

Participant Pack

2025-30 Regulatory Proposal Engagement
Energy Transition
Workshop 1 - August 2022

SA Power Networks

Empowering South Australia

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This pack has been designed to provide background to participants in SA Power Networks' Reset 2025-30: Energy Transition first focussed conversation (workshop).

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Who we are

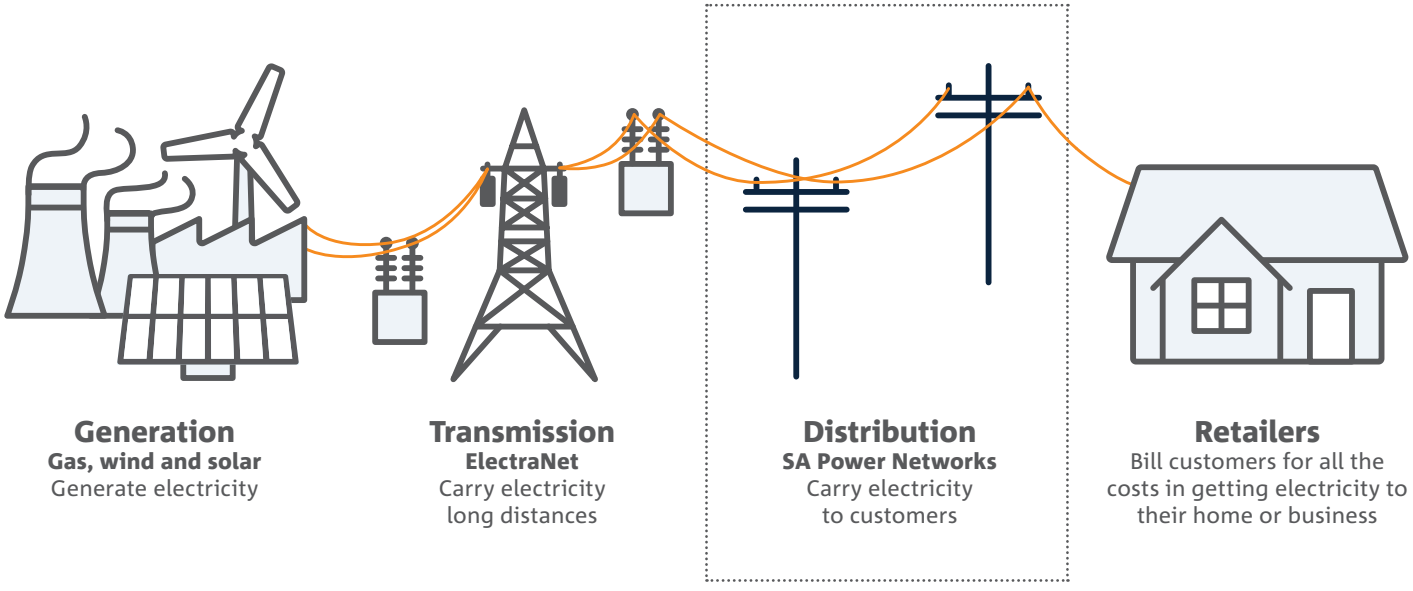
SA Power Networks is South Australia's regulated electricity distribution network service provider (distributor) covering a large service area of 178,000 square kilometres. We are responsible for managing the South Australian electricity distribution network – the substations, transformers, poles and wires that deliver electricity to your home or business.

Our traditional role has been to take power from the State's high voltage transmission network and deliver it to about 1.7 million South Australians in 900,000 homes and businesses. But, as our State's energy system undergoes significant transformation and modernisation, and with a third of our residential consumer installing solar in their homes, we have become a major platform for sharing electricity from widely distributed energy resources (DER).

South Australia has a dispersed population served by a network with a route length of about 89,000 kilometres. It leaves us with the lowest customer density in the country – on average 10 customers per kilometre of line.

The energy supply chain

Our role as distributor is just one element of the supply chain, which also involves energy generators (wind, solar, coal, gas etc); retailers (who source electricity from generators and manage your bills); and a transmission provider who transports electricity long distances at high voltages.



Generation
Gas, wind and solar
Generate electricity

Transmission
ElectraNet
Carry electricity long distances

Distribution
SA Power Networks
Carry electricity to customers

Retailers
Bill customers for all the costs in getting electricity to their home or business

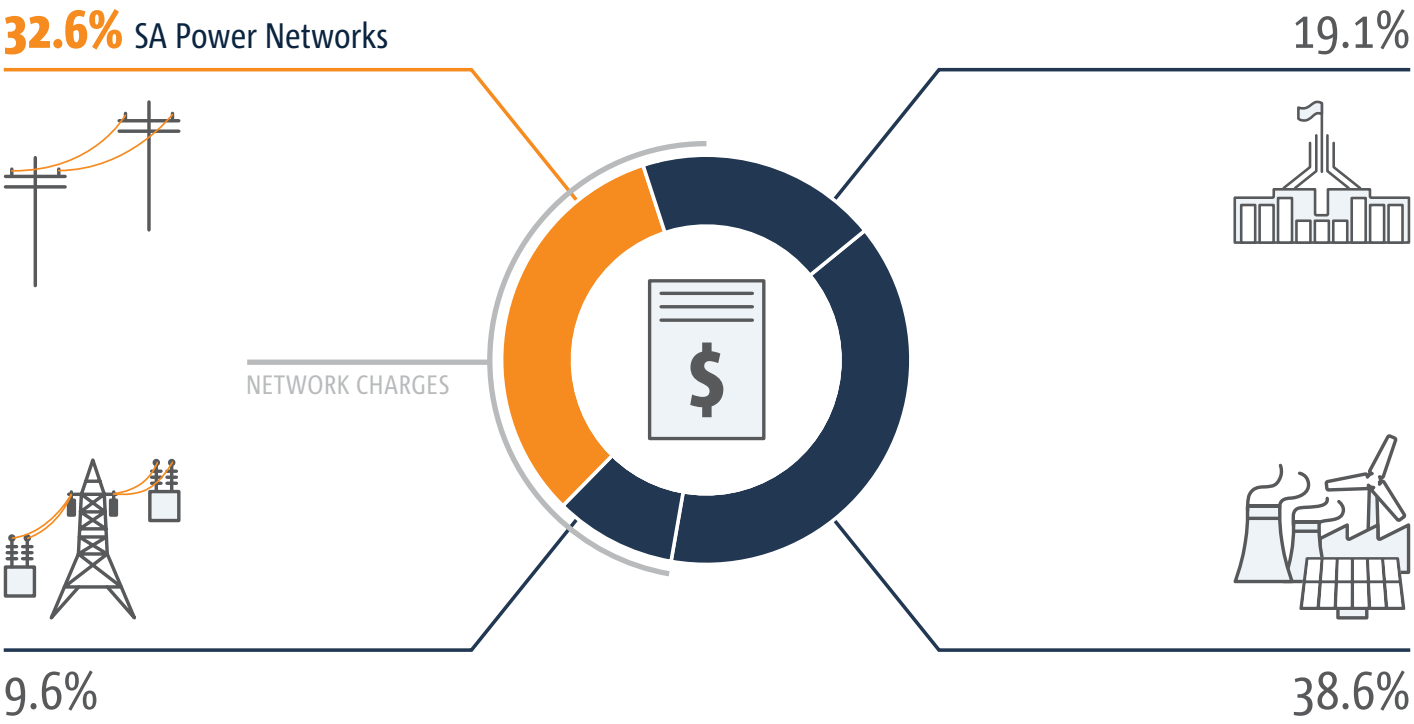
Understanding your electricity bill

The average residential bill is made up of:

- SA Power Networks' distribution costs
- ElectraNet's transmission costs
- Generation and retail costs
- State and federal green energy schemes
- Goods and Service Tax (GST)

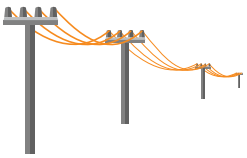
Charges for distributing energy across South Australia (from west of Ceduna, north to Leigh Creek, and south to Mt Gambier) currently amount to a little less than a third of the average household bill.

Distribution charges are about $12 per week for the average customer consuming 5MWh.



Source: *AEMC Residential Electricity Price Trends 2021 Report*. South Australian average residential annual bill 2021/22.

About SA Power Networks



Operate the oldest grid
in the National Electricity Market



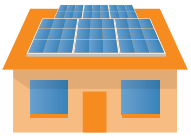
Provide network coverage over
178,000km²



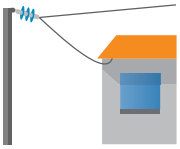
Deliver power to 99%
of SA's population



Service 900,000
homes and businesses



Connect most rooftop solar
in the National Electricity Market



Enable 25,000
New or altered
connections each year



Read more than 853,000 meters
and provide date to retailers



Maintain 240,000 street lights
for councils and SA Government

Our fleet of network assets – made up of 408 substations, 1,955 feeders, 647,000 poles, and 77,000 distribution transformers is the oldest in the country.

We believe that our distribution network has a central and ongoing role to play in the energy transformation underway in South Australia. It will be a platform for consumers to share the energy they generate and store and to fuel the electrification of transport and the decarbonisation of our economy. Our network and the 2,400 skilled people who manage and maintain it, will continue to meet the energy needs of South Australians, reliably, safely and affordably for many years to come.

What is Reset?

Why are we seeking your input, comments and feedback?

SA Power Networks is the primary electricity distribution network operator in South Australia and we are responsible for managing the South Australian electricity distribution network.

As a distributor, we are regulated by the Australian Energy Regulator (AER) and are required to submit our expenditure and revenue proposals every five years for their review and approval.

This process is often referred to as a 'price reset' - hence the term 'reset' which you might hear us say.

Our plans for 2025-2030 are being shaped by extensive engagement with customers, stakeholders, and other parties across various diverse communities. As part of this process, we hosted a series of targeted and regional workshops to help capture the views and aspirations of our South Australian community.

Our Reset Engagement reinforces our commitment to working with our customers and stakeholders to understand their needs and deliver services they value.

What happens to your comments and contributions?

Each workshop will be summarised into a written report to ensure we capture all feedback provided. The reports will be shared internally to help us develop a range of potential future investments and a key source of information for the next stage of engagement.

These reports will also be available to the public via our website **talkingpower.com.au**

The engagement process

These workshops are part of a larger engagement process, that has been designed to actively consult customers and stakeholders on their expectations and priorities through a variety of research and engagement activities, both quantitative and qualitative.

We have worked closely with our Community Advisory Board (CAB) in co-designing and endorsing our overall engagement process. Your feedback will help us to progressively narrow down the options and pathways to achieve a balance of services and price outcomes to best meet both customer and business needs.

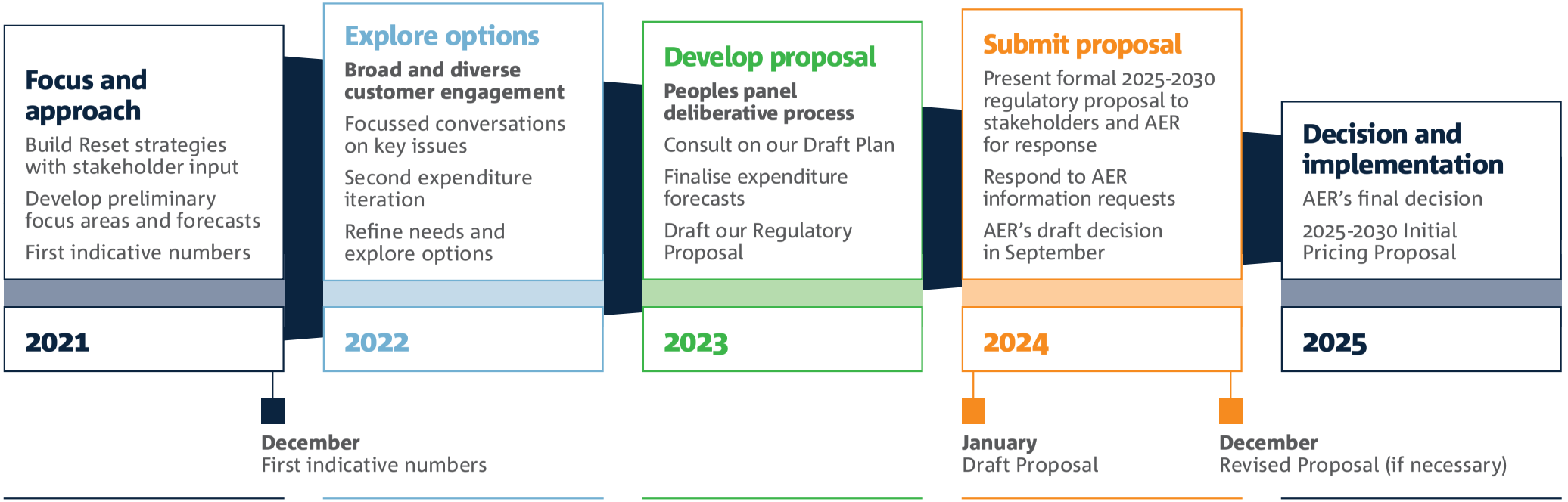
Stay in touch

We are using our website **talkingpower.com.au** to provide regular updates on our process and share the feedback we receive from our engagement activities. You are encouraged to 'register' on the site to receive our regular email updates or can view the site at any time to follow our process or share any other comments or ideas you may have.

Five Year Price Regulatory Proposal engagement 2025-30

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

In building up our **Regulatory Proposal** we engage deeply with customers and the community.



Focussed Conversations

The key objectives of the **topic-based engagement** focussed conversations is to:

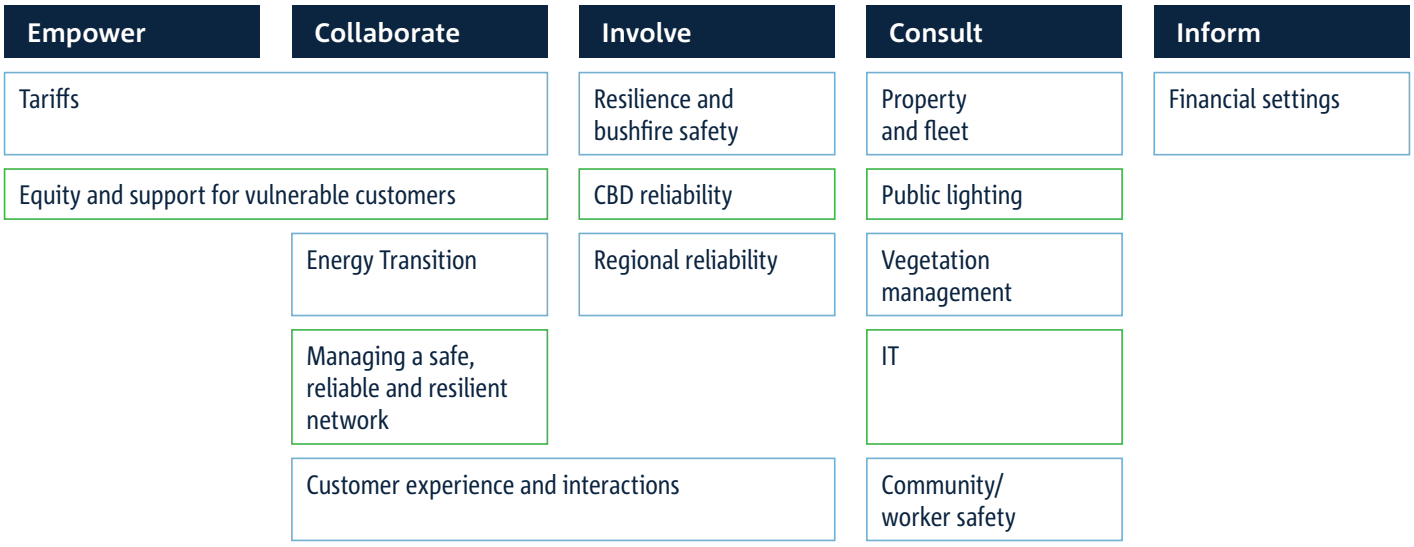
- Engage on identified priority topics and facilitate focused engagement activities.
- Narrow options on service outcomes and potential expenditure
- Create a report, using a standard template for key input into Stage 4 engagement (deliberative).

The focussed conversations will involve workshops on a broad range of topics. The following figure the key topics and their proposed level of engagement based on the IAP2 spectrum of engagement from empower/ collaborate to inform.

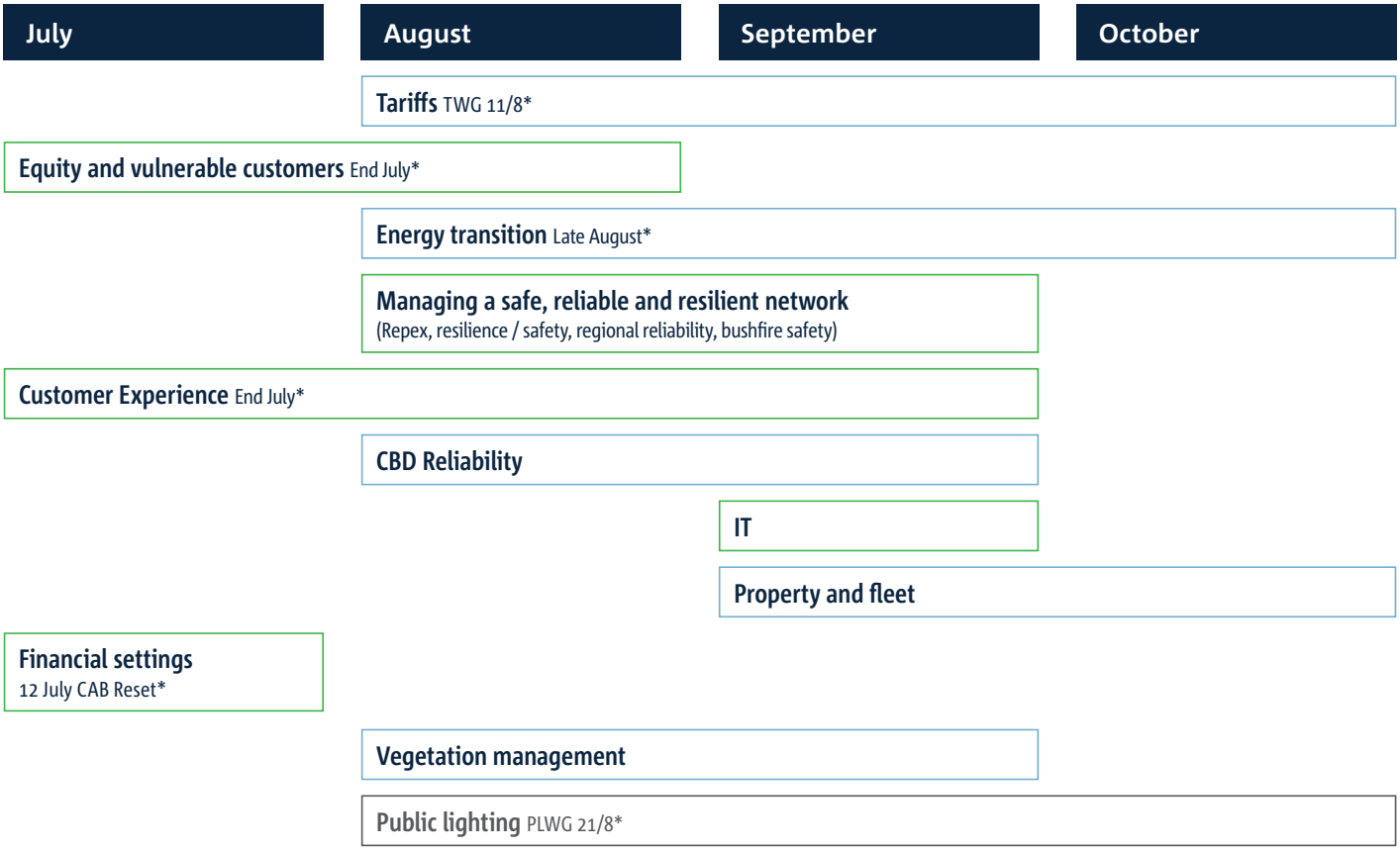
For most of the focussed conversations three scenarios will be developed to discuss with stakeholders:

- **Scenario 1** (BASIC) – service levels decrease
- **Scenario 2** (COMPLIANT) – maintained / compliant service levels
- **Scenario 3** (NEW VALUE) – increase in service levels and new services

Information on the price impacts to customers of each scenario for each topic will be provided. Following the engagement, each focussed conversation will recommend a preferred scenario/ expenditure level to take to the People's Panel.



Focussed conversations timeframe



* Engagement start date

This focussed conversation

Purpose

This Energy Transition workshop ('focussed conversation') is the first of three workshops on this topic and follows on from our earlier round of engagement ('broad and diverse' workshops) across the State, where customers and stakeholders were asked to help identify ideas and opportunities for consideration in SA Power Networks' 2025-30 Regulatory Proposal.

This focussed conversation brings together the range of ideas on how SA Power Networks could support South Australia's transition to a clean energy future from the broad and diverse sessions, to be further discussed, refined and prioritised by our customers and stakeholders.

This first workshop will help narrow options and result in prioritised initiatives which we will then explore in further detail – including service outcomes and potential expenditure – in two subsequent workshops in September and October. One outcome of this process will be to inform recommendations and a report to the deliberative People's Panel later this year.

Key questions to consider

Focussed conversation participants will be asked to consider the following questions as we work through the session:

- Do we have the right people in the room to provide advice?
- What are the key topics for detailed discussion in subsequent workshops?
- What kind of information will we need to bring to subsequent workshops to explore these key issues in more detail and provide advice on options?
- Is there anything missing that we should be thinking about for 2025-30 in this area?

Background and context

South Australia is at the forefront of energy transition, with the highest uptake in rooftop solar per capita in the nation and more than 63% of the State's energy needs met by renewables in 2021.

As South Australia's electricity distribution network operator, we have a key role to play in supporting and enabling this transition. The way we plan, build and operate the network is changing as the grid evolves into an increasingly distributed, two-way energy system. We are developing innovative solutions to help manage our network, enable more solar, and facilitate new energy services, while also making sure we continue to provide a safe, reliable, and affordable network to act as a solid foundation for the new energy future.

Our aim in these workshops is to deepen our understanding of what really matters to our customers in this area, such as the level of investment we should make to enable the continued uptake of renewable technologies such as solar and batteries and to support emerging technologies like Virtual Power Plants and community energy. We are also keen to explore how we can best support the transition to electric vehicles, including the opportunity to transition our own vehicle fleet to electric, as well as how we can support broader efforts to electrify and decarbonise the economy.

Outcomes from broad and diverse engagement

Our discussions with customers, communities and stakeholders during our 'broad and diverse' engagement earlier this year have helped shape this Reset theme and the three focused conversation workshops.

In this earlier consultation we heard that customers continue to value reliability and affordability but also strongly support the transition to renewable energy. Customers did, however, express concerns over the increasing complexity of the energy system and highlight the need for information and advice. Customers also raised concerns around equity and the need to ensure that no-one was left behind or disadvantaged in the energy transition.

These 'broad and diverse' workshops identified several topics that stakeholders expect us to consider in our plans for 2025-30 in relation to our role in the energy transition, including:

- Facilitating smart home energy use and optimisation
- Energy advice and information
- Affordability and accessibility of solar, batteries and electric vehicles
- Supporting customers exporting excess energy back to the grid

In our focussed conversations we are engaging with stakeholders to explore these topics in more detail, understand desired service levels, obtain feedback on key initiatives proposed to deliver them, and seek a recommendation on the level of investment we should make to enable them.

Key themes for discussion

During this focussed conversation, we will be taking participants through three key themes relating to the Energy Transition:

Enabling Clean Energy

- Making sure the network has enough capacity to meet customer needs and support the continued growth in rooftop solar, battery storage and other distributed energy

- Using smart technology to get more out of the current network assets, and making targeted investments to add capacity as required
- Balancing cost vs. service levels
- The new rules governing network access and pricing

Empowering our Customers

- Supporting our customers to get the most from their investments in solar, batteries and other energy resources
- Enabling and rewarding load flexibility
- Community energy

Enabling the Electric Vehicle (EV) Transition

- Supporting EV charging
- Options for transitioning our own vehicle fleet to EVs

Potential Initiatives/Programs for investment

We are considering a range of initiatives in this area as we develop our regulatory proposal for 2025-30. Some of these will also be explored through other workshop streams in our overall focused conversation engagement program. Initiatives under consideration include:

- **Enhanced Voltage Management (EVM) phase 2**
  Investment in more advanced dynamic voltage management at the substation level to enable more solar
- **Flexible Exports scale-up**
  Support ongoing growth in flexible connections for solar and battery customers
- **Targeted export capacity augmentation**
  Targeted investment in additional export capacity, particularly in the Low Voltage (LV) network, to ensure customer service levels are met
- **New connection options and tariffs**
  Providing a choice of service levels and tariffs for customers, including the potential for export tariffs
- **Compliance program**
  Working with industry to improve compliance to technical standards (e.g. inverter standards) that enable the network to operate efficiently
- **System security program**
  Maintaining our capability to support AEMO in managing system security at times of minimum system load
- **Flexible load enablement**
  Supporting customers with flexible load technology, e.g. smart appliances, to maximise the benefits
- **Hot water load program**
  Targeted program to facilitate the transition of remaining electric hot water loads to the daytime
- **Market integration systems enhancements**
  Supporting aggregators and others to engage with AEMO's future market platforms, as well as new platforms for network services

- **New connection services**
  Including new information resources like ‘opportunity maps’
- **Community energy program**
  Potential fund to support community energy schemes such as community batteries
- **Enhanced connection options for large loads**
  To support significant new loads such as highway EV charging stations
- **Fleet EV transition program**
  Progressively transitioning our own vehicle fleet to EVs, including deploying associated charging infrastructure

Focussed conversation 1 - Agenda

Friday 12 August
Online (via Microsoft Teams)

9.15-9.30am	Arrival and coffee
9.30-9.45am	**Welcome and introductions** • Welcome and Acknowledgement of Country • Overview of the session • Introductions
9.45-10.30am	**Background and Context** • South Australia's Energy Transition • Reset process and Price outcomes 2025-30 • Focussed Conversation purpose • Broad and diverse engagement outcomes
10.30-11.20am	**Topic 1: Enabling Clean Energy** • Upgrading and evolving the network to keep pace with SA's transition to renewable energy • Balancing cost vs service levels
11.20-11.30am	**Break and stretch**
11.30-11.55am	**Topic 2: Empowering our Customers** • Supporting our customers to get the most from investments in solar, batteries and other energy resources • Empowering the community
11.55-12.20pm	**Topic 3: Enabling the EV Transition** • Including plans for SAPN's own vehicle fleet
12.20-12.30pm	**Next steps and questions**
12.30pm	**Close**

Workshop participants

Representatives from the following organisations have been invited to attend this focussed conversation:

Electricity & Water Ombudsman SA	RAA
Department Energy & Mining	Shine Hub
Essential Services Commission SA	369 Labs
Business SA	Chargefox
Electric Vehicles Association	AGL
SA Council of Social Services	Simply Energy
Uniting Communities	SwitchDin
Australian Electric Vehicle Association	Suntrix
Australian Energy Regulator	The Energy Project
Consumers SA	Smart Energy
Service to Youth Council	Flow Power
NRG Solar	Yates Electrical
Tesla	SA Power Networks Community Advisory Board members
Central Irrigation Trust	Members of AER's Consumer Challenge Panel (CCP30)

We understand that attendance may fluctuate given people's personal circumstances. The complete slide pack and outcome summary from focussed conversations will be shared with all invitees, and anyone unable to attend workshops will be invited to provide feedback separately.

Outcome of this session

During Workshop 1, we will be capturing your feedback and questions on our key themes, which specific areas we should explore in detail in subsequent workshops, as well as any new ideas you may have.

Next steps

Following Workshop 1, the next steps are:

- We will provide an opportunity for participants to provide further input on the matters discussed via an online survey
- Based on the feedback received, we will develop a shortlist of key topics for detailed discussion in subsequent workshops, and begin preparing more detailed information on these topics to support a robust and informed discussion
- We plan for two additional workshops, one in late September and one in late October, to workshop and interrogate these topics in detail and seek stakeholder guidance on the specific options, work programs and investments we should put forward in our regulatory proposal

Acronym cheat sheet

Acronym	Full Name
ACCC	Australian Competition and Consumer Commission
ACS	Alternative Control Services
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
ARENA	Australian Renewable Energy Agency
BFRA	Bushfire Risk Area
CAB	Community Advisory Board
CALD	Culturally and Linguistically Diverse
CAM	Cost Allocation Method
CAPEX	Capital Expenditure
CBD	Central Business District
CCP	Customer Consultative Panel
CESS	Capital Expenditure Sharing Scheme
CPI	Consumer Price Index

Acronym	Full Name
CSIRO	Commonwealth Scientific and Industrial Research Organisation
DEM	Department of Energy and Mines (SA Government)
DER	Distributed Energy Resources
DET	Distributed Energy Transition
DMIA	Demand Management Incentive Allowance
DNSP	Distribution Network Service Provider
DPTI	The Department of Planning, Transport, and Infrastructure
EBSS	Efficiency Benefit Sharing Scheme
ECA	Energy Consumers Australia
ENA	Energy Networks Australia
ESCoSA	Essential Services Commission of South Australia
EV	Electric Vehicle
FiT	Feed-in Tariff
GSL	Guaranteed Service Level
IAAS	Infrastructure as a Service

Acronym	Full Name
IT	Information Technology
LTIFR	Lost Time Injury Frequency Rate
LED	Light Emitting Diode
LEG	Large Embedded Generation
LGA	Local Government Association
LV	Low Voltage
MEDs	Major Event Days
MEG	Medium Embedded Generation
MW	Mega-Watts
NBRFA	Non-Bushfire Risk Area
NECA	National Electrical and Communications Association
NEM	National Electricity Market
NER	National Electricity Rules
NMI	National Meter Identifier
NPU	Network Protection Unit
OPEX	Operating Expenditure
OTR	Office of the Technical Regulator (State Government)

Acronym	Full Name
pa	Per Annum
PTRM	Post Tax Revenue Model
RAB	Regulated Asset Base
RoR	Rate of Return
RFM	Roll Forward Model
SAIDI	System Average Interruption Duration Index
SAIFI	System Average Interruption Frequency Index
SAPN	SA Power Networks
SCS	Standard Control Services
STPIS	Service Target Performance Incentive Scheme
ToU	Time of Use
TSS	Tariff Structure Statement
USAIDI	Unplanned System Average Interruption Duration Index
VCR	Value of Customer Reliability
VPPs	Virtual Power Plants
WACC	Weighted Average of Capital Costs

Notes