for customers on both a short and long-term basis
> the short and long-term bill impacts for customers with and without energy resources (mainly solar panels at present)
> whether different types of customers were paying their fair share of the network costs.

Small groups discussed each solution after it was presented and were asked to reconsider their support based on this deeper knowledge.

What we heard

> A smarter network remained the most popular solution.
> Limiting exports remained the least popular solution.
> The greatest change was a drop in the level of support for subsidised customer batteries.
> Building the network was not popular although support increased slightly after the detailed presentation.
> Pricing received more support after the detailed presentation, but only if equity could be guaranteed.
> Participants thought that education about tariffs could assist customers to positively change their energy use behaviour.

'It is critical that we switch this way.'

'It's not equitable, it's really blunt and I don't like the first in, first served aspect.'

Subsidised means I'm going to pay for this somewhere else.'

'It might solve reliability, but it will affect the affordability.'

'I'm supportive of pricing changes as long as there is equity, some don't have a choice in changing.'

Consumption pricing

We explained the electricity supply chain and the various components of a customer's bill to participants. We also explained that retailers hedge wholesale market risks and pay feed-in-tariffs to customers, not electricity distributors.

We briefly touched on the components that can comprise a tariff, highlighting that exports can now be included.

We also showed our network costs chart from the Phase 3 forums to highlight that while most of our costs are fixed, the fixed portion of our tariffs is small. This means that most of our costs are recovered through consumption charges.

We again showed how our various tariffs sit on the cost-reflectivity scale and explained that in the near future everyone will have a smart meter, Flat Rate tariffs will be phased out and that Essential Energy needs to select a future-proof default tariff.

We then showed participants our current default tariff (our three part Time of Use tariff) and our trial Sun Soaker charge and asked customers which one they preferred.

What we heard

The Sun Soaker was preferred because it was simple and participants believed it benefitted more people, particularly those who are at home during the day, as well as solar customers. This view was shared by customer advocates.

However, participants regarded the Time of Use tariff as optimal for people who leave the house early and can set their machines on a timer – although this assumes the customer is invested in saving money and energy.

Participants believed a choice of tariffs was necessary to allow customers to choose the best option for them. They also understood that tariffs need to be simple and easily understood to encourage customers to change their energy behaviour.

'I like the simplicity of the sun soaker – just two rates.'

'[I prefer] the Sun Soaker tariff as everyone benefits but people who are home during the day benefit more…'

'I like the Sun Soaker option as I see the value in the Aboriginal community – we have the highest rate of unemployment, so they are going to be able to take advantage of it.'

'I love the idea of having a choice – of the two.'

'When you don't give people a choice you upset them. You force them into something.'

Two-way pricing and the preferred default tariff

We presented our trial export price, highlighting that it is a trial charge only and that we will revisit its structure following the trial results in a year's time. We then showed a summary of what we heard about two-way prices from the Phase 2 pricing forum.

Participants were then shown two options for a future-proof default tariff: our three part Time of Use tariff and our Sun Soaker tariff, with our trial export price in both instances. We then explained indicative bill impacts for different types of customers moving from our Flat Rate Anytime tariff to either of these two tariffs. The groups then had another discussion to confirm their preferred two-way tariff.

What we heard

Participants were not put off by two-way pricing and there was minimal perception of solar customers being penalised by two-way pricing. Early adopters were thought to already be ahead financially.

The Sun Soaker two-way price was seen as the most favourable default tariff option, though customers still want a choice of tariffs so they can switch if they want to.

> 'It is interesting that people with no solar are getting the biggest benefit. As a solar customer I don't have a huge problem with it as I have recouped the money, I've invested so I can be altruistic for people who haven't been in the system for five years.'

> 'It's a no brainer, you'd go with Sun Soaker.'

Transition to two-way pricing

We outlined what we had heard from customers in Phase 2 and made it clear that we wanted to revisit the transition approach given how poorly charging for exports was perceived.

We presented three key dates on a timeline:

> 1 July 2024 – the date that customers can choose to opt in to two-way prices
> 1 July 2025 – the date when we can legally apply export prices to all customers under the NER
> 1 July 2028 – the date that our new billing system will be implemented, which will enable us to move large volumes of customers to two-way prices.

We also showed two customer types – those who had invested in energy resources and those who hadn't and asked the deep dive participants to consider how each should be transitioned to two-way prices.

What we heard

Participants supported a quick transition to minimise potential pain. That is, giving customers the ability to opt in from 1 July 2024 and applying two-way pricing to everyone else from 1 July 2025. These results were identical to the polling from the forums in Phase 2.

They also believed education could help avoid negative perceptions.

> 'If we take the example of the way the shops decided to go plastic bag free, rip the band aid off. Everyone moans for a while then they get used to it.'

> 'If we're trying to solve a significant problem for the network, let's do it sooner rather than later.'

Advocates supported a transition that gave clear signals and enough time for people to make decisions about potential investments.

Education and communication

Finally, we asked customers for their ideas about communicating with other customers about two-way pricing.

What we heard

Customers suggested ways that Essential Energy could actively improve and promote a greater understanding of the energy cycle, by:

> creating awareness of what is happening and why in the simplest possible terms and communicating this effectively

> providing facts, but reinforcing the potential solution with a degree of optimism

> showing the collective benefit and emphasizing a progressive, renewable-focused future

> downplaying the financial aspect

> educating customers about ways they can change their energy behaviour to reduce their bill

> Using case studies to reinforce positive messaging

> Ensuring communication is consistent

> Providing customers with the data they need to make informed decisions

> Including retailers and giving them a role in getting the message across

> Using multi-channel advertising

> Creating and promoting a campaign to create traction and brand recognition

'Explain the current network has not been designed to export power. I'm thinking your average person does not even understand so we need to go as basic as possible.'

'Showing yesterday and tomorrow – this is the solution, and this is where we are going, it is achievable.'

'Emphasising the benefit to others is the best way to sell it.'

'Explain how this is equitable and we are sharing.'

'Concentrating on the green aspect and that the network is helping the environment.'

'Not making the financials the key focus but the human and the environmental.'

'Send something with the bill, as effectively we only think of things when we see them on the bill.'

'People need a slogan – something catchy like between 10 and 3 get BIZZEE.'

Advocates also stressed the importance of communication and education on tariff changes, especially given the low energy literacy in the community. It was thought that better information could be provided on customers bills to alert them to the amount of energy that different appliances use and to highlight the different tariff options available and how they might be able to benefit from them.

'There is a lot of product differentiation in the area, but no one gets the information on their regular bills to tell them about the options. The better bills program may help, but that is going to take a while.'

'We need to educate people about what appliances use a lot of energy. So they don't need to get into the nitty gritty of the times of day and the costs.'

Retailers and aggregators discussion and survey

In this meeting, we took the group through our proposed default Sun Soaker two-way tariff and a proposed timeline for the transition to two-way prices. We also provided an update of our current and future trials.

What we heard in the meeting and subsequent survey responses

> Some retailers don't support cost-reflective network tariffs, whilst others do

> Introducing the Sun Soaker tariff may negate the need to introduce an export charge

> Network tariffs that align with wholesale market prices have a greater likelihood of being incorporated by retailers and aggregators

'The Sun Soaker tariff and the export tariff are attempting to resolve the same issue, why wouldn't you see whether the Sun Soaker tariff is able to achieve the desired results before introducing the more complex and punitive export tariff?'

- Our export price is considered to be overly complex:
  - The stepped demand charge for exports between 10am and 3pm will be difficult for customers to understand and customers are unlikely to be able to avoid it through behavioural change. They also consider it confusing because it mixes a demand charge with a cents per kWh (c/kWh) rebate
  - The stepped demand charge would be difficult (or impossible) to build in some retailers' billing systems, and cost recoupment would be dependent on the scale of tariff take-up

> 'It is far too complex for a residential customer and not something that can be easily explained by retailers.'

> 'We recommend that the time-varying kWh-based charges are applied instead of the kW-based charges.'

> 'In its proposed form our billing system could not accommodate this tariff.'

- Some consistency in the form of export charge between networks would be preferable, for example, all c/kWh charges even if they have different windows.
- There was a preference for networks to use standardised terms when establishing tariff structures and names
- Some retailers would prefer that new smart meter customers have a 12 month grace period before transitioning to a new tariff. One retailer is preparing a rule change to this effect. This would enable the customer and their retailer to better understand their consumption and help them select an appropriate retail product.

- There were mixed views as to whether customers should be able to opt out from the default tariff.

> 'No, there should be no opt-out option, if the tariff has been designed to appropriately reflect impact on the network.'

> 'The proposed Sun Soaker two-way tariff should be an opt-in choice only. If mandated an opt-out should be provided.'

- One retailer considered that we should recover more of our sunk costs through our fixed charges so that our variable tariff signals can be better seen by customers.
- When surveyed about how likely they are to offer a retail offer that incorporates two-way pricing over the next five years, those retailers who responded said that they were very likely.

> 'Very likely as long as it is simple for the customer to understand, easy for our retail systems to implement, or something that we can derive the benefit of via operation of a Virtual Power Plant.'

- They would like to see customers' export potential considered when the connection agreement is established, like South Australia has adopted.

> 'We strongly urge Essential Energy to seriously consider adopting the South Australian model that addresses the question of a customer's future export potential at the time when a connection agreement is entered into rather than through tariffs.'

- Customer education was considered very important. A tariff optimisation calculator for both retailers and customers would assist with making informed choices.

> 'An easy plug-in to their current network tariff to compare against the Sun Soaker trial.'

Meeting with NSW Government

In this meeting we summarised our pricing and deep dive engagement with customers and stakeholders, what we had heard, and how this had shaped our export tariff transition strategy. We also presented the results of our network hosting capacity which indicates that 1.5 kW is an appropriate level for the free export band.

The department was supportive of the fact that our proposed export price included a reward for evening exports. They also thought our proposed transition path would appropriately alleviate any potential backlash from existing solar customers.

> 'It's good to come out first as a benchmark. There are some carrots and some benefits in there to really help make it look like this is not at all bad, that it is not just charges. It seems like a good balance of getting it right.'

> 'A lot of correspondence complaints with the Minister were that customers want more time to pay off their solar, so that will be giving those customers another good six years or so.'

How what we heard shaped our Draft Proposal and Phase 4 engagement

The results of this session informed our Draft Proposal and Draft TSS that was published on 1 September 2022 which proposed:

> the Sun Soaker two-way as the proposed default 'future proof' tariff for the 2024–29 period

> that the final form of the Sun Soaker two-way charge (particularly the export price) will be informed by the results of our small customer tariff trials

> a staged move to two-way prices in line with our proposed export tariff transition strategy, which offers a slower transition to two-way prices for customers who have already invested in solar panels to provide a fair time for them to recover the costs of their investment

> removing the ability for customers to opt out from a cost-reflective price to a flat rate tariff

> including a one-year grace period for faulty meter changes suggested by retailers (though it is worth noting that some stakeholders do not agree with delaying cost-reflective network prices, especially as most customers benefit from moving to our two-way price)

We also included a session on potentially introducing flexible connection agreements as these were considered to be a low cost enabler to maximise customers' exports in our future network business case.
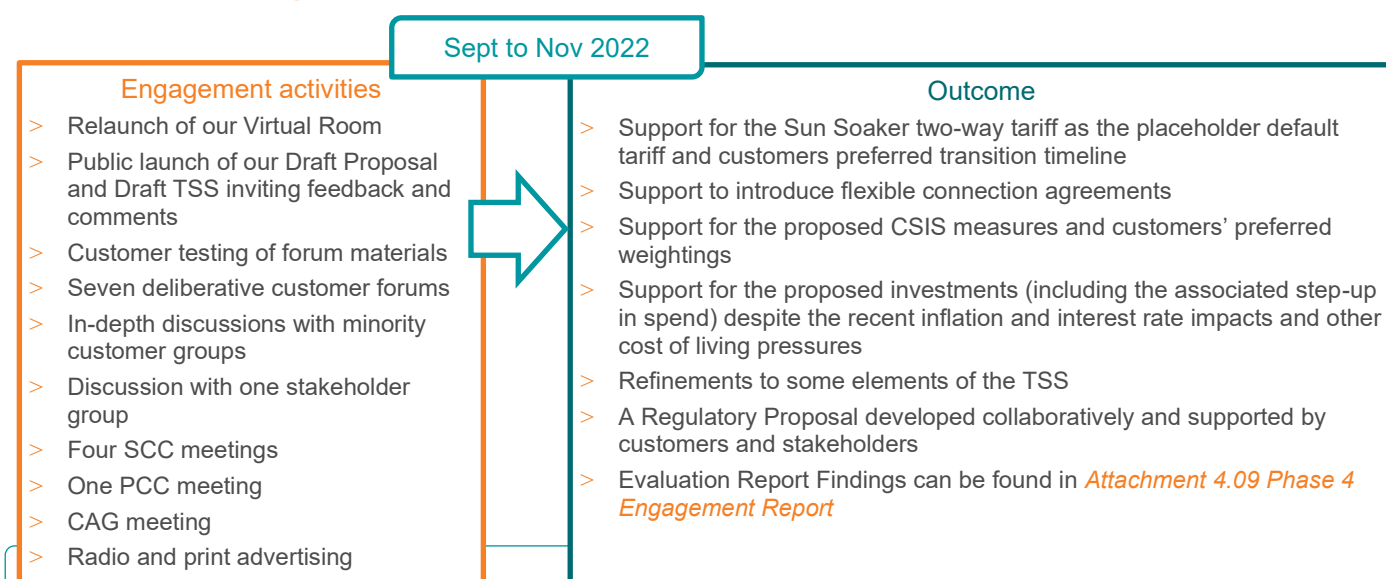
Each of these aspects were tested with customers in the Phase 4 forums

Education

In addition, we committed to undertaking customer education in our Draft Proposal in the lead up to and throughout 2024–29. We will also test some of the education ideas as part of our residential and small business customer education trial that is currently underway.

Phase 4: Testing the Draft Proposal

Sept to Nov 2022

Engagement activities

> Relaunch of our Virtual Room
> Public launch of our Draft Proposal and Draft TSS inviting feedback and comments
> Customer testing of forum materials
> Seven deliberative customer forums
> In-depth discussions with minority customer groups
> Discussion with one stakeholder group
> Four SCC meetings
> One PCC meeting
> CAG meeting
> Radio and print advertising

Outcome

> Support for the Sun Soaker two-way tariff as the placeholder default tariff and customers preferred transition timeline
> Support to introduce flexible connection agreements
> Support for the proposed CSIS measures and customers' preferred weightings
> Support for the proposed investments (including the associated step-up in spend) despite the recent inflation and interest rate impacts and other cost of living pressures
> Refinements to some elements of the TSS
> A Regulatory Proposal developed collaboratively and supported by customers and stakeholders
> Evaluation Report Findings can be found in *Attachment 4.09 Phase 4 Engagement Report*

Detailed engagement activities in this phase:

> Virtual drop in website containing information about the findings from Phase 3 and the issues to be covered for Phase 4
> Seven face-to-face deliberative forums with residents and small to medium businesses across the Essential Energy network area
> Six in-depth interviews with Aboriginal and Torres Strait Islander customers (ATSI)
> Six in-depth interviews with culturally and linguistically diverse customers who speak a language other than English at home (CALD)
> One group session with new technology providers
> Stakeholder and Pricing Collaboration Collective meetings

Purpose

The purpose of this phase was to test the proposed content of the Proposal and TSS with customers and stakeholders before submission to the AER in January 2023. The specific topics that were discussed and tested with customers and stakeholders were:

> Whether the investment options selected in Phase 3 should go ahead given the impact on network bills from cost of living pressures and the NSW Roadmap or whether the options needed to be revisited
> Whether there is support for the proposed CSIS measures and weightings
> Sharing our costs fairly between customers – specifically, whether there is support
  • to adopt the Sun Soaker two-way price as the placeholder residential and small business default tariff, pending the results of the tariff trials
  • for the proposed export tariff transition timeline
  • a grace period to apply before moving customers to the two-way price
  • for customers to be able to opt-out from a cost-reflective network tariff to a flat rate tariff
> Sharing the benefits of exports fairly between customers – specifically:
  • whether there is support to move to flexible connection agreements
  • initial thoughts on how exports should be shaved to the network's export capacity can be fairly shared

In total 358 individual customers took part in the Phase 4 engagement (residential and small to medium business customers) along with four new technology providers and the members of the SCC and PCC.

What we heard and how it influenced our final Proposal

The following table clearly calls out where we heard diverging views from customers and/or stakeholders and, where applicable, attributes findings to different cohorts. Where, however, the views of customers and stakeholders were aligned, these are written under the one broad finding.

Topic	What we presented, asked and heard	How this influenced our Proposal
Our Draft Proposal and changes since we last met	We outlined the key features of our Draft Proposal and how they aligned with customers' priorities. We then provided context to the Draft Proposal figures due to upward pressure on the cost of living – arising as a result of increasing oil and gas prices and supply chain costs arising from Russia's invasion of the Ukraine, the impending NSW Roadmap costs and increasing inflation and interest rates. We then explained how the inflation and interest rates impact our costs and that movements in these factors since we last met had already added $30 per year on average to each customers bill. We highlighted that this meant that even if we only did our 'must do' activities and didn't invest in any of the options we engaged on in Phase 3, that customers are already facing bills that are $30 higher.	This was to educate customers as to the effects that inflation and interest rates have on our costs and ultimately their bills. It provided early acknowledgment that bills were increasing by a larger amount than when we last met and that increasing cost of living pressures are an important consideration.
Sun Soaker two-way as the new default tariff	We provided a recap of the challenges facing the business and the possible solutions, including the findings from the deep dive session. Sharing our costs fairly between customers was also touched on and we presented our two personas and showed how the gap between the respective bills they pay today will grow over the next 15 years, especially if we continue to only recover our costs through consumption charges. We spoke to the desired features of a future proof default tariff and how the peak export and peak demand issues can be tackled from the opposite side. We then presented the two parts of the Sun Soaker two-way tariff and outlined that it was the preferred default tariff selected by the deep dive group. We showed the expect bill savings from moving to this two-way tariff from the flat rate tariff (and the table handouts included the savings moving from our Time of Use tariff). **What we heard** Table discussions tended to recognise that the Sun Soaker two-way tariff would assist in solving network issues and could defer or avoid significant network upgrades. Some saw the tariff as complicated, whilst others thought it was relatively straight forward.	This section was about sharing the results of the deep dive session with customers and giving customers a chance to reflect on how the Sun Soaker two-way tariff might work in practice.

> 'Less investment in the system is a positive.'
> *Bega participant, Phase 4*

> 'I think it's great. It's simple enough.'
> *Ballina participant, Phase 4*

> 'I'm struggling to get my head around it at the moment.'
> *Bega participant, Phase 4*

It was recognised that the tariff may not be fair as it was advantageous for some and disadvantageous for others and some also thought it would require expensive smart appliances.

> 'Business-wise, most would be using their energy during the day, so there's no need for us to change what we're doing.'
> *Dubbo small business participant, Phase 4*

> 'It doesn't seem fair to me. It's not made for families – all of our electricity is used in those peak times, if I want all those smart appliances, I need to have a better paying job.'
> *Ballina participant, Phase 4*

However, many participants believed they would be able to shift some of their electricity use and that consumers need to be more mindful of how and when they use electricity. Some, including solar installers and new technology providers, also liked that it gave people the chance to save money.

> 'I feel that you could program things in your house to come on in the middle of the day.'
> *Broken Hill participant, Phase 4*

> 'I am very supportive of the introduction of this, particularly … the rebate in the evening peaks. It does send the right signals to market.'
> *New technology provider, Phase 4*

> 'It would be good to have the opportunity to make a difference to my bill.'
> *Wagga Wagga participant, Phase 4*

> 'I can see the advantages for everyone with it. It will inspire the uptake of storage.'
> *New technology provider, Phase 4*

Topic	What we presented, asked and heard	How this influenced our Proposal

Sun Soaker two-way as the new default tariff

As in previous forums, education was seen as imperative for people to be able to comprehend the tariff, understand its impact on their bill and be able to take advantage of the new structure.

'They will need to educate people about different time periods so that they can take advantage of them.'

Broken Hill participant, Phase 4

'I get it. We just won't get as much back. Obviously not ideal when they're already reduced the rate we get for exporting to almost nothing.'

Wagga Wagga participant, Phase 4

'It solves a lot of equity issues – It's just a fairer system. People without solar before were subsidising those with it.'

Inverell participant, Phase 4

Stakeholders were generally supportive of Essential Energy moving to cost reflective pricing and in particular the Sun Soaker two-way tariff given that retailers are the direct recipients of cost reflective tariffs.

'The primary principle of cost reflectivity is an efficient reflection of costs at the retail level not all the way to the consumer.'

SCC or PCC member, Phase 4

'The future is in retailers working out what to do with network tariffs.'

SCC or PCC member, Phase 4

'It needs to be done in a way that puts the responsibility on retailers, that doesn't let them opt out on behalf of customers.'

SCC or PCC member, Phase 4

In terms of the polling results:

> 68% of participants agreed (supported or strongly supported) that the Sun Soaker two-way tariff would help solve some of the network challenges, with a further 22% neither agreeing or disagreeing.

> 49% of participants agreed that the Sun Soaker two-way tariff would help improve fairness, with a further 24% neither agreeing or disagreeing.

> 54% of participants agreed with the Sun Soaker two-way tariff becoming the new standard (default) tariff, with a further 27% neither agreeing or disagreeing.

Based on the conversations heard throughout our engagement journey, we see customer education as being imperative to introducing two-way tariffs, especially as the concept of fairness and charging for what people see as 'doing good' for the environment is heavily influenced by personal circumstances and prior policy decisions.

Given the strong stakeholder support and the fact there is strong recognition from customers that the tariff will assist with solving the network challenges, we believe that customers fairness concerns will be alleviated by retailers pricing these charges in different ways to suit different customer types.

Our Proposal has a commitment to undertake marketing and education leading into and throughout the 2024–29 regulatory period in relation to:

> current and emerging network challenges

> smart meters

> shopping around for a retail offer

> how two-way prices may influence customers' solar panel installation decisions

> opportunities arising from the results of the AEMC's metering review.

Our TSS adopts the Sun Soaker two-way tariff as the default tariff for new smart meter installations.

Free export limit

We presented a simple heat map of our network indicating which areas of our network can accommodate 1.5kW of exports from each customer on top of existing exports and those that can't. We explained that our network characteristics as well as existing customer exports are the main factors driving the outcome.

We then explained that we are proposing 1.5kW as our free export limit even though some areas will require investment to allow customers to export at this level. We did not have a discussion with customers about the free export level given we had been given clear direction by stakeholders to align the limit with our network's capabilities.

Our Proposal adopts 1.5kW as the free export limit on a postage stamp basis (in line with customers' preference from Phase 2).

Topic	What we presented, asked and heard	How this influenced our Proposal
Export tariff transition timeline for existing smart meter customers	We then presented our proposed transition timeline to move customers to two-way prices. We indicated that the proposed timeline was slower than customers and stakeholders wanted (based on the Phase 2 and deep dive findings), but that it gave existing exporting customers a fair time to recover the costs of their investments and that it was based around the timing of our new meter data and billing system which is fundamental to our ability to transition large amounts of customers across to the new tariff.	Given the mass transition of existing smart meter customers requires system capabilities that we currently do not have, we have maintained the 1 July 2028 change-over date. However, in line with our SCC's suggestion and with the support of the PCC, our TSS will include a contingent trigger to bring forward this date should billing capabilities be obtained earlier.

What we heard

Customers and stakeholders appreciated the opt-in ability, especially as many participants wanted to see a faster transition.

> 'Great that existing smart meter customers get to opt in straight away.'
> *Taree participant, Phase 4*

> 'People are going to be better off under this. If they can do it quicker than they're saying, then they should bring it in sooner.'
> *Wagga Wagga participant, Phase 4*

Customers with solar systems felt the timeline would allow time for solar owners to recoup more of their investment.

> 'Six years away doesn't seem so bad.'
> *Bega participant, Phase 4*

> 'It's a reasonable timeframe for those with solar to be making the most out of it before anything changes for them.'
> *Ballina small business participant, Phase 4*

And there was recognition that new solar customers would be aware of two-way charges before they purchase their system and could make an educated decision before investing.

> 'New solar customers will know what they're signing up for.'
> *Broken Hill participant, Phase 4*

When asked when the Sun Soaker two-way tariff should be introduced and given the option of 1 July 2026, 1July 2027 or the proposed 1 July 2028 date, 49% of customers preferred the 1 July 2026 date with only 30% supporting the proposed 1 July 2028 date.

Culturally and linguistically diverse customers and Aboriginal and Torres Strait Islander customers generally supported the staggered timeline, with some suggesting a faster transition, so long as education helped people to understand the change.

> 'I like that I can opt in, but I also have time to get used to it. People with newer systems would be aware of what's going on, they have made an informed decision.'
> *Aboriginal and/or Torres Strait Islander participant, Phase 4*

> 'There is a lot of information and customers would need education on how to best use the Sun Soaker.'
> *Culturally and linguistically diverse participant, Phase 4*

New technology providers and solar installers were supportive of the transition timeframe to the Sun Soaker two-way with one member even wanting the opt-in to be brought in earlier. There were some concerns about how the tariff would impact larger exporting and embedded network customers and we later calculated and shared individual impacts for specific customers with some of the group. There was also a suggestion to move controlled load to the middle of the day, which the business is looking to do.

Our SCC and PCC maintained their stance that two-way tariffs should be implemented for all customers as soon as possible.

Topic	What we presented, asked and heard	How this influenced our Proposal
Export tariff transition timeline and grace period	As part of the transition discussion, we outlined that we were proposing a one year grace period before moving customers who receive a smart meter as a replacement for a faulty meter across to the Sun Soaker two-way tariff. We indicated we were particularly keen for their thoughts on this aspect given most customers are better off on the Sun Soaker two-way tariff.	Using the balancing principles we developed with our PCC we are not proposing any grace period. This is because:

As part of the transition discussion, we outlined that we were proposing a one year grace period before moving customers who receive a smart meter as a replacement for a faulty meter across to the Sun Soaker two-way tariff. We indicated we were particularly keen for their thoughts on this aspect given most customers are better off on the Sun Soaker two-way tariff.

Using the balancing principles we developed with our PCC we are not proposing any grace period. This is because:

> it is not consistent with customers' and stakeholders' preference for a faster transition to two-way prices

What we heard

68% of customers supported the one year grace period, with some seeing an advantage in being able to analyse their usage before being transferred across, however the table discussions did not reveal a strong level of commitment towards either supporting or opposing the proposed delay. Rather customers seemed to be more concerned that customers with faulty meter replacements should be allowed to opt into the Sun Soaker two-way tariff earlier if they wanted to.

> deferring the application is not in customers' best interests given the significant administrative burden and the fact that:

> • most residential and small business customers are better off on our Sun Soaker two-way tariff

> • For low voltage large busines customers, two-way tariffs will not be implemented until we have the required billing capability, giving these customers time to understand the impacts. In addition, these tariffs will be made revenue nuetral in the first year.

'It seems dragged out. Maybe allow for a year but let people know they can opt in before the year expires.'

Ballina participant, Phase 4

'I don't think it's fair that they have to wait a year when they could be benefiting before that.'

Ballina small business participant, Phase 4

Some culturally and linguistically diverse and Aboriginal and Torres Strait Islander customers supported the grace period while others did not.

'I'm in two minds …if everyone eventually moves to this tariff, does it really make a difference?'

Aboriginal and/or Torres Strait Islander participant, Phase 4

'… just say here's your new connection and a way better tariff that comes with it.'

Culturally and linguistically diverse participant, Phase 4

> we are not proposing default demand charges for residential and small busines customers, so the retail concern falls away

> retailers can implement a grace period for customers themselves

> solar installers may inadvertently model their propositions on the grace period tariff which could undermine customers' investments.

> If the AEMC implements such a policy in its metering contestability review, Essential Energy will comply with any associated rule changes.

Red/Lumo Energy's submission requested a grace period also be applied to retailer led smart meter roll-outs, however subsequent discussions with our PCC indicated that this is only important when customers are being defaulted to demand based network tariffs, not Time of Use tariffs.

Our SCC and PCC maintained their stance that two-way network tariffs should be applied to retailers immediately but that retailers can apply a grace period for customer's themselves i.e. before moving a customer to cost-reflective retail tariff.

We 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, but 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.

Topic	What we presented, asked and heard	How this influenced our Proposal
Removing ability to opt-out to a flat rate tariff	We then outlined our proposed change to remove the ability for residential and small business customers to opt out to a flat rate tariff on the basis that this aligns with the broad support to move to more cost-reflective charges. We also made it clear that it is retail tariffs that customers sign up to and retailers will likely offer flat rate tariffs for sometime. We showed how the flat rate and Sun Soaker consumption tariff rates compare across the day and the network costs of a few common household appliances that customers use, and how these change depending on the tariff and the time of day in which the appliance runs. **What we heard** Customers do like choice – even if they don't want it themselves, they can see that different tariffs suit different customer cohorts. 'It's good to allow people choice. Choice is key.' *Wagga Wagga participant, Phase 4* 'People should have the choice – it's their choice to save money or keep doing what they're doing.' *Dubbo participant, Phase 4* 'People should still have a choice, even if it's more expensive.' *Culturally and linguistically diverse participant, Phase 4* Even so, there was a level of support for phasing out the flat rate tariff, especially once the cost savings were known and so long as people understand why tariffs need to change and how to manage this change. 'People aren't going to want to go to the flat rate if they see the benefits of the Sun Soaker.' *Ballina participant, Phase 4* 'It's not going to be a big deal phasing it out.' *Taree participant, Phase 4* 'Well, if it's cheaper then maybe it's OK. It goes back to education, telling people and helping them to change their behaviour.' *Aboriginal and/or Torres Strait Islander participant, Phase 4* A flat rate tariff is considered easy for people to understand. Many customers wanted to know how a different tariff would impact them and some also expressed a desire to see the outcomes of the tariff trials before making a final decision. 56% of customers supported maintaining a flat rate tariff. 32% supported phasing it out and 12% were uncertain. Our SCC and PCC maintained their stance that customer choice occurs at the retail level, not the network level. They support retailers receiving cost-reflective network tariffs and choosing how to package these into retail products for customers. 'Give retailers a single cost reflective network tariff and let them work out how to smear it amongst their customers.' *SCC or PCC member, Phase 4*	Again, using the balancing principles we agreed with the PCC, 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. Instead, 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 export tariff transition strategy, 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 processcapabilities.

Topic	What we presented, asked and heard	How this influenced our Proposal
Flexible connection agreements	We explained that the network will run out of space for new export connections if we don't change how we connect customers now. We outlined two options as to how this could be managed: 1. Implement lower export limits for all customers 2. Implement flexible connection agreements We outlined the pros and cons of each option and showed how these would play out for two exporting personas. **What we heard** Customers supported flexible connection agreements for new exporting customers as they understood that the export capacity of the network was limited and it would prevent greater amounts of renewable energy from being wasted.	The business will look to implement flexible connection agreements for new exporting installations within the next year. They are a low cost solution that will work with our smarter network invesment and are a key assumption of the future network business case. We will work with solar and new technology installers to ensure that they make this change clear to customers and encourage self-consumption where it makes sense.

'… if they are saying that it is causing too many issues then being able to reduce people would resolve the issues.'

Wagga Wagga participant, Phase 4

'Flexible connection agreements are a good idea because it means that the electricity is going back into the grid.'

Bega participant, Phase 4

'I support flexible connections because it's a fairer option and better for customers than lowering export limits.'

Culturally and linguistically diverse participant, Phase 4

'It has got to be the flexible (one) it can't be the fixed one – that is not fair for anyone. So, it is how you implement it.'

New technology provider or solar installer, Phase 4

The fact that limits would only occur for a few days a year was seen as acceptable, though it was thought this may creep up in time given the impacts of climate change.

'It's only a handful of days. It's a lot of conversation about a small amount of money.'

Inverell participant, Phase 4

'Climate change could change those 10 days into much bigger numbers.'

Ballina participant, Phase 4

Most participants were accepting that the agreements would only apply to new exporting connections, though education before customers invested was seen as imperative. Others, however, thought it was unfair that existing customers be allowed to export without any limitations.

'…I don't think it's fair that only new customers get curtailed. Agreements have changed in the past ... so, they could apply it across the board.'

Taree participant, Phase 4

'People need to know that this is going to be in place before they put on solar. Then they can look at the size of the system they put in.'

Ballina participant, Phase 4

'…why should those who have already invested in solar be able to go on without the new changes applying.'

Wagga Wagga participant, Phase 4

'Need a strong education piece so that people self-consume as much as they can … this is a fundamental behaviour change.'

SCC or PCC member, Phase 4

As further evidence of the need for customer education, a few customers also felt that Essential Energy was putting the problem back onto customers rather than just investing to increase the export capacity of the network. This was the same sentiment heard from many of the deep dive participants ahead of their education session.

Overall, there was 77% support for introducing flexible connection agreements.

Topic	What we presented, asked and heard	How this influenced our Proposal
Applying flexible connection agreements	We then showed three options as to how flexible limits could be applied and asked customers and stakeholders what they thought was fairest and whether they had any other ideas on how they could operate. **What we heard** Overall, it was thought that larger exporters should be penalised more than smaller exporters as they are contributing more to the problem. Reducing customers by the same percentage was seen as simpler (43% support), but both this option and reducing large exporters first were seen as appropriate (40% support).	This question was not intended to inform the Proposal. The details of how export shaving should operate fairly in practice will be considered with the new Essential Energy People's Panel in the future as the capabilities of the technologies and systems becomes known.

'Option 1 is quite unfair in that smaller users get punished for having a smaller system.'

Inverell small business participant, Phase 4

'It makes sense to target those who are putting strain on the network and a percentage is better.'

Wagga Wagga participant, Phase 4

'I am a large solar customer so I would go Option 3 as I benefit most of the time so I should give back.'

Taree participant, Phase 4

Again, customer education was highlighted as being necessary given the unregulated nature of the solar industry.

'There needs to be an independent body that educates and gives the correct information to people looking at solar. They all tell you something different and use jargon/terms we don't understand.'

Inverell participant, Phase 4

'Some sort of programme to encourage self-consumption where there are too many exports.'

Aboriginal and/or Torres Strait Islander participant, Phase 4

'Everyone needs to be encouraged to get the right sized system.'

Bega participant, Phase 4

'People should be putting (solar systems) in to "save money not to make money."'

Wagga Wagga participant, Phase 4

New technology providers and solar installers expected a dynamic implementation and suggested we learn from other states that were ahead of us. It was also suggested that there may need to be different approaches for households compared to virtual power plants and larger exporters.

Topic	What we presented, asked and heard	How this influenced our Proposal
CSIS proposed measures and weightings	We outlined our CSIS journey since we last engaged with customers on customer service measures back in Phase 1. We explained how we had landed on the three proposed measures and weightings and how all the measures were inter-related and would work together to encourage us to improve our customer service.	Our proposed CSIS places 50% weighting on the estimated time to restore for unplanned outages, 20% weighting on the 'easy to deal with' measure and 30% weighting on the complaints measure.

What we heard

There was support for the proposed customer service measures (81%) and acknowledgement that whilst unplanned outages are a key customer touchpoint the accuracy of any estimated time to restore was key.

You can read more detail about the CSIS development in:

- *What matters to our customers*
- *Developing the proposed customer service incentive scheme metrics*

'They match what we discussed and they make sense.'
Ballina participant, Phase 4

'If I had a complaint, I'd like it to be solved quickly.'
Ballina participant, Phase 4

'We aren't just dealing with them for outages, so being easy to deal with is important too.'
Wagga Wagga participant, Phase 4

'If it is inaccurate, then the ETR is useless.'
Bega small business participant, Phase 4

Most participants thought that external factors outside of our control, such as extreme weather events, should be excepted from the measures.

Overall, the proposed weightings weren't considered to be too far off the mark. There was agreement that unplanned outages were the most important and many felt that complaints should have a higher weighting.

'Outages are obviously the most important.'
Inverell small business participant, Phase 4

'I think their average time to resolve customer complaints could be better.'
Dubbo participant, Phase 4

'I haven't found a big issue with them being difficult to deal with.'
Inverell small business participant, Phase 4

	Essential Energy proposed weighting	Customers' preferred weighting
Providing an estimated time to restore unplanned outages and updates	50%	50%
How easy it was to deal with us	25%	21%
Average time to resolve customer complaints	25%	29%

Some culturally and linguistically diverse and Aboriginal and Torres Strait Islander customers thought the estimated time to restore weighting could be higher and the easy to deal with measure lower, given customers prefer using the web than the call centre.

Topic	What we presented, asked and heard	How this influenced our Proposal
Investment options in the face of cost-of-living pressures	We ran through the Phase 3 engagement findings for each investment option and explained how these had been incorporated into the Draft Proposal. We made it clear that all of customers' preferred options had been included except for: > a lower proactive composite pole replacement number to allow composite pole manufacturers time to upscale their operations > the number of identified microgrid sites being seven rather than the possible 10 included in the Phase 3 option We also explained that our smarter network expenditure had ended up slightly higher than indicated in the Phase 3 options and the benefits of the increased spend. With these changes, we showed that the bill increase to customers was now over a dollar higher than they been prepared to pay last time and whether they were happy with this or wanted to revisit the options. We than added further context by showing the extra bill impacts of higher inflation and interest rates on this additional spend, along with the underlying average annual increases on a customer bill, that had been explained at the beginning of the session.	Our Proposal contains the Phase 3 customer supported investment options but with two minor reductions: > The number of proactive composite pole replacements in high-risk areas has been reduced from about 15,000 to about 11,000 to align with the findings of our recently completed climate change modelling > The number of microgrid sites has been reduced from 7 to 6 as one site will be installed in this regulatory period.

What we heard

Despite the projected increases in interest rates and inflation, most participants still supported the inclusion of the optional investments discussed in Phase 3. Most felt that that these investments were important and needed to occur, despite the cost increase.

> 'The investments were important to increase resilience. They can't help inflation and interest rate rises.'
>
> *Broken Hill participant, Phase 4*

> 'I would be happy to spend a few extra dollars to save the environment and keep those options.'
>
> *Culturally and linguistically diverse participant, Phase 4*

> 'I think most people would think the cost wasn't high if they knew what they were getting for that cost.'
>
> *Inverell participant, Phase 4*

This was particularly the case with the increased smarter networks spend.

> 'I'm happy with the amount increasing in the smarter network's component. This will improve the speed of identifying and rectifying issues and communication.'
>
> *Wagga Wagga participant, Phase 4*

> 'It matches our energy future – we are putting money into what is needed and wanted for the network to move towards that.'
>
> *Ballina participant, Phase 4*

> 'There will be a payoff to having a better, smarter system.'
>
> *Bega participant, Phase 4*

A minority did voice some concerns, particularly for pensioners and other vulnerable customers and it was acknowledged that this was just the network share of an average customer's bill.

> 'While for us we are saying it is ok, for someone else it might be major.'
>
> *Wagga Wagga participant, Phase 4*

> 'This is just the Essential Energy costs. Four percent of interest is not even worth talking about, but I think the whole increase would be a lot more a year.'
>
> *Bega participant, Phase 4*

Residential customers identified that some of the bill increase would be offset by moving to the Sun Soaker two-way tariff.

> 'If you put it in combination with the tariff which shows we will save money it is not going to matter.'
>
> *Bega participant, Phase 4*

Topic	What we presented, asked and heard	How this influenced our Proposal

Participants understood the reason for the reduction in proactive composite pole replacements (upscale in manufacturing), but they would like to see additional composite pole investment in the future.

> 'With composite poles, in this area in particular where you need it, we are behind the eight ball.'
>
> *Bega participant, Phase 4*

> 'Composite poles are awesome – I wish we had more companies that make them.'
>
> *Taree participant, Phase 4*

Overall, there was 86% support to proceed with the proposed investment options.

> 'An increase in prices is never ideal but I think Essential Energy is trying to get the maximum benefit for everyone.'
>
> *Culturally and linguistically diverse participant, Phase 4*

Customers' support for the Proposal and assessment of our engagement

At the end of each Phase 4 forum, Woolcott Research & Engagement facilitated table discussions asking participants:

> Their overall level of support for the proposal

> Whether or not the content reflected customers' priorities and preferences

> To provide comments and feedback regarding the overall engagement program – whether we had collaborated with them, had taken their views into account and they understood the reasons for certain decision-making.

A summary of the findings of this session is provided on *page 6 Our Proposal and TSS represent the views of our customers and stakeholders*.

Written submissions received on the Draft Proposal

We received submissions from the following people/entities. The key points raised and how these have been considered in the Proposal are outlined in the table below.

Person/Entity	Summary of feedback and/or concerns	How this has been addressed or considered in the Proposal
�——	Agreed that the Draft Proposal seemed to cover the issues discussed in stakeholder meetings.	No changes required.
Central NSW Joint organisation	Had some queries in relation to the Sun Soaker two-way tariff including whether it is applicable to large customer sites, asked for clarification the proposed export band prices and the method for calculating export charges.	Answers to these queries were provided.
Southern Lights (on behalf of Central NSW Joint organisation)	Raised concerns that public lighting engagement had occurred before operating and capital cost modelling was completed	We have since conducted a further phase of engagement with councils in relation to public lighting and further engagement will continue in 2023.
�——	Believes we are charging excessive prices to customers to upgrade the network when they choose to sell up and develop their farms.	Customers must engage third parties to build any new assets for their connection. Essential Energy only connects those new assets to the existing network. Where the new connection requires upgrades to the existing network, our Connections Policy outlines which party pays what share of the costs. Our Connections Policy works to ensure that our existing network customers only pay a share of the connection costs that aligns with the benefits they will receive from the new connection.
	Essential Energy has relabelled network assets as private assets that must now be replaced by customers	Essential Energy is responsible for maintaining and repairing the electricity network to the customer connection point located on private land, which is defined in the Service and Installation Rules of NSW and reflects provisions under the Electricity Supply Act 1995 (NSW). Landholders are responsible for network maintenance beyond this point (as, similarly, all owners of home and business premises are responsible for internal wiring maintenance). To delineate ownership, we are ensuring that all power poles on a customer's property are appropriately labelled, and we are now pro-actively advising landowners with private assets located on their properties about their ownership responsibilities. Our website offers FAQs, examples of privately-owned network asset configurations, common overhead power pole and powerline defects and indicative rectification costs. It's also worth noting that, previously, Essential Energy may have undertaken private asset defect rectification work at its own expense to manage potential safety risks. However, since the Australian Energy Regulator's Ring Fencing Guidelines were introduced in January 2018, we have been precluded from undertaking this type of rectification work at no cost to private network asset owners (unless, in rare circumstances, exceptions apply).

Person/Entity	Summary of feedback and/or concerns	How this has been addressed or considered in the Proposal
▪▪▪▪	> Wants to see evidence that we have investigated a range of options to manage the impacts of distributed solar exports before introducing export limits and charges for exports. Believes a better explanation of the implications and alternatives is needed. > Believes that charges for exports greater than 3kW per month seems unreasonably restrictive when the average residential solar installation is currently around 6.5kW.	This evidence and detail was not included in the Draft Proposal, however the details can be found in: > *Chapter 07 A network fit for the future* in our Proposal outlines our proposed investments and how these have been derived from the Future Network Business Case and the associated Export Hosting analysis. > Our Tariff Structure Explanatory Statement, in particular *Chapter 4 Two-way pricing proposals*
▪▪▪▪	Supports the proposal to introduce a Time of Use Sun Soaker network tariff and encourages us to let retailers know about it early so they can structure their tariffs to reflect ours.	We have maintained the Sun Soaker two-way tariff as our default tariff and existing smart meter customers can opt in to the charge from 1 July 2024. Our annual sub-threshold tariff notification letter to the AER and our TSS and the primary means of alerting retailers of our potential and impending tariffs.
▪▪▪▪	Supports the Sun Soaker tariff and looks forward to its implementation to charge his electric car.	We have maintained the Sun Soaker two-way tariff as our default tariff and existing smart meter customers can opt in to the charge from 1 July 2024.
Red Energy & Lumo Energy	> Welcome customer choice and consistent pricing signals in our Draft TSS.	
	> Education is imperative for customers to take-up new tariffs and governments have a role to play in this education.	We have committed to education and marketing leading into 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 prices and how this may impact customers' solar panel installation decisions. In addition, we will encourage the NSW Government to create and run an education campaign around time of use tariffs on behalf of industry (networks and retailers).
	> The export tariff should be offered as opt-in and structured the same as other NSW networks. > To date, retailer investment to build more complex tariffs has not delivered any value as very few customers take them up.	We do not intend to offer export charges on an opt in basis as (with education) both customers and stakeholders have supported their introduction and want them applied earlier than we are currently proposing. The final form of our export charge will be informed by the results of our tariff trials, including the lived experience of customers. We appreciate the benefits of common structures for retailers and this will also be considered in our trial assessment next year.
	> Also want a 12 month grace period before applying a cost-reflective network tariff to customers who are part of a retailer led smart meter roll-out i.e. expand the grace period to include these customers as well as faulty meter replacements	We have removed the application of a grace period for residential and small business customers given the administrative costs it would entail and the fact that most customers are better off on our Sun Soaker two-way tariff. We have been told by retailers that our Sun Soaker consumption tariff is an attractive tariff for them as it addresses both network and wholesale market issues. We have also been told by a retailer that the bill shock concern only arises when customers are moved to demand charges, not Time of Use charges like our Sun Soaker two-way tariff. Of course, retailers are welcome to apply their own grace period if they so choose.

Person/Entity	Summary of feedback and/or concerns	How this has been addressed or considered in the Proposal
PIAC	Support cost reflective network tariffs and want us to increase the pace to transition to such tariffs, while providing more clearly.	We have included a contingent trigger in the TSS to allow for a faster transition if our billing capabilities are implemented earlier than planned.
	Retailers are the intended target for network tariffs, not customers, so network tariffs should be cost reflective with customer choice offered at the retail level	We agree and this is supported by our proposal to not apply a grace period for faulty meter replacements or retailer led smart meter installations.
	Education on cost-reflective tariffs and information on how retail tariff choice can be exercised are necessary	We are proposing a significant education piece as described above.
	Make it clear whether our free export limit and charges are based on: > a cost reflective basis i.e. can export 1.5kW at any point in time, before being charged (PIAC's preference), or > a volumetric basis	Our export charges are based on the maximum kilowatts exported in a half hour window between 10am and 3pm in the month. In this regard, it is cost-reflective and a true capacity charge. These details are outlined in the explanatory notes to our pricing list.
	PIAC supports export curtailments that first 'equalise' larger connections before implementing a fixed or proportionate curtailment to all systems.	This was also supported by customers and stakeholders. The exact workings of this will be established in conjunction with our People's Panel as the system and technology capabilities become known.
	The Sun Soaker tariff contains a single extended evening peak that is not apparent in other tariffs and may not be appropriate. Want to see justification to support a consistent 7-hour peak window for summer and winter.	The simplified two charging windows of the Sun Soaker trial tariff was requested by customers and stakeholders who participated in the design of the trials. We will use the tariff trials data and lived experience results to inform whether three windows are more appropriate. In terms of seasonality, our customers do not support the additional complexity of seasonal tariffs. In addition, parts of our network experience summer peaks, whilst others experience winter peaks. You can read more about this in our Tariff Structure Explanatory Statement.
	See a non-dynamic Sun Soaker tariff as potentially unsustainable if the 'sweet spot' between the price differential of the peak and off-peak windows is not achieved. It is important that the price differential: > is sufficient enough that it is passed through by retailers > but not so great, that it unintentionally drives up consumption over the middle of the day to a point where the potential benefits to customers are offset by increases in costs in other parts of the electricity supply chain	We do not consider increasing wholesale prices a potential risk given the size and diversity of the weather across the National Electricity Market. We also believe customers only have relatively small discretionary loads that can be moved into the middle of the day. We are unable to control the prices that retailers offer, but our discussions with retailers as part of the tariff trials project indicate that the Sun Soaker is a tariff that suits the needs of both retailers and networks, so we expect retailers to offer the Sun Soaker product to customers. We have also been told by some PCC members that our price differential looks about right. We will use the tariff trials data to determine the potential scale of a forecast increase in consumption over the 10am to 3pm window and have included contingent wording in our TSS should we identify a need to adjust our charging windows. We do intend to move to dynamic prices in the future, with such trials planned for the 2024–29 regulatory period.
	Concerns were also raised in the relation to the recovery of the NSW Roadmap costs and the NSW Government's decision to discount network tariffs for hydrogen producers.	These are NSW Government policy decisions that are outside of our control and largely unrelated to the Regulatory Proposal process.

Final PCC meeting

We did hold a dedicated meeting with the PCC in this Phase to 'tie up the loose ends' in the TSS. We had divergent views to balance and consider, we had some questions to ask around the possible inclusion of contingent triggers in the TSS and we wanted to know whether we should close some loopholes in the Draft TSS that would allow low voltage customers to avoid export charges. The topics we discussed were:

> Principles for balancing diverse views

> Building in a contingency to address customers' and stakeholders' desire for a faster transition to two-way prices for existing smart meter customers

> Whether a grace period should be applied before moving customers across to the Sun Soaker two-way tariff

> Whether customers should be able to opt-out to a flat rate network tariff

> Whether low voltage connected customers should be able to avoid export prices or whether we should add an export charge and rebate to all low voltage demand tariffs. If it is the latter, how should it be implemented given it is a late addition?

> Given the removal of the flat rate tariff and the fact that the current Time of Use tariff becomes obsolete, should we maintain the residential and small business demand tariff as an optional tariff, but also apply an export charge and rebate to it when our billing capabilities allow?

> Whether we should include contingent wording in our TSS to allow us to adjust our charging windows should our network load profile data indicate this is a required before 1 March 2027.

> Do we need to consider any guidelines around our education and marketing spend in relation to network challenges, smart meters, the importance of shopping around for retail offers and the introduction of two-way prices.

The results from this discussion are woven into the tables in the *Summary of engagement outcomes* section of this attachment.

Joint engagement with other networks

We worked with other networks on the same Proposal timeline as ourselves to develop joint discussion papers and hold joint public forums where we had common, topical issues of interest to stakeholders.

The two topics where this occurred were in relation to service classification and network resilience in the face of a changing climate. Joint publications and forums were intended to alleviate pressure on stakeholders who would otherwise had to engage with each network separately.

Service classification

More than 80 stakeholders participated in this public forum to discuss how five emerging services should be classified. Networks want to be active participants in the industry's transformation and service classification plays a key role in their ability to do so. Together, service classification and ring-fencing determine how emerging services are defined and the role networks can play in their delivery. We received four written submissions from stakeholders in relation to this topic.

Platform services

During the public forum we heard that:

> networks need to enable energy services for customers and trading platforms need to be valued and procured like any other network service
> cost recovery for these services needs to be considered – it must be technology neutral and reflect load characteristics and network usage, not types of appliances or equipment.

PIAC's written submission supported distribution system operator functions, such as dynamic operation of the network and visibility, as being provided collectively to customers and so are likely to be inputs, whereas dynamic connection agreements and associated export services are more likely to be services.

The Electric Vehicle Council (EVC) submission recognises the importance of network platform services and supports networks playing a more active role in this space. Combined with prices, the EVC believes this will help shape consumer behaviour and limit excessive network investment.

AGL's submission did not consider it appropriate for distribution system operator functions to be explicitly recognised as distribution services at this stage.

In relation to the export services and charges, PIAC believes a generation capacity limit linked to the output of the inverter, rather than an export limit, which is linked to the flow through the meter is fairer. They also want to see consumers who have paid for, or are entitled to through regulation, a certain level of exports should be compensated if that service level is not met, and this compensation should not be funded from consumers who do not benefit from an export service. Export tariffs should recognise the network benefits as well as the costs of energy resources – for instance, by rewarding energy exported to the network during evening peaks.

How the AER has classified platform services for the Draft Proposal

The AER has not included platform services or system support services, as they consider that there is still work needed on defining the scope of these developing services for classification purposes. The current common distribution services already provide for some aspects of these services. The AER has also clarified that export services are already part of the common distribution service (similar to consumption services) and therefore do not require separate classification. Customer requests for export capacity beyond a basic or standard connection agreement can be captured within the enhanced connection service grouping.

Stand-alone power systems (SAPS)

During the public forum we heard that:

> The circumstances for network owned SAPS is not yet clear within the wider community
> Customers need to be involved in the decision to install a SAPS on their property, including the choice of system, to ensure it meets their needs, now and in the future
> SAPS customers should be charged fair and equitable rates for their power, which are comparable with the prices paid by grid connected customers
> The performance of SAPS will be an important metric, and the interaction of SAPS with incentives (like the Service Target Performance Incentive Scheme) needs to be determined.

PIAC's written submission supports allowing networks to transfer existing customers onto SAPS supply where it is a more efficient and preferable option to retaining traditional grid-connected supply. The potential harm arising from networks providing the generation component of a SAPS is trivial and ring-fencing exemptions are a regulatory burden. Arrangements must be in place to ensure SAPS customers are not worse off. SAPS customers should have access to tariffs which allow them to make the most of their consumption and behind-the-meter technology commensurate with what is available to grid-connected consumers but also have access to tariffs and pricing arrangements that allow them to contribute to reductions in overall network costs by efficient use of their SAPS resource where they choose to do so.

How the AER has classified SAPS for the Draft Proposal

Regulated SAPS are now recognised as part of the common distribution service grouping and under standard control. It allows for 'work related to a regulated stand-alone power system (SAPS) deployment, operation and maintenance (including fault and emergency repairs), and customer conversion activities'. Investment in and the use of temporary SAPS is considered by the AER as something that distributors already have the flexibility to undertake.

Leasing spare battery capacity

During the public forum we heard that:

> Network batteries should be deployed for the provision of network support, with any leasing of spare battery capacity provided only as a by-product
> Network customers should not pay for any battery capacity used by network businesses to provide non-network services.

PIAC supports allowing networks to lease excess battery capacity to a legally separate third party and lease any excess capacity of third-party owned batteries. As the leasing of excess battery capacity will likely be provided on an ad-hoc basis to individual customers it suits the alternative control classification.

AGL does not support networks providing contestable services with a network owned battery

How the AER has classified the leasing of spare battery capacity for the Draft Proposal

The AER has not included the leasing of spare battery capacity in its service classifications, as that service is 'unregulated' or 'unclassified' and is therefore not needing to be specified. If distributors wish to provide that type of service, it will require a ring-fencing waiver from the AER beforehand.

Electric vehicles (EV) charging infrastructure

During the public forum we heard that:

> The role for networks in relation to EV charging is as the provider of platform services for widespread private slow charging, and connecting public fast charging sites
> EV charging will be provided by the market on a competitive basis
> Networks should apply tariffs based on the characteristics of a customer's load rather than technology, meaning that the appliances in use behind the meter are not a consideration.

PIAC thinks that networks should seek to develop specific EV charging station tariff that is cost-reflective and affordable for operators and customers while not forcing other customers to pay for services they do not benefit from. tariffs should be designed and implemented in consultation with customers and other affected parties.

The EVC believes networks play a crucial facilitation role for EV charging. Networks should not deploy EV charging equipment as this is provided by the competitive market.

How the AER has classified electric vehicle charging infrastructure for the Draft Proposal

The AER has not included any reference to electric vehicles in the service classifications for 2024–29. Whilst distributors will play a large part in ensuring the infrastructure will support the charging of greater levels of electric vehicles, it is not a service that requires classification.

Smart public lighting

During the public forum we heard that:

> The provision of access to network infrastructure should not be limited in the future to the provision of public lighting if it is economically efficient for those assets to be applied to 'smart city' technology and services
> Multiple uses of network (shared) assets avoids duplication and increases the utilisation of those assets
> Stakeholders want the regulatory process for the introduction of new lighting types (and services) and the setting of 'public lighting' charges to be sufficiently responsive and flexible to keep up with the pace of technological change.

The Central NSW Joint Organisation supports smart public lighting but questions the fitness of the current regulatory regime whereby these services are provided by networks and indicate that where councils and road authorities own and manage their own lighting, they have successfully adopted new smart lighting/smart city technologies at scale on average 2-4 years earlier than networks.

How the AER has classified smart public lighting for the Draft Proposal

The AER has included emerging public lighting technology as part of the public lighting services grouping. Emerging public lighting technology relates to luminaires that the NSW distributors do not provide at the time of distribution determination in April 2024. Smart-enabled luminaires, combined with Control Management Systems, are an example of emerging public lighting technologies.

Evaluation of the service classification joint engagement

Only 15 participants chose to complete the post forum survey, of which 13 were from NSW. Key findings were:

> 87% understood the purpose of the forum
> 66% felt they had received enough information prior to the forum to enable them to participate fully
> Participants noted that the online format, participation by multiple networks, and having dedicated space for questions worked well
> 67% of respondents felt that the engagement could have been conducted differently or better, but did not provide any further insights as to what these improvements/changes might be
> 93% agreed with the statement they were happy with the way the forum was run.

Climate resilience

116 stakeholders and 54 network staff participated in this public forum aimed at uncovering how networks can best support the communities they serve in adapting to a changing climate over the next 10 years. Stakeholders saw networks supporting communities in the following four ways.

> Support local resilience planning and community education
> Utilise available partnership opportunities
> Improve communication and responsiveness during large-scale events
> Network resilience to adapt and transform with communities

Submissions on climate resilience

Seven submissions were received from stakeholders.

S&C Electric raised three areas for us to consider:

> Looking beyond large, one-off events as the role of asset health and its monitoring and incentivisation is equally important
> The limitations of the existing reliability metrics and that a broader range of metrics and using existing metrics differently will provide a more complete picture
> The requirement for flexibility in regulation as the challenges of ensuring resilience requires a balance between proactive and reactive actions and that the regulatory framework must support both components.

The AER wrote that they consider that resilience-related funding is accommodated by the National Electricity Rules (NER) as it directly influences service level outcomes, even though it is not explicitly mentioned in the NER. They also indicated that their (at the time soon to be released) note on network resilience will set out the supporting evidence required to demonstrate that resilience-related funding is a prudent and efficient response and that good evidence on consumer willingness to pay for actions that improve resilience over the long term would assist their consideration of this. They also confirmed that they see the role of networks in supporting network resilience is a collaborative one with other responsible entities and that they expect networks to work together with affected communities, and other responsible entities involved in disaster management to understand what the communities' needs are to plan and prepare for, as well as recover from a natural disaster.

The Australian Energy Foundation was supportive of the resilience methods that will assist critical life support customers.

Erne Energy:

> Wants networks to work with communities to understand each community's individual requirements and develop an appropriate plan. Sees communication, support and providing educational resources to support a community before, during and after a prolonged outage.
> Sees smart meter data as highly effective in providing information on outages
> Following a major weather event, networks need to provide effective communication and restoration times and in-person on the ground support is preferred over a website or pamphlet
> Recognises that some of the most cost-effective approaches may not be in front of the meter, but behind the meter solutions
> Do not see the service target performance incentive scheme as fit for our changed climate and note that other countries include metrics for resilience either as part of a separate incentive scheme or part of the reliability scheme
> Is not saying that networks need to be more proactive, but they must understand the risks posed by climate change and this needs to be fully integrated into their business model
> If networks working with customers delivers a better experience for those customers at least cost and the only barrier is ringfencing, then the ringfencing issue needs to be resolved – like SAPS, the regulatory approach does not necessarily make it easy to deploy these solutions, even where they provide better outcomes for customers
> Thinks networks will need to review past outage data and correlate it with past severe weather events to convince the AER of the impact and costs of severe weather and severe weather-related outages on customer from their climate modelling.

NBN is keen to discuss three areas with networks:

> Planning to reduce outages for services during planned works and prioritisation for restorations during unplanned events
> Sharing of planned/unplanned power outage data including restoration times through an Application Programming Interface (API) to improve the efficiency of outage communications. This API can be used by a wide range of essential service customers and support from all networks would be greatly appreciated
> Joint investment in solutions to improve power resilience.

NBN supports the resilience measures identified in the joint consultation paper and appreciates this will be an ongoing process. In addition

> They see an opportunity to lobby the government together for joint investment in uplifting resilience as part of the Strengthen Telecommunications Against Natural Disasters grants
> NBN is assessing switching to smart meters for high risk metered grid connections such as our 2,300 wireless towers sites and this will be helpful to networks

Total Environment Centre:

> Wants to see networks complement the joint consultation paper with engagement with industry stakeholders through committees and working group and vulnerable communities
> Though there was an over-reliance within the paper on 'hardening' network
> Suggests the AER will need to see evidence (correlation) between past severe weather events and long duration outages and appreciates the difficulty in correlating compound effects
> Asks the question of community priority and how, given limited resources, who gets the investment first?
> Suspects that greater investment in behind the meter and local grid supply solutions may be more cost-effective than network-scale investments.

The Network of Illawarra Consumers of Energy

> Welcomes the approach, but disagrees with using the terms 'resilience' and 'reliability' and does not think there is a distinction between resilience and reliability
> Believes some events are unlikely to be solved through network hardening and strengthening the network is not the only solution
> There is third option from adaption or avoiding the risk which is to bear the risk with insurance
> Would like to see the focus on outcomes rather than inputs.

How this feedback informed our engagement plan

Based on this feedback, we specifically designed Phase 2 and 3 of our engagement to call out community resilience as an important part of assisting with recovery from extreme weather events. We also spent a significant amount of time and reiteration in Phase 3 highlighting that, given the scale of our network, it will take many regulatory periods before any expenditure in relation to resilience plays out in improving reliability outcomes for our customers.

In Phase 3, we provided three community resilience investment options to customers – one of which was to continue our current reactive approach. A key aspect of the other two options was the creation of three new roles to work solely with councils, communities and critical infrastructure asset providers to help them develop resilience plans. We recognise that our high-risk communities will face different risks and have different needs. These dedicated, expert staff will provide an efficient means to deliver bespoke, relevant, community supported outcomes across our network.

Evaluation of the climate resilience joint engagement

22 participants completed the 16-question survey. 59% of respondents said they participated as a representative from an energy organisation, industry group, consumer group or as a private individual. 41% said they participated as 'other' but chose not to specify. 68% of respondents were located in NSW.

Feedback questions were asked using an agreement scale - Strongly agree, Somewhat agree, Neither agree nor disagree, Somewhat disagree, Strongly disagree.

> 82% of respondents strongly agreed or somewhat agreed with the statement Overall, I am satisfied with the way the forum was run today
> 100% of respondents strongly agreed or somewhat agreed with the statement, I understood the purpose of today's forum
> 95% strongly agreed or somewhat agreed with the statement I feel I received enough information before today's forum to participate to the best of my ability
> There was some confusion about how the feedback from the session will be used, and some would have liked more information about network resilience and how the session was to be run
> 55% of respondents strongly agreed or somewhat agreed with the statement I believe aspects of today's engagement could have been done differently/better. Some respondents thought more time for discussion was needed and that other tools may have facilitated easier observation and debate of the group's comments. Others thought it was run well. When asked to select aspects of the session's engagement that they thought worked well, 77% of respondents included Slido in their selection.
> Respondents were given an opportunity to give an open feedback response about the forum or network resilience. Most took the opportunity to provide further comments on network resilience. Comments about the forum included suggestions of other tools and meeting platforms that are compatible across different devices, as some people had difficulty during the forum. Others thanked the group for the opportunity to participate in the forum.

Improvements for joint engagement

This was our first attempt at joint engagement with other networks and it was by no means an easy exercise. Only a handful of stakeholders are interested in multiple networks across jurisdictions, and we are unconvinced as to whether the benefits of this joint engagement approach to stakeholders, outweighed the combined network effort and cost. This is an area we will inquire and determine with stakeholders ahead of our 2029–34 Regulatory Proposal. You can read more about this in the *Engagement learnings* section.

Public lighting engagement

Phase 1
Understanding our customers

March - April 2022
- Online survey
- 1 zoom forum

- We engaged independent experts Woollcott Research and Engagement to facilitate our engagement with Local Councils
- 42 Local Councils responded to the online survey covering satisfaction with streetlight services, reasonable timescales for restoration and installation, pricing and billing data and streetlighting options
- We held a zoom forum with 43 local council participants to present a summary of the survey findings, identify key priorities, obtain input into the key principles for the public lighting proposal and set expectations for future engagement

Outcome:
- Draft principles for the Public Lighting Regulatory Proposal
- Identified Councils' key priorities
- Improve education and communication

Phase 2
Setting the Scene

May 2022
1 zoom forum

- We held a zoom forum with 18 local council participants to present an overview of the findings from Phase 1, retesting the principles, effective delivery of public lighting services, embracing new technologies and enabling smart communities and fair and transparent recovery of costs

Outcome:
- Agreement of principles although costs are a key concern
- Reduction in glare shield installation times
- Cost is the upmost consideration with new technologies

Phase 3
Deep dive into services

June - July 2022
- 2 zoom forums

- We held two zoom forums with local council participants to discuss standardising minor capital works fees, effective delivery of public lighting services, new technology and smart street lighting pilot and proposal timeline and future collaboration.
- We also discussed details of opex and capex charges and introduced indicative pricing for 2029-24 including the proposed weighted capex rate using a blended model.

Outcome:
- Small working group formed to take a deeper dive into minor capital works rates and charges
- Mixed views on the componentised approach to pricing and billing
- Further education and engagement is required

Phase 4
Deep dive into prices and costs

September - November 2022
9 zoom meetings

- We held nine zoom meetings with local council participants to revisit timelines and agreed principles and review current versus next period performance. We also shared opex and capex modelling outcomes and key assumptions for opex and capex and LED benefits. We also facilitated deep dive sessions into opex and capex items including overheads, modelling updates and latest pricing were presented based on feedback.

Outcome:
- Participants were asked for feedback throughout each of the sessions, with a view to further collaboration
- Future deep dive meetings required to resolve issues identified throughout phase 4 engagement

Phase 5
Finalising 2024-29

2023
- Commitment to continued engagement

- We acknowledge that there are several items in the Public Lighting pricing model that require further review, explanation and decision making over the coming months and as part of the revision process in 2023.

Outcome:
- Seven items identified for further collaboration and review
- Collaboration and review of AER Draft Decision

In addition to our business-as-ususal engagement with local councils and Joint Organisations (JOs), we held a series of online forums and meetings specifically to prepare our Proposal. An overview of our public lighting Proposal engagement program is shown on the prior page. We have completed four phases of engagement to date and have planned a fifth phase for next year for further discussions on a number of matters.

The following pages provide more detail on the survey findings and each of the four phases of public lighting engagement held to date.

Phase 1: Understanding our customers

Public lighting survey

A survey link was sent to public lighting contacts at 85 councils and three Regional Organisations of Councils (ROCs) on 17 March 2022. This was followed by two reminder emails and a follow-up phone call to encourage completion. The survey closed on 11 April 2022 and received 42 responses, 24 of which are part of the Southern Lights Group of Councils (Southern Lights), a collection of ROCs across NSW.

The purpose of the survey was to draw out councils' satisfaction with Essential Energy's public lighting inventory and the delivery of associated services and use the results to inform the discussion in workshop 1.

Detailed findings can be found in *Attachment 4.10 Public lighting Survey Engagement Report*.

What we asked	Response	How this shaped our engagement program or Draft Proposal
Satisfaction with our streetlighting services	> 62% were quite or very satisfised > 19% were quite or very dissatisfied > The remainder were neither satisfied or dissatisfied	Overall, councils are happy with our services. We shaped a question around how we could improve service levels into Workshop 1
Satisfaction with response times from Essential Energy for streetlighting general enquiries	> 50% were quite or very satisfised > 14% were quite or very dissatisfied > 31% were neither satisfied or dissatisfied > The remainder did not know	We shaped a question around how we could improve service levels into Workshop 1
What is a reasonable time for streetlight restoration > Within 2-5 days > Within 5-10 days > Within 10-15 days > Within 15-30 days	> 29% chose 2-5 days > 57% chose 5-10 days > 10% chose 10-15 days > 5% chose 15-10 days	
What is a reasonable time for an extra streetlight to be installed? > Within 60 days > Within 90 days > Within 180 days > Within 365 days	> 38% chose 60 days > 57% chose 90 days > 5% chose 180 days	This became an area of focus in the following workshops
What is a reasonable time for a glare shield to be installed? > Within 60 days > Within 90 days > Within 180 days > Within 365 days	> 62% chose 60 days > 38% chose 90 days	This became an area of focus in the following workshops

What we asked	Response	How this shaped our engagement program or Draft Proposal
Maintenance charges paid to Essential Energy for the maintenance of Streetlights are? > Too expensive > About right > Very cheap > Don't know	> 36% thought they were too expensive > 26% thought they were cheap > 38% did not know	Based on the high level of "did not know" we provided further clarification and education of Streetlighting Use of System (SLUOS) charges in the following workshops
Capital charges paid to Essential Energy for the replacement of Streetlights are? > Too expensive > About right > Very cheap > Don't know	> 38% thought they were too expensive > 26% thought they were cheap > 36% did not know	
Streetlighting inventory and billing data is accurate?	> 40% agreed or strongly agreed > 24% disagreed or strongly disagreed > 14% neither agreed or disagreed > 12% did not know	This became a specific question to discuss in Workshop 1
The range of streetlighting options that are available on the Essential Energy Approved Materials List (AML) should: > Be increased for a slightly higher cost > Kept the same > Decreased for slightly lower cost > Don't know	> 33% wanted the range increased for a higher cost > 38% wanted the range to stay as it is > 12% wanted the range to be decreased for a lower cost > 17% did not know	This became a specific question to discuss in Workshop 1 and ultimately led to discussions around implementing an annual review of the AML
What is your level of interest in installing smart controllers on streetlights?	> 71% were quite or very interested > 12% were not that interested or interested at all > 17% were unsure or did not know enough to answer	We shaped a question around new technologies for Workshop 1 and these topics flowed through to subsequent workshops and stakeholder support for these technologies has led to a 'Smarts Pilot'
What is your level of interest in the benefits of installing Zhaga luminaires on streetlights?	> 42% were quite or very interested > 12% were not that interested or interested at all > 45% were unsure or did not know enough to answer	
Essential Energy should include multi-function and smart poles as a standard approved material?	> 69% agreed or strongly agreed > 21% neither agreed or disagreed > 5% disagreed > 5% did not know	We shaped a question around our inventory listing for discussion in Workshop 1 and this led to discussions around implementing an annual review of the AML
Essential Energy should include solar streetlights as a standard approved material?	> 86% agreed or strongly agreed > 10% neither agreed or disagreed > 2% disagreed > 2% did not know	

What we asked	Response	How this shaped our engagement program or Draft Proposal
Essential Energy conducts night patrols for Category V roads on a bi-annual basis (6-monthly), this is in line with Australian Standards. If the Australian Standard was to change, what do you believe is an appropriate frequency for Category V night patrols? > Never – discontinue patrols for a $5 per category V asset saving per annum > Move to annual inspections for a $2.50 per category V asset saving per annum > Continue bi-annual checks for no change in costs > Don't know	> 2% selected discontinue > 12% selected annual inspections > 69% selected continued b-annual checks > 17% did not know	We mentioned the outcome of this in Workshop 1 but as support was strong for the current approach to remain in place this topic was not taken any further
Approach for removal and replacement of catenary (suspension) streetlights: > They should be proactively removed and replaced with standard infrastructure as part of planned projects for a slight additional cost > They should be removed and replaced with standard infrastructure when they fail > They should be upgraded with an equivalent catenary (suspension) LED when they fail > Don't know	> 19% selected proactive replacements with standard infrastructure > 21% selected replacements with standard infrastructure only when they fail > 26% selected replacements with an equivalent catenary LED > 33% did not know	There are only 3 councils with significant volumes of catenary lights and we will address replacements of these lights directly with the relevant councils
Redundant dedicated overhead street light conductors pose a risk to both the public and Essential Energy workers. These conductors should be: > Completely removed as soon as possible for a slight additional cost > They should be de-energised as soon as possible but not removed > They should be removed on a gradual basis when there are other major works in the vicinity > Don't know	> 14% selected removal as soon as possible > 24% selected de-energise as soon as possible but don't remove > 45% gradual replacement as other works occur > 17% did not know	We have adopted a combination of the two most supported preferences which will see us removing the risk of these conductors by isolating the cables and making safe and then gradually removing these assets

Phase 1 workshop

This two-hour forum was held via Zoom in April and was attended by 43 council staff.

The purpose of the forum was to:

> Identify key priorities for councils in relation to public lighting
> Obtain input into the key principles for the public lighting submission
> Present a summary of the findings from the survey
> Set expectations for future engagement

Detailed findings can be found in *Attachment 4.11 Public lighting Phase 1 Engagement Report*.

Top priorities for councils

Smart technology

Councils are:

> keen to embrace new technologies and understand how smart controllers could be incorporated into the network
> eager for guidance from Essential Energy on the capacity to add dimming technology onto the LED network
> keen to see street lighting move from a reactive service to a more proactive service

Black spot identification and streetlight failure detection

Councils would like to see Essential Energy using smart technology:

> with a direct feedback loop so that councils and the public can easily alert us to lighting failures
> with a google maps overlay to identify whether lighting is sufficient in a specific area and to detect black spots

'We still have a lot of blackspots around town which is a concern especially for the elderly.'

LED upgrades and glare shields

Whilst the not yet completed LED replacement program is seen as successful and has resulted in cost savings for councils, some smaller regional councils find that the LEDs are too bright for their towns and are keen to understand where the responsibility lies for installing glare shields.

Towns that have not yet been upgraded to LEDs are deferring glare shield installations as they hope the new LEDs will not require them.

'This is a quiet corner of the world we always get backlash that says it is councils' responsibility regarding the level of lighting. People complain that the lights are too bright here and ask for shades.'

'We currently have residents requesting glare shields, but we don't have the LED lights yet, so we want to know if these residents will still need glare shields when the LEDs are in place.'

Communication and information

There is consensus that reporting has improved, along with accuracy, but communication issues remain, especially in relation to ownership, responsibility and billing. This can impact service levels.

'There has been a bit of toing and froing on roles and responsibilities about things that are non-standard, for example the under-awning lights connected to the Streetlight system and the decorative lights in roundabouts.'

'When the bulb blows who changes it? The problem is that the light is owned by Essential Energy but on private infrastructure.'

Joint use of poles and the streetlight design process

Conversations reflected a lack of consistency in streetlighting poles throughout the state and references were made to the City of Sydney Council's multi-functional smart poles.

The upgrading and design of streetlighting in areas that fall outside of new development guidelines, was described as painstakingly slow given the numerous steps required by Essential Energy's contestable works process.

Development of principles for forming the Public Lighting Regulatory Proposal

To get the conversation started, we presented some suggested principles and meanings to the group and asked for their feedback and thoughts – whether they thought anything was missing or needing tweaking. Participants thought the principles should align more with the priorities that emerged in the previous discussion and suggested the following changes.

	Principle	This means	What we heard
	COLLABORATION & CO-DESIGN	Working together to build a framework that serves the needs of both Councils and Essential Energy	Needs to enable informed decision making and empower communities
	REALISING THE BENEFITS OF TRANSITION TO LED	Councils capital investment is realised through reduction in energy, maintenance & greenhouse gas emissions.	This is not required as a principle as it can be combined with the embrace new technologies and enable smart communities principle below Instead, consistency of approved assets was considered a priority with some requesting uniformity throughout the state
	FAIR RECOVERY OF COSTS	Councils SLUOS charges are fair & cost reflective of Essential Energy's Public Lighting operating costs	This is also about bill transparency and having better visibility of Streetlighting Use of System (SLUOS) components.
	EMBRACE NEW TECHNOLOGIES & ENABLE SMART COMMUNITIES	Essential Energy working closely with Councils to utilise a uniformed & streamlined approach to embedding new technology.	This is more about embracing new technologies and enabling smart communities to help improve the services that councils offer It is also about realising the benefits of the transition to LEDs
	EFFECTIVE DELIVERY OF PUBLIC LIGHTING SERVICES	Operate a public lighting scheme safely, efficiently and effectively over its economic life in accordance with the service level requirements in the NSW Public Lighting Code & the in-service values specified for lighting in the AS/NZS1158 series of standards pertaining to the lighting of roads and public spaces.	This should encompass a commitment to faster turnaround times and responsiveness to requests, especially in relation to level 3 design applications

These suggestions were incorporated into the revised priorities presented in Workshop 2.

Response to the survey findings

The main findings that participants were surprised by was our average 270 day timeframe to install a glareshield. All agreed this was unacceptable and there was an opportunity to work together to reduce the timeframe to within 60 days. This topic flowed through for further discussion in Workshop 2.

Strategies to improve satisfaction

Process improvements

The causes of dissatisfaction were generally small concerns that continued to build-up. Our processes lack a "close the loop" resulting in a disconnect. Councils want to know that their issue is being investigated, even if we are unable to resolve it immediately or even in the short-term. A lack of key contact within Essential Energy was identified as an issue, though this has recently improved with the appointment of a Head of Strategic Council Partnerships role within the business.

The public lighting team is trying to improve the timeliness in responding to general enquiries and hopes that the new annual touchpoint when reviewing the AML, will help improve our working relationship with councils.

'It comes down to understanding the reasons behind the slow response times, it could be resourcing or staffing. If a delay has to happen, people will be more accepting if they can understand the reason for it.'

Accuracy of inventory and billing data

There are still concerns with the accuracy of inventory and billing data and resolving these issues is difficult , some of which is considered to be due to a lack of dedicated well-informed public lighting staff within Essential Energy, but also because councils cannot afford dedicated public lighting staff so their staff members are not experts. Billing and payments between the parties are also undertaken by completely different teams.

> 'There aren't many Councils that have the same person doing everything to do with Streetlighting and paying bills. Not many are knowledgeable about SLUOS billing.'

This topic was included for further discussion in Workshop 2.

Variety in the AML

In relation to the AML, conversations expressed a desire for consistency across states and in interest in broadening the product choice. However, there was opposition from some councils who were worried about the costs this could give rise to.

> 'I would like to see more variety in terms of decorative poles for the CBD areas ... There should be a couple of decorative options available for us to select from.'

> 'One of the problems I see with the increased product availability on the AML is that it would add costs and go against standardisation.'

> 'There is no one size fits all approach, but we need to be realistic about how flexible Essential Energy can be.'

> 'If councils have a specific requirement like decorative lighting, then they need to accept there will be a cost in maintaining that standard.'

This topic was included for further discussion in Workshop 2.

Interest in new technologies

Interest in this area was high and councils want Essential Energy to educate and advise them of what is available in the marketplace and how to access these new technologies. A definite need emerged for Essential Energy to deliver education, regular updates on new technologies, availability and appropriateness to councils, as the current model was regarded as sporadic and frustrating.

New technologies will be a key topic in the annual AML review discussions. The 'Smarts pilot' will also inform the future state and whether similar trials take place in the future.

> 'Smart lighting is beyond a Streetlight. If people want to do things that are out of the box, we should be looking at a simple array, but these things can do so much more now that we need a broad strategic conversation about it.'

> 'It comes in fits and starts. There'll be technological improvement that comes into play and we all hear about it. Then it will go quiet for a while and nothing new is happening until something else comes along. But maybe this discussion could be built into regular meetings, once or twice a year where Essential Energy could tell us what the new developments have been or are on the way.'

Phase 2: Setting the scene

This two-hour forum was held via Zoom in May and was attended by 18 council staff.

The purpose of the forum was to:

> Playback the findings from the first workshop
> Playback and refine the principles for the public lighting submission that we heard in Workshop 1
> Inform councils of developments in specific areas of interest and to increase their knowledge and awareness in relation to
  • Our delivery of effective public lighting services
  • Our role in new technologies and enable smart communities
  • How we recover our costs

Detailed findings can be found in *Attachment 4.12 Public lighting Phase 2 Engagement Report*.

Principles for the public lighting submission

The revised principles following Workshop 1 were presented to participants and they were asked whether they agreed with them, whether they reflected what they had said and whether any tweaks or changes were required.

Principle	This means:
COLLABORATION & CO-DESIGN	Working together to build a framework that serves the needs of both Councils and Essential Energy. Enabling informed decision making & empowering communities.
EFFECTIVE DELIVERY OF PUBLIC LIGHTING SERVICES	Operate a public lighting scheme safely, efficiently and effectively over its economic life in accordance with the service level requirements in the NSW Public Lighting Code & the in-service values specified for lighting in the AS/NZS1158 series of standards pertaining to the lighting of roads and public spaces. Commitment to faster turn around times, open lines of communication and responsiveness to requests.
EMBRACE NEW TECHNOLOGIES & ENABLE SMART COMMUNITIES	Essential Energy working closely with Councils to utilise a uniformed & streamlined approach to embedding new technology & lighting equipment options.
FAIR & TRANSPARENT RECOVERY OF COSTS	Councils SLUOS charges are fair & cost reflective of Essential Energy's Public Lighting operating costs. Bills & charges are transparent and easy to understand.

'I think they reflect the comments of the last session and all that we raised.'

What we heard

On the whole participants were supportive of the principles developed. A few suggestions were made.

Suggestion	How we have taken this on-board
'Consistency' in direction, approved assets and the approval of streetlighting across the state was raised as missing in the 'Collaboration and co-design' and 'Effective delivery of service' principles	We have not included this wording in the principles as we think the principle 'Collaboration and co-design' and the term "working together to build a framework…" implies consistency of direction. Also, our council customers are diverse and can have varying and quite different requirements and expectations from other councils in the state. We do not see consistency in public lighting assets and approvals across the state and the country as necessary or realistic.
'Timely response' should be a part of the 'Effective delivery of public lighting services' principle	We have not adapted the wording proposed as we think that the principle of 'Effective delivery…' and the terms 'efficiently and effectively … in accordance with the service level requirements' 'Commitment to faster turnaround times … and responsiveness to requests' implies a timely response.
In terms of priority order, costs are the key concern for most councils followed by 'Effective delivery of services'	Recognising the diversity of our councils and the need for the principles to be balanced, we have chosen not to show the principles in any order.

Effective delivery of public lighting services

Glare shield installation timeframe

We outlined our commitment to install glare shields within the 60 days expected by councils. This was received favourably and councils were happy with this outcome.

> '60 days is better than 270, we are moving forwards and that is great.'

Minor capital works improvements

We also presented the minor capital works process and our proposed changes around introducing standard rates for construction and feasibility assessments, rather than using spot replacement capital annuity rates that are not always cost reflective of the works being undertaken. Standardised rates will assist councils with their planning and budgeting.

Councils were supportive of this approach but requested more transparency and a detailed cost breakdown. Some councils were accepting of the costs of a feasibility study, whereas others wanted to understand what the charge covered.

> 'I think the MCW model is good. We have just started to engage with that and use it for a couple of small things we needed to do. It is good to have some pricing guidance. I would like to see a little bit more of how that is built up.'

Following this workshop, a small working group of councils was formed to take a deeper dive into the build-up of the proposed standardised rates for minor capital works. The group was supportive of transitioning to the proposed rates and these were presented to the larger council group as part of Workshop 3.

New defect reporting tool

We provided an update on the replacement of our current 'Neatstreets' fault reporting system with a new customer-built portal. The new portal is easier to use and will improve communication and provide a better customer experience.

Councils agreed that Neatstreets is not the best tool, and they tend to opt for direct contact with Essential Energy as it is easier. It was thought that an educational programme should accompany the release of the new App on June 30th. An education email about the Streetlighting Fault Reporting System was sent to all councils as the product was launched. The system is very intuitive and simple to use.

> 'Neatstreets I have used, but we often have a better result being a ratepayer and calling Essential Energy direct rather than going through Neatstreets as a council. If there is a better tool that would be great.'

A further update on this tool was included in Workshop 3.

Contestable design process

We outlined what's being done to improve contestable works and the level 3 design process.

> On average, it currently takes two months for us to approve a level 3 design
> Our Better Connect (Salesforce) is offering a more dynamic end to end view of a contestable project
> The Network Information portal has already been released and offers greater visibility for Councils and level 3 designers to build a concept
> In addition, our resourcing levels are continually being reviewed to ensure we are meeting demand and forecast growth.

Councils appreciated this update and we hope that, combined with our fairly new Strategic Council Partnerships role, will help improve this process for councils.

Embrace new technologies and enable smart communities

Proposed annual review of the AML

We proposed introducing an annual review with councils of the AML to consider the existing listing and collaborate on potential new additions. This process can be started ahead of the 2024–29 regulatory period as we are able to introduce new equipment so long as the costs and charge are calculated in line with the current regulatory model and are included in the AER Annual review held each March.

> 'There's an advantage to having an annual process that brings everything together, considers it in a single process rather than having lots of things moving around, drawing all those ideas in and allowing a number of changes together rather than individually is beneficial.'

What we heard

Responses were positive of this proposed approach, so we are formalising this into a business-as-usual process. An update on the process was included in Workshop 3.

Non-standard approvals process and enable smart communities: smart streetlighting

We outlined when the Non-standard approvals process applies and what is required for approvals to be granted.

We also provided information on our comprehensive work over the last three years undertaking a smart streetlighting procurement process. The outcomes of the process allowed us to better understand the business case that supports the transition to smart streetlighting, however based on work to date and the current level of commitment to the rollout of smart streetlighting, we have not been able to identify a viable business case to support the broad rollout of a smart streetlighting solution at this time.

We reiterated that we are eager to explore how we can best support any Councils wishing to move forward with a smart streetlighting solution.

We then asked a question to gather councils' interest in the prospective introduction of five public lighting technologies that enable smart communities: smart poles, multi-function poles, solar lighting, decorative streetlights and smart streetlighting/controllers.

> 'All sorts of different things are happening. There is real potential for co-ordination and leadership from Essential Energy.'

What we heard

Councils showed an interest in all five types of technologies, with solar lighting having the most near term- interest with 72% of councils looking to implement it in the next 5 years, followed closely by multi-function poles, smart poles and smart streetlighting/controllers.

There was a lot of comments around the leadership role we have to play in driving these smart technologies forward.

We included an update on our smart streetlighting pilot with Bathurst council in Workshop 3.

Fair and transparent recovery of costs

We explained how componentised billing works and how the charges translate into the data on councils' bills. We then stepped through our operating costs and explained how our capital costs are calculated.

Councils were then asked for their feedback on componentised billing and billing transparency.

What we heard

Comments varied with some finding the componentised approach more transparent than the previous method, and others finding interpretation and reconciliation difficult.

There was also a call from streetlighting representatives for further itemisation to enhance transparency. It was suggested that location be added to the bill as well as a breakdown of costs rather than a blanket figure attributed to each item.

> 'I have no issue in the way the reports are presented currently. They are fine.'

Following the workshop we contacted the council who was concerned with the itemisation and have explained how it can be located in the detailed billing report. Further education to Councils around Streetlight Use of Services Charges was provided in Workshop 3.

> 'When we do get an invoice, I'd like to know where and does it correlate with the reports that have come through. For example, we'd have a report to say these lights have been replaced, we'd like to know it it's been done. Certainly, having a location and I get it if you have 100 locations it's a bigger invoice but that's the information that would allow us to put A to B.'

Phase 3: Deep dive into services

This two-hour forum was held via Zoom on July 27th and was attended by 20 council staff.

The purpose of the forum was to:

> Present a summary of the findings from Phase 1 & 2
> Review the key principles for the public lighting submission
> Explore key topics in further detail
  • Discuss outcomes of the Minor Capital Works working group
  • Provide an update on the recently implemented Streetlight Fault Reporting System and the planned Smarts Streetlighting pilot
  • Introduce the concept of a design component for LED Floodlights and the need to introduce field auditing and validation of un-metered loads data.
> Discuss proposed SLUOS charges
  • Present the proposed operational charges and how they are built up
  • Present the proposed capital charges and introduce the concept of blended charges.

Detailed findings can be found in *Attachment 4.13 Public lighting Phase 3 Engagement Report*.

Effective delivery of public lighting services

Outcomes of the minor capital works working group

We reminded councils of the Minor Capital Works process and how this is a new offering. We are proposing the introduction of standardised construction rates and upfront feasibility assessment fees. Councils were informed that a small working group with council representatives was held in June to take a deeper look into the build-up of the proposed rates, explore alternatives to using standardised rates and to discuss any questions that had been raised.

Councils were presented with an example of the standardised charges build up for the construction of a category P luminaire and outreach on an existing network pole as an example of the typical requests received for Minor Capital Works. It was reiterated that the pricing presented was indicative only and subject to change and future review.

The same alternatives explored in the June working group were presented to Councils with the major pros and cons discussed.

'I think it's good for budgeting purposes, especially for us as we have a backlog of requests that we weren't able to fulfil so knowing what was requested and being able to budget for it would be good.'

There was a consensus in both the working group held in June and in the third engagement workshop that the standardised rates look fair, give a clear indication of components and provide foresight into budgeting. It was also considered to be a time-saving tool.

'It gives us some indicative pricing which we can use to incorporate into our budgeting process and we can tailor it that way. So, I am in favour of it.'

Update on the streetlight fault reporting system

Councils were advised of the successful release of the new Streetlight Fault Reporting System. Though the new system had only very recently gone live, many councils had researched or even used the new system with the overwhelming feedback received on the system being very positive.

'I've had a quick look at it and it looks pretty good, the old system required you to register, with your password and if you could remember your log in details, then good luck to you.'

Audit and validation of un-metered loads

Councils were informed that we are proposing to pass through the operational costs for auditing and validation of public lighting asset data to align with requirements of Type-7 (un-metered) AEMO meteorology procedures. We emphasised that the cost to do this work was included in the operational charges model as a placeholder only and that further internal clarification needed to take place prior to the models being finalised.

'I would've thought that some aspects of managing your assets should come out of your profit, not just charge the ratepayer.'

There was some negative feedback received on the inclusion of costs for this auditing and some confusion around the requirement for the auditing to take place. We advised councils that further information will be provided on this topic as part of future engagement.

Embrace new technologies and enable smart communities

Annual review of the AML

We provided further clarification around the introduction of the annual review of the AML, namely the timing of the proposed review to occur in October or November each year with the intent to have any agreed alterations or new additions available for the AER's Annual pricing review in March.

Feedback from councils was supportive of the introduction of the annual review and this was seen as an opportunity improve the process of addressing emerging technologies as well as building on overall on-going collaboration.

LED floodlight introduction and proposed design component

We introduced the concept of our design teams conducting a design review as part of transitioning traditional luminaires on pedestrian crossings over to LEDs. We proposed that the effort associated could be recovered through the inclusion of a design component in the capital charges build-up of LED floodlights.

'I thought it would be like for like. If there's going to be an assessment done, council didn't install these, and council is paying for everything that is non-standard. Why is every, single, one being checked?'

Whilst feedback from councils on this topic was supportive of the transition of floodlights to an LED technology, when it came to the design component and the costs of this work being passed through to councils the feedback was divided. Some councils were supportive whilst others expressed concern for the associated costs and questioned if the design effort was required.

'It's a positive step to update that lighting and I'm supportive but I'm concerned about the additional charges.'

We advised councils that further clarification on the proposed design work and the associated build-up of the charges would be provided.

Smart streetlight pilot update

A brief update was provided on the SMARTS pilot that is being planned in partnership with Bathurst Regional Council. Councils were informed that the pilot is expected to kick off in early 2023 and run for six to 12 months with the key objectives of the pilot including the testing of Zhaga luminaires with associated sensors, dimming of lighting on a selected roadway and receiving operational feedback on the luminaires.

'From our point of view, we have budget constraints so obviously we'd have to investigate it and look at the total cost.'

Whilst some councils are quite keen to be involved in the SMARTS pilot project, others were less eager to investigate this technology due to budget constraints.

Fair and transparent recovery of costs

Further education on streetlight billing

An explanation of SLUOS charges and network use of system (NUOS) charges was provided for context ahead of the next topics.

Operational charges

An overview of the components that make up our public lighting operational expenditure was provided including our most common costs for routine tasks and non-routine tasks and examples of other costs such as fleet, buildings, consumables, administration staff and IT expenditure.

'Councils are being hit left, right and centre with charges at the moment. Budgets are taking a massive hit and the smaller councils are already financially stretched.'

We presented the draft operational charges for the upcoming regulatory period and included examples on both a per unit and council level. It was reiterated that the costs were draft and refinement

'That is one hell of an increase, it has eroded the benefit of moving from the previous technology.'

would continue in collaboration with councils ahead of lodging our Proposal in January 2023.

The draft charges presented a clear increase in operational charges so councils were eager to continue to collaborate with us on this to understand the contributing factors to the projected increase.

Many participants were aggrieved by the increase in the charges presented and some councils expressed concern that the increase in operational charges would erode some of the benefit of transitioning to LED.

Capital charges

We provided further education on capital charges including an overview of the differing economic lives of the three public lighting components: luminaires, supports and outreaches. We also explained and gave examples of when capital charges are applied. This education was provided as councils have often expressed that there is an element of confusion in relation to costs in this area.

We then discussed the key items that typically make up the capital charges including materials, labour, overheads, traffic control and fleet costs. We explained that the costs for items have increased and cited examples such as the significant increase in steel prices in recent years.

Examples of capital charges and a comparison of the current charges with the draft 2024–29 capital charges was provided on a unit level for the most common LED luminaires. It was reiterated that the prices shown were indicative only and subject to change as the broader Proposal is finalised.

We then introduced the concept of using weighted charges that would blend the current period's capital charges with a portion of the 2024–29 capital charges in line with the small volume of expected replacements needed in the upcoming period. We explained that we believe this mechanism will more closely reflect the likely true expenditure.

> 'I don't fully understand what this means. If we take this discussion offline and have a deeper discussion that would be good.'

Alternatives to using blended charges were discussed we reminded participants that we are not committed to this model and councils are encouraged to raise any preferred alternatives.

Councils were then shown an example of a common LED as a visual representation of how the blended charge could work. Whilst there was some support for this model from councils it was clear that further explanation of this concept was needed for everyone to be comfortable and supportive of adopting this approach.

We reminded councils at the end of the session that further engagement sessions and information will be provided on the areas where councils requested further clarification.

Phase 4: Deep dive into costs

This phase of engagement entailed nine Zoom meetings over September, October and November with 12 councils (or their representative), Joint Organisations and ROCs.

The purpose of this phase was to:

> Present a summary of the findings from the Phase 3 engagement
> Revisit timelines, agreed principles and provide an update on actions
> Show the current period performance compared to the next period performance
> Share operating cost assumptions and draft pricing
> Share capital cost assumptions and draft pricing
> Deep Dive into overheads
> Outline the next Steps

Detailed findings can be found in *Attachment 4.14 Public lighting Phase 4 Engagement Report*.

After touching on the timelines and agreed principles, the main discussions began.

Actions update

Zhaga luminaire failure rates

We shared that Zhaga luminaire failure rates will be updated following recent consultation with councils. The new failure rates will be based on the standard LED failure rates to reduce the operating expenditure component passed on to Councils. There was positive feedback from Councils on the revision. This action is now closed.

'I'm very happy that the Zhaga OPEX rate will be the same as the standard luminaire, as in the previous version the price differential was very large between the standard and Zhaga and was going to be a disincentive for councils.'

LED floodlight proposed design component

We have allocated one hour of labour as a placeholder for the design of each floodlight.

This action remains open with conversations to continue between the business and Next Energy outside of the Regulatory Proposal process.

'I agree that Essential Energy needs to have a rough guidance of what number goes in there, as long as it's clearly recognised we haven't agreed on the number.'

Audit and validation of un-metered loads

We shared that a placeholder of $150,000 had been allocated for the operational costs for auditing and validation of public lighting asset data to align with requirements of Type-7 (un-metered) AEMO meteorology procedures – this equates to 80 to 90 cents per light. This has not yet been built into the charges model as discussions as to whether this charge constitutes repairs or planned maintenance remain ongoing.

'I can't imagine the intent of the regulator was to impose significant costs if someone is already out there visiting the poles.'

Participants asked for clarification as to whether this was a new requirement and, if so, expressed a preference for auditing and compliance to be combined with routine maintenance. **This action remains open**.

'Obviously that's not a new requirement, was it previously unrecognised, has it fallen through the cracks somehow?'

Current versus next period performance

Commentary on the impact of switching to LEDs

Using Blayney Shire Council as an example, we shared the reduction in total annual operating expenditure charges arising in this period from the LED upgrade program and compared the current period pricing to the proposed pricing for the next period. We also shared the two options available for funding LED rollouts – either as an upfront cost or through a tariff recovery agreement. An indicative return on investment example between the two regulatory periods was also shown. Participants had no concerns with this section of the Draft Proposal.

Commentary on operating expenditure under-recovery in the regulatory period 2019-2024

NB. This topic took place across a few Zoom sessions.

To highlight the under-recovery of our operating costs, we shared data comparing our current operating costs to the associated revenue received.

Participants requested more details on the modelling and to better understand the reason for the under-recovery.

'I'm assuming the actual [operating expenditure] is declining, reflective of the LEDs. Is that what is driving the reduction in the actual?'

We then explained that our proposed revenue for 2019–24 takes the LED savings and the benefits of refined labour rates into account. Our proposed operating costs for the next 10 years were shown compared to the current period, demonstrating no dramatic change in total costs.

Questions were raised on the total operating costs for both periods, especially the new costs for the dedicated public lighting team and the expectation that the outcome of the LED upgrade would be a gain in efficiencies. Participants were also confused by the ratio of direct and indirect cost components (see the *Deep dive into overheads* section below) and raised concerns that the costs were not being adequately managed when councils are operating in a rate-capped environment.

At a later meeting, we presented lower operating costs as it had been discovered that the data had mistakenly been inflated twice. We also provided further detail on the substantial decrease in materials costs resulting from the reduced maintenance for LEDs. **This conversation will continue in Phase 5.**

'Can you talk us through the increase into the resourcing of the Streetlighting team, it's a massive increase?'

'You're the monopoly provider, please be really careful with those costs as that will come off a pothole in a road that your car is going to drive into. We don't have separate funding for Streetlighting, so it comes off roads. Please interrogate those numbers and try and find as many cost savings as you can, we don't want it gold plated.'

Operating cost assumptions and draft pricing

NB. This topic took place across a few Zoom sessions.

Operating cost assumptions

We informed councils of a proposed increase in the field worker labour rate to reflect the costs of resource supervisors and crew co-ordinators who are on a higher hourly rate. We also proposed the addition of an asset inspection rate to provide more equity in charges. After clarifying that this rate was a dedicated streetlighting rate, there were no further comments.

We also proposed a slight change to the timeline for pole inspections – moving from 4 years to 4.5 years, in line with our asset management strategy. We made it clear this would deliver councils a small cost saving.

Operating costs

Participants were informed of the Initial SLUOS charges indicating an increase in real terms were revised based on suggestions from councils and to rectify the inflation error. The revised numbers indicated a small decline in operating costs due to the change in the asset mix between regulatory periods (HID and LED).

Participants raised questions about the LED failure rates:

> They wanted assurance they were exclusive of warranty claims
> High luminaire failure rates were concerning given councils are not empowered to select their preferred supplier or luminaire and they requested we
> The highest failure rate pertained to the most common luminaire which caused some concern with the proposed move to use weighted failure rates.

'It looks like something must be wrong with those luminaires … At the basic engineering level, has the question been asked?'

'I can imagine as things progress and history goes past there will be a lot better data on the actual failure rates but if you look those failure rates now, you'd favour a particular fitting if you had a choice.'

'I remain concerned that the risk of enforcing a warranty has passed slightly to the customer ... The responsibility shouldn't be up to the councils, it should rest with Essential Energy.'

Assuming these questions and concerns are managed, there was support for moving to a weighted failure rate.

We have since reviewed our modelling and adjusted to now only include the LED failure rate in the Warranty NPV calculations. The other **aspects of this conversation will continue in Phase 5**

> 'We want to make sure the blending doesn't hide the problem of a luminator, given this is the most common luminaire on the network. If it was an obscure luminaire, I wouldn't be too worried.'

Capital cost assumptions and draft pricing

We detailed the key assumptions for our capital spend and the proposed move to a weighted blended approach for the charges. We explained that this is a fairer approach, given the small volume of expected replacements needed in the upcoming period and the fact that the current annuity model works well in a stable cost environment rather than the high inflation market we are experiencing today.

> 'I'm not sure the blended rate works as the costs may already be accounted for in the Field Worker Rate of $51.91'

Participants agreed that further discussions were required for them to better understand the capital cost modelling. **This conversation will continue in Phase 5.**

Deep dive into overheads

NB. This topic took place across a few Zoom sessions.

We described the costs that comprise our overheads and how our Cost Allocation Methodology that is approved by the AER operates to share costs between business units and to operating and capital projects. The overhead rate and some terminology prompted concerns, including reactive 'break in work' and how Night Patrol is accounted for in the modelling.

There was agreement that further discussions were required and **this conversation will continue in Phase 5**.

> 'Could you please explain the 49.42%? Is that the overall support cost that Essential Energy carries, is 49% applied to Public Lighting?'

> 'I'm struggling with the labour rate as we're charged a premium to break-in to the schedule when we've already been guaranteed a 10 day maximum … in the regular scheduled maintenance.'

> 'It's my concern we're paying on top of the systems you've put in place. You're saying now you need to apply the extra effort to log in the workflow, but I thought this would be helped by putting in smart controls.'

Next steps

We have committed to addressing these outstanding issues with councils through a dedicated engagement programme in 2023, with any changes included in our Revised Proposal when it is submitted to the AER in late 2023. The list of items to be resolved follows, but it is acknowledged that this does not restrict the addition of new items that may arise as conversations continue.

> LED Luminaire and PE Cell Failure Rates – we will continue to collaborate, review, and gather relevant up-to-date information on all applicable failure rates to be used in the calculation of operating charges

> LED Floodlights design component – we will continue to collaborate, review, and gather relevant up-to-date information for the appropriate treatment of design labour for the transition to LED floodlights

> Compliance testing of un-metered supply – we will continue to collaborate, review, and gather relevant up-to-date information for the auditing of un-metered supplies and include any identified efficiencies in the Revised Proposal

> Night Patrols – we will continue to review and discuss with councils whether the costs of staging night patrols on Category V roads are best delineated as a separate charge in the pricing model or whether these are best incorporated into the overall Category V operating charges

> 6 Yearly LED Luminaire – Cleaning and Inspection Cycle – we will review this item as further information becomes available

> Public lighting management team – we will provide details to alleviate concerns about the size of the team

> Overhead and labour productivity assumptions – we will work to provide further information to address these concerns

> 'All parties should probably support blended rates but when you've got an outlier that becomes the basis of blending without exploring it first, that's an issue.'

Tariff trial projects for the 2019–24 regulatory period

Residential and small business customers tariff trials project

Overview of the project

In late 2019 we embarked on the design of a tariff trials project for residential and small business customers.

The aim of the trials is to test whether new tariffs:

> change how customers use electricity

> help solve our network challenges

> improve fairness between the relative prices that different customers pay

> can be implemented on a broad scale in a cost-effective manner for the 2024–29 regulatory period.

Our network challenges (

Background

The project consists of three phases, the first of which was co-designing the tariffs to trial with customers and stakeholders. Detailed summaries of this engagement piece have already been prepared and shared with stakeholders. Rather than repeat them here, they are attached as appendices to this report.

What we are trialling

We are trialling four tariff components:

> Our two part Sun Soaker consumption tariff – trial customers can switch from a flat rate or Time of Use tariff to this tariff

> Our export price – customers with energy resources who participate in the trials must have this component applied to their bill. It can be paired with either our Time of Use or Sun Soaker price

> A Peak Time Rebate – that can be paired with any consumption tariff, but not also with the Critical Peak Price

> A Critical Peak Price – that can be paired with any consumption tariff, but not also with the Peak Time Rebate

In addition, we are also undertaking an education only trial to determine the extent to which information alone can influence when customers use electricity.

Working to 'go live'

Since completing the design phase of this project in early 2021, we have been working with three retail partners to bring the trials to life. Initially we were holding weekly meetings with each retailer and these have dropped to fortnightly for much of 2023. We have spent over 210 hours working with retailers to date.
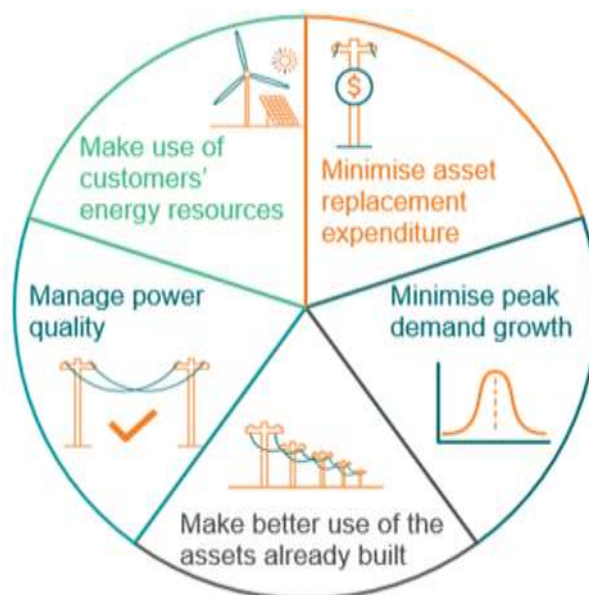
The first customers began on the trials on 1 August 2022. Our partner retailers will continue to recruit customers through to the end of January 2023. Unfortunately, the start date was delayed by some months due to the volatile wholesale market conditions experienced in early 2022 which resulted in our partners' call centres being over-whelmed.

Our education only trial began in May 2022. Initially this utilised local print advertising and 15 second videos on social media platforms, including Facebook and Instagram as well as advertisements in regional newspapers. The campaign encouraged more efficient use of the network by asking customers to shift some of their consumption to the middle of the day to soak up excess solar energy. The second campaign took place in November 2022 and adopted a more 'solar friendly' approach following feedback and data from the initial campaign. Alternative messaging and education channels will be investigated for the 2023 campaigns.

Learnings to date

We have learned an awful lot in bringing these trials to life. You can read about these learnings in the *Engagement learnings* section.

Large, peaky load customer tariff trials

Overview of the project

The objective of this project is to:

> Consider alternative tariffs that could be applied to large, peaky load customers who often have seasonal loads

> Consider whether there are technologies that could assist with making our tariffs easier for these customers to work with

> Trial possible solutions that we derive

> Propose any changes to the rules if required

Background

We were approached by Cotton Australia to consider alternative tariffs for and customers with large, generally seasonal, peaky loads. We have held four workshops to date with relevant industry stakeholders and customers. This group included Cotton Australia, the Electric Vehicle Council and irrigation customers: cotton ginners, cotton farmers, farmers, orchardists and fruit dehydrators.

There were three main problems identified by the group in relation to our existing tariffs.

1. One section of the group finds the application of monthly demand charges limits their ability to operate

    To avoid paying a monthly demand charge for just operating in, say the last week of the month, the businesses actively defer operations until the first day of the upcoming month and then works 24-7 to try and get through the processing by the end of a subsequent month. This group is not unhappy with the total amount of their electricity charges, it is just that weekly demand charges would provide them with better flexibility as to when they begin and end their seasonal processing.

2. Another section of the group would prefer their electricity bill to be more evenly spread across the year – so a capacity-based charge. We used to offer these charges, but they have since been phased out.

3. A third group uses electricity so intermittently, generally years apart, that they choose to pay a disconnection and reconnection fee to avoid our network access fees in the years when they are not using electricity. We had our Stand-Alone Power Systems (SAPS) lead present to the group as it is likely that such intermittent loads may be best served by an alternative power system.

What we are trialling

The group has chosen to trial the weekly demand charge. Because of the limitations of our billing and meter data systems, the trials will be kept to only a few customers at a time as the bills will need to be manually calculated.

The capacity charge was not considered to be an innovative concept to trial, given it has been used in the past and other networks still offer such a charge.

Working to 'go live'

We have been unable to find a retail partner willing to move to weekly billing. The La Nina weather of the last few years has also reduced the pumping requirements of our seasonal irrigation customers. As a result, we have had to change our approach to this trial and will now look to:

> Do a paper-based trial for summer irrigators based on the load data from recent years as well as years prior to the recent La Nina weather events. We will work with the customers in the trial to determine how they may have shaped their load differently had they been operating under a weekly demand charge

> Undertake the planned trials for autumn/winter/spring seasonal loads over 2023. We could also undertake a paper-based trial for these customers, using their data from prior years, if they see value in such a thing. To undertake these trials, we will need to contact the retailer for each customer and obtain their agreement to participate in the trials as well.

Battery tariff trial

Overview of the project

We have designed a grid-scale battery tariff for new low voltage customers connecting a battery whose sole purpose is to operate a commercial scale battery or batteries, with no co-located load behind their meter.

The objectives of the trial are to:

> seek to minimise the barriers to grid-scale batteries deploying within our network
> incentivise operation of these large commercial batteries in a manner that recognises the potential costs and benefits to our network and our customer base, and
> achieve a fair and efficient level of network cost recovery which recognises how grid-scale batteries use and benefit from the distribution and transmission systems.

What we are trialling

We have adopted the following key tariff design features when setting the tariff structure and price levels:

> The tariff will separately price consumption and exports on a Time of Use demand basis
> Recognising the higher degree of control a commercial battery has for the pace at which it consumes or exports energy, we will adopt demand-based charging for both consumption and exports. This will:
> • allow the battery technology to manage the pace at which it buys and sells energy to minimise network costs (charged in kW for exports and KVA for consumption demand) while still being able to profit from the scale of its energy trading, and
> • ensure that if the battery technology has spikes in its rate of consumption or exports due to its provision of other market services (e.g., FCAS), it will face the network costs of accommodating these spikes.

The trial tariff targets operation that inversely responds to the network cost drivers being imposed by other customers — that is, consuming at times of distribution system daily minimum demand and exporting at times of distribution system daily maximum demand, when exports are free.

> The trial tariff will be a business tariff because the primary use of the connection point is to profit from energy trading.
> The trial tariff adopts the same export price and rebate arrangements as the trial for our small business customers – though, given it is a new technology, we have not applied the transitional requirement of a 'free export' band for exports into the network between 10am and 3pm.
> It will also pay the same network access charge as the business parent tariff for the benefit of being able to connect to and profit from using the grid.
> The tariff structure and equivalent pricing levels to the parent tariff and other distributed energy resource (DER) trial tariffs, means we will recover fewer residual costs from the grid-scale battery tariff than we do from the equivalent business parent tariff. Our marginal costs will still be recovered from the trial tariff, along with a competitively neutral network access charge
> The trial tariff has a predictable incentive structure, to provide a network-wide incentive to counter the system minimum and maximum demands caused by other customers. This predictability will provide certainty to the technology operator to plan its service value stacking whilst knowing what it will have to pay if this involves rapidly consuming or exporting at times that cause network costs.
> Where Essential Energy wishes to procure other specific locational or system security services through more targeted network support charging and discharging behaviours, these may be separately agreed through network support arrangements outside of the trial tariff.
> The tariff would apply equally to any technologies that Essential Energy owns and operates for network service provision purposes, thereby supporting competitive neutrality in this emerging market.

Working to 'go live'

We specifically tested this proposed structure with battery proponents in March 2022 and the response has been positive. We have three proponents currently planning a trial, the first of which began in late 2022.

Appendix A – Summary of the 'Trial Design' phase (small customers tariff trial project)
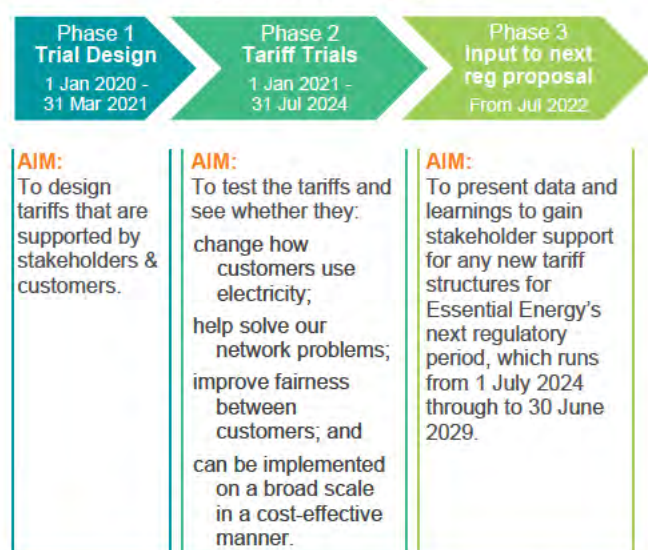
Essential Energy undertook a dedicated engagement program with small customers and stakeholders to co-design acceptable tariffs to take to trial.

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:

Phase 1 Trial Design 1 Jan 2020 - 31 Mar 2021	Phase 2 Tariff Trials 1 Jan 2021 - 31 Jul 2024	Phase 3 Input to next reg proposal From Jul 2022
AIM: To design tariffs that are supported by stakeholders & customers.	**AIM:** To test the tariffs and see whether they: 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.	**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.

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.
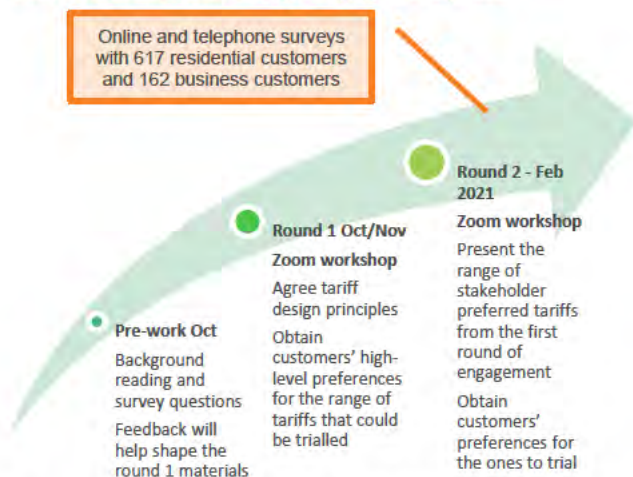
The network problems that tariffs may help 'solve'

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: > Capacity issues > the widening of the voltage envelope; and
The level of replacement capex will cause issues > 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	> 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)	> 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

Online and telephone surveys with 617 residential customers and 162 business customers

Pre-work Oct

Background reading and survey questions

Feedback will help shape the round 1 materials

Round 1 Oct/Nov

Zoom workshop

Agree tariff design principles

Obtain customers' high-level preferences for the range of tariffs that could be trialled

Round 2 - Feb 2021

Zoom workshop

Present the range of stakeholder preferred tariffs from the first round of engagement

Obtain customers' preferences for the ones to trial

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 Research & Engagement 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	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	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	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.
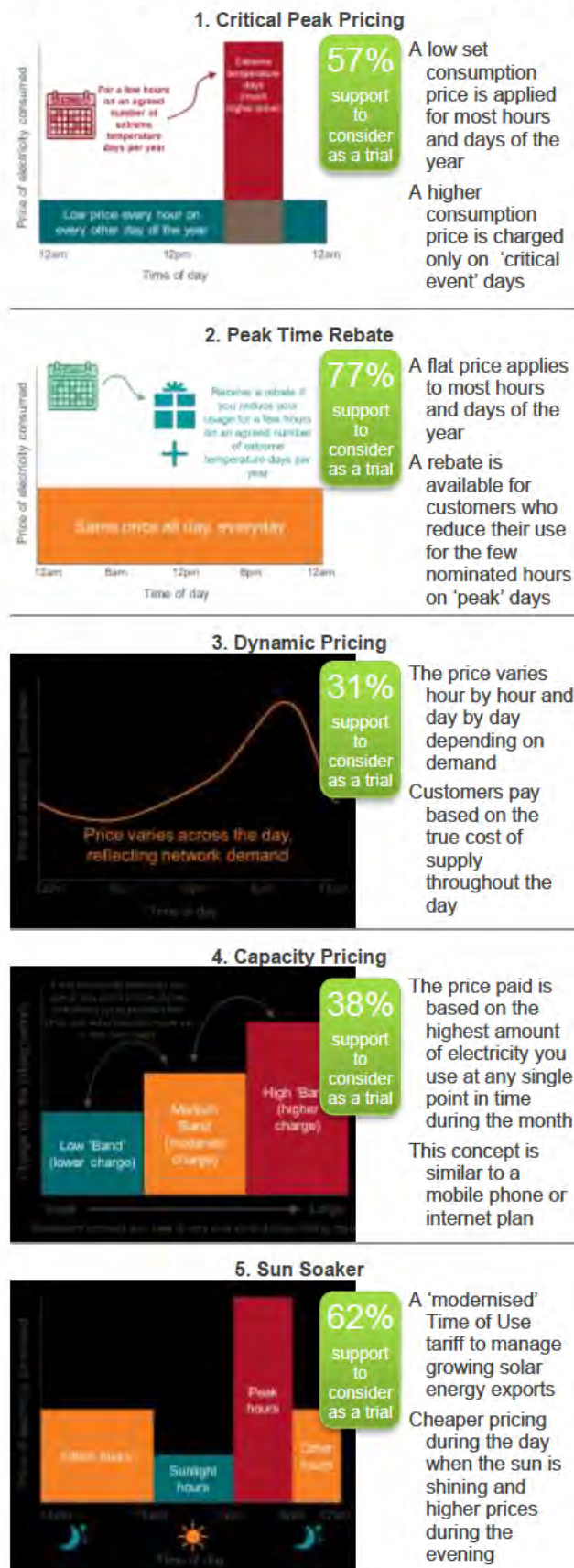
More detail on the feedback in relation to export charges can be found in the *Export charge findings from the 'Trial Design' phase* summary document.

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.

1. Critical Peak Pricing

57% support to consider as a trial

A low set consumption price is applied for most hours and days of the year

A higher consumption price is charged only on 'critical event' days

2. Peak Time Rebate

77% support to consider as a trial

A flat price applies to most hours and days of the year

A rebate is available for customers who reduce their use for the few nominated hours on 'peak' days

3. Dynamic Pricing

31% support to consider as a trial

The price varies hour by hour and day by day depending on demand

Customers pay based on the true cost of supply throughout the day

4. Capacity Pricing

38% support to consider as a trial

The price paid is based on the highest amount of electricity you use at any single point in time during the month

This concept is similar to a mobile phone or internet plan

5. Sun Soaker

62% support to consider as a trial

A 'modernised' Time of Use tariff to manage growing solar energy exports

Cheaper pricing during the day when the sun is shining and higher prices during the evening

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 it if 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.
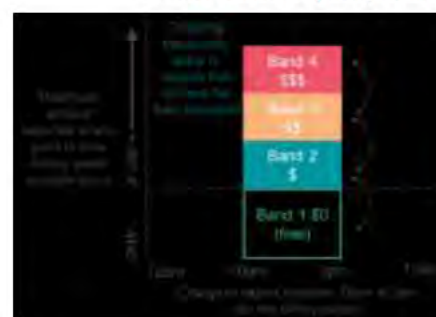
1. **Time of Use export charge**

Charge to customers with DER to export over the middle of the day (10am to 3pm)

Payment to customers with DER to export at night (5pm to 8pm)

2. **kW Based Capacity charge**

Customers with DER can export up to a set kW value for no charge between 10am and 3pm, but any exports above this 'free' limit are charged in kW capacity bands

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	
1.	Flat rate + PTR	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. 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. This tariff is also fairly easy to implement, with only the rebate calculation requiring manual intervention. Since the engagement phase was undertaken, we have decided to trial the PTR in conjunction with any underlying consumption tariff.	
2.	Simplified Sun Soaker + CPP (+ export charge overlay for customers with DER)	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. 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. 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. Applying the export charge for customers with DER directly picks up on suggestions from customers and stakeholders.	
3.	Simplified Sun Soaker + PTR (+ export charge overlay for customers with DER)	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. 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. 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. 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.	
4.	Time of Use (ToU) (+ export charge overlay for customers with DER)	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. 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.	

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)
2. Reduce energy use between 5pm and 8pm
3. Don't ever put your health at risk to reduce your electricity bill
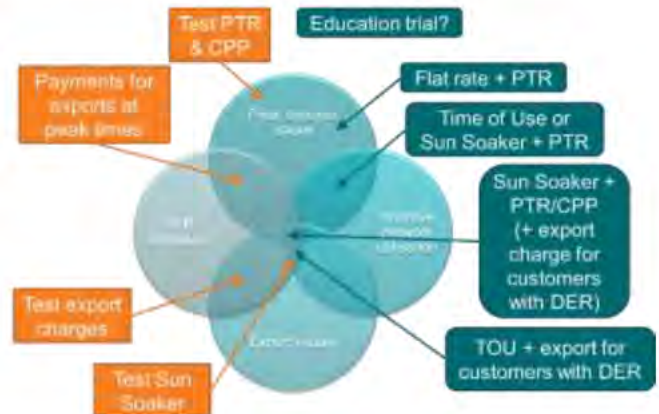
In addition, educational materials will be developed around:

> 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 using 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.

[1] In 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.
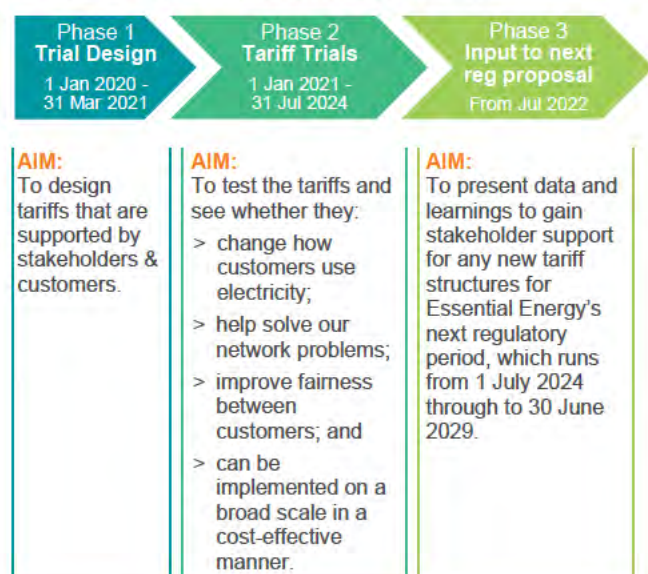
The findings from these different engagement streams (qualitative and quantitative) demonstrate the important role of education in 'bringing customers along on the tariff journey' - ensuring customers understand why network prices need to change and what any tariff changes mean for them cannot be overlooked 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.

Appendix B - Export charge findings from the 'Trial Design' phase (small customers tariff trial project)

> - In recent engagement with small customers and stakeholders on the types of tariffs to take to trial, Essential Energy specifically asked about the concept of export charges.
> - Whilst participants could understand there was inequity in current pricing structures, the desire to not hinder the move to a renewable energy future means that export charges remain a divisive and controversial concept.
> - Both customers and stakeholders were most supportive of an export charge that gives everyone the ability to export a small amount to the network for no charge (when such exports are causing issues for the network), especially if such a charge can be balanced with payments to export into the network (when such exports have a value to the network).

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:

Phase 1
Trial Design
1 Jan 2020 - 31 Mar 2021

Phase 2
Tariff Trials
1 Jan 2021 - 31 Jul 2024

Phase 3
Input to next reg proposal
From Jul 2022

AIM:
To design tariffs that are supported by stakeholders & customers.

AIM:
To test the tariffs and see whether they:
> - 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.

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.

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.
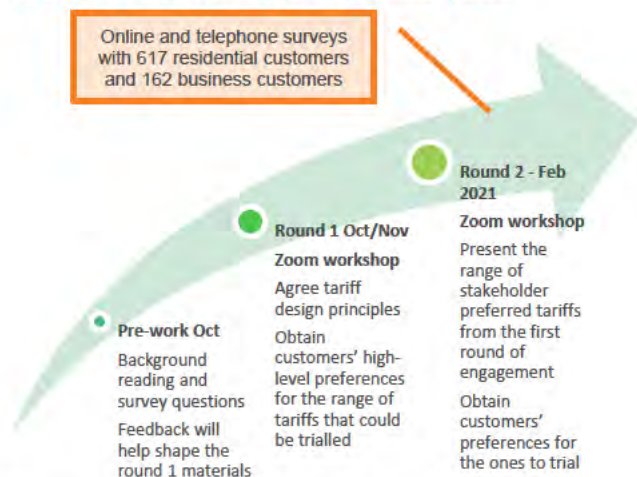
The network problems that tariffs may help 'solve'

	Issue	Potential tariff solution
7.	Some areas of our network suffer from voltage and/or thermal constraints	Pay customers to provide support services to the network to address: > the widening of the voltage envelope; and > capacity issues
8.	The level of replacement capex will cause issues > Costs to replace ageing assets will push the RAB value higher > Postage stamp pricing means there is cross-subsidisation between high and low cost-to-serve customers	> Transition uneconomic customers to 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.
9.	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
10	We are not able to make efficient use of customer's Distributed Energy Resources (DER)	> 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

Online and telephone surveys with 617 residential customers and 162 business customers

Pre-work Oct

Background reading and survey questions

Feedback will help shape the round 1 materials

Round 1 Oct/Nov

Zoom workshop

Agree tariff design principles

Obtain customers' high-level preferences for the range of tariffs that could be trialled

Round 2 - Feb 2021

Zoom workshop

Present the range of stakeholder preferred tariffs from the first round of engagement

Obtain customers' preferences for the ones to trial

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 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 Research & Engagement 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	> 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	> 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	> 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

The remainder of this document presents the engagement findings relevant to export charge discussions.

Summary of Round 1 engagement

Using customer feedback from the 'Talking Tariffs' engagement website, draft tariff trial design principles were presented to the workshop groups for their thoughts.

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.
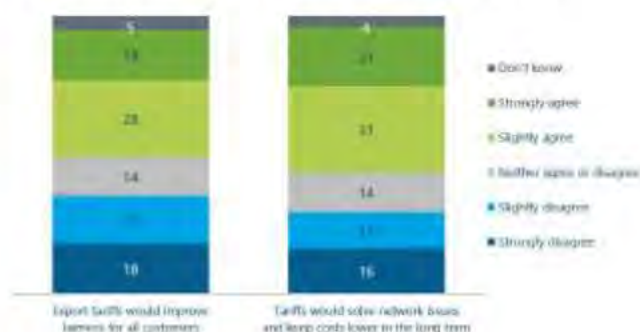
Feedback from small customers

When asked about the idea of Essential Energy introducing an export tariff, most of the comments from small customers were quite negative and focussed on the notion that solar customers, who had gone to the significant expense of putting on solar panels, would be penalised. It was also felt that introducing an export tariff would not encourage people to take up solar, thereby going against the community's desire to reduce their energy footprint and help improve the environment.

However, some customers could see the other side of the argument and understood that solar users are putting extra pressure (and costs) on the network. A minority also felt that if they could get a good price (be paid) to export during the evening peak times, then an export tariff might balance out.

Participants were then asked to indicate their level of agreement with the statements:

> *'An export tariff would improve fairness for all customers'*.

Under half of the participants agreed with this statement (46 percent), and over one in three disagreed (35 percent).

> *'An export tariff would help solve some of the issues for the network and keep costs lower for customers in the long term'*.

Just over half agreed with this statement (21 percent 'strongly' and 31 percent 'slightly'), while almost three in ten disagreed (29 percent).

Small customer perceptions to export charges

Export tariffs would improve fairness for all customers

Tariffs would solve network issues and keep costs lower in the long term

Feedback from retailers

Retailers were mixed in their reactions to an export tariff. Some felt that it was good to communicate to customers that solar is not necessarily reducing peak demand and that it was important to understand the pros and cons of solar. However, it was suggested that this would be complicated to implement.

Others were totally against the idea and felt that if it were introduced, they would not see themselves passing it through. Overall, retailers saw an export tariff as a contentious issue that would raise a lot of conversation and debate.

Feedback from other stakeholders and Essential Energy's Customer Advisory Group

Many stakeholders did not think Essential Energy should consider introducing an export tariff as it would appear to the public, media and politicians, to be inconsistent with society's movement towards 'green' energy. It was also thought that networks have not yet adequately defined how costs related to DER have been separated from the costs arising from other network problems.

Consumer advocates also thought that export tariffs do not adequately address the principle of 'Fair' as they make the cost of solar PV more expensive, thus putting it even more out of the reach of many customers. It was also thought that retailers' systems would require fundamental changes.

In terms of the potential form of an export tariff one advocate suggested variable feed in tariffs over the application of just a flat rate. A couple of stakeholders suggested that export tariffs should be applied at a locational level to address the pockets of the network where the level of solar export is a problem. Another suggested that exports could be managed through tariff bands, like Capacity Pricing. Under this scenario customers could be allowed to export a small amount for free, but they would be charged a fee for exports beyond the 'free' level (with different payment bands applied, depending on how much is exported).

Closing the loop – How customer and stakeholder feedback was considered

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

Given export charges are 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, 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.

Summary of Round 2 engagement

In this round, three different forms of recovering the costs related to DER were presented to customers and stakeholders, along with their relative alignment (pros and cons) to the agreed tariff trial design principles.

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	Description	Small Customer	Residential Survey[1]	Small Business	Stakeholder Workshop
Time of Use export charge	> Charge to customers with DER to export over the middle of the day (10am to 3pm) > Payment to customers with DER to export at night (5pm to 8pm)	57%	51%	44%	55%
kW Based Capacity Charge	Customers with DER can export up to a set kW value for no charge between 10am and 3pm, but any exports above this 'free' limit are charged in kW capacity bands	71%	54%	49%	65%
Green Network Contribution	A fixed fee paid by all network users, regardless of whether they have DER, to fund the network costs required to facilitate customers' DER.	49%	25%	17%	30%

Of the three export charge options put forward in Round 2, the 'kW Based Capacity Charge' had the highest level of support. Although considered slightly more complex, participants were more favourable towards this option because it was thought to be more palatable for solar customers and would encourage the purchase of the most 'suitable' sized system to avoid charges.

A 'Time of Use' export charge was the second favoured option based on its relative simplicity and the balanced approach of customers paying to export during the daytime period but being paid by the network to export during the evening peak. It was suggested that this balanced approach i.e., paying customers for exports during the evening peak period, could also be applied to the kW Based Capacity Charge.

The 'Green Network Contribution', offered as an alternative means of recovering the costs of facilitating Distributed Energy Resources (DER) into the network, received the lowest level of support. Whilst it was thought that many customers would be happy to pay a small amount to facilitate green energy and it was seen as simple and would not discourage solar uptake, it was recognised that

this option would not solve the network problems. It was also seen as less 'fair' than the other options, with continued cross-subsidisation from customers without these assets, to those customers with these assets.

Determining the form of export charge to trial

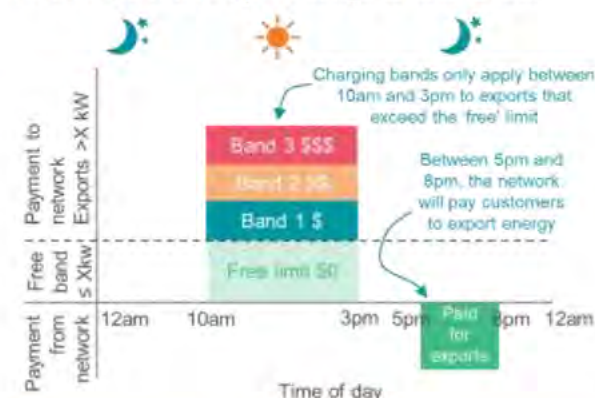The following criteria were used to determine the final structure of the export charge to take to trial:

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

Closing the Loop

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

Next steps

The final form of this tariff, such as the hours it will apply, what the capacity charge is based on and how it is calculated and charged, will be worked out in conjunction with the internal project team, retailers and university researchers in the next phase of the project.

In addition, determining success criteria, how customer response will be measured, the role of technology in the trials as well as customer selection and recruitment will also be undertaken ahead of the December 2021 planned 'go live' date.

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[1] In 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.

Appendix C – PCC Minutes

NB. In the interests of privacy, individual names attributed to statements have been removed, however organisations may be referred to where a comment was indicated as being the view of an organisation.

PCC meeting 1 – 31 January 2022

Topic(s)	Discussion Points	Action
Pricing Postage stamp pricing vs zonal/nodal Cost-reflective tariffs Role of retailers	> General consensus that residential customers support postage stamp pricing for electricity networks in both cities and regional/rural areas but that large business customers generally do not support postage stamp pricing. This is supported by ECA research. > Postage stamp pricing does have some issues for large business customers. > Postage stamp pricing results in social justice and fairness. > Networks should be supporting fairness which does inevitably result in some cross subsidisation. > Some cross-subsidisation is fine when it is mostly fair, but it becomes an issue when it flips to being not fair. > The role of retailers in price signalling needs to be considered when designing network tariffs. > Most solar PV owners are paying less than their share of network costs under volumetric pricing. > Network tariffs are about moving energy so should be thought of in terms of two-way flows, e.g. include export and battery tariffs. > Load is essential so postage stamp pricing for consumption promotes social good > For exports, nodal or zonal might provide greater rewards. Promotes efficiencies and therefore lower costs for everyone. Consider complimentary measures to enable nodal exports. > EVs will have nodal pricing. SAPN are predicting that by 2030 1 in 3 homes will have an EV. > You could have nodal pricing on time variance, rather than geospatial. > Tariffs should target load types, not necessarily customers or devices. > Tariffs are a combination of multiple charging parameters, and exports can be added to this. > Pricing should be device agnostic and focus on rewarding good customers. > Consider peak and minimum demand in the design for each cohort. > Moving to more cost reflective signals such as peak demand pricing will support new devices and innovation. > It is impossible to predict what devices people will be using in the future, but this supports moving to cost reflective pricing in a technology agnostic way. > Tariffs need to be predictable enough for algorithms to work with and offer rewards for grid support > We need to educate customers on the differences between tariffs and prices. > The role of retailers needs to be considered when designing network tariffs. > 95%+ of customers are on a flat or block retail tariffs. > Retailers should try to use cost reflective pricing when possible, but this requires that there is a critical mass of customers in a network and with smart meters. > ToU or demand tariffs are dependent on Smart Meter rollout.	> In one-on-one meetings with Retailers be sure to discuss Postage stamp pricing and other key pricing topics > Retailer pricing should be considered under Tariff Assignment Policy discussion > Consider the purpose of our tariffs, ie what are we trying to achieve -behavioural change or just wanting to reallocate costs for fairness - at next PCC meeting.

Topic(s)	Discussion Points	Action
	> We need to get ahead of the curve when designing tariffs, not just focus on what works now, more where we want to be. > It is important to consider what outcomes you want when designing tariffs – are you wanting behavioural change or just wanting to reallocate costs for fairness? > The role of tariffs needs to be considered early in the process, and consider 2 broad elements: 1) changing behaviour, and 2) changing who pays what relative shares of your total revenues. > Agree the principles first, then the conditions. > Could principles underlie the LRMC?	
Suggested PCC Topics	> Small business pricing should be added to list of topics. > Discussion around the purpose of network tariffs in relation to end customer tariffs as we don't know what retailers are going to do. > Retailer's lack of presence indicates they are not that interested in network tariffs. What systems capabilities / limitations do they have? > Need to consider what is the primary purpose of tariffs. This should be addressed early on in tariff design process.	
Long Run Marginal Costs How they are calculated Scale of costs Costs vs benefits of the two methods	> Residual costs pay for the existing asset and the fixed costs (85.5% of EE's current revenue). > LRMC are used for recovering changes in demand. At just 14.5% of EE's current revenue, we need to bear this in mind when considering LRMC. > Whatever method is used to determine LRMC does not change our total revenue entitlement, ie LRMC revenue just gets deducted from the total revenue requirement. > Most networks use the Average Incremental Cost (AIC) method to determine LRMC. > AER have advised that 10 years is the minimum time horizon to determine LRMC. > NSW Energy Roadmap is going through a Jurisdictional Passthrough and is not part of LRMC or Residual Costs. Est total NSW cost is $3.0b - $4.5b per annum. This could make LRMC seem insignificant. > Putting costs into the right "Marginal" or "Residual" bucket is important. Which bucket should capability uplift costs go into? > Other NSW DNSPs are planning to use 10-year AIC method to determine LRM costs. > General support for taking a 10-year AIC view to determine LRMC. > Some members are interested to understand more about LRMC.	> Share more information (NERA report) about different types of LRMC (done) > EE working view on what LRMC cost method it will use is to retain the AIC method, consistent with other NSW DNSPs and prior practice, and will report back when estimates have been prepared on this basis
Battery Tariffs Proposed trial tariff LUoS consideration	> Need to be very precise with language given things are likely to change significantly over time. > Having a battery specific tariff is slightly at odds with principle of having technology neutral (agnostic) tariffs. Consider the load more than the technology and rename it to Bi-directional Distribution System Support Tariff > Proposed Battery tariffs give people a reward for grid support. This will help build a customer base who understands the market and what we are trying to do. > This tariff would apply to any exporting load that is in-front of the meter. > Could Virtual Power Plants (VPPs) use this tariff? > This is a community solution to a problem, but some people might try to game it.	> Battery tariff to be technology neutral > Determine if the battery tariff could be used by VPPs. > Ensure that how tariffs work together is considered under the Tariff Assignment Policy.
Large Customer Tariffs	> Carried Forward to next meeting.	> Add large customer tariffs to the agenda

Topic(s)	Discussion Points	Action
Other Business	> We should consider cost allocations for external factors as they could potentially swamp everything else and change pricing signals. Would be good get this on the table early.	> Add external cost allocations to the agenda.
TSS Actions from SCC Meeting	> Essential Energy to review current petrol/diesel price structures and whether they could apply to EV tariffs? If appropriate, include as a tariff structure option. > Essential Energy to incorporate SCC feedback on the TSS principles and present back to the group for approval > Essential Energy to consider developing tariffs for load profiles and even connection type	

PCC meeting 2 – 22 March 2022

Topic(s)	Feedback	Action
Pricing Objectives	> Prices should reflect the efficient costs of providing those services to retail customers. > LRMC is not just about supporting behavioural change. PIAC do not have a problem if people do not change behaviour as a result of LRMC costs, as long as they are cost reflective. > Tariffs are not just about supporting behavioural change, it's about creating opportunities for other types of change as well. It's about giving customer's opportunities for agency. > Customer's bills should reflect the cost impact of the decisions and actions they take. > Both LRMC and residual costs should be recovered on a cost reflective basis. > Tariff plans should be considered over the long term, not just cover the 5-year TSS period.	
Pricing Principles	> Principle 5 – Effective Tariffs – Should solve network and also some social issues.	
Tariff Classes	> General support for retaining existing tariff classes. New tariffs can be added to existing tariff classes to support new technologies such as exporting DER, EVs, SAPS, Microgrids.	> Retain current tariff classes in draft TSS
Tariff Structures	> PIAC are concerned about sending price signals for minimum demand because in itself, minimum demand is not a problem. Sending a signal about minimum demand is not necessarily going to drive more efficient use of the network. > There is a risk that any new export tariffs could create a new daytime peak, so need to closely monitor these to ensure they are not going to result in unintended consequences.	> When available, use trial tariff findings to test and refine final TSS tariff structures
	> Retailers haven't moved customers to new cost reflective network tariffs because customers may be adversely impacted if they switch to new plan or retailer. > Question as to why we use the term "Rebate." Rebate term is normally post payment. > It was explained that 'rebate' was the term used by the Australian Energy Markets Commission (AEMC) when making its clarifying statements in the rule review about permitting both positive and negative export tariffs.	> Ensure the TSS explanatory statement explains the term used when paying customers for exports and align this with what other distributors are doing to support customer and retailer understanding.
Introduction of new charges and rebates	> If customers are going to be better off by the introduction of new charges and rebates, they should be automatically introduced, ie customers should not have to opt in. If customer is potentially going to be worse off, they should be notified and have to opt in.	> Present bill impacts to April PCC to enable feedback on whether export transition is needed

Topic(s)	Feedback	Action
	> New customers should have cost reflective structures that have bells and whistles features. > Existing customers - depends on whether they face bill shock > If there is going to be a bill shock, then we will need to look at glide (transition) path so existing customers don't have bill shock.	for existing customers
Future Default Tariffs	> Default tariffs must have a transition path where there is a bill impact. > Tariff assignment is primarily dependent on presence of a smart meter. > New customers should have cost reflective structures that have bells and whistles features.	
TOU Windows	> EE's charging windows line up well with demand > General agreement that current charging windows are fine, no need to change them for sun soaker and/ or export tariffs. > It would be useful to look at network utilisation and what impact that would have on overall bill changes. > Most people have limited ability to shift load outside a 4-hour window. So, there should be a hard limit of 4 hours for a peak window. Ideally 2-3 hours. But peak windows should not be too narrow either. > Wide peak windows can help transition to cost reflective tariffs. > Interplay between residential and consumer usage can offset each other positively on the network.	> Should the morning peak window shift slightly earlier?
Seasonal Tariffs	> Support will depend on the difference between seasonal tariffs. > It is appropriate to have seasonal tariffs only if they are opt in and the network has the ability to diversify the utilisation of the capacity over different seasons > Ideally you should trial the sun soaker and learn from that before considering a seasonal tariff. Sun soaker may fix the seasonality problems.	> Await sun soaker trial results before considering if there is a need for seasonal tariffs in the future TSSs
Large Peaky Load Tariffs	> Large businesses want consistent tariffs so they can make investments behind the meter to manage their costs. What are their net zero objectives and do our tariffs support these? > Have we spoken to these customers about concept about critical peak charging instead of flat month to month charging?	> PCC to email any questions / observations on this to RM/CW. > Consider critical peak charging in a trial tariff.

PCC meeting 3 – 19 April 2022

Topic(s)	Feedback	Action
Minutes of previous meeting	> The minutes of the previous meeting were adopted.	
Tariff Trials	> Recommend that EE analyses 5 and 30-minute settlement data for when maximum demand is above 300MW for grid scale battery trial. This would allow EE to determine risk profile of tariffs being trialled. > One member offered to share 5-minute load data from c400 customers with controllable DER. > Discussion around possibility of customers switching between tariffs every 6 months or so to lock in best tariffs. > The PCC supported EE looking to restrict customers' ability to game their network tariffs through opportunistic network tariff changes during a 12-month period	> Essential Energy to obtain data. Investigate whether NDA is required and if data can be used at a disaggregated level. > Add words in TSS assignment and tariff eligibility policies to say that if a customer moves

Topic(s)	Feedback	Action
	> Essential Energy explained that restricting annual requested tariff reassignments to a single instance was already part of the eligibility terms for the current period TSS	to a new retailer, that retailer may also request a tariff change. > EE to reflect this in its TSS assignment and tariff eligibility policies.
Export Pricing Feedback	> Despite 62% of customer forum respondents indicating they are not in favour of export pricing, the PCC is generally still supportive of it. > One member made the point that face-to-face engagement sessions may be a better mechanism for debating complex matters like export pricing and may yield different results. Zoom sessions may not always reflect genuine opinions on complex matters, so some caution needs to be applied when considering the feedback from these sessions. > There was general support from the rest of the PCC on this view.	> EE to investigate feasibility and cost of including face-to-face engagement on the tariff deep dives in the round 3 engagement phase
Billing System Capabilities	> Complimentary measures are important consideration when making elasticity of demand assumptions. > There was discussion of the need for retailer billing systems to also be ready for future tariff structures.	
Export pricing - Bill impact testing	> When speaking to retailers about what type of retail offer the would have (when facing network export tariffs) out of insurance/pass through/ prices for devices, we should recognise that their decision may be informed by concerns over potential regulatory interventions.	
DER Hosting capabilities	> Do we know how much load curtailment would be needed without augmenting the network. > If network is fully optimised in terms of exports and load is it possible to determine unit cost rates?	> EE to advise.
Bill Impacts of TOU DER ready tariff	> One member does not believe 2 rates export tariffs will be popular. Would prefer to see a single rates as a starting point. > General - Methodology for calculating bill impacts of TOU DER ready tariff were not easy to understand > Need to arrange a Bill Impact Tool demonstration session, noting that it is DUOS only (not retail)	> EE said this would be tested in tariff trials. > EE to book Bill Impact Tool Demonstration session – done for 3 May.
Export Tariff Transition	> Due to low export rates in the 1.5-3KW band, transaction cost of charge will come close to what we recover from them. One member is concerned with these optics. Would prefer to see a single export rate. Work around value of customer exports should feed into Bill Impact analysis. > Likes the proposed timelines for transitioning to TOU DER ready tariff. Raised question around solar customers being offered a solar sponge tariff. Tariff may be technology agnostic but this tariff is about export and import of energy. Do not rely on tariff averages as it is the outliers that need to be understood. > Blending consumption & export tariffs could results in unintended shifts in load. > Does not believe that Sunsoaker is a cost reflective tariff because it creates an incentive so that the more people take it up the less cost reflective it becomes. ie Causer is not the person the person who pays for the import tariff. Used SAPN as an example.	> Add profiles of customers who do not have solar into tariff bill impacts tool. > EE to discuss solar sponge tariff behavioural response experience with SAPN.

Topic(s)	Feedback	Action
	> Explained that Sunsoaker tariff is designed to reflect cost and also drive behavioural change to reduce total network cost based on both time of use export and consumption decisions.	
Future Trial Tariffs	> SAPS tariffs being trialled are not always easy to understand and may not need separate tariff signals. EE need to work to make the rationale for and basis of these trial tariffs easier to understand.	> EE to share a fact sheet on SAPS tariffs being trialled.

PCC meeting 4 – 16 May 2022

Topic(s)	Feedback	Action
Last Meeting	> Minutes of the last meeting were adopted	
Bill Impact Tool	> Stakeholders who have been using the tool did not raise any further questions about how to use it. > Suggested that it would be good if the Bill Impact tool included the breakeven point, in KW, when feed in tariffs reach a certain price. This would show the value provided to households.	> EE to determine breakeven thresholds > EE to follow up with one member to see if there is any further feedback on Bill Impact tool.

Agenda items for 6-hour pricing deep dive session on 4th June	> Two-way export pricing tariff
	  • How will it work
	  • Transition plan / glide path
	  • Education plan - including positioning this as a platform for the future whilst giving customers time to adjust
	  • Avoided costs and opportunities
	  • Complimentary measures i.e. don't think of these matters in isolation
	  • Potential risks / unintended consequences (load shift)
	  • Static versus dynamic pricing
	  • Opt out versus choice (opt in) versus default tariffs – including what information do consumers need to make informed decisions in response to pricing signals
		> EE to produce agenda for 4th June
		
		> EE to build material for deep dive

Is there a risk that the Sun Soaker tariffs could lead to load shifting at a scale that would potentially create a new peak	> Sun Soaker tariffs can lead to a shift of load, creating a new peak and necessitating an adjustment to tariff windows in future. That could disadvantage consumers who have invested in technology and /or changed their energy behaviour in response to the sun soaker pricing signals. Adjusting tariffs if there is a new peak is not necessarily a quick fix as it can take consumers time to adjust. Recommends that EE engages with customers about this risk. > For there to be a material shift in load in response to the Sun Soaker tariff, a number of preconditions would need to be met, including 1 – a material number of customers would need to respond to the new price signals. 2 - the retail tariff would need to reflect the changes in network tariffs. These are all highly speculative and would be assessed in the trial. > Asked what the alternative to Sun Soaker tariffs might be and also stated that these are not "set and forget" tariffs, especially in the trial period. > Suggested that if Sun Soaker tariffs are trialled, there should be a small savings price signal so that we do not create unintended consequences. If solar soaker tariffs do have a more pointed pricing signal, they should be dynamic so that they are not offered on days when there is a very high demand. Stated that we should proceed with realistic caution and awareness of the risks when introducing sun soaker tariff. Also stated that trials do not mirror what happens in real life, so trial outcomes need to be treated with	> EE to closely monitor demand levels when Sun soaker tariff is trialled. > EE to consider potential responses if there is a shift in load as result of Sun Soaker trial tariff, and account for these lessons when setting the level of the sun soaker two-. > EE to consider probability of this risk manifesting (including after accounting for the

Topic(s)	Feedback	Action
	caution and the risks need to be communicated during engagement with customers.	preconditions for this to occur at scale) and if it feels there is a credible risk of this, then customers will be advised of potential risks during engagement
Revenue Movements	> Customer number growth should be factored into revenue movements > To what extent is our connections forecast dependent on NSW regional development precincts?	> EE to confirm that customer growth is factored into revenue requirements
Total Costs	> There was discussion around the nomenclature of tariff charging parameters. > Rather than using the terms peak and *minimum* demand, we should consider using alternate terms > One member does not agree with view that LRMC must relate to the variable charge and residual costs should relate to a fixed charge. Align some element of residual costs to LRMC price signal. (It was confirmed that this is the approach adopted by networks under the National Electricity Rule pricing requirements, including what EE has done to date and will continue to do)	> EE to ensure use of consistent and clear nomenclature for tariff charging parameters. Instead of the term "minimum demand" consider options including peak export / peak solar / minimum system load and solar export demand.

PCC meeting 5 – 12 July 2022

Topic(s)	Feedback	Action
Recap & confirm minutes of previous meeting	> Shared actions and updates > One member provided feedback via email prior to PCC meeting and in the Zoom chat: *Re the Sun soaker demand, the specific thing to be monitored is when higher demand during solar times coincides with lower volume or higher cost generation (local generation volume with respect to Dx, demand with respect to Tx, and high wholesale prices with respect to the spot market)*	> Minutes adopted > Member comment noted
Testing our approach to Alternative Control Services (ACS)	EE provided overview of ACS Public lighting: > No comments or questions Metering and ancillary network services: > How many basic meters will you have left at the end of the reg 24-29 period? > because basic meters are manually read, as the number reduces, does the unit cost of meter read go up? When will this occur? How material is this – and when will it become a pain point? > We are seeing it now and the average cost per meter has and will continue to go up. Largely driven by travel costs which don't change much as the number of meters decline. > Forecasts show that by 2026-27 we'll be down to 445,000 basic meters (350,000 by end of next regulatory period) – this is a reduction of around 45,000 per annum. Not seeing proportionate reduction in costs going forward. So we will still have a significant number of basic meters at end of 24-29 Reg Period, and this will be an issue in the following period.	> EE to consider long term consequences of decline in number of basic meters on average costs to read each meter.

Topic(s)	Feedback	Action
	> AER's most recent decision for EE recognised this and took account of the diseconomies of scale in the base step and trend metering opex forecast	
Export Pricing – Timing considerations		
When should we start recovering DER enablement costs in our export prices?	> DER cost recovery timing considerations – 2 date options have been provided by the AER in the export pricing TSS guideline > EE preference is to start with the next regulatory period > Does this align with the approach of other NSW DNSPs? If so, that would make sense from a communication perspective. > Agree, start with the next regulatory period and consistent with approach of 'looking forward'. > On export charge start dates I reckon even if the other networks go later, the start of the next reg period is probably a good time to start. Wouldn't expect all the NSPs to have their systems full bore at once, and different retailers will probably pass it on differently anyway.	> EE to check what Endeavour and Ausgrid are planning > Preference of PCC is option 2 (start of next regulatory period) and this preference is not contingent on Endeavour/Ausgrid approach
Tariff Rebalancing		
Tariffs that are below their efficient costs - Energy saver (controlled load)	> EE posed the question: Should we be looking to reduce the difference in the Energy Saver (Controlled Load 1) tariff 2.4c per kwh and the LV residential TOU off peak tariff 4.8c per kwh? Currently we have about 350,000 customers on Controlled load 1. > Can customers who are on controlled load can also have the sun soaker tariff? Should we draw a distinction between static and dynamic controlled load? And how does this work with DSO and DOE? > Customers can have both sun soaker and controlled load tariffs. > SAPN have moved the controlled load time windows to take advantage of solar sponge. Energex are doing that too, but they have ripple control. > If not Controlled load tariff is not cost reflective, EE should push up charge but give customers the option of having a cheaper rate through sun soaker. > It is evident that another NSW DNSP anticipates that they will have an EV problem that is influencing their tariffs. Without treating EVs different from other technology, they may need to extend the evening peak. Is there an opportunity/way to modify the Controlled Load 1 tariff to be suitable for EVs? > Sun soaker has more off-peak times than any other tariff on offer. What we are raising in this discussion is whether there is ability for networks to move controlled load windows and does that warrant having a lower rate than for people who choose to consume energy in off peak times? > If you have the ability to move controlled load windows around, it should mean a cheaper rate, compared to a controlled load time tariff with a static time window. > We're all going to have an electric vehicle problem! That is one of the reasons why controlled loads are still so valuable. > There is a cheaper rate where control of taken away and there is greater value to network > We can and will move times around to suit our network in different areas. > Can we lift this up and highlight its value? This is a very good starting point for building social licence for dynamic operating envelopes. > This is the current version of customers being controlled (i.e. consumption only) –some dynamically. As previously discussed in PCC3 (in April), EE is planning a trial on DOEs in next period. This is a good opportunity to build social licence for the DOE trial tariff. > How will a small business or other tenants access tariff savings if they are stuck with tenancy agreements or where landlords are not passing savings onto tenants - is this a responsibility of Government or retail providers or open for negotiations between tenants and landlords.	Note that the principles supported by the PCC were that: > dynamically time-adjusted controlled loads warrant being discounted relative to off peak, and > it is ok to gradually increase the controlled loads generally towards off-peak rates where they are not providing other benefits. > Continue with plan to trial DOE tariffs. > PCC supported: Controlled load tariffs with static time windows should have the same rates as the TOU off peak rate, but for tariffs with dynamic time windows, the differential should be maintained. > Action Essential Energy will leave some discount in, noting that we want to attract and retain customers on controlled load. We will consider the level of retailer discount in their

Topic(s)	Feedback	Action
	> Only small customers can access controlled load tariffs (not large businesses such as Westfield) > AEMC did the Embedded Networks Review a few years ago and this is sitting with governments. These reforms would have made things much easier for small businesses to access savings by introducing new tariffs. > NSW government also has a public inquiry into embedded networks underway.	published tariffs in our decision. > Link to NSW Inquiry (and AEMC review) re embedded networks https://www.parliament.nsw.gov.au/committees/inquiries/Pages/inquiry-details.aspx?pk=2873
Small business demand	> EE outlined the issue we currently have of the Small Business Opt in Demand tariff not recovering its full share of costs. > There are built in costs (time etc) to opt in / opt out and those costs act as a barrier > Best way to deal with this issue – the principles lend to moving away from cross-subsidising one category to another. Looking at this from perspective of overall cost recovery. Suggest comparing not by annual average invoice but do it on basis of impact in terms of distribution. Ie. don't compare based on what customers are paying, but on a like-for-like customer eg so choose an average customer and compare what they would pay on one compared to the other. > We can do the analysis the other way around, ie take the usage data from the TOU customers and see what they would have paid if they were on the Opt in Demand tariff. > Definitely support the proposal to align level of cost-recovery. Historically people on legacy tariffs have been subsidised by those on new tariffs. Customers with the same load profile should ultimately pay the same even if they are on different cost reflective tariffs. We need to move away from some customer groups cross subsidising other groups. So supports the principle of aligning the level of cost recovery. > If everyone supports the principle that everyone should pay their fair share, we will check the analysis against this principle to ensure we've got it right. We'll do this by using similar customer profiles for each tariff not just for customers that are on the tariff now. > Supports the principle of everyone paying their fair share but questioned whether it is contingent on customers having smart meters. > The transition to cost reflective tariffs is dependent on the transition to smart meters.	> The principles supported by the PCC were that: > As more customers continue to transition to cost reflective tariffs, those tariffs should pay a fair share of Essential Energy's total costs, i.e. be cost reflective > All tariffs should be cost reflective, not just opt in tariffs. > Analysis to inform how much those non cost reflective tariffs should increase by should use common customer load profile data, not just the customers on those tariffs now. i.e. ensure we are comparing like for like. > Action EE will perform the analysis against this principle by redoing the analysis using similar customer profiles for each tariff not just for customers that are on the tariff now, these profiles will also be used in presenting bill impacts in the draft proposal.
Legacy (obsolete) tariffs	> EE discussed the issue of 201 large business customers being on legacy tariffs, >90% of whom would be better off on the default cost reflective policy.	> Support from PSS to have mandatory reassignment of closed legacy

Topic(s)	Feedback	Action
	> Question is whether EE should have mandatory reassignment of these customers or continue to increase the tariffs to encourage voluntary reassignment. > Preference is to close out the legacy tariffs. > Seems achievable to close out legacy tariffs with small number of customers impacted. > Supported mandatory transition for customers who would be better off, and engagement with those that may be worse off. > In summary, the PCC showed support for mandatory transitioning of customers who are going to be better off to cost reflective tariffs and engage with those that may be worse-off to agree transition plan.	tariffs but with an engagement approach for the small number (<20) of customers that may be worse off.
Should opt-out to anytime tariffs be available for small customers?	> EE led the discussion on whether small customers who are on a cost reflective tariff should be offered the ability to opt out to anytime energy tariffs, at a discount as per AER guidance. Noting opt out rates are low (circa 6%). > 2 options – (1) anytime is available for opt-out and (2) anytime is not available for opt-out > If you have multiple network tariffs, its difficult to sell a product to customers in your network. Moving forward, the more you can get a common foundation, the more you'll build a market. Move them into it and manage the transition. Give retailers a single cost reflective tariff and let them work out how to smear it amongst their customers. > Just give customers a network tariff. Let the Retailers sort out how to charge their customers. > Agree. It's the retailers that should offer tariff innovation on this front. Retailers are sometimes opposed to cost reflective tariffs. To the extent that we let people opt-out, there is no issue with customers opting out to an anytime tariff, as long as the costs of servicing those customers are recovered from that group. Retailers are always going to want to offer flat rate tariffs to some customers. > Just a thought: Will the "opting out" principle have a (big) impact on small energy retailers if they lose business by these tariff changes.... > Based on the recent retailer roundtable the AER just held, most retailers have a preference for fewer network options > We generally map the default offering to a customer to be network following. We did offer one product that allowed customers to choose to avoid the 'complexity' of TOU / Demand / etc called No Frills – we didn't change the underlying network tariff though. We don't generally like requesting network tariff changes - we don't really have a clean process for the customers for it. > Question is how do customers opt out? Sounds like retailer opts out on their behalf for whatever reason they choose > Question is how many choices should they have? We haven't included a no choice option, but should we? > End game should be no choice. Question is how we get there. > Is it enough that customers can protect their interests by having choice at the retail level? > Retailers views are helpful to a point, but in over a decade of tariff reform I've never met a large or medium retailer who supports cost reflective network pricing. Because they don't want to change systems or manage risk. That shouldn't be a barrier - the rules are about the interests of consumers, not the convenience of retailers. > Should we say that we are going to take away the ability to opt out to anytime, but retailers will offer flat rate products so that is enough	> Of the options presented, a Preference is for option 2 i.e., for not making anytime available for opt-out. > However, the PCC noted that the principles should be what is in customer's long-term interests. This principle was seen as a further option of having no network tariff choice, only retail choice. > EE has considered this feedback and will have opt out to cost reflective tariffs only (and will consult further in the draft proposal).

Topic(s)	Feedback	Action
	> Is happy to have cost-reflective tariffs in place and pass these through. Retail arm plays a flat rate for energy which complicates putting forward very cost-reflective tariffs for customers. There is a market for customers wanting a simple offering, but its not big and most customers don't care. > Conclusion is that the best outcome is to send a cost reflective network signal to the retailer, irrespective of what the retailer does. PCC supported this principle	
Other business	N/A	

PCC meeting 6 – 9 August 2022

Topic(s)	Feedback	Action
Recap & confirm minutes of previous meeting	EE shared actions and updates One member shared feedback on a new solar self-optimising variable power water heater that will transition off controlled load and migrate to intelligent control in conjunction with cost reflective tariffs. Retailer session held. Feedback included: > Cost reflective tariffs having to recover sustainable fair contribution to total cost and cautioned against discounting them. Wanted stability in transition. > Request for grace period of 12 months when a customer gets a smart meter not through the retailer or customer's choice but through end of life. Current practise in Energex QLD. > Charges to be as simple as possible, including c/kW vs demand charge on exports One member shared feedback on his experience in moving to a new retailer trying to get a TOU tariff after ROLR event Discussion on purpose of cost reflective tariffs (pay appropriately/fairly or change behaviour) and whether retailers not passing on tariff structures limits the impacts or does it give another tool to deal with issues.	> Minutes adopted
> Export Tariff Transition Approach		
Export Tariffs	> Review of timeframes proposed for transition to export tariffs, noting the updated share of customers on the Sun Soaker two-way tariff due to the 12-month grace period > The form and pace of tariff assignment presented at PCC and updated here was still supported > One member considered that the 12-month grace period should apply at the customer retail tariff level, but that the network reassignment should apply immediately to their retailer.	> Retain the proposed export tariff transitions strategy in the Draft TSS
Tariff Setting and Rebalancing		
Tariffs setting process and Rebalancing Principles	EE outlined that the process includes: > Forecast total revenues > Estimated Long Run Marginal Cost separately for peak demand and for System minimum and peak exports > Forecast overall customer demand including smart meter deployment and tariff assignment to different tariffs > New tariff designs – parent tariff charging parameters, maintained alignment with our LRMCs, incentive signals, trial designs, closing obsolete tariffs and reassignment to default cost reflective tariffs – impacts 200 with 90 better off	> Retain the proposed principle approach to residual cost recoveries that avoids price volatility as we transition more customers to cost reflective tariffs

Topic(s)	Feedback	Action
	Discussed a principled approach to rebalance the tariffs with 60% of customers moving across to a new tariff by the end of the next period, can't keep discounting the cost reflective tariffs Discussed two objectives in revenue recovery: > Achieve total revenue recovery to fund operations > Avoid price volatility as we transition more customers to cost reflective tariffs Sought to keep fixed charges equal on all tariffs, so no change when they move between tariffs All inflation put on the fixed charges and people won't be impacted differently depending on usage Worthwhile thinking how the roadmap and ISP costs get allocated moving forward and how that might change this narrative Currently no regulatory head of power on jurisdictional schemes, currently wash through with no NER pricing principles No luck getting any sort of forecast of roadmap costs from NSW Government yet Office of Energy and Climate Change coming to the SCC Principles are a good reflection of the discussions we've had so thanks for that. Really interested in the idea of keeping the fixed fees the same across tariff types, I've never thought of that before as an approach. At first thought sounds good, be interested to think of it further around the relationship between tariff types, building certainty and cost reflectivity especially where people have a voluntary signal for peaky load. Consider how to avoid the cross subsidy between tariff classes and ensure people are paying their way. Rules are pretty loose in terms of what the upper/lower bounds are for revenue recovered from each tariff class. What we're seeking is more of a predictable fair point as according to rules you can have a fair bit of cross subsidy going on. If you could measure the net system load profile for a group of customers on a given charge and adjust that up/down according to the cost to serve, net system load profile that should be a reliable way of giving a good mid-point that avoids the cross subsidy between different groups. Specify the net sum that is carried across groups, could just be adjusting them year on year as the net system load profile changes for these groups. The efficient price bounds are set to stop an uneconomic outcome, but because it is shared infrastructure there will be some people paying more, some paying less. Pricing principle rules require us to recover it across the customers in the way that least distorts their use of the system so we can still support efficient utilisation. Next slide (10) shows that allocation across customers has not been distorted, we are keeping the share of residual costs by customer type the same as what it costs to serve them in terms of their contribution to the total cost now and by the end of the regulatory period. Principles behind what you're describing has been maintained in the way we've managed to affect the transition between the existing tariffs and the new cost reflective Sun Soaker two way tariffs. Sun Soaker will be your challenge on that one as the Sun Soaker is not a cost reflective tariff so you don't have the same capacity to leverage that which you've addressed through gradually increasing, but the risk is that you lure people onto it and then they end up losing the benefit because after a few years you have to re-adjust it up to the point where there's not much saving. That is the issue the retailers have asked us to avoid and we're working to avoid that through the approach to fixed charges described earlier. Terminology of cost reflective - There is cost reflective in the structure that it's not anytime and has structures that reflect the different ways costs are incurred by the business at different times of day or consumption versus export, so Sun Soaker is definitely cost reflective in that way because it has time of use on consumption and time of use consumption or export as well, so it has a cost reflective structure. What are the things that marginally drive costs? And then	> Thoughts on questions for the OECC presentation at the SCC

Topic(s)	Feedback	Action
	we have to recover sunk costs. Cost reflective for sunk costs is reflective of how we would attribute the total cost base to different whole tariff classes, and that's the level to which we've done the allocation of costs work with the residual costs of the business. In moving these residual costs they are not going to exports tariffs more to fixed charges, so they don't distort behaviour or create volatility and tariff reassignment as the smart meter rollout picks up. Cost reflectivity from a consumer perspective is about what you can control with your own behaviour Discussion of charts showing the residential and small business bill impacts from 2025 to 2029 by residential customer type and consumption level (slides 11-12) Has there been consideration of changes in demand load with businesses electrifying etc? Two ways this can be considered in total consumption which was forecast by Frontier. Secondly in assumed tariff assignment which is considered in the transition to cost reflective tariffs spoken about earlier. This is for customers with a new meter or for existing TOU meter customers in year 5. We haven't actively made extra assumptions about opt-out customers. Is this taking into account that Essential will be managing customers peaks somewhat by introducing dynamic operating envelopes? That is the plan but it's not going to happen in the short term. It's a next period trial and test before rolling it out more broadly. Probably not such an issue in Essential's area but I assume that we're still expecting people to take up EV's. Does this feature in the predictions for your forecast for who is going to take up voluntary opt in demand tariffs? We could account for it in the estimates. The tariff should be robust to a greater level of opt in than what we've expected. It was very helpful when you gave us that objective in Meeting 1 – think future state, don't create another problem for the future. So we tried to move everything to a sustainable footing in terms of those recoveries. Presentation of Sun Soaker Two Way bill impacts updated it to the draft TSS tariffs that would be in the next TSS period. It shows that doing nothing except moving from anytime to a TOU signal you will save money. Good news for risk of bill shock. Much smaller savings if already on a TOU tariff.	
Draft TSS Documents		
Documents and Feedback	EE outlined the two documents which have been provided last week for review: > Draft Overview – explaining this in 10 pages in accessible format for customers > TSS – compliance document which shows how all this meets the rules that we need to comply with. AER has worked with the network sector to develop a standardised format which has been adopted in the TSS. > Keen to get any feedback given the scale of the communication task. Goes live on 1st September still in draft form for feedback and consultation. > Ideally feedback within the next week would be great > Feedback can be also made by formal submissions through the consultation process after 1 September > Be good to continue the communication strategy following on from the consultation that has already been completed to support the introductions of the tariffs, mitigate the risk of push back when the tariffs go live. > Definitely something we've heard through-out the process in relation to education. We are probably looking to do some broader education around network challenges and use the tariff trials education that has already started to test some of those messages and see which messages resonated, which forms of media worked the best. Also need to do a bit more with the solar installers industry group as well.	> Documents to be re-distributed by Essential Energy [completed]

Topic(s)	Feedback	Action
	> How have you interpreted the potential retailer response, if they pass the tariffs through or not, in the document for customer?	
	> We haven't sought to second guess the retailers. We have provided scenarios where we assume no behaviours response from customers but that those signals are seen by customers	
	> It is one of the toughest things to deal with as it is speculation either way. Safe place is to say that some retailers will, some won't, some will do both, but customers will have the options. So suggestion would be to frame that as speaking to this.	
	> Might want to do something with regulatory framework and protections, as well as the DMO, bill smoothing payments arrangements	
	> TSS is very compliance based so would need to go in the Overview Document and perhaps this is adding a page at the back where we talk about the money flows and who does what in the chain. And then talk about how they don't see our prices but there is a number of ways retailers can package so make sure you use Energy Made Easy and shop around.	
Future Engagement	Draft Regulatory Proposal and Draft TSS published for feedback on 1 September. Thanks for all the efforts from the PCC group for their involvement in the process. Massive thank you to everyone for your considerable involvements. Also like to point out that this isn't the end, we have phase 4 engagement process already planned to go through which will focus on these draft documents. Do we need another meeting with this group between the Draft and the Proposal?	> Agreed meeting required, maybe two
Other business	N/A	

Meeting 7 – 2 November 2022

Topic(s)	Feedback	Action
Recap & confirm minutes of previous meeting	Rob shared a recap of the prior meeting and actions and updates since then.	Minutes adopted
AER PCC engagement	AER introduced their intent and approach for meeting with the group	
Engagement and tariff trials update	> EE explained the Phase 4 engagement and engagement on the draft regulatory proposal and draft TSS. > EE outlined the issues raised in engagement that will be revisiting today. > EE gave an overview of the tariff trial status. > One member noted the value of doing trials such as this is dependent on Retailers passing on the pricing signals and to see how different customer types respond. It is the role of Retailers to figure out the best way to present choice to end consumers. > EE noted that one of the values of the trial is to see how Retailers pass the pricing signal on.	
Matters for further testing		
Recap and principles for considering feedback	EE provided a recap of draft TSS two-way tariff transition approach. Discussion about where we are at and how we navigate the future. What principles should guide our final positions in the TSS, particularly where we received differing views from some parties. Starting point is:	> Maintain existing principles and include another principle that we will consider impacts on retailers and other market players who

	> Advancing the National Electricity Objectives (NEO) > Advancing the network pricing objective (sending efficient signals to consumers) > Pricing objective principles co-designed with Customers (avoid bill shock, fairness, easy to understand, effective, integrate renewables and new technologies) Do we need a principle that steers us on how to balance retailer and consumer interests eg on draft plan whereby customers who receive a smart meter due to a faulty meter replacement will have 12 months for their retailer to understand their TOU data before reassignment. Retailers asked for this but is this in consumers' best interests? Do we need a principle that considers the direct impact on retailers, noting that retailer interest does not align with consumers' best interests? Export tariff rule change included a principle along the lines of: Tariffs reasonably capable of being understood by customers OR put into a tariff by retailers (e.g. considers impact on billing systems). Not just talking about customer facing billing systems. Retailers billed by DNSPs. What retailer pays DNSPs does not require automatically follow on to customer billing systems. Is leaning towards scrapping 12 month grace period, but we should consider having a principle that shows we are considering the impact on Retailers. Based on discussion with retailers – the export demand change is difficult to build. Most retailers could quickly implement a ToU based tariff, but the export demand charge is hard. Retailers have other options that doesn't necessarily rely on passing on the export pricing signal. They could increase fixed charge or change feed in tariffs (FiT) – there are other ways retailers could pass this charge through. So are we OK if we take existing principles and include another principle that makes clear we have considered impact on retailers? Yes. correct reading is that customers want to be able to understand the end point. The intent should be capable to be passed through. Observed that the change in principle was to acknowledge a future of prices for devices with automated responses, not just pricing for human behavioural response Agree that the principle that consumers must understand tariff comes from the old paradigm. The additional principle should be broader than retailers. It needs to have regards to the ability of intermediaries, or people who make products and services in the market to make those products and services. It's not just retailers. As principles, we need to recognise that they can necessarily involve trade-offs between them. They frame decision making.	develop products and services for electricity consumers, while not losing the existing focus on consumers' interests. > Ensure that when we refer to our pricing principles that it is clear that they are to provide guidance and that there are trade-offs to be made between them i.e. they frame our decisions.
Issue - sun soaker two-way as the new default tariff	EE provided an overview of the results from the Phase 4 engagement. Key point was that retaining Sun Soaker two-way as the default tariff was well supported. PIAC concern with sun soaker is potential to have to change tariffs further down the track. Need to change the design – give the sun soaker a pointy signal, it is more likely to get taken up and responded to but overtime, it would become less effective in terms of reducing peak and could create a new one. Recommends that we don't have a super pointy price (which is what Essential Energy is doing – ubiquitous across the network, off peak is same and peak is average of peak and shoulder). The challenge for Essential Energy is to set sun-soaker prices at level which gets some response but doesn't have unintended consequence of creating a new peak. The levels of the peak and off-peak can be monitored over time for effectiveness, and we are going to discuss the flexibility to adapt the TOU windows	> Retain draft TSS approach

Issue - pace of transition two-way tariffs	> Noted the preference from customers for a faster transition to two-way tariffs. (49% supported transition from 1 July 2026) > EE is considering the timeframes for implementing the new billing system. Considering whether this should be a contingent trigger. Asked for thoughts on this refinement to the TSS. > This was a recommendation from the SCC. > This creates option value. > When it comes to decisions about transition, obviously we need to consider billing system impacts, consumer impacts, what is reasonable and critical path. But this transition has to be ASAP. So, what are the absolutely barriers rather than preferences? Approach with some sense of urgency. So, Craig supports this quicker approach. > Customers generally support the quicker transition, so both support a quick transition. > Overall, there was support to implement two way tariffs as soon as we are able to, rather than a set date. > I think that's a that's a good outcome, because you might find given costs of certain things like the NSW roadmap, and whatever is going on, The introduction of this tariff earlier actually could provide significant cost relief for people. > I agree on the scope to help on bill shock, which will be important. We are seeing a very significant difference in the proportion of a retail bill that the network component makes up. For the first time in history wholesale costs will be a dramatically larger part of the retail bill.	> Include contingent trigger for early establishment of our new billing process capabilities. > If Essential Energy establishes its new billing capability ahead of schedule, it will trigger the reassignments to the mass smart meter reassignments to Sun-Soaker two-way and the addition of export tariff and rebate to our LV demand-based cost reflective tariffs (BLND3AO, BLND3TO, BLND1AR and BLND1AB) in the next pricing year. > We will publish notice of this early trigger 6 months before the pricing year that these two-way pricing changes will apply.
Issue - One year grace period	Bill impact analysis shows that when customers go from anytime to sun soaker two-way, customers benefit from the ToU windows. The customers are better off if they can see the signal. Retailers are better off from customer moving to the tariff, even if they don't pass it through. Should we put the grace period in or take it out? Retailers should face the new tariff when they have to face it. The grace period should apply at a retail level, but not at a network tariff level. I don't think it's necessary to have the grace period. The AER have seen the grace period after a faulty meter replacement as fairly important particularly in context of AEMC metering review and accelerated roll out of smart meters. Impacts on the positive side for average customer – but vulnerable customers (or other subgroups) may not benefit therefore the lag on transition can help to build social licence. Retailers should have the option to pass it on. Retailers are not obliged to pass it on. Also clarified that the lag is only for faulty meters not for a retailer led roll out triggered by the AEMC, which is a relatively small number. I don't disagree – broader social licence of customers getting moved to a cost reflective tariff is more of an issue in a world where many customers will be transferred and moved to cost reflective tariffs in response to AEMC. If desired from a policy perspective, the AEMC can consider this in its metering contestability review and rule changes. Essential Energy would comply with any rule change through the TSS period. Customers who have a faulty meter won't have a particular load type. They will just be like average customers. There is no negative financial impact on retailers on average. Cost to serve some customers may increase slightly, but most will go down for most customers. Therefore, in terms of impact on retailers, it will be a portfolio impact. There is no need for retailers to pass that through. If there was no lag, customers would still have choice to switch to someone else if they don't like the cost reflective tariff. A 12-month delay won't change a vulnerable customer's circumstances. AER will consider their position on this further in light of these comments.	Remove one year grace period because: > It is not in affected customers' interests > It is not consistent with the customer and PCC preferences for a faster transition to two-way tariffs. > Retailers have no obligation to pass on the network tariff in retail offers, and can implement the grace period themselves > Would involve significant administrative costs for no customer benefit.

	AER has raised a very important issue but need to come back to what are the real impacts of the proposed change. Essential could address this issue by saying that it is not expecting Retailers to automatically pass the pricing signal on. AEMC should look at this in its decision. We shouldn't look to put something on DNSPs that is binding in case the AEMC incorporates this into their decision, e.g. as a 12 month grace period obligation on retailers. We have a position, where we are not in favour of price periods. We [as a retailer] see it as a retailer's problem to solve. If we, if we do choose to move the retail tariff for a customer. From a customer's perspective it doesn't make sense to have the network tariff grace period either. In the past the concern had been about moving straight onto demand tariffs, but that is not a concern here where you don't have demand default tariffs.	
Issue - Export tariff approach for large LV customers	EE provided a recap of the content in the fact sheet, including: > Why sub-transmission and HV customers do not need to face an export tariff > How data shows large business LV customers are having an export impact on Essential Energy. This is a harder problem to solve for business customers. Big challenge with export tariff is that it isn't cost reflective (reflects solar generation). Impact on network is different for different businesses. Gut feeling – these businesses are making a decision on what tariff best addresses their profile – so perhaps could add export charge and rebate their existing tariff. Discussion of the data with Essential Energy's Asset Management team shown that if you are a large business, and unless you operate 7 days a week, some of these businesses are causing significant impact on weekends when they are not soaking up the power with their own load. Design of the charge accounts for the diversity. Yes that is what the demand-based export charge does. Agreed. I'm keen to understand how this effects existing customers who have responded to current tariff signals in their usage, and seasonality. If only operating seasonally, option c doesn't upset existing arrangements. The cohort of above 160MWh pa business customers is price responsive, which we see in their data. If they have a lot of solar installed, they would be liable for an export charge – the scale would be from 1-5%. An option (variation of option c) being considered is, if make a call to put the charge in, Essential Energy could seek to make this tariff revenue neutral ie lessen another parameter, include the export charge and rebate and keep the tariff revenue neutral in year 1. Meets the fairness principle and avoids bill shock. So how do we collectively feel about an option to bring in version of option c and ensure impact is neutral – Is this supported? The PCC supported this approach. It supported the principle 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 > the same commencement date as our export tariff transition strategy for mass reassignments (i.e. in the pricing year following establishment of our new billing process capabilities, and no later than 1 July 2028). Adding the export charge with the existing demand charges for these large businesses is good.	In the pricing year following establishment of our new billing process capabilities, we will add the export charge and rebate to the existing default large business LV tariff (BLND3AO) tariff. This will comprise: > The same export and rebate structure (including basic export limit) as all our two-way tariffs > The same export tariffs as all our two-way tariffs > A rebate symmetrically aligned to the equivalent BLND3AO peak tariff We will ensure the new tariff is revenue neutral for the first year it applies. All default and opt-in cost reflective tariffs for LV customers will reflect the above export charge and rebate from that date. This will: > prevent customers opting out of export charges > allow customers who have already chosen to respond to demand-based tariffs to continue to benefit from their response to such tariff signals for their peak demand, whilst still facing the same export tariff and rebate as other customers.
Issue - Ability to opt out from sun soaker two-way	The issue is understood. PCC retains its prior view that no opt out should be provided from the default tariffs at the network level.	Remove the opt out option from default cost reflective network tariffs because:

	We support not having opt out to anytime because retailers won't do it anyway under their current costs. I think having two cost reflective tariffs with two-way pricing gives you flexibility. Having a demand and a sun soaker variant gives you future options. Only 1 two-way tariff for the next 10 years has some risk. I agree keeping the demand opt out tariff and having that as two-way makes sense.	> It is not consistent with the customer and PCC preference for a faster pace of two-way tariff transition > The sun soaker time of use consumption windows broadly align with retailer wholesale energy cost structures > Retailers have no obligation to pass on the network tariff in retail offers > Customers exercise choice at the retailer and retail tariff level > Avoids gaming of two-way and non-two-way network tariffs by large exporters.
Issue – potential risk that the peak charging window moves	Real issue for Ausgrid and Endeavour. Assume uptake of EVs will push peak later. Need to introduce a tariff that incentivises EVs to charge in right periods. Want flex to do this, not just blunt instrument of changing peaks. Don't think other parts of the Sun soaker tariff will address this issue. Sun soaker is more for stationary load. Important to have capacity to change. Re the tech neutral point – the specific tariffs designed to shift big loads when they are causing a problem should be designed around type of load rather than the technology (eg EVs). Sun soaker tariff is a good example of tariff designed to take into account the shape of network demand. When overall load shape shifts, it's time to adjust the tariff. Need to look at technology neutrality. In general, customers are responsive to managing their devices. Should not be singling out specific technologies. Essential is not singling out specific technologies. The question here is around the option value of the TSS permitting Essential Energy to adjust the TOU windows if evidence shows this is needed. Is that supported? The ability to adjust TOU windows was supported by the PCC and the AER. Ausgrid has specified wording of one system peak per annum that is outside the current window. The AER prefers a measurable trigger.	> Include contingent trigger for adapting the TOU charging windows if the data show that this is required within the TSS period. > Include clear wording around how the need to move the windows will be identified and ensure it works with the timing of the annual pricing proposal e.g. "one system peak in the 12 months preceding the date of lodging the annual pricing proposal".
Issue – education	You'll need to be clear what you're doing and how that sits with what retailers and others are doing (e.g. say if they only keep flat tariffs). You'll need to have an education campaign that builds out whatever the AEMC lands at in the push for smart meters.	Our education efforts will tie in with developments arising from the AEMC's metering review rule change and associated recommendations.
AER Q&A Feedback from PCC to AER	**Sun soaker** If you have export tariffs, question is whether they are equitably applied. Are export tariffs helping to solve the problem? Those that are being penalised may not have deep pockets nor be able to take action. We need to unpack the logic behind that. Heard that there is a lot of agreement about Sun Soaker being the default tariff for Essential Energy. Should acknowledge that Essential energy has found a good middle ground in managing issues in making Sun Soaker the default tariff. But there are some real challenges which will require monitoring and the potential to respond. There is an inherent risk largely beyond Essential's control that some consumer investments may be impacted. This creates some innate risk when consumers are thinking about investing in long lived	EE to share AER's remaining questions with Gavin and Jay who were not able to make the meeting.

assets (heat pump for example). But recognise this risk will be a challenge for Essential Energy to control. Comes with the sun soaker two-way tariff being ubiquitous, which makes it unavoidable.

Pace of transition / change

Having heard many of the engagement sessions, regardless of our own perspective, there is a loud and clear preference from community to move faster to export tariffs. That has come through consistently and that has been presented in Essential Energy's proposal.

It was clear in the engagement sessions that when customers understand context and direction, that made a difference in the appetite they had for change. This is testament to good consultation and to the idea that customers will react differently when they understand the context.

Essential Energy's engagement has been exceptionally thorough. The quantitative customer evidence has been garnered from rigorous and deliberative engagement. Essential's engagement in this process has been top-notch.

There has been a genuine intent from Essential Energy to garner customer preferences and to have this conversation in a meaningful way. There are structural issues around some of this engagement – Essential is consulting with many consumers but most of these consumers will never see the outcomes (the tariffs and options around these) due to the role of retail pricing. This affects pricing engagement for all networks. Essential has really listened to stakeholders and have responded to feedback throughout the engagement process.

Network constraints driving Essential's tariff plans

Are these well understood by this group?

The information provided for this group was appropriate. PIAC would like more detail though (more so than many of this group would like) and would like more granularity in this information. Would like to understand aging asset locations, SWER lines, opportunities, constraints etc etc. Where is it happening at a fast rate and a slow rate. How big and urgent the problems are etc. The information that Essential has pitched is probably at the lower end of what is necessary for this group.

I found the information we were given was appropriate for what we were being asked. I participate in energy policy discussions in lots of forums and found the balance here was good. What was provided in the sessions has facilitated productive conversation.

| Other business | N/A | |