

SA Power Networks Regulatory Proposal Engagement 2025-30

Focussed conversation – Tariffs: Enabling the Energy Transition

Workshop 4 – 28 September 2022



Empowering South Australia

Acknowledgement of Country

'I would like to begin by acknowledging the multiple Traditional Owners of the lands that host the South Australian electricity grid.'

I would also like to pay my respects to Elders past and present and acknowledge that these are living cultures by paying respect to emerging leaders.'



Housekeeping

Diverse group of stakeholders, keen to hear all voices

Hybrid session

- Questions, comments in chat function online
- Raise hand if want to speak ()
- Cameras on preferable (particularly when asking a question)
- Session will be recorded

Parking Bay

- We'll use the chat function to capture 'parked' items

Follow up

- Discussion summary will be circulated post-workshop
- Offline chats welcome (SAPN staff)
- Workshop series scheduled

Stakeholder Invitees

Members of the Tariff Working Group and others:

- SA Power Networks Community Advisory Board + Reset Sub-Committee
- Australian Energy Regulator
- Essential Services Commission of SA
- Central Irrigation Trust
- Energy & Water Ombudsman SA
- SA Wine Industry Association
- Uniting Care Wesley Bowden
- SA Small Business Commissioner
- Dept. Energy & Mining
- Yates Electrical
- Electric Vehicle Council
- Business SA
- Pangolin Associates
- The Energy Project
- Energyplex
- Smart Energy
- Sun Energy
- CCP30 representatives

SA Power Networks staff presenting and listening:

- Jessica Vonthethoff – Executive General Manager Customer & Community / Chair – Tariff Working Group
 - Helen White – Manager Revenue & Pricing
 - James Bennett – Manager Regulation
 - Bryn Williams – Network Strategy Manager
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- Dan Popping – Head of Stakeholder Engagement
 - Joe Caruso – Major Customer Manager
 - Martin Coelho – Billing & Credit Manager
 - Amanda Hudson – Customer Consultation Lead

Overview – Focussed Conversation

9.30am-9.45am	Welcome and Introduction • Welcome • Recap: Workshop 3 • Overview: Workshop 4
9.45am-10.05am	INVOLVE – Residential • Electrify Tariff impacts
10.05am-10:55am	INVOLVE – Business • Customer Profile Small Business Time of Use Demand • Public EV Charging Stations Australian Distribution Networks
10:55am-11:10am	Break
11.10am-12pm	INVOLVE – Business • Compliance with Flexible Tariffs – Large Business • Small Business Time of Use Opt in Solar Sponge
12pm-12.50pm	Consumption Tariff Summary • Outcomes of Workshops 1 – 4
12.50pm-1pm	Wrap Up • Final questions, comments? • Next steps, close • Lunch

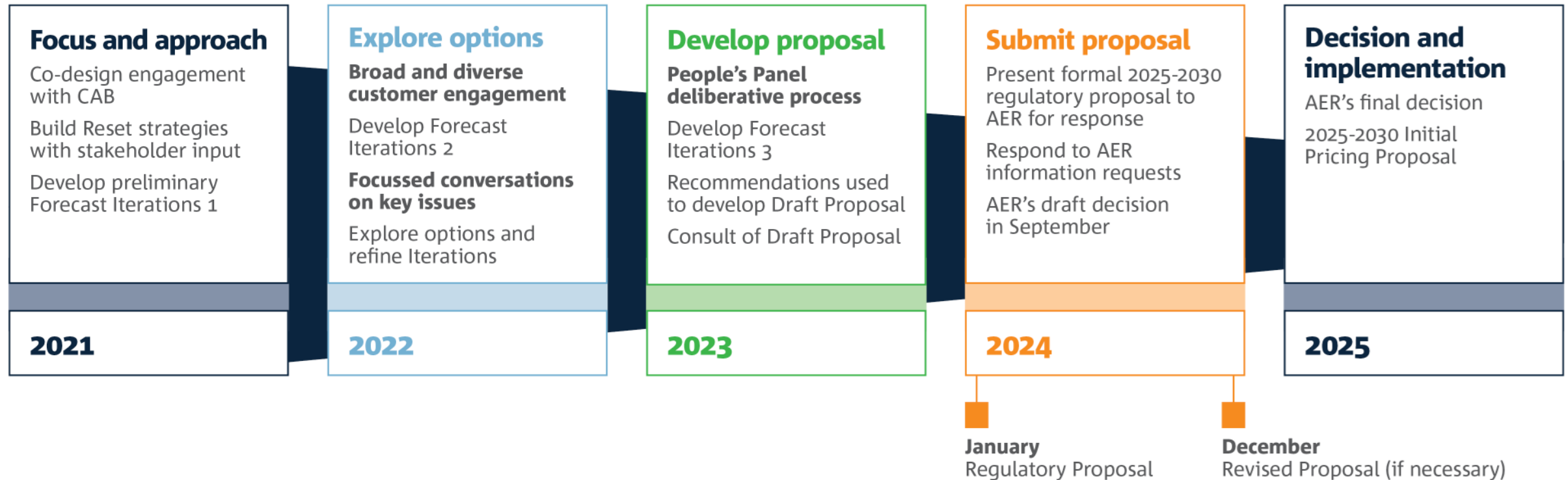
Recap - Reset



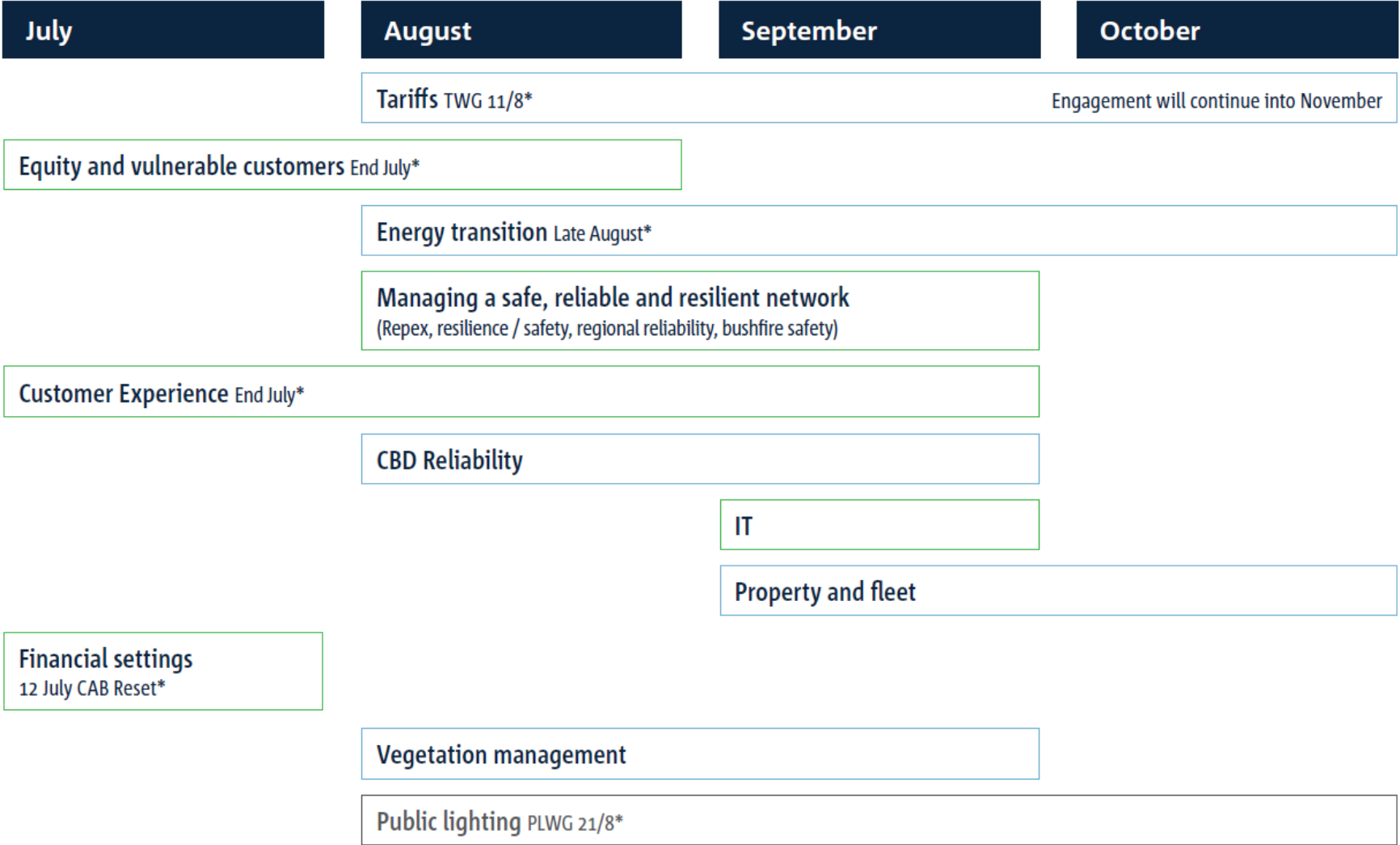
The Price Reset process

As a monopoly service provider, our prices are approved by an independent regulator

In building our **Regulatory Proposal** and **Tariff Structure Statement** we engage deeply with customers and the community



Focussed Conversations timeframe



* Engagement start date

2025-2030 Reset Engagement: Background

Five year regulatory period

Customer and Stakeholder Engagement

Revenue Determination (RD)

Approved by the Australian Energy Regulator (AER)
Adjusted annually for CPI, Incentive Schemes and Cost of Debt
Overall amount of revenue SAPN can recover from customers

Tariff Structure Statement (TSS)

Describes the tariff classes and structures, policies and procedures for assigning customers to tariffs, tariff charging parameters, and how the revenue will be recovered

Annual Pricing Proposal (APP)

Details the proposed prices for the agreed tariff structures to take effect at the commencement of each regulatory year - 1 July

Year 1

Year 2

Year 3

Year 4

Year 5

Recap: Workshop 3 Enabling the Energy Transition

- Residential
 - Electrify
 - Diversify
- Business
 - Public EV Charging | Small Business Time of Use Demand
 - Flexible Tariffs – Large Business
 - Generation Tariffs

Participants' input and feedback from Workshops 1-4 will be captured in a report on consumption tariffs (for the TSS) to the People's Panel.

Today's Focussed Conversation



Purpose: Today's Focussed Conversation

- Today's Focussed Conversation (workshop) is the fourth in a series of Tariff related Reset discussions:



Purpose: Today's Focussed Conversation

Outcomes of today's workshop 4:

- Illustrate the distribution network bill impacts for an electrified home.
- Understand the customer profile for Small Business Time of Use Demand tariff.
- Understand how other Australian distribution networks approach EV charging.
- Understand how Flexible Tariffs will be complied with for Large Business.
- Consider the option to develop an opt in Small Business Time of Use tariff with Solar Sponge pricing signals.
- Summarise the outcomes from Workshops 1 – 4.

Enabling the Energy Transition – Residential

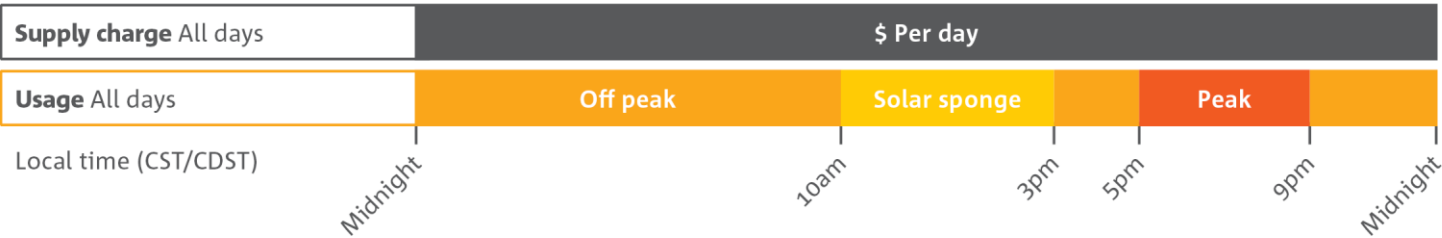


Electrify – RELE

What we heard from Workshop 3:

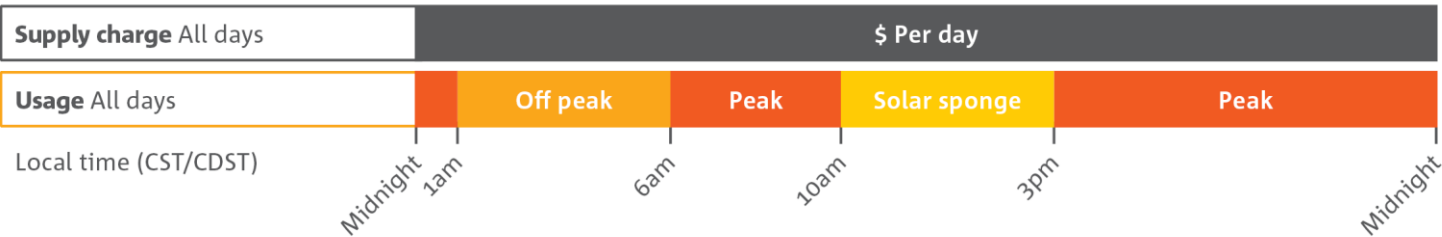
- What does the distribution network bill look like for different appliances on Electrify?

RELE | Electrify



- Peak | 4 Hours | 213%
- Off Peak | 15 Hours | 67%
- Solar Sponge | 5 Hours | 15%

RTOU | Residential Time of Use

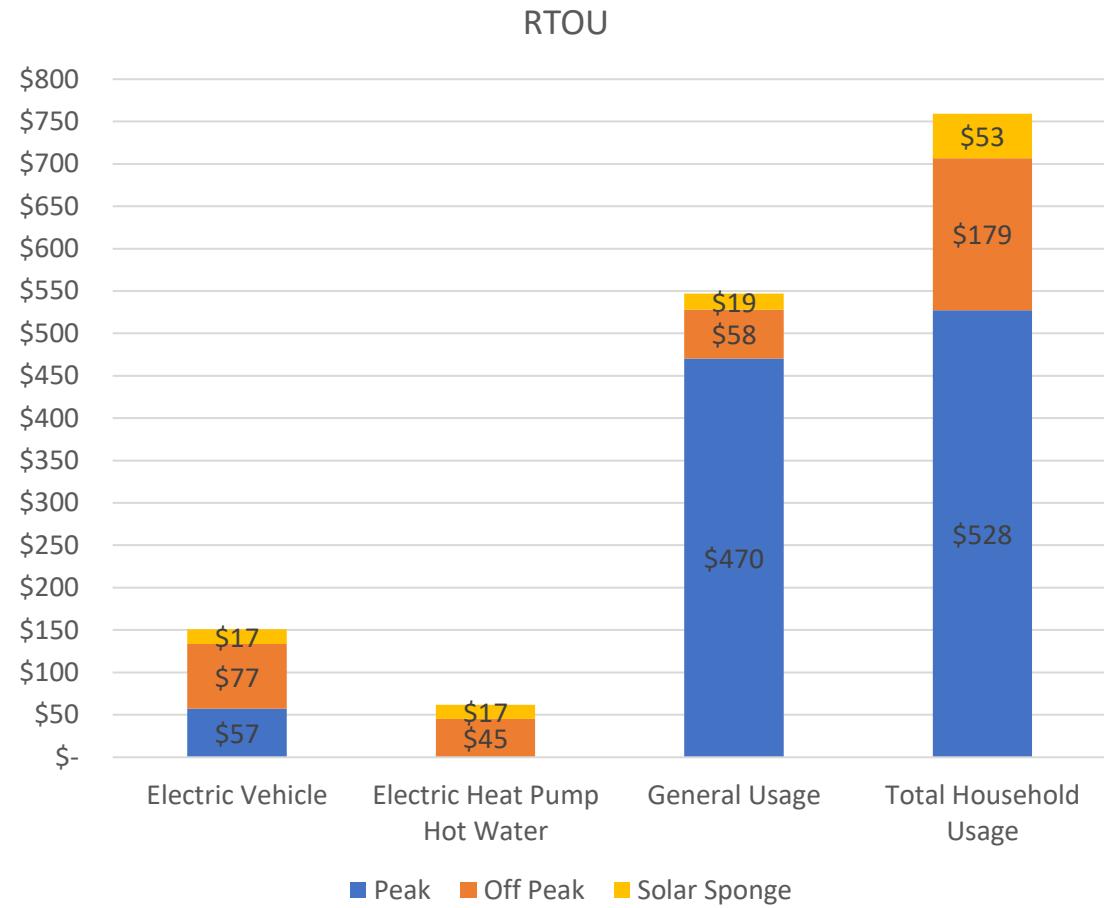
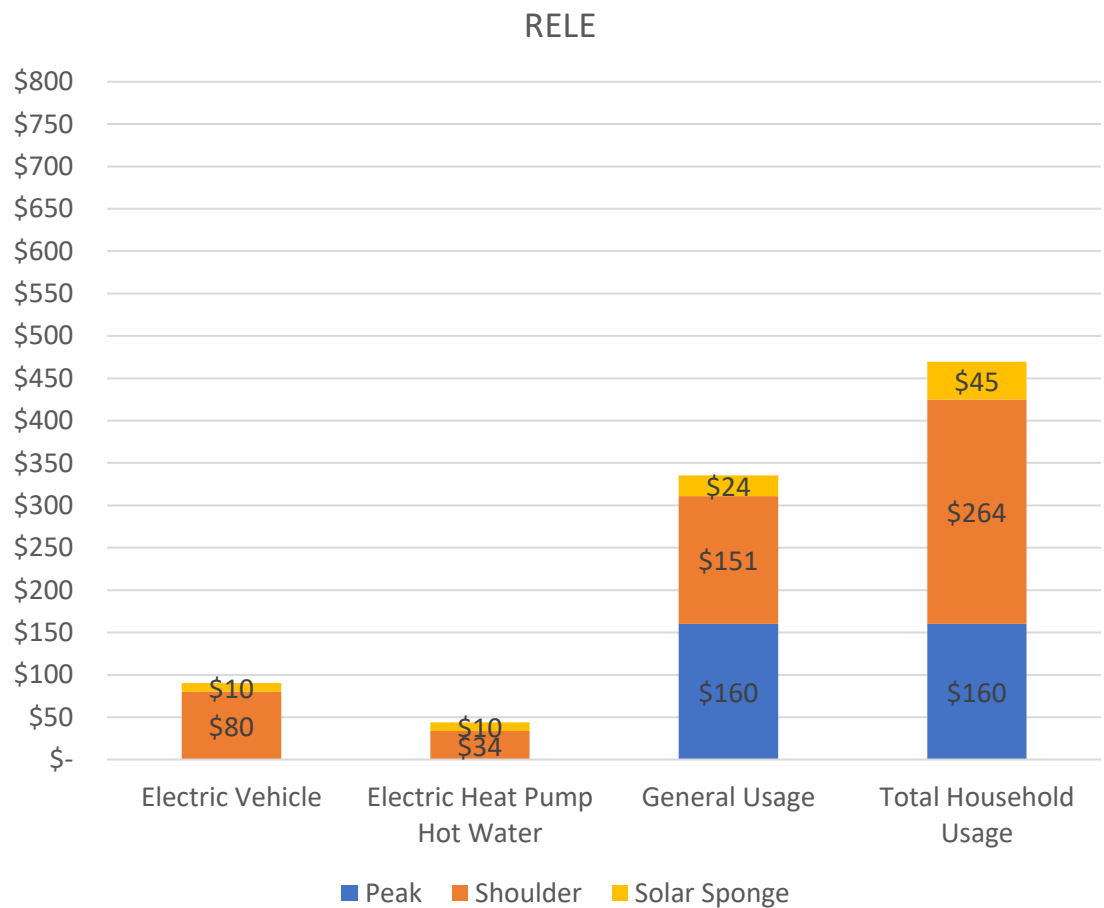


- Peak | 14 Hours | 125%
- Off Peak | 5 Hours | 50%
- Solar Sponge | 5 Hours | 25%

RELE v RTOU NUoS Bill Impacts

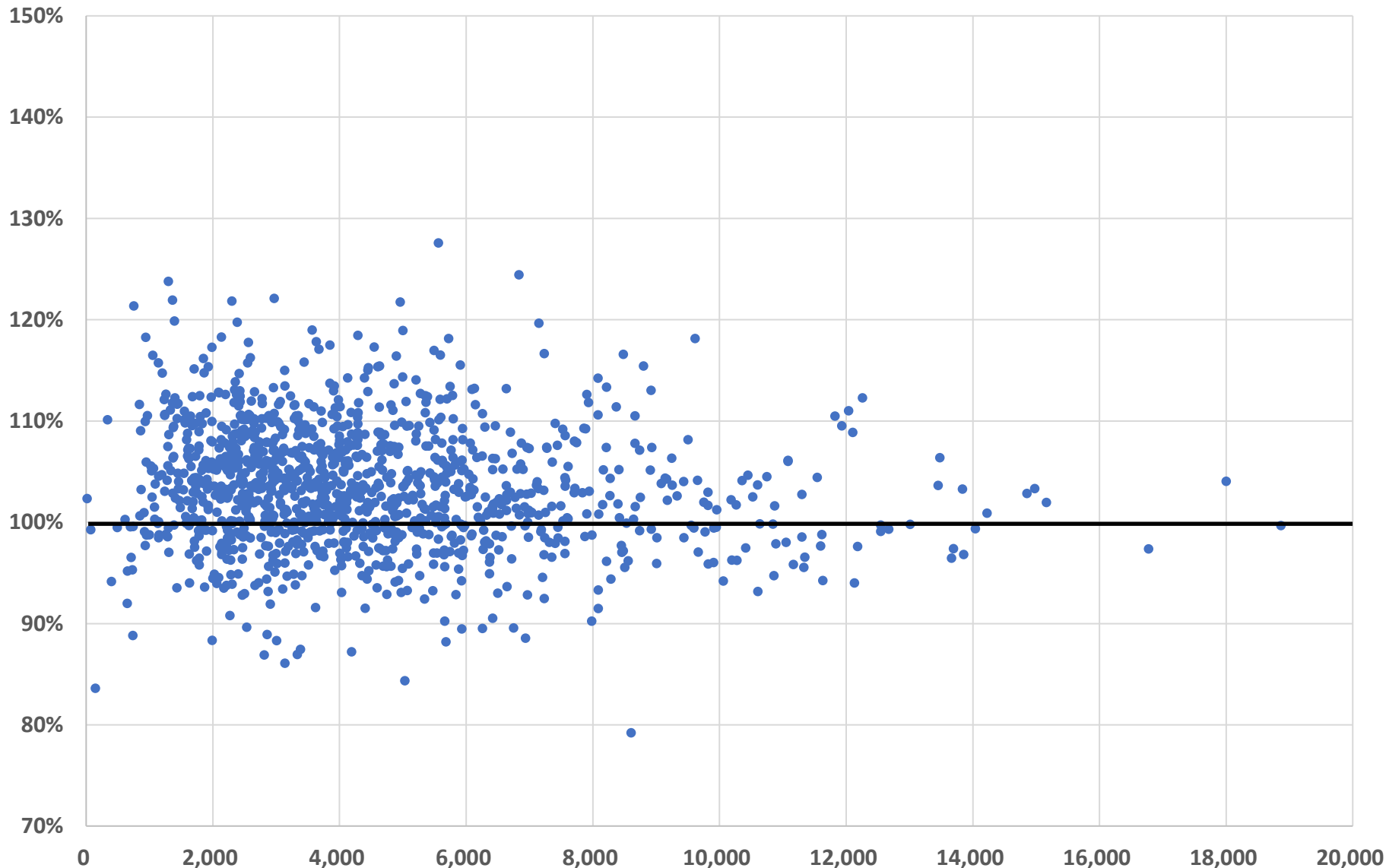
		kWh p.a.	Charging Profile – RELE Charging profile percentages represent customers who have changed their behaviour to respond to the sharp price signals of Electrify. Electrify customers are avoiding the sharp pricing signals.	Charging Profile – RTOU Charging profile percentages represent the current usage profile for all customers on this default tariff. Price signals are not as sharp on the default tariff and as such the change in behaviour is not as significant.
Electric Vehicle	11,000 km p.a.	1,700	30% Solar Sponge 70% Shoulder	20% Peak 30% Solar Sponge 50% Off Peak
Electric Hot Water Heat Pump	340L	1,000	50% Solar Sponge 50% Shoulder	50% Solar Sponge 50% Off Peak
General Usage		4,000	14% Peak 30% Solar Sponge 56% Shoulder	70% Peak 14% Solar Sponge 16% Off Peak
Total Usage		6,700		

RELE v RTOU NUoS Bill Impacts



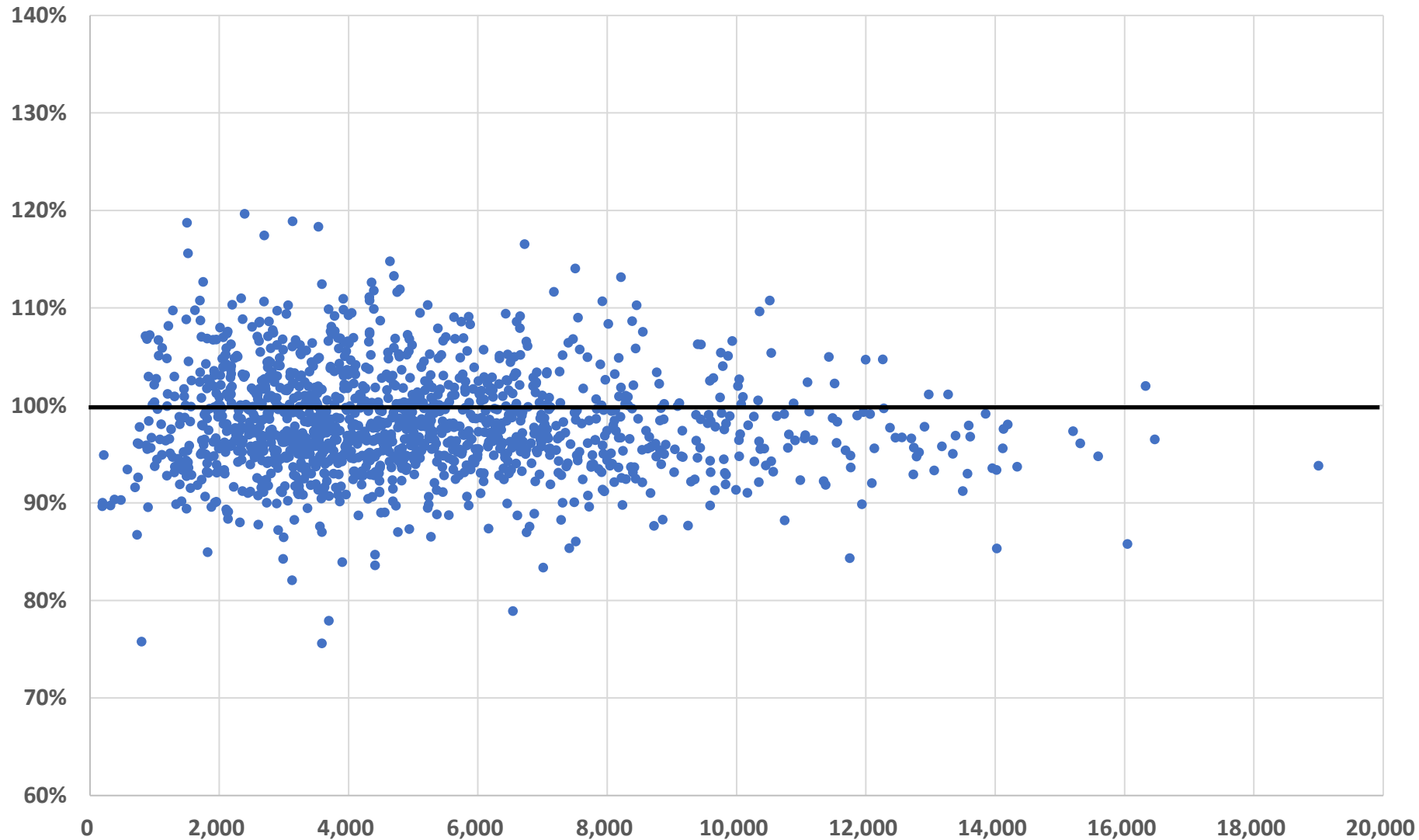
- Electric Vehicle – 11,000 km p.a.
- Electric Hot Water – Heat Pump 340L
- General Usage | 4,000 kWh

Electrify 2022-23 vs Residential TOU : Customers with PV



- Y-axis: Electrify average price/kWh vs Residential Time of Use
- X-axis: kWh used per annum
- Below 100% a customer makes savings on the Electrify tariff based on their RTOU usage profile.

Electrify 2022-23 vs Residential TOU : Customers with No PV



- Y-axis: Electrify average price/kWh vs Residential Time of Use
- X-axis: kWh used per annum
- Below 100% a customer makes savings on the Electrify tariff based on their RTOU usage profile.

Discussion | Questions | Comments | Observations

- RTOU is showing as way more expensive across every category?
- What approximate % between 5-9pm is normal residential? (slide 17)
I would have thought – with kids at home – the amount of electricity that is used between 5-9pm is air conditioners, cooking, multiple TVs, would be more? Is the data pre or post-response?
- Is that a typical residential customer vs typical RELE electrify customer (slide 18)?

SUMMARY

- Need to additional information about data assumptions.

ACTIONS

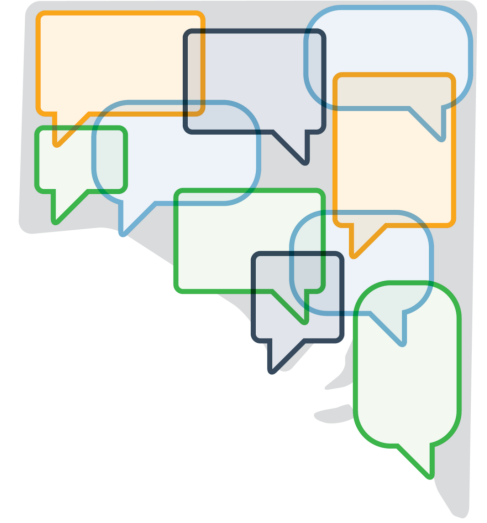
- SA Power Networks has updated this slide pack to include clarification on data assumptions.
- Additional analysis (slides 19 and 20) demonstrating an RTOU customer usage profile with Electrify pricing.

RESET ACTIONS – SA Power Networks

- None.

*Reset matter for consideration/discussion in future workshop

^BAU matter for response by SA Power Networks



Customer Profile – Small Business Time of Use Demand SBTOUTD

What we heard from Workshop 2b:

- What are the top 5 industries/sectors which have customers accessing SBTOUTD that have Demand >120kVA?
- We currently have 446 customers with Demand >120kVA and usage <160 MWh p.a. who are assigned to SBTOUTD.
- The cohort of customers captured with usage <160 MWh p.a. are diverse. There is no one type of small business or industry.
- Allowing Public EV Charging Stations with usage <160 MWh p.a. to opt out of the Demand component of the tariff would result in a wide and varied range of industries/sectors in Small Business to subsidise them.



	NMIs
Schools	89
Manufacturer/Fabrication	57
Agriculture	51
Recreation	34
Vineyard/Cellar	27

Discussion | Questions | Comments | Observations

- If everyone opted out of SBTOD, what would the impact be?
- How many of these businesses are SA Government?
- Does this mean the demand charges will be higher for the majority of these businesses?
- Is a demand tariff an appropriate tariff due to SA Power Networks' sustainability targets – less demand may be better to encourage people to decarbonise? If the kWh get more expensive it would be more expensive?
- How many small businesses are able to wind back their demand? Some people don't know how to do it or can't.
- Is there any evidence that there is any response from the small businesses who have moved (to SBTOD)?
- Businesses need to have the opportunity to think about it and then take action.
- There is a lot of focus on reduction in consumption but demand is a different concept to consider.
- Should businesses should be incentivised to move onto SBTOD (education needed)?^
- Education is important, at the moment a lot of businesses are trying to stay afloat – they need the time to spend with data and results to understand it.^
- There are so many steps for businesses (in understanding data and opportunities to move to SBTOD) so that they can get the benefits.

- Build the awareness; ToU tariffs are a new way of thinking for most people and they need to understand how to respond.^
- Who's responsibility is it to educate consumers?^

SUMMARY

- Education around tariffs and electricity (SA Power Networks' role being discussed in another focussed conversation scheme).

ACTIONS

- Investigate/support education for customer cohorts through regular Tariff Working Group

RESET ACTIONS – SA Power Networks

- None.

*Reset matter for consideration/discussion in future workshop

^BAU matter for response by SA Power Networks



Public EV Charging Stations – Australian Distribution Networks

- SA Power Networks considers the applicable tariff to Public EV Charging Stations whereby usage is <160MWh p.a. and Demand >120kVA as appropriately reflecting the cost to the distribution network.
- We recognise that other distribution networks around the country have differing approaches.
- Each distribution network needs to develop network tariffs that reflect the costs to their individual networks and the legislative environment upon which they operate.

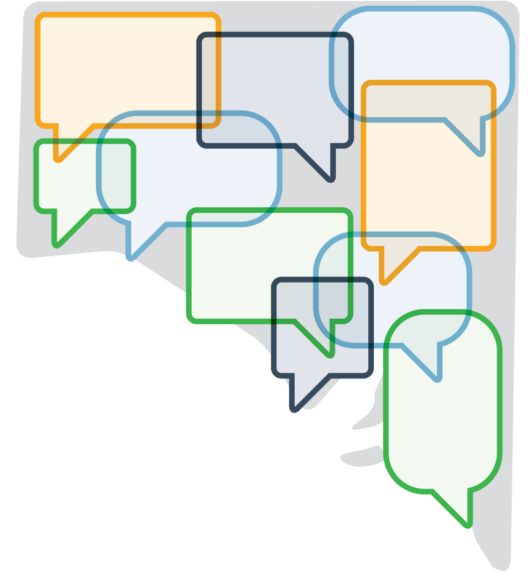
Public EV Charging Stations – Australian Distribution Networks

	Consumption Threshold	Demand Threshold	Tariff Structure	Comments
Essential Energy	<160 MWh p.a.	N/A	ToU or Demand	Can opt out of Demand.
Endeavour Energy	<160 MWh p.a.	N/A	ToU or Demand	Can opt out of Demand.
Ausgrid	0-40 MWh p.a. 40-160 MWh p.a.	N/A N/A	ToU Capacity	Proposing Demand charge if usage is >100MWh p.a. in next TSS. Can opt out of Demand if <100MWh p.a.
Ergon + Energex	<100 MWh p.a.	<1,000 kVA	ToU	Government ownership. Can opt out of Demand.
Victorian DNSPs	<160 MWh p.a.	N/A	ToU	Victorian Government legislated requirement. Can opt out of Demand.
Evoenergy	N/A	N/A	ToU or Demand	Must be a commercial customer.
TasNetworks	N/A	N/A	ToU or Demand	Can opt out of Demand.
Power & Water Corporation	<750 MWh p.a.	N/A	Demand	Tariff has a demand charging element. Proposing ToU in upcoming TSS.

Discussion | Questions | Comments | Observations

- What is the State Government's appetite for looking at the issue of public EV charging stations?
 - The Victorian <160MWh threshold is a transition measure
 - Long term concern about introducing (160MWh pa threshold no demand threshold) – it allows for transition as EV market grows, but once it reaches a point – if you're still allowing people to opt-out then everybody will be subsidising.
 - Next five years might be OK but after that it could get very ugly and there is concern about regulated control that the other States have at this time.
 - Storage is one of the big necessities in the transition so surely it's a good idea to encourage chargers to put a battery in at the same time as they're building their charger.
 - If public EV chargers stay below 160MWh, what's the contribution that would make to demand?
 - If a fuel station that is already connected to the network get charged an additional connection fee (for EV chargers?)
 - It should be user-pays; surely people with EVs should be able to support cost recovery?
- SUMMARY**
- Cross subsidisation by one business cohort to another is not considered an equitable outcome.
- ACTIONS**
- None.
- RESET ACTIONS – SA Power Networks**
- None.

*Reset matter for consideration/discussion in future workshop
^BAU matter for response by SA Power Networks



Break



Compliance with Flexible Tariffs – Large Business

What we heard from Workshop 3:

- How will SA Power Networks ensure customer compliance that if customers elect to have Flexible capacity that they are compliant?

Summary

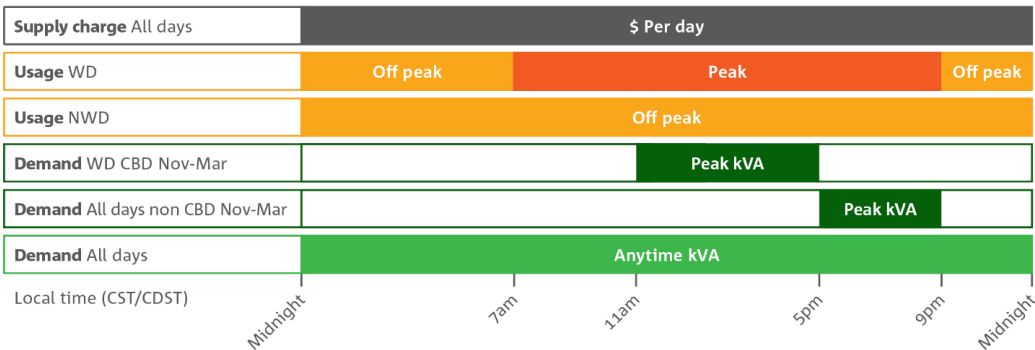
- If Large Business can be flexible with their demand, that is, they can limit their Anytime Demand to lower level when required by SA Power Networks then they will only pay 50% Anytime Demand tariff price on the amount of demand they elect to be flexible.
- Business would determine what amount of their demand is required to be Firm and what amount of their demand can be Flexible.
- Increasing flexibility decreases or delays the need for distribution network augmentation.
- The flexible component of the demand is not guaranteed demand, rather, it is available for all customers and may not be available when required.
- The trial also redefines the term Peak Demand:
 - November to March 5pm – 9pm when the preceding day's 4pm Bureau of Meteorology forecast for the local temperature is 38°C or higher.
- This is a narrower definition of Peak Demand.

Compliance with Flexible Tariffs – Large Business

- Compliance will be administered both contractually, through the connection agreement and also through technical controls.
- Large batteries are currently required to have SCADA and as such can be controlled via our Network Operations Centre.
- All other customers technical controls will be determined on a site specific basis. There will be different technical solutions depending on where the customer is located in the distribution network.
- The trial allows us to develop the technical control requirements to facilitate the customer accessing a pricing signal which encourages them to be flexible.

LBADF | Large Low Voltage Business Agreed Demand Flexible

HVADF | High Voltage Business Agreed Demand Flexible



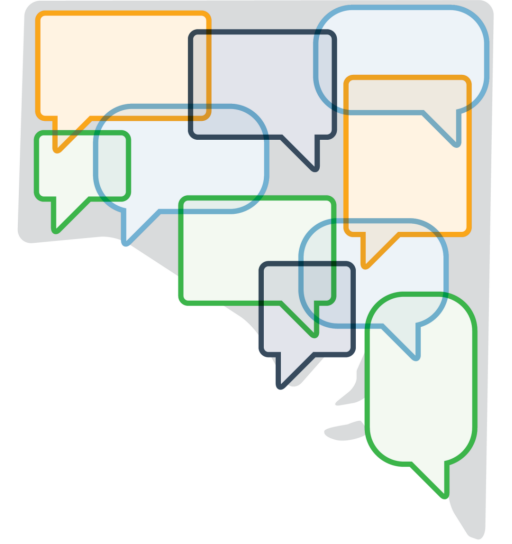
ZSNF | Zone Substation Flexible

STNF | Sub Transmission Flexible



Discussion | Questions | Comments | Observations

- None.

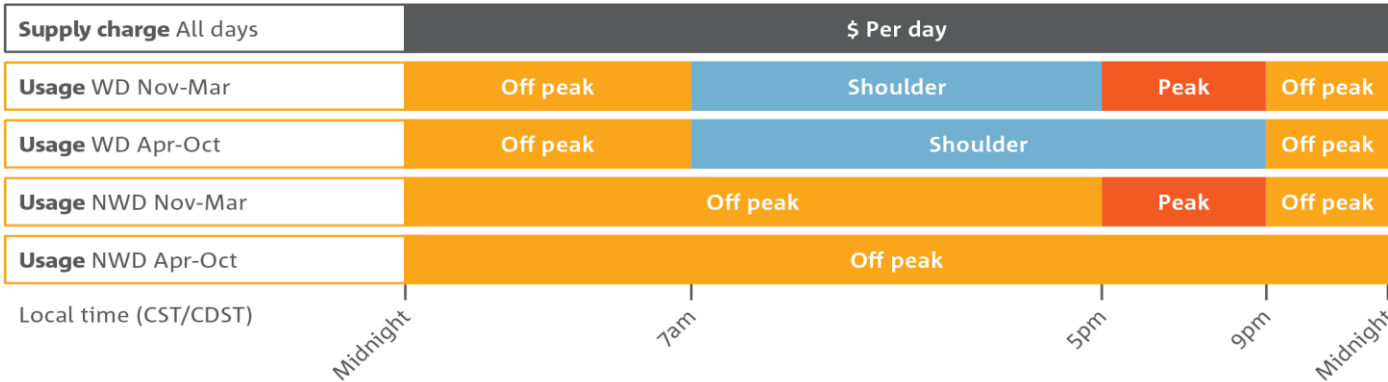


Tariff Design – Small Business Time of Use (SBTOU)

What we heard from Workshop 2b

- If a Solar Sponge signal is to be meaningful it needs to have a sharp pricing signal.
- Key principles of a default network tariff include:
 - Be structured and priced in such a way that it is appropriate for the majority of customers in the tariff class;
 - Not have strong/sharp pricing signals, instead these should be included in opt in tariff options;
 - Encourage the avoidance of Peak times; and
 - Be simple for greater customer understanding.
- To achieve a sharper pricing signal we have developed alternative SBTOU tariff structures which would be an opt in for customers rather than a default.

SBTOU | Small Business Time of Use



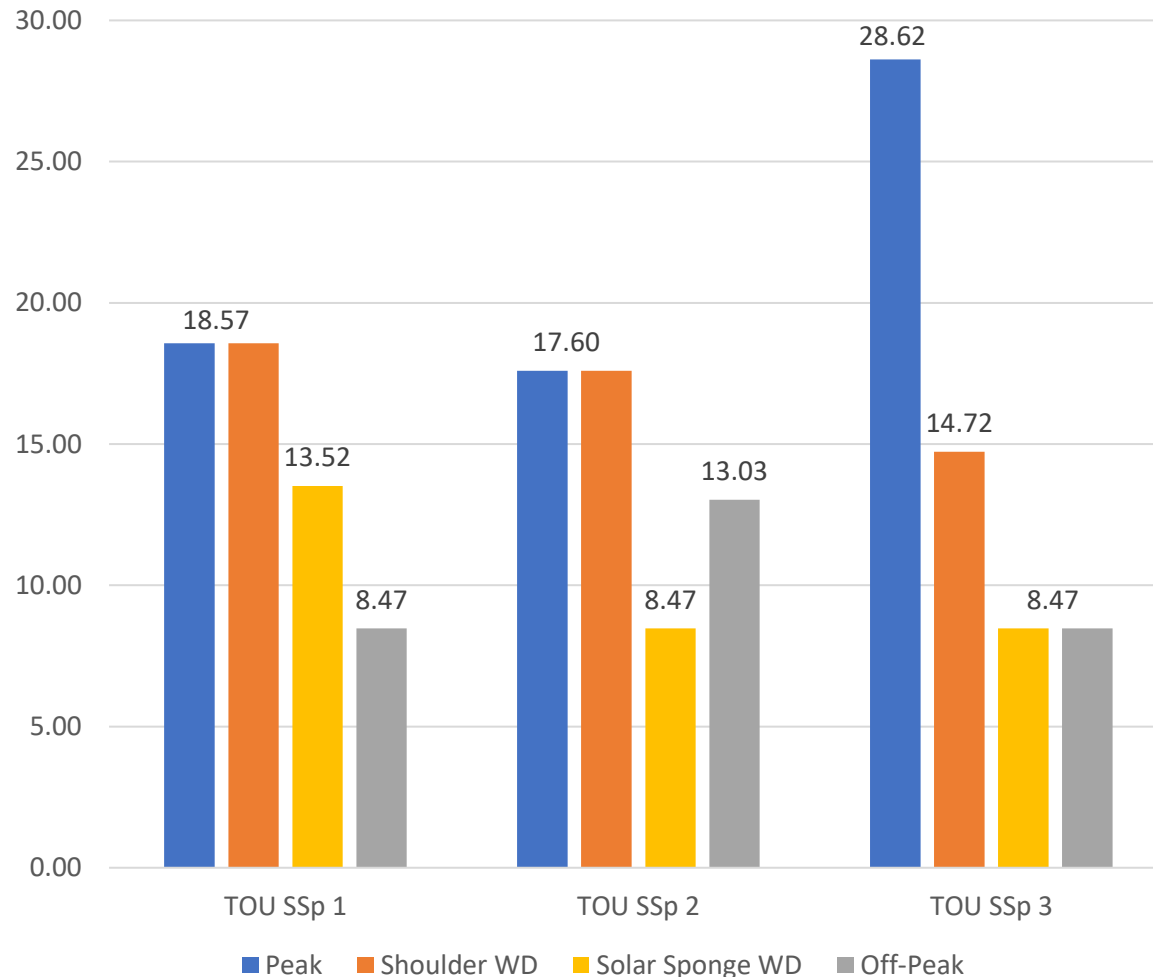
Tariff Design – Small Business Time of Use Solar Sponge

- Implements the principles of Electrify in a Small Business tariff:
 - Removes seasonality from time windows – Summer v Winter
 - Creates a Peak window all year round – 365 Days

	Time Window	Work Day WD	Non Work Day NWD
Peak	5pm – 9pm	4 Hours	4 Hours
Shoulder	7am – 10am 4pm – 5pm	4 Hours	0 Hours
Off Peak	9pm – 7am 9pm – 5pm	10 Hours	20 Hours
Solar Sponge	10am – 4pm	6 Hours	0 Hours

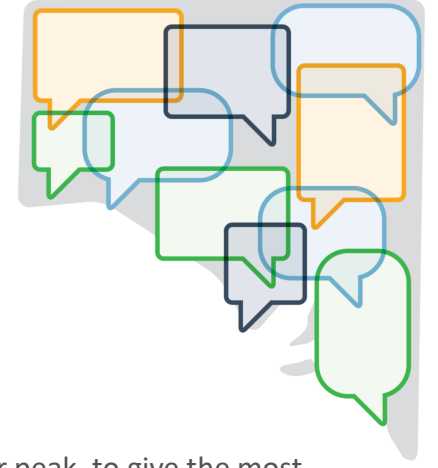
- Final tariff structure would only have 3 time windows/pricing signals
- Two time windows would be combined with the same pricing signal

Tariff Design – Small Business Time of Use Solar Sponge



- TOU SSp 1
 - Peak and Shoulder same pricing signal
 - Solar Sponge
 - Off Peak
- TOU SSp 2
 - Peak and Shoulder same pricing signal
 - Off Peak
 - Solar Sponge
- TOU SSp 3
 - Peak
 - Shoulder
 - Off Peak and Solar Sponge same pricing signal
- Commitment to include it as a trial tariff in 2023-24

Discussion | Questions | Comments | Observations



- Do you agree that an opt in Small Business tariff is the best way to incorporate a Solar Sponge signal?
- What combination of time windows would you want to see in the tariff structure?
 - Peak + Shoulder
 - Off Peak + Solar Sponge
- What should be the cheapest price signal – Solar Sponge or Off Peak?

- Why are there only three time windows – is this for simplicity?
- How is the differential of five days, Mon-Fri for work days decided? This is probably becoming less relevant, we're moving to a 24 hour day/7 day week cycle
- If combining a couple of time windows (to go back to three windows) why not only have two, combining Peak and Shoulder, and Solar Sponge and Off Peak?
- As a small business owner, you can't really change the way you use your power (e.g. opening a shop), the bulk of them can't change their hours.
- Have you looked at what % of small business have the ability to vary their load? (likely to be small).
- What's the goal of a trial tariff – will this become the standard for everyone?
- Would encourage a trial, and points to the importance of having a really good default tariff as the opt-in will not suit everybody.
- We have to offer this for those who can benefit from the solar sponge, and it should be accompanied by education program to alert customers that it exists, and work with retailers to try and get them on board
- Previously SA Power Networks had looked at customers' data and then targeted suitable businesses to get into the trial.
- SSp3 option seems simpler.
- Won't impact irrigators, 5-9pm period is a low period for anyway apart from heat wave; on the hottest of days some irrigators don't have a choice.
- If the response is sufficient enough to move people into the day time, the reduction in demand can be smoothed across all customers (irrigators).

- TOU SSp3 appears to provide more price differentiation for peak, to give the most chance of observed behavioural change and learnings with trial.

SUMMARY

- Support for sharp pricing (SSp3) but note that it is difficult for many small businesses to shift their loads due to the nature of their operations (so would need to be opt-in rather than default, because this would not work for everybody)
- Group keen to see data from trial

ACTIONS

- SA Power Networks to continue work to lodge the trial tariff for 2023-24 and report data back to the Tariff Working Group
- SA Power Networks undertake analysis on impacts on customer cohorts and report back to the group

RESET ACTIONS – SA Power Networks

- None.

*Reset matter for consideration/discussion in future workshop
^BAU matter for response by SA Power Networks

Consumption Tariff Summary: Workshop Outcomes

Workshop 1 | Workshop 2a | Workshop 2b

Tariff Design – Default Tariff Structures

- Maintain cost reflective tariff structures for all default interval meter tariffs for all tariff classes
 - Residential
 - Small Business
 - Large LV Business
 - Large HV Business
 - Substation
 - Sub transmission

Tariff Design – Time and Demand Windows

- Extend Solar Sponge time window by 1 hour: 10am – 4pm
- Maintain Demand windows:
 - Statewide 5pm – 9pm
 - CBD 11am – 5pm

Consumption Tariff Summary: Workshop Outcomes

Workshop 1 | Workshop 2a | Workshop 2b

Cost Allocation

- Residential v Business
 - 53% | 47%
 - In principle agreement on the methodology – data inputs (number of customers, diversified demand, usage)
 - TSS percentages subject to the composition of data inputs at the time of calculation
- Fixed v Variable
 - In principle agreement of an annual increase to the supply charge for Residential and Small Business
 - Considered to be cost reflective and equitable
 - TSS will include analysis on a proposed end point i.e. SA Power Networks is not working towards 100% of the distribution network charge recovered through the supply charge.

Tariff Allocation – Role of SA Power Networks

- To be addressed via Energy Advisory Focussed Conversation

Consumption Tariff Summary: Workshop Outcomes

Workshop 1 | Workshop 2a | Workshop 2b

Topics of engagement were agreed upon via our existing stakeholder group – Tariff Working Group however through our tariff Focussed Conversations we have listened and responded to stakeholder queries which have resulted in the following outcomes:

- Small Business Sub Tariff Class
 - Creation of two segments within Small Business as defined by legislation – 160MWh p.a.
 - 0 – 40 MWh p.a.
 - 40 – 160 MWh p.a.
- Solar Sponge pricing signal in Small Business
 - Creation of an opt in Small Business tariff with sharper pricing signals
 - Commitment to include it as a trial tariff in 2023-24
- Understanding of Embedded Networks and SA Power Networks' role
 - Demonstrated that existing Large Business tariff structures adequately meet the demand profile of an Embedded Network such as a residential apartment building.
 - Creation of Embedded Network specific tariffs in not necessary

Consumption Tariff Summary: Workshop Outcomes

Workshop 3 | Workshop 4

Enabling the Energy Transition – Residential

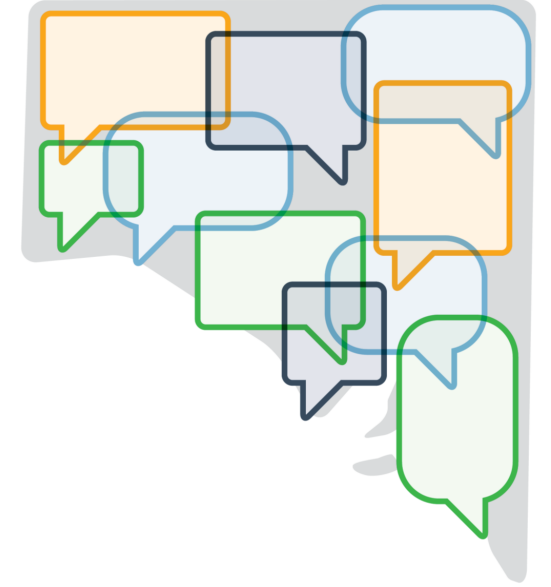
- Electrify
 - Extend Solar Sponge time window by 1 hour: 10am – 4pm
 - Revise trial tariff in 2023-24
- Diversify

Enabling the Energy Transition – Business

- Flexible Tariffs – Large Business
- Public EV Charging
 - 120 kVA Demand threshold to be maintained to ensure cost reflectivity and no creation of cross subsidisation within Small Business tariff class
- Generation Tariffs
 - Utilise existing generator tariff structure
 - Substation and Subtransmission pricing differential

Discussion | Questions | Comments | Observations

- **Is there any topic that hasn't been appropriately captured?**
- Noting that the next section is on Export Tariffs, will be interesting to see how Consumption and Export Tariffs are pulled together.
- You've captured the comments from the last 4-5 meetings well, thank you.
- Thanks for combined efforts of SA Power Networks in providing transparent analysis that has accompanied these 4 tariff discussions.



Next Steps – Engagement

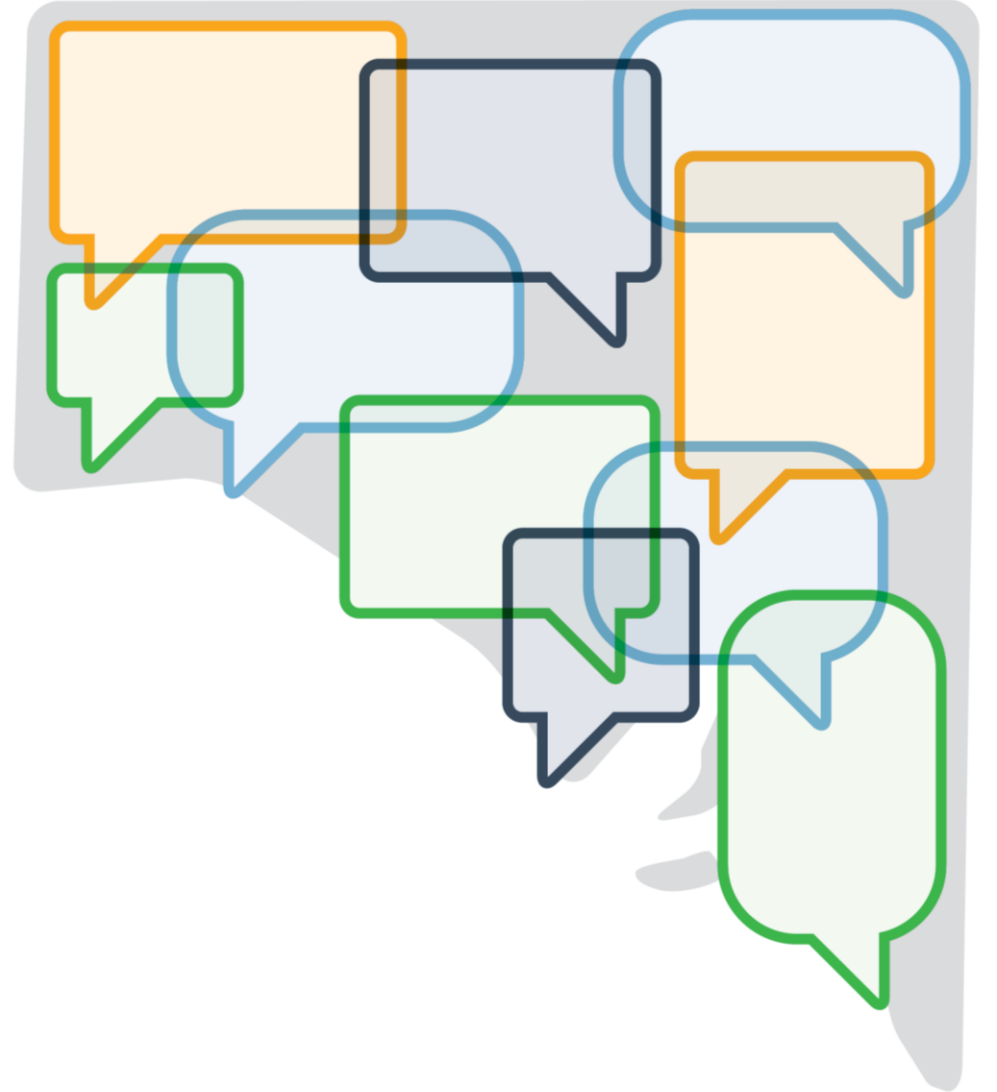
Date	Description
Workshop 1 11 August 2022	• Default Tariff Structures, Cost Allocation / Tariff Design
19 August 2022	• Summary of workshop outputs and discussion to all invitees and attendees
Workshop 2 24 August 2022	• Continuation of Cost Allocation / Tariff Design - Residential
31 August 2022	• Continuation of Cost Allocation / Tariff Design - Residential
9 September 2022	• Summary of workshop outputs and discussion to all invitees and attendees – via Talking Power
20 September 2022	• Business tariff analysis to be shared with Business stakeholders and any other stakeholders who would like to participate
30 September 2022	• Summary of workshop outputs and discussion to all invitees and attendees – via Talking Power

Next Steps – Engagement

Date	Description
Workshop 4 28 September 2022 9.30am – 1pm	Continuation & finalisation of: • Enabling the Energy Transition – Residential • Enabling the Energy Transition – Business
Workshop 5 TBC 12 October 2022 9:30am – 11:30am	Export Tariffs – Setting the Scene • Building customer and stakeholder knowledge regarding the AEMC rule change and AER Export Tariff Guideline
Workshop 6 TBC 24 October 2022 1pm – 4pm	Export Tariffs – Residential & Business • Development of tariff structures
Workshop 7 TBC 16 November 2022 9:30am – 12:30pm	Export Tariffs – Residential & Business • Refinement of tariff structures
Workshop 8 TBC 1 December 2022 2pm – 5pm	Export Tariffs – Transition • What does implementation look like?
People’s Panel Deliberation	• February – March 2023

Discussion | Questions | Comments | Observations

Any final questions or comments?





Empowering South Australia