

# People's Panel Report

Summary Report 2021



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# Summary

*The People's Panel concept is based on the premise that everyday people, when provided with the time and the information, will reach sensible decisions on behalf of the greater population they represent.*



Power and Water Corporation (Power and Water) held two People's Panels in November 2021 to inform the development of the 2024-2029 Revenue Proposal for the Australian Energy Regulator (AER).

The Panels were held in Darwin and Alice Springs. Participants in the People's Panels were recruited to be broadly representative of the residential customer base in those areas.

The People's Panels were run over two days and participants were given information about how electricity is generated, distributed and the roles of various organisations. Participants were then asked their thoughts about the future of electricity and their views on the key challenges facing Power and Water.

The People's Panel program was informed by the outcomes and learnings from four focus groups held with residential customers in August 2021. These activities enabled refinement of communication materials to provide a baseline of understanding of Power and Water and its role in the energy supply chain, the process for putting forward expenditure and pricing plans to the national regulator to determine future revenue requirements.

The sessions were designed, facilitated and reported on by an external facilitator, working closely with Power and Water and key executives to ensure the process was thoughtful, meaningful and engaging.

Day one of the People's Panel focused on the role and experience of customers, now and in the future. The external facilitator explained the role of the Panel along with tools and exercises to assist participants in engaging in group work, critical thinking, and exploring different views.

On day two, participants were encouraged to take on the role of the Board and were asked to respond to priorities in four key challenge areas

- ▶ Solar uptake
- ▶ Benchmarking
- ▶ Maintenance and asset management
- ▶ Electric Vehicles (EVs)

Power and Water will reconvene the same participants in early April 2022 to present on how they have responded to the ideas and suggestions made by the People's Panel and feedback on customer preferences. These sessions will be a key contribution to the Proposal in line with the AER's requirements and Better Resets Handbook.

## Power and Water's commitment

Power and Water was represented by members of its Executive team and Board, and staff from across the organisation including the regulatory team, customer service, service delivery, project delivery, asset management and delivery, and corporate affairs.

The Executive team presented to the Panels and sat on tables as table facilitators.

In Alice Springs there was interest in understanding the Alice Springs Future Grid project. Lyndon Freeson, Managing Director of Akistica, gave an invigorating presentation on the role Alice Springs has played in the development of innovative approaches to off-the-grid and solar solutions over the last two decades. This information supported a more engaged discussion about the potential for new technologies in Alice Springs.

Power and Water committed to all participants to listen, act on and reflect transparently on how issues and suggestions raised by the Panels had informed and shaped not just the 2024 - 2029 Revenue Proposal but also the wider operations of Power and Water.

This Report provides both feedback for the People's Panel participants as they prepare for the second workshops planned for early April 2022, and a record for all customers, the AER and key stakeholders on what is important to customers in how Power and Water, and the energy system in the Territory in general, respond and plan for the challenges of the future.



## Key ideas

Participants came up with a wide range of ideas across a number of different activities. These are summarised below. Further details on how customers' key ideas relate to Power and Water's Revenue Proposal and high level next steps that Power and Water is proposing to take in relation to these ideas is outlined in Section 6 – Next Steps.



### Research and Development

Investing in research and development of new technology to address current and future challenges



### Pricing

Setting up a 'rainy day fund' that could be used to smooth out future price increases to avoid bill shock



### Community Solar Batteries

Initiatives that would allow customers to share their excess solar with people who cannot access solar panels



### Education/information

Energy efficiency school programs, financial aid for energy, ways to increase access to energy efficient appliances



### Solar Service Providers

Power and Water should recommend/publish a list of reputable solar installers that meet best practice requirements



### Customer Service

Out of hours contact number, Power Water Ambassador, audit of meter reads, adopt a 'staying connected policy', Power Passport, greater consistency in communication across platforms



### Government Initiatives

Government should facilitate the uptake of solar – 'rent-to-buy solar schemes', solar on public housing and mandating solar in building standards



### Electric Vehicles

Strategic charging locations, tariffs to incentivise charging at the right time, provide enabling infrastructure i.e. kerb side charging



### Business Improvements

Power and Water should have a clear 'vision statement' regarding its network, provide more information on different roles in the supply chain, cost benefit of renewable energy targets.

## Key themes

Summarised below are some of the key themes to emerge from the People Panels.



### Customer Values

Affordability remains an important consideration for customers. Other key customer values noted included sustainability, innovation, and reliability.



### Transition to solar

Customers strongly supported greater uptake of solar and considered that Power and Water should be doing more to facilitate this. Customers also wanted to understand the impact of this on network pricing and reliability.



### Asset Management

Customers want Power and Water to manage assets in a timely and responsible way, while minimising price impacts.



### Electric Vehicles

Range anxiety and lack of charging infrastructure were identified as major hurdles to uptake. Customers considered Power and Water should play a role in facilitating the shift to EVs but not necessarily owning the infrastructure in the long term.



### Benchmarking

Customers recognised that the Northern Territory had unique characteristics and considered that benchmarks should only be set against networks that are similar or elements that are comparable.



### Other

Customers wanted Power and Water to embrace innovation, new technology, and transition to a new energy future that is more customer focussed and responsive.

Some of these issues are not directly related to Power and Water's role as a distribution network service provider in regulated networks. These ideas are being assessed by Power and Water using the following criteria:

- ▶ Where an idea requires response from an external party, appropriate agency or jurisdiction, we will seek to engage these parties and provide feedback to the next People's Panel
- ▶ Where ideas are already being tried, tested or considered and not pursued, these will be reported back to the next People's Panel
- ▶ Remaining ideas will be assessed and developed in terms of feasibility and broad cost impacts for presentation to and consideration by the next People's Panel.



# 1 Purpose

*'We will work with you to develop solutions and recommendations to ensure that we reflect your views, values, and concerns in the options/solutions/approaches that we develop and are able to demonstrate how your feedback has influenced our decisions.'*

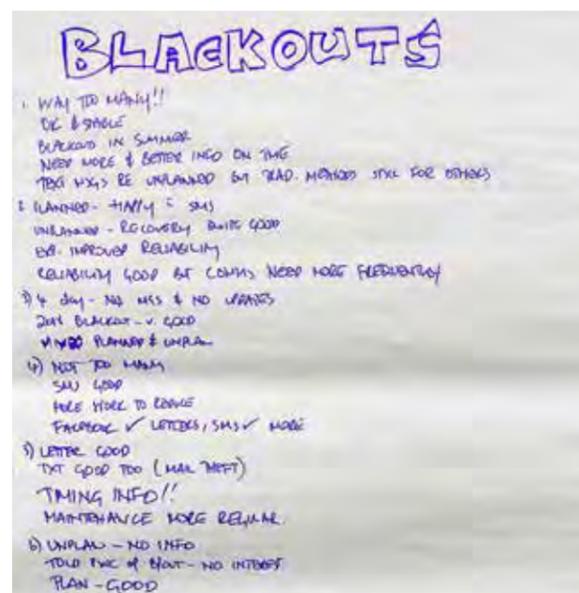
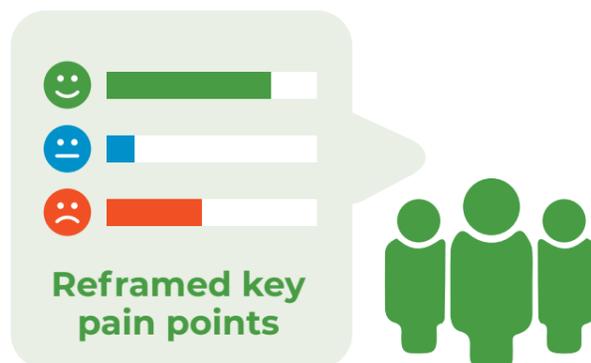
Power and Water's commitment to the People's Panel

## Improving the Customer Journey

Participants documented their customer journey including positive, neutral and negative experiences. We have reframed key pain points in the customer journey as questions for Power and Water (listed below).

Many of these challenges relate to general customer service rather than specifically to the Revenue Proposal. However, as all customer issues are important, Power and Water is working to understand and address these as best we can.

- ▶ How might we improve choice for customers in the NT?
- ▶ How do we currently work with Jacana on issues and how might we work better?
- ▶ What is involved in a disconnection and why does it cost so much? How might we lower these costs?
- ▶ What is the process for connecting and disconnecting and how might we improve this process?
- ▶ Where can people go for information on solar and installations? How might we support better dissemination of quality information?
- ▶ How do we improve communication with people who have trouble over the phone, including cultural communication?
- ▶ What has been our progress on tree trimming?
- ▶ How might we improve public safety around infrastructure?
- ▶ What are we doing to improve outages for customers?
- ▶ How have we improved our response to cyclones?
- ▶ How can we improve bill payments?
- ▶ How might we improve meter reads?



# Purpose

This is an interim report that summarises outcomes from the two individual People's Panel sessions held in November 2021. These sessions form part of Power and Water's community engagement on its 2024 – 2029 Revenue Proposal, with further sessions planned for April 2022.



The Darwin People's Panel was held at the Darwin Convention Centre on 20 and 21 November and the Alice Springs People's Panel was held at the Double Tree Hilton on 27 and 28 November. There were 23 participants in both Darwin and Alice Springs.

The People's Panel is intended to be representative of our residential customer base. Participants were randomly recruited by Taverner Research to broadly reflect the Northern Territory population and included representation from young people, residential customers, Aboriginal Territorians, quiet voices, pensioners and solar customers.

- The objectives of this first session were to:
- ▶ give Power and Water guidance on customer priorities and values for planning and the Proposal
  - ▶ provide information on, and gather responses to, the biggest challenges facing Power and Water
  - ▶ lay the foundations for a more specific, complex discussion at the next session scheduled for April 2022
  - ▶ meet the AER's requirements to demonstrate that customer feedback has shaped the 2024 – 2029 Revenue Proposal from the beginning.

A range of Power and Water staff were in attendance and, at the participants' request, a representative from Customer Service attended the second day of the People's Panels at both locations to hear feedback directly from participants.

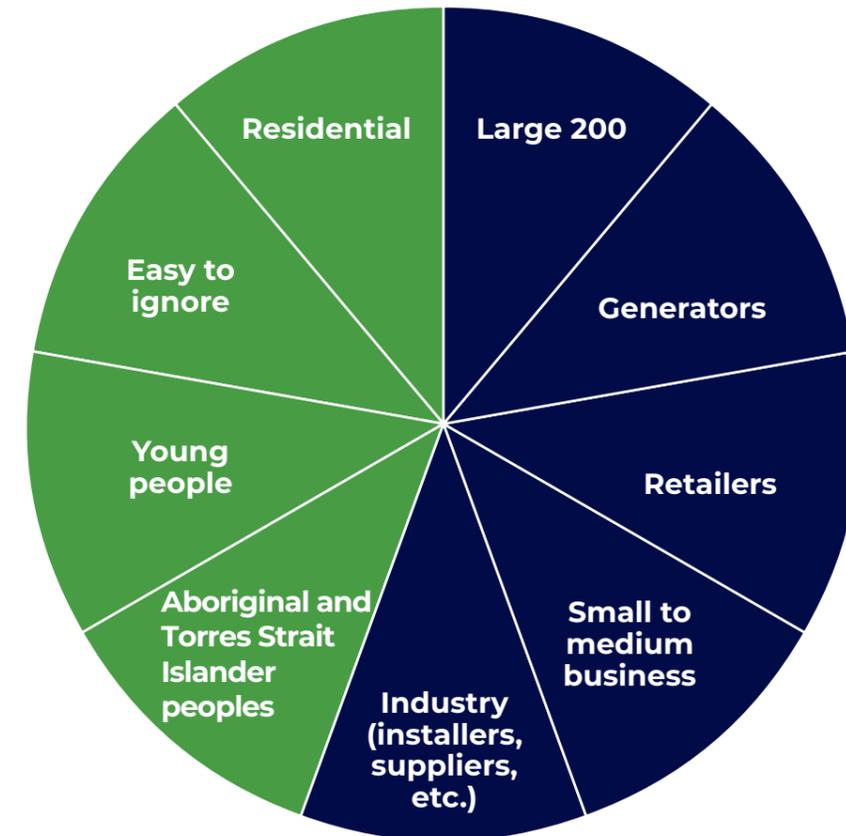
The session was facilitated by Lucy Cole-Edelstein, an external facilitator with specific experience in deliberative engagement.

The People's Panels are only one aspect of our customer and stakeholder engagement. We have a broad range of stakeholders informing our preparation of plans to the regulator.

Some of the customer groups we will be engaging with are outlined in the diagram below.

## Power and Water Corporation Customer Voices

Power and Water need to understand customer experiences and values to better meet their needs.



**Residential customers**  
Residential customers need to **understand** the issues to be able to **contribute** to planning for their energy future.

**Business customers and key stakeholders**  
Business customers and key stakeholders need to share their experiences and ideas so that they can **act as partners** in the changing energy landscape.

Power and Water is seeking to engage with residential customers through the People's Panels so that we can better understand customer experiences and values and are able to better meet their needs. This also provides an opportunity for participants to understand the issues and challenges that Power and Water is facing so that they can provide feedback on how we plan for their energy future.

Power and Water will also be seeking to engage with business customers and other key stakeholders including Future Network Forums, Retail Forums, and the Customer Advisory Council so these stakeholders are able to share their experiences and ideas and act as partners in changing the energy landscape.

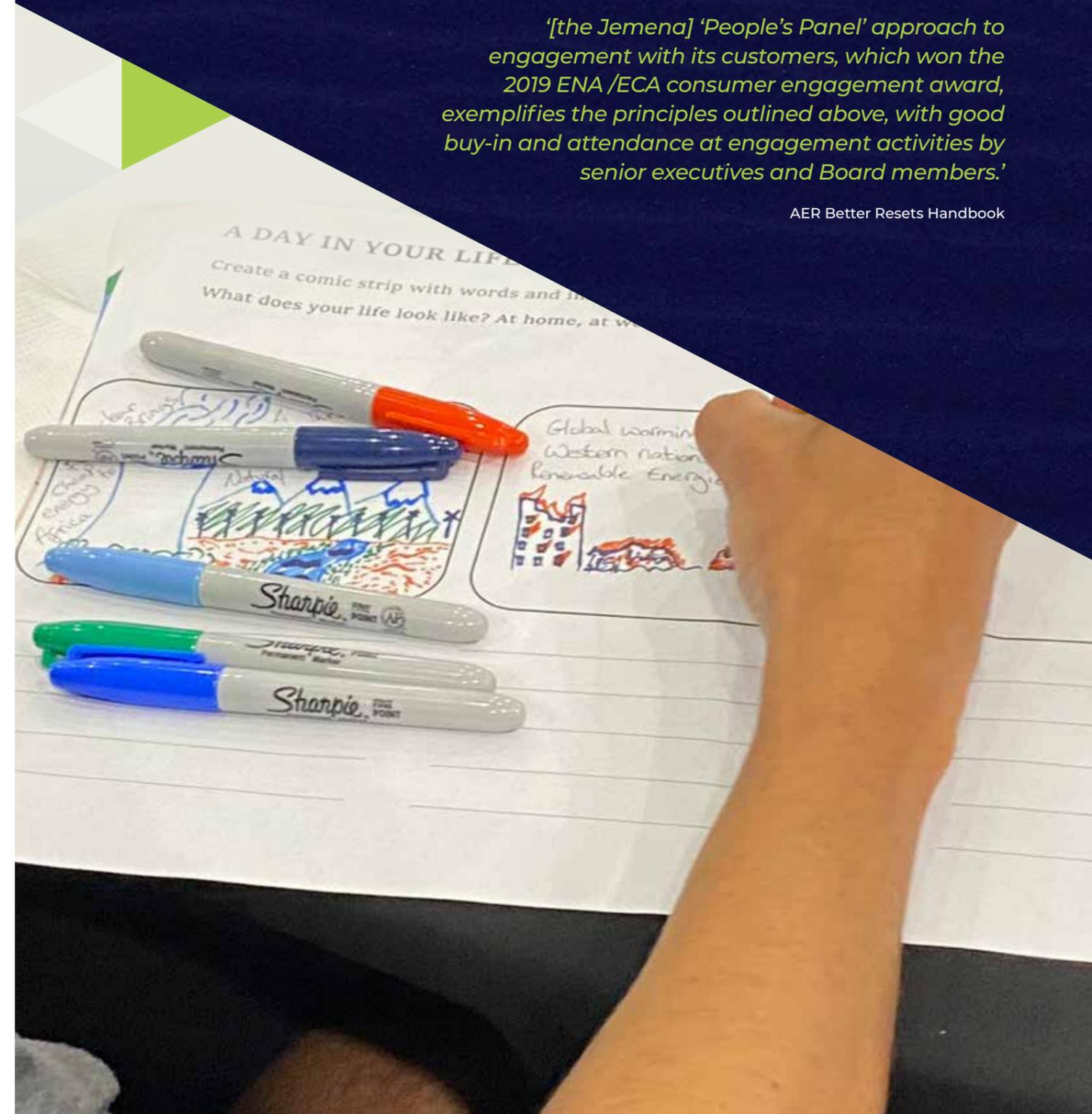
Traditional deliberative engagement will be complemented by a co-design approach, which focuses on understanding what works well now and why, and what needs to change and how, with an emphasis on an agreed future state we are all working towards.

An outline of our proposed engagement process is below.

## 2 Method

*'[the Jemena] 'People's Panel' approach to engagement with its customers, which won the 2019 ENA /ECA consumer engagement award, exemplifies the principles outlined above, with good buy-in and attendance at engagement activities by senior executives and Board members.'*

AER Better Resets Handbook



## People's Panel

The People's Panels allow for customers to consider issues in-depth. It is a valuable way of collaborating with the community in the development of the Revenue Proposal and also provides direct, actionable insights into the priorities of customers for Power and Water to incorporate into their forward planning.

Participants from the People's Panels were randomly selected residential customers to simulate a 'mini-public' that was representative of a larger customer cohort.

Panelists are supported by skilled facilitation and information on critical thinking, group consensus decision making, interrogation and generation of new information and competing views. With these skills, panel members are asked to explore their own experiences and reach consensus on how our proposed plans should be developed and refined.



- ▶ Participants are broadly representative of the wider customer base.
- ▶ Participants are tasked with answering one big question; 'How can Power and Water plan for a future that best serves customer needs?'
- ▶ Participants have access to in-depth information and diverse perspectives.
- ▶ Participants are given time to discuss issues, ideas and weigh up options.

## Representation

The People's Panels aim to give a broad representation of Territorians and provide Power and Water and panel members the opportunity to explore key issues in-depth.

People's Panels are often used in community engagement processes in which choices have to be made and there is no clear 'right' technical answer, but rather decisions are about values and priorities. Most members of the community have not deeply considered Power and Water's potential courses of action and their long-term consequences.

However, the expenditure and pricing plans submitted as part of the Revenue Proposal will have a significant effect on the way Territorians consume and use electricity into the future and they have the right to be involved in this process. It is Power and Water's responsibility to ensure they have access to the information and support they need so they can participate fully.

It is important that Power and Water, as a service provider, is guided by the views and values of the public, alongside that of subject matter experts, if it is to develop a robust Revenue Proposal that best serves the people of the Northern Territory.



## Prior engagement

**Customer engagement on the Revenue Proposal began in August 2021 with four focus groups across Darwin and Alice Springs.**

We used these focus groups to test how quickly and easily we could establish a baseline of customer knowledge and understanding, priorities and preferences for engagement activities.

One of the key challenges with engagement on the AER regulatory proposal is the relative unfamiliarity of customers to the regulatory framework. During engagement on the last regulatory proposal (2019 – 2024) it was often difficult for customers to isolate the work Power and Water undertakes on the regulated electricity network.

This is largely because Power and Water is the provider of a range of essential services and the delineation of AER related services from other essential services and other parts of the supply chain is not widely understood.

Over four separate sessions, we tested and refined presentation techniques and approaches. By the end of the focus groups we were confident we could bring the majority of a group of people unfamiliar with our role to a baseline understanding of the energy system, our role in it, and how this links to our expenditure plans within about an hour.

## Recruitment

Participants were screened to ensure a broadly representative group based on location (Alice Springs or Darwin or within a 20km radius of each location), age, gender and income. Potential participants were also asked if they identify as Aboriginal or Torres Strait Islander, commonly speak a language other than English at home, have solar panels and/or a solar battery, or currently receive some form of government pension or disability benefit.

There were more males in the Darwin People's Panel (15 of 23) and more females in the Alice Springs panel (17 of 23)

The Darwin People's Panel had more participants in the 40 – 59 age bracket (11 of 23) than the 18 –39 or 60+ age bracket (five and seven respectively), whereas the Alice Springs panel was more evenly spread.

There were four participants in Darwin and six in Alice Springs that were in the lower-income bracket and six participants in Darwin and seven in Alice Springs that were in the middle-income bracket.

The sessions were postponed by a week on short notice due to a COVID-19 outbreak that resulted in a tightening of restrictions in Darwin on Friday 5 November that would have impacted attendance and the representation of the Panel.

In line with industry practice, participants were given a \$500 gift card in recognition of their time.

## 3 Structure

*'Electricity is complex and networks can be looked at as a collection of assets. It's not the customers' job to decide if how those assets are being used is efficient. That's what the regulator does...the role of customers in engagement is actually to talk about their lived experience of the network, what's working for them, what isn't working for them... So the purpose of the engagement is not for consumers to become proxy regulators, its actually for them to talk about the things that matter to them.'*

Lynne Gallagher, Energy Consumers Australia



## Day 1 – Customer Journey

Day one focussed on the customer experience, explaining the electricity system, distribution network and the relative roles of generator, network and retailer. Broad level context on the energy supply chain was further broken down into the context for expenditure and pricing plans that Power and Water as a regulated distribution network service provider (DNSP) needs to provide to the Australian Energy Regulator (and why).

Participants were also provided with relevant material to provide them context for the engagement process and help them understand their role in this process.

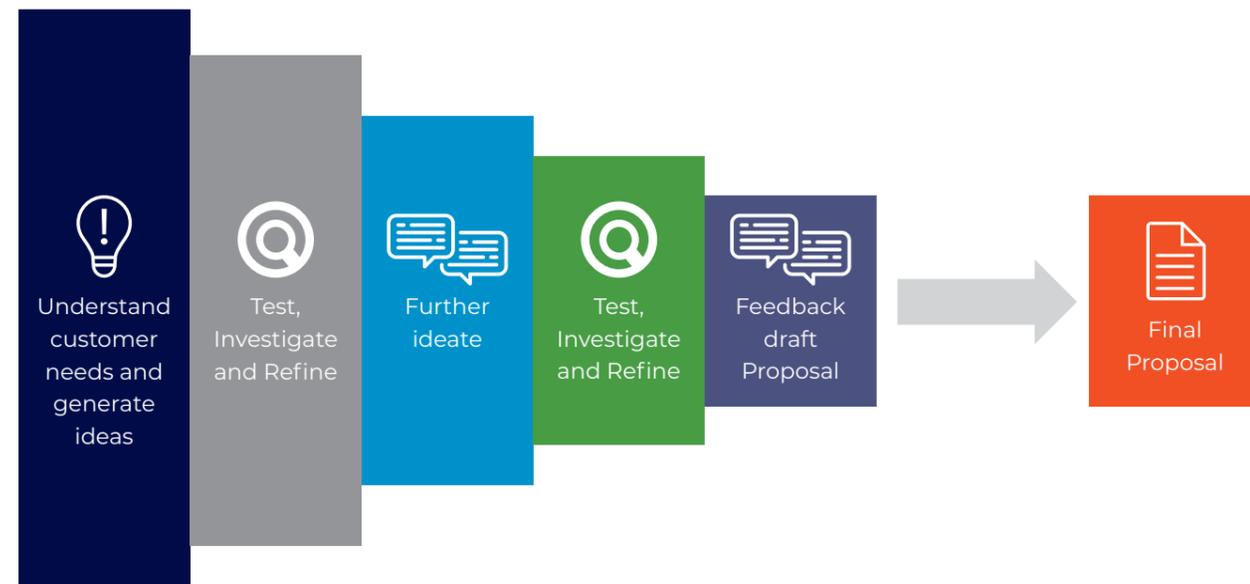
An entire session on day one was devoted to participants mapping their customer journey experience, contemplating their values and exploring the impacts of the rapidly changing energy environment for customers.

The external facilitator walked participants through tools to assist them through the deliberative engagement process, including exploring issues of group work and cognitive bias.

In their Better Resets Handbook, the AER recommends engagement cover issues where customer engagement is most relevant. These areas include capital expenditure (Capex), operating expenditure (Opex), tariffs and depreciation.

Our customer-centric engagement approach meant that we did not structure our sessions with these categories. Rather, Power and Water decided to structure the content in a way that would make most sense to customers.

Firstly, we linked the customer journey maps to relevant expenditure plans we must prepare as part of our Regulatory Proposal. We also investigated customer experience in the context of current expectations and tested whether these expectations will change over time. We noted several megatrends globally which will change the way customers use energy and how these future drivers may impact our current plans. Finally, we explored key issues driven by customer expectations that have an impact on our future plans. These “deep dive” sessions were the focus of day two.



## Day 2 – Power and Water Journey

Day two focussed on how Power and Water should respond to the challenges through a role-play exercise where the participants became the Board. Participants were given a snapshot of Power and Water’s past performance and future drivers. There were then a series of sessions on key areas requiring strategic input for the development of expenditure forecasts.

► **Unlocking renewables:** exploring the opportunities and challenges with the network needing to accommodate the predicted doubling of small-scale solar by 2030.

► **How do we compare:** exploring the challenges with benchmarking and identifying the most important comparisons that would enable Power and Water to deliver customer focussed outcomes.

► **Keeping up with our age:** introducing the challenge of replacing an ageing network, noting that today’s replacement rates reflect a relatively young asset age across the network but are well below long-term sustainable levels.

► **Electric vehicles:** exploring opportunities and challenges of electric vehicle uptake for the network, including the issue of managing network capacity, affordability.

## Activities

Sessions were designed to be engaging for participants and to elicit valuable data. A range of tools were used including individual reflection, working in pairs, table discussions and whole-of-room share backs. Participants were asked to write, draw, verbalise and even move around the room to convey their thoughts and ideas. The sessions included short quizzes and role play exercises, including a scenario-based activity on replacement costs.

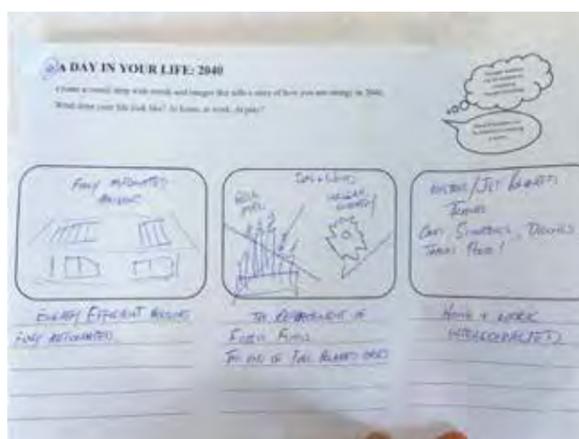
Each table comprised four to six participants and a Power and Water team member tasked with note-taking and ensuring participants had equal opportunity to contribute. The live polling tool Mentimeter was used to elicit responses and share results in real-time.

As it was the first session, and much of the People's Panel process involves working together as a group to come to a conclusion, several activities on day one were designed to encourage effective communication and dialogue through personal reflection or skill-building exercises or videos.

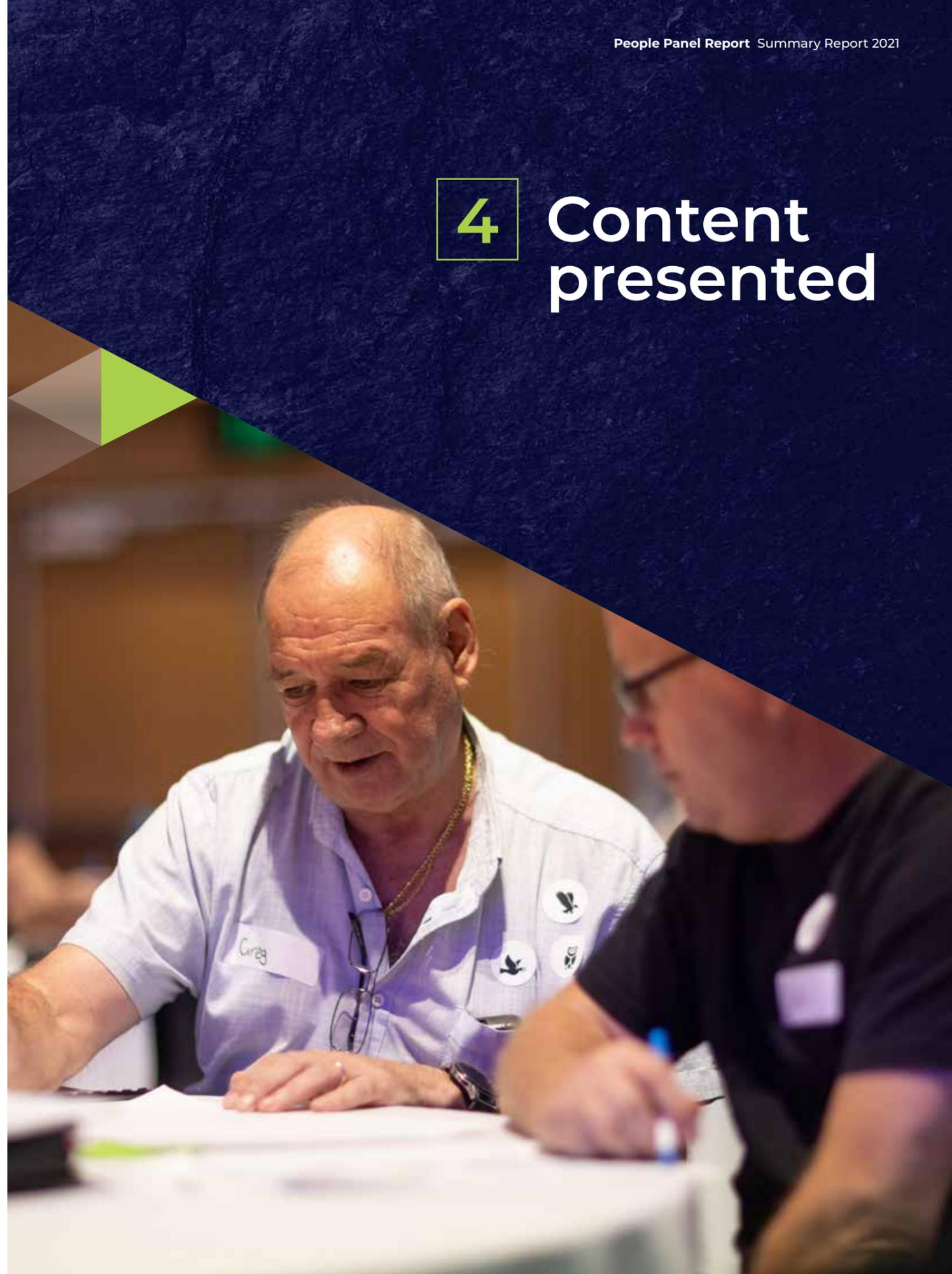
These included:

- ▶ The DOPE (Dove, Owl, Peacock, Eagle) personality test to understand how different people prefer to communicate and handle conflict
- ▶ Short video and activity on confirmation bias and the need to be aware of personal biases
- ▶ Short video and reflection on group decision-making.

Regular breaks and comprehension testing and opportunities for clarification were provided to help ensure participants progressed at a similar pace. Panel members were regularly asked to change tables to remove group think and achieve broader consensus. Feedback on the process was also sought at the conclusion of each day.



# 4 Content presented

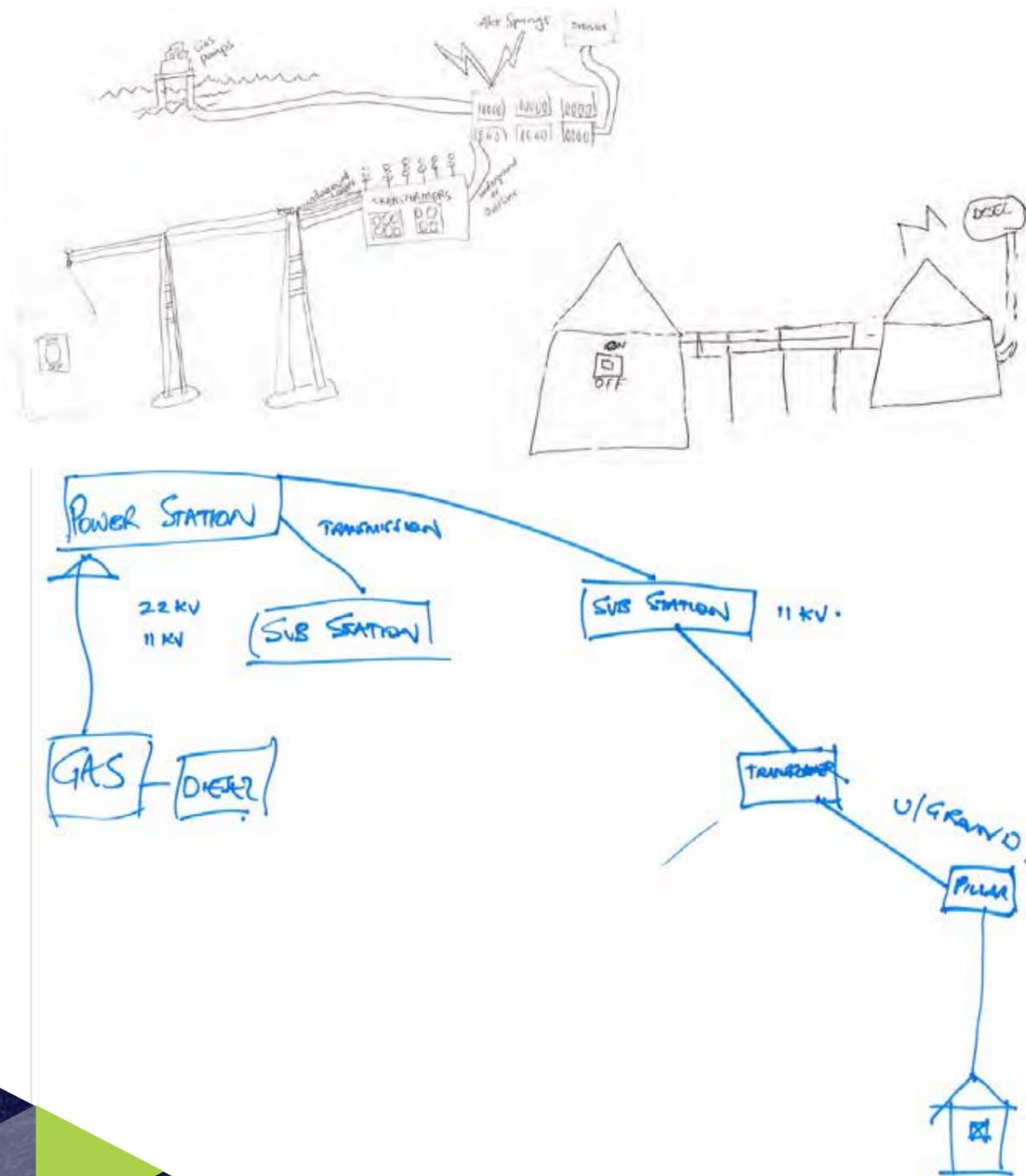


# Day 1 – Customer Journey

## Establishing baseline understanding – where does electricity come from?

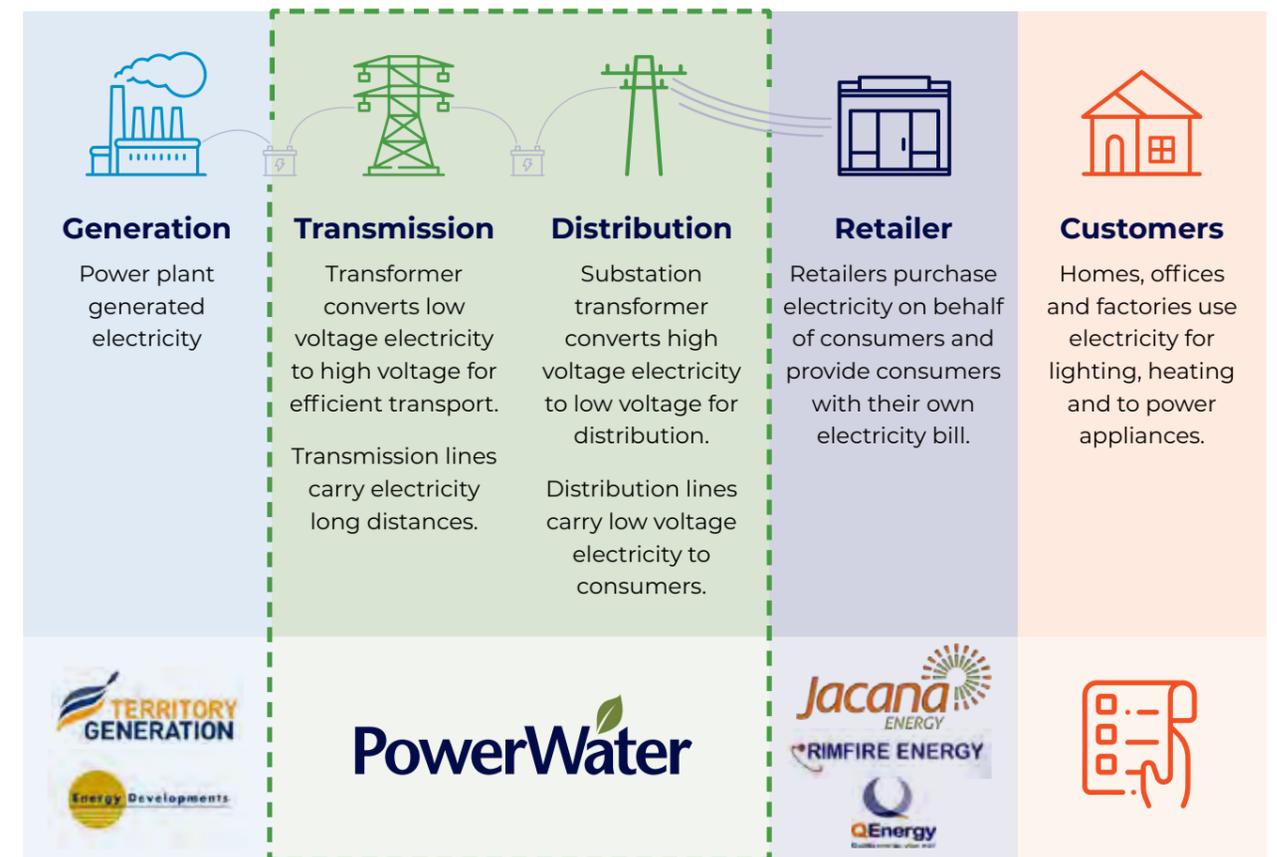
An introduction to Power and Water was provided by Jodi Triggs, Executive General Manager, Customer, Strategy and Regulation.

Participants worked in pairs and were asked to draw how they understand electricity – where it comes from and how it gets to their homes. This was followed by several short videos to explain electricity and the role of Power and Water.



The range of responses indicated that there was a wide range in the levels of understanding, however most participants understood that:

- ▶ most electricity in the Northern Territory is generated from gas (unlike in other Australian states and territories)
- ▶ gas is extracted and sent via pipeline to electricity generators where it is converted to electricity and transmitted at high voltages over long distances before being converted into lower voltages by transformers
- ▶ electricity is then carried in wires over poles at lower voltages to businesses and homes.



We had early discussions on the changing mix of energy, including an increasing number of residential customers using rooftop solar photovoltaic units (PV units) to generate their own electricity.

It was clear that many panel members found the 'split' of functions of the supply chain not to their taste. They did not feel there was real 'choice' and the result was they were paying more than they needed to.

Finally, there was a lot of interest in other forms of energy and what opportunities there were in the Northern Territory to expand the generation mix.

## Day 1 – Customer Journey

### What would be a good way to talk to customers?

Participants were asked how they think Power and Water should engage with customers. Many responses included common communication methods familiar to participants and currently used by Power and Water such as:

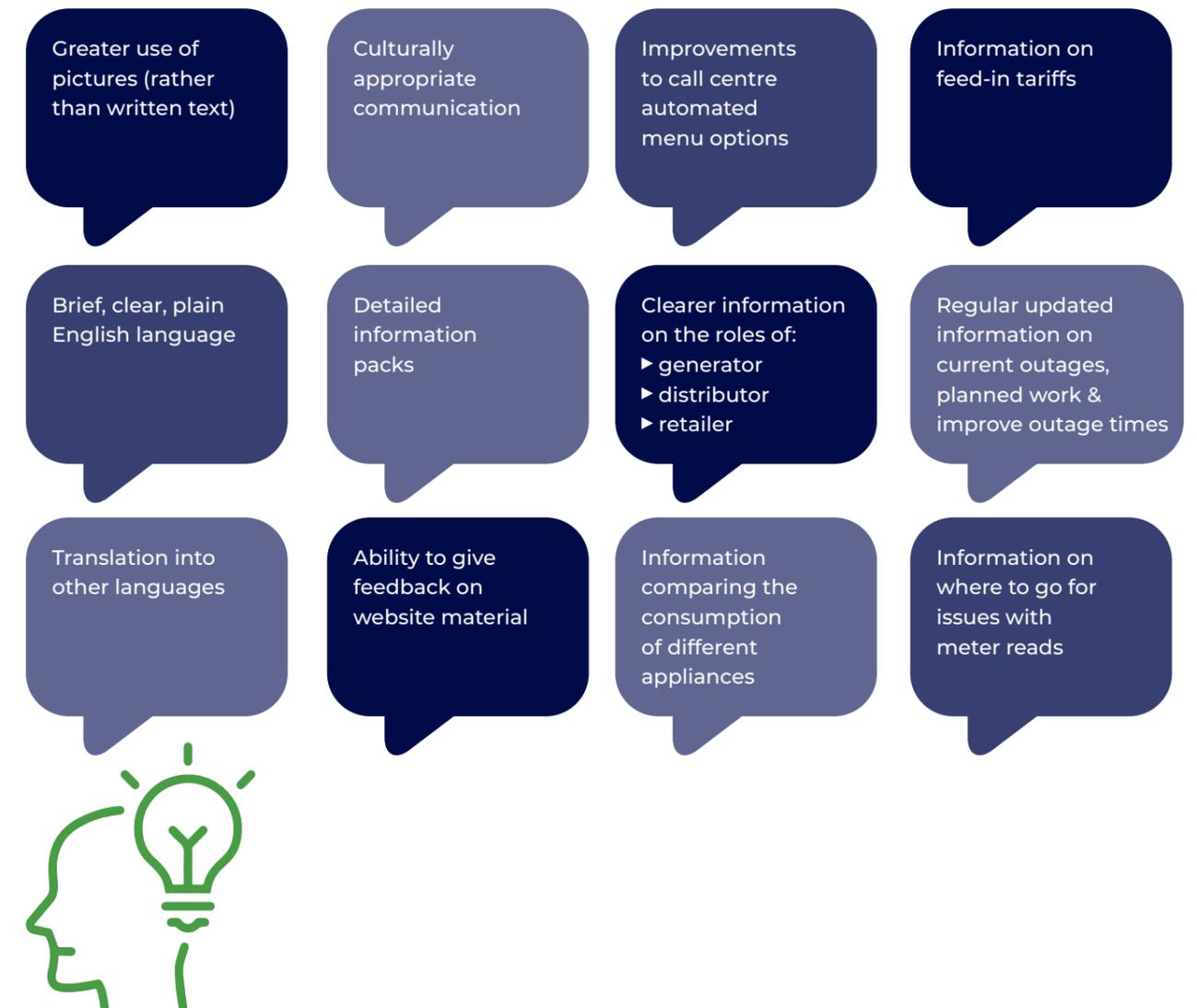


Participants expressed a strong desire for greater face-to-face engagement, suggesting:



Several participants highlighted that while online communication methods were effective, they were concerned about those who are not online. Participants also made suggestions regarding online and phone engagement:

- ▶ Raise awareness of the Power and Water app
- ▶ Different communication channels (e.g., website, Facebook, recorded message) should be simultaneously updated with information
- ▶ Use Facebook Messenger chat function but with a staff member not an AI bot
- ▶ Call centre auto directs to region-specific customer service representatives
- ▶ Consider that pay walls may limit access to online news sites
- ▶ Remove surveys from the end of telephone calls.



## Day 1 – Customer Journey

### Understanding the customer experience

Participants were asked to map their experience of energy from connecting, connected, blackouts and disconnection. Participants discussed their experiences in small groups at their tables and shared back. The key positive, negative and neutral feedback received is provided below.

#### The Customer Journey

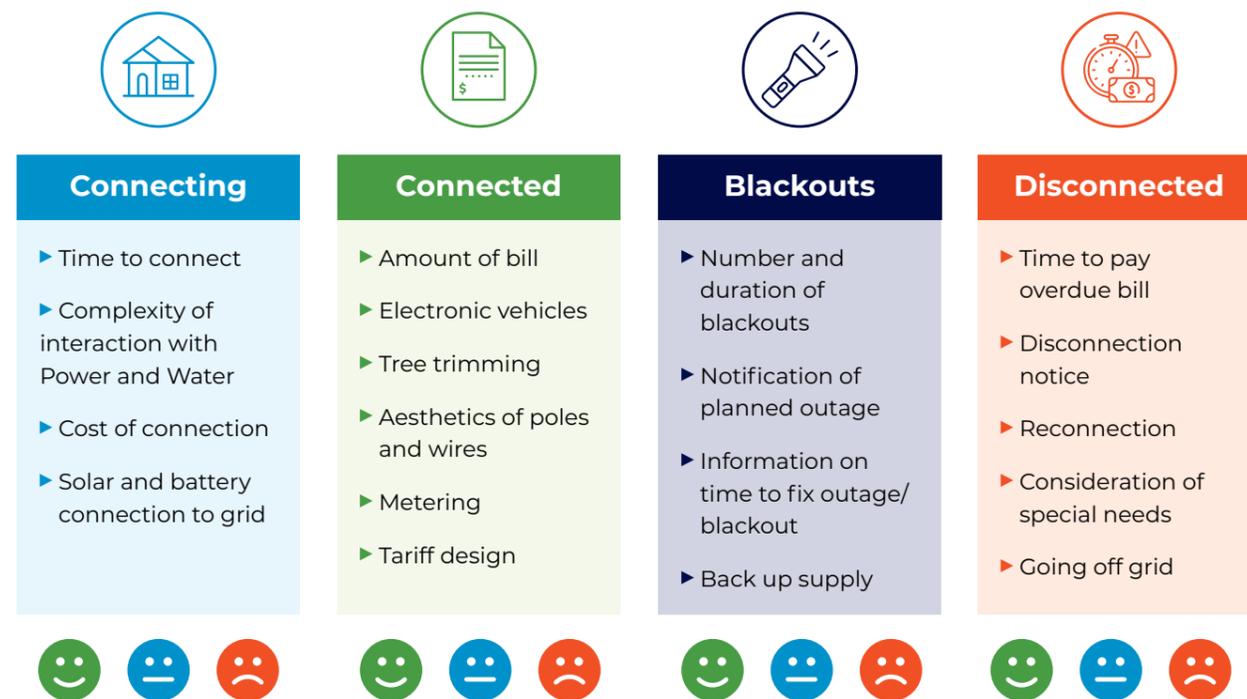
Our customers			
			
80,000 households		6000 small and medium businesses	180 Major users
Connecting			
	<ul style="list-style-type: none"> <li>▶ Who do I ring?</li> <li>▶ How long to connect?</li> <li>▶ How much to connect?</li> </ul>	<ul style="list-style-type: none"> <li>▶ Can I connect online?</li> <li>▶ How do I connect my solar?</li> <li>▶ Who connects me?</li> </ul>	<ul style="list-style-type: none"> <li>▶ Can I use an app?</li> <li>▶ Can I connect my battery?</li> </ul>
Power on			
	<ul style="list-style-type: none"> <li>▶ How much power am I using?</li> <li>▶ Do I get a discount for solar?</li> <li>▶ Why are they cutting trees?</li> </ul>	<ul style="list-style-type: none"> <li>▶ When do I get my bill?</li> <li>▶ How can I charge my EV?</li> <li>▶ Can you get rid of the ugly service line?</li> </ul>	<ul style="list-style-type: none"> <li>▶ What am I paying for?</li> <li>▶ How to contest my bill?</li> </ul>
Power interrupted			
	<ul style="list-style-type: none"> <li>▶ When will it be back on?</li> <li>▶ Is it planned or unplanned?</li> <li>▶ Will I be compensated?</li> </ul>	<ul style="list-style-type: none"> <li>▶ Who do I ring for info?</li> <li>▶ When did you notify me?</li> <li>▶ Why do I get worse service than others?</li> </ul>	<ul style="list-style-type: none"> <li>▶ Is info online?</li> <li>▶ Is my solar impacted?</li> </ul>
Disconnected			
	<ul style="list-style-type: none"> <li>▶ Can I get more time to pay bill?</li> <li>▶ Can't you lower the bill?</li> <li>▶ Who do I ring to disconnect?</li> </ul>	<ul style="list-style-type: none"> <li>▶ When did you tell me?</li> <li>▶ My business is doing it tough?</li> <li>▶ Can I do it online?</li> </ul>	<ul style="list-style-type: none"> <li>▶ Who can I appeal to?</li> <li>▶ I pay too much?</li> <li>▶ Can I get connected again?</li> </ul>





## Day 1 – Customer Journey

### Understanding the customer experience



This was largely consistent with what was heard in the customer focus groups held in August.

## Feedback from Customer Focus Groups August/September 2021

Connecting	Connected	Blackouts	Disconnected
<ul style="list-style-type: none"> <li>▶ Time to connect</li> <li>▶ Complexity of interaction with Power and Water</li> <li>▶ Cost of connection</li> <li>▶ Solar and battery connection to grid</li> </ul>	<ul style="list-style-type: none"> <li>▶ Charges</li> <li>▶ Metering services</li> <li>▶ Electronic vehicles</li> <li>▶ Poles and wires</li> <li>▶ Tree trimming and other Power and Water activities</li> </ul>	<ul style="list-style-type: none"> <li>▶ Blackouts</li> <li>▶ Brown outs</li> <li>▶ Emergency outages</li> <li>▶ Communication of outages</li> <li>▶ Notification of planned outages</li> </ul>	<ul style="list-style-type: none"> <li>▶ Time to pay overdue bill</li> <li>▶ Disconnection notice</li> <li>▶ Reconnection</li> <li>▶ Consideration of special needs</li> <li>▶ Going off grid</li> <li>▶ Overdue bill</li> </ul>
<p>😊 Generally, customers found connection time quick and the process easy.</p> <p><i>“Quick to connect.”</i></p> <p>😊 Customers found Power and Water helpful and easy to communicate with.</p> <p><i>“Found it was best to ring Power and Water rather than Jacana...”</i></p> <p>😞 Many customers were unhappy with the costs involved in connecting, some understood and were just happy to be connected.</p> <p><i>“Cost sucks.”</i></p> <p><i>“Generally OK with costs as I understand the constraints.”</i></p> <p>😞 Customers found connection to solar to be time consuming and confusing, although one customer reported it was easy and seamless.</p> <p><i>“Solar is much harder in terms of paperwork delays...”</i></p>	<p>😞 Customers were generally unhappy with the size of their bills although some were not surprised.</p> <p><i>“I do feel my bills are too high... I don't think I should use that much?”</i></p> <p><i>“Amount of bill is high but I don't feel annoyed, it is expected.”</i></p> <p>😞 Only one participant mentioned electric vehicles.</p> <p><i>“Disappointed with lack of EV push.”</i></p> <p>😞 Customers strongly disagreed with the practice of tree trimming in their communities.</p> <p><i>“I hate the way the trees are destroyed.”</i></p> <p>😞 Customers recommended underground powerlines as an alternative.</p> <p><i>“Underground power lines essential.”</i></p> <p>😞 Customers complained about the lack of a meter read on their electricity bill.</p> <p><i>“No meter read on electricity bill, difficult to track.”</i></p>	<p>😊 Most customers have rarely experienced blackouts except for during cyclone season, which they understand is a part of life.</p> <p><i>“Only got blackouts during cyclone season.”</i></p> <p>😊 Customers report almost no planned outages.</p> <p><i>“Never had an outage or blackout.”</i></p> <p>😊 Customers are happy to find out they can find information regarding blackouts on Facebook.</p> <p><i>“I am pleased to hear there is a Facebook page to find info on blackouts.”</i></p> <p>😊 Only a few customers use solar/generator power as backups during blackouts, those that do seem pleased with the results.</p> <p><i>“Have my own solar panels and standby generator due to blackouts.”</i></p>	<p>😊 Customers state that there are plenty of reminders to pay overdue bills.</p> <p><i>“Plenty of reminder notice given.”</i></p> <p><i>“Text message reminder is good.”</i></p> <p>😞 None of the customers present had dealt with a reconnection and that was for a business account.</p> <p><i>“Although it was all sorted with the wonderful lady at PAWA our disconnect/reconnect did not happen as planned.”</i></p> <p>No customers mentioned any experience with consideration of special needs.</p> <p>😞 Only one customer had contacted us to enquire about going off grid whilst still having power.</p> <p><i>“Going off grid but still be able to have power there etc. More tariff for different regions required.”</i></p>

We explored our customer data to understand what customers had contacted us about at different points in their life cycle.

## Day 1 – Customer Journey

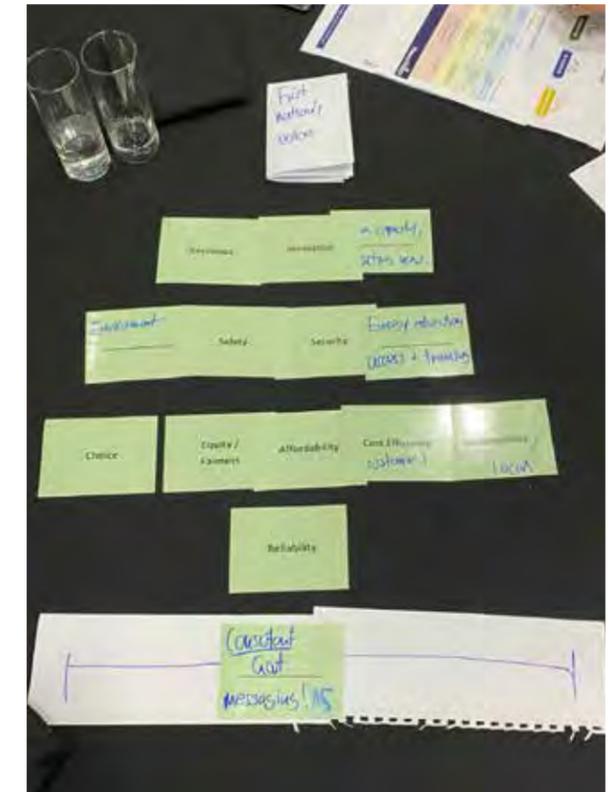
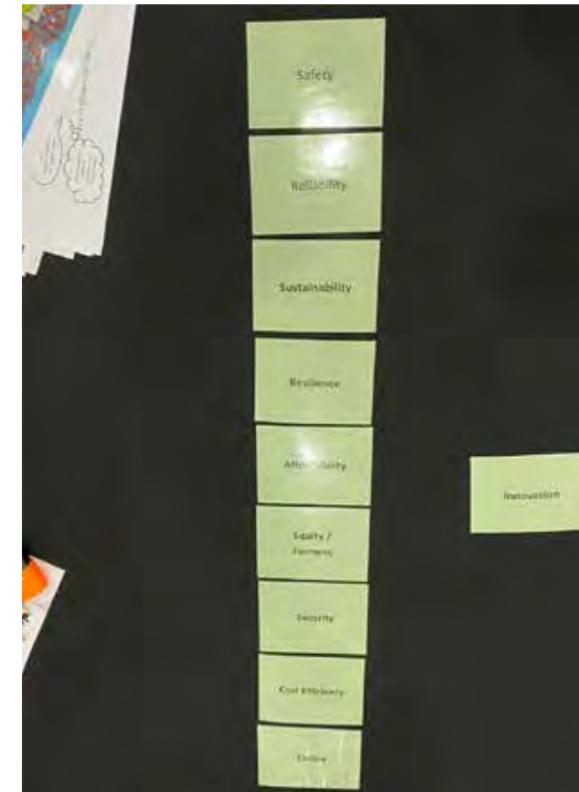
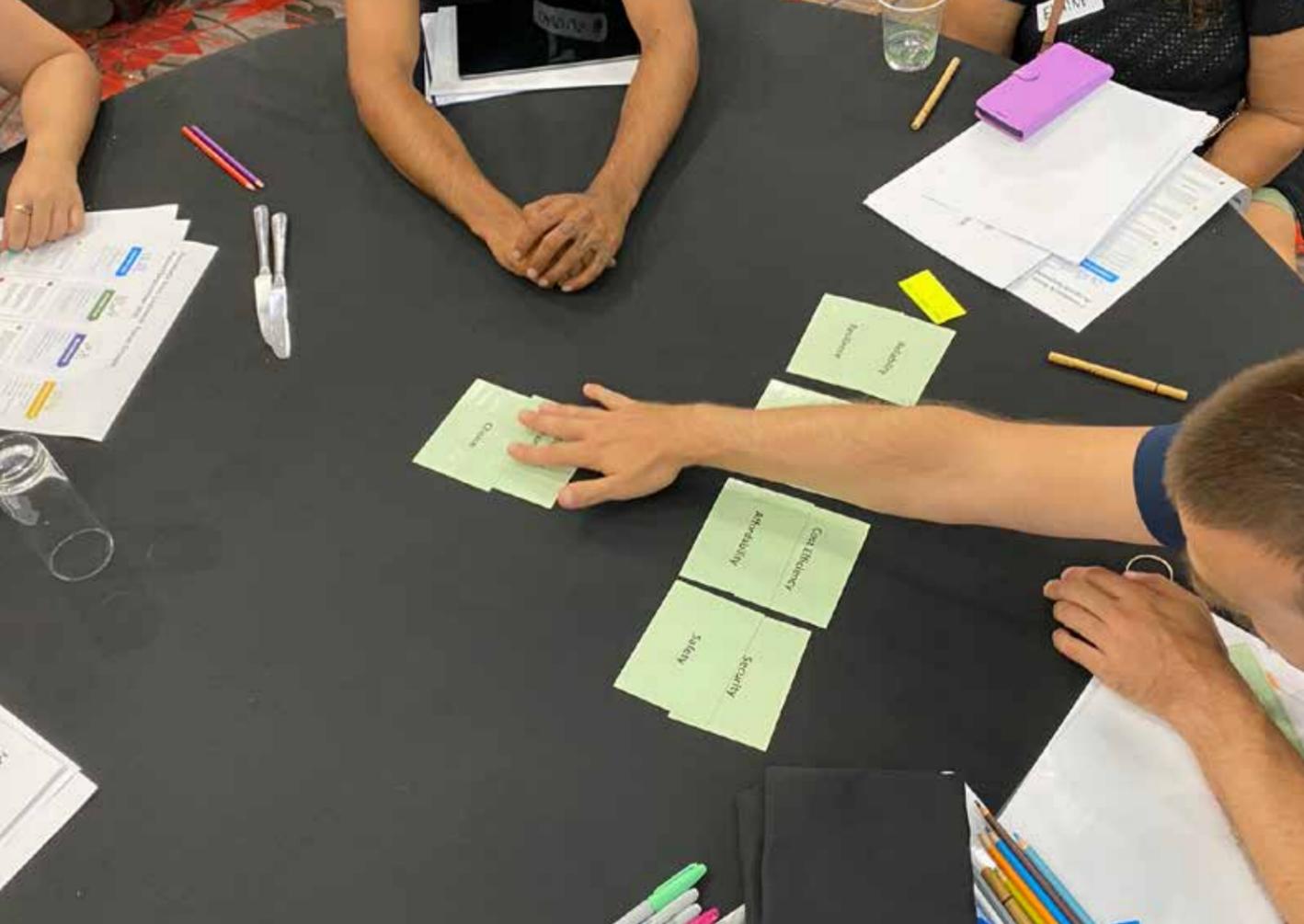
More detail on what participants said follows.

 <b>Connecting</b>		
 <b>Positives</b>	 <b>Negatives</b>	 <b>Ideas</b>
<ul style="list-style-type: none"> <li>▶ Many participants found their connection process was relatively simple, done over the phone.</li> <li>▶ There were also positive experiences regarding their solar connection noting it was quick and smooth.</li> <li>▶ Participants cited good connecting experiences with solar; “Solar connection is quick”; “Solar connection smooth”.</li> </ul>	<ul style="list-style-type: none"> <li>▶ There was some confusion between what functions were performed by Power and Water and the retailer (Jacana Energy).</li> <li>▶ Participants said they did not understand connection or disconnection charges.</li> <li>▶ Participants found the need to disconnect and reconnect when moving homes unnecessarily difficult and to be a ‘painful process’.</li> <li>▶ Participants felt frustrated with a lack of information about connecting solar.</li> </ul>	

 <b>Blackouts</b>		
 <b>Positives</b>	 <b>Negatives</b>	 <b>Ideas</b>
<ul style="list-style-type: none"> <li>▶ Participants noted their preference for SMS, letterbox drops, Facebook and Twitter as means for communicating blackouts.</li> <li>▶ Some participants in Alice Springs commented they were reasonably happy with the reliability of the system while others felt it could be improved.</li> <li>▶ Participants emphasised the importance of knowing the duration of an outage and when power was likely to be restored.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Participants complained about a lack of good communication during disruption (black outs and brown outs).</li> <li>▶ In Darwin, participants complained about the long outages, lack of communication surrounding Cyclone Marcus in 2018, and why restoring power was taking so long.</li> <li>▶ Participants noted the need for life support arrangements to be improved.</li> </ul>	<ul style="list-style-type: none"> <li>▶ The need for and importance of ensuring different methods of communication are simultaneously updated to ensure consistency in messaging.</li> </ul>

 <b>Connected</b>		
 <b>Positives</b>	 <b>Negatives</b>	 <b>Ideas</b>
<ul style="list-style-type: none"> <li>▶ Participants praised the pre-payment meter.</li> <li>▶ While feedback was mixed on vegetation management, a couple of participants commented it was good or that it had improved.</li> </ul>	<ul style="list-style-type: none"> <li>▶ The majority of comments about tree trimming were negative noting that vegetation management was slow and potentially not consistent.</li> <li>▶ Several participants complained about meter readers placing cards without reading meters.</li> <li>▶ A participant complained that the location of lines is unsafe.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Covering the cost of generators in case of black outs.</li> <li>▶ Suicide prevention signage on Power and Water infrastructure.</li> <li>▶ Closer oversight and monitoring of meter readers.</li> <li>▶ Improve cultural communication and include face-to-face options for non-technology literate people.</li> </ul>

 <b>Disconnecting</b>		
 <b>Positives</b>	 <b>Negatives</b>	 <b>Ideas</b>
	<ul style="list-style-type: none"> <li>▶ Participants complained that the cost of disconnection was too high and there was a lack of explanation surrounding disconnection costs.</li> <li>▶ Participants complained about insufficient notice of disconnection and time taken to reconnect.</li> </ul>	



## Day 1 – Customer Journey

### Understanding customer values

Understanding customer values is helpful when considering the inevitable trade-offs inherent in decision-making.

Considering and discussing values in the abstract cannot be directly translated to priorities when considering a particular issue. Introducing an exercise which looked generally at ranking values and priorities provided useful insight into the general values and priorities of different participants and is a useful precursor to group deliberation required in the next People's Panel session. It also served to test deliberative engagement and consensus in a controlled setting.

Participants were given ten laminated cards each with a value written on it and several blank cards for participants to write any additional values they felt were missing. They were then asked to work in small groups to order the cards from most important to least important. One group ordered the cards in a straight line, but many groups had different shaped arrangements highlighting that they held multiple values in similar regard.

Many groups put sustainability, innovation, reliability and safety as their top one or two values (many groups gave multiple values equal weighting). It is interesting to note that in this exercise affordability consistently ranked as a mid-range value, neither very important nor very unimportant.

Groups also added their own values which included 'First Nation's voice', consistent government messaging, 'ethical provision of power', 'vision targets timelines', 'capacity - acting now', 'environment', 'energy education, access and training' and 'EV charging stations'.

As these additional values were not mentioned by other groups they did not rank highly in the average scores but should nonetheless be taken into consideration.

Below is the list of top values, from most important to least important, based on the average of all the groups.

1. Sustainability
2. Innovation
3. Reliability
4. Safety
5. Security
6. Affordability
7. Resilience
8. Cost efficiency
9. Equity/ Fairness
10. Choice

## Day 1 – Customer Journey

### Imagining the future

Envisaging the future, and how people’s expectations will change with the way they use and consume energy, is an important part of the planning process.



During this session participants were asked to consider:

- ▶ What is the most exciting possibility that you see for energy?
- ▶ What will be biggest change for you in how you use or think about your energy?
- ▶ How would it affect your life in your household/with your family? At work and play?
- ▶ What does a day in their life in 2040 look like?

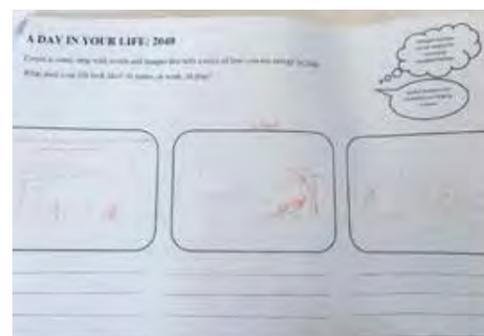
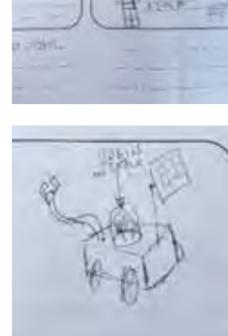
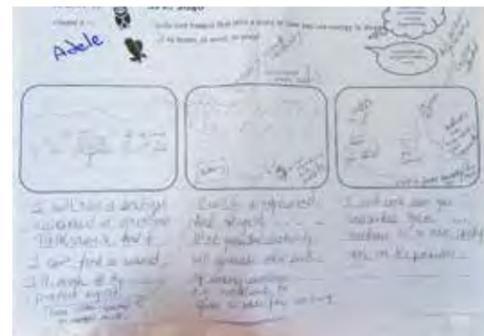
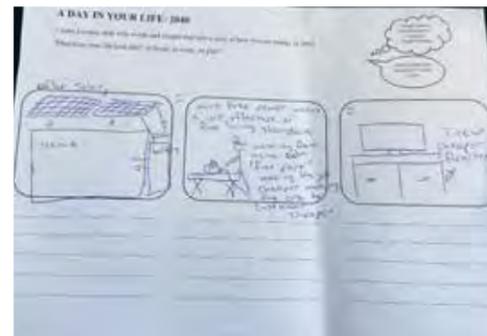
Participant responses to these questions are summarised below.

#### What is exciting?

Participants commonly described an energy future they were excited about as ‘cheap’, ‘clean’ and ‘sustainable’.

Many participants mentioned solar in the context of free energy production, improved battery storage capacity and life span.

A few participants mentioned equity and two mentioned nuclear fusion. Other suggestions included microgrids and personal and community battery banks. One participant mentioned cars with a fossil fuel alternative, but few participants explicitly mentioned electric vehicles.



#### What’s changed?

When asked about the biggest change in use or thinking about energy, many participants cited greater affordability as a key change along with not needing to think about their consumption.

Some participants suggested there would be more energy-efficient appliances leading to a decrease in consumption. This view was tempered by predictions that further technological advancement in renewable energy such as electric vehicles will significantly increase consumption. A few participants also referred to the need to consider climate change.

#### What’s different about your life?

When asked how this future would it affect their life, participants frequently cited greater affordability and convenience due to automation. Two participants mentioned portable power, with one describing a rechargeable micro-battery that could be used for multiple devices (like a USB).

#### What does your life look like in 2040?

While some participants imagined lying on a beach or jet-powered travel, other participants projected a bleak future describing environmental destruction, reflecting their concern about the environment.

A number of responses included solar panels on homes, automated energy-efficient homes, working from home and the end of fuel powered cars (most did not refer to electric vehicles specifically and three referred to hydrogen-powered vehicles).

## Day 1 – Customer Journey

### Exploring Equity

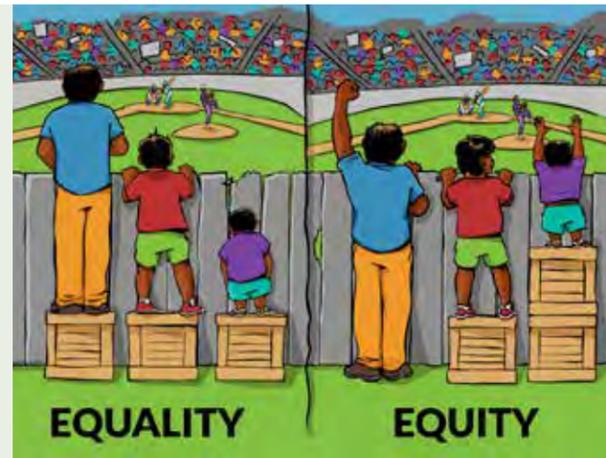
When delivering an essential service, equity is a key issue.

The issue of equity is frequently raised in engagement processes around energy. Participants were asked to contemplate the energy future they want not only through the lens of their personal experience but the impact on the wider community.

Participants were shown the graphic and asked to discuss:

- ▶ What is energy equality?
- ▶ What is energy equity?
- ▶ What kind of energy future do we want?

This discussion generated quite challenging and sometimes heated debate. As this was a general discussion in small groups that would inform subsequent activities, the outcome or conclusion of the discussions was not documented. It is clear some groups had interesting discussions about the current and desired future state of energy equity and equality.



**Statement 1: Lower income families spend a higher proportion of their income on energy than higher income families. Is this an issue? Why or why not? If so, how might we address this?**

Most, but not all, groups agreed this was an issue. Many participants thought there should be subsidies in place for those who need financial assistance but there was mixed awareness of whether this exists.

Those who did not think it was an issue explained that a pay-for-what-you-use model is fair as the costs to provide the service are the same, there are ways to reduce energy consumption to make it more affordable and subsidies are available to those in need.

Those who thought it was an issue explained that energy is an essential commodity. Those who do not use energy because of the unaffordable expense may suffer health impacts as a result and those that do prioritise spending on energy may go without other essentials such as food. A couple of participants also mentioned a growing divide between the rich and poor and this leading to social unrest.

Some participants also mentioned that low-income households may have less energy efficient appliances.

Ideas to address these issues included:

Rate structure reform:

- ▶ A minimum amount of electricity that is available to all, free of charge
- ▶ Charges, or a base tariff, based on income
- ▶ A fixed fee service fee that covers network cost plus a fixed usage fee.

Enabling greater access to solar:

- ▶ A solar power scheme to share power to those without access – ‘pay it forward’ scheme
- ▶ A reputable and trusted rent-to-buy solar scheme
- ▶ Solar panels on public housing.

Efforts to support energy consumption reduction:

- ▶ Energy efficiency education programs
- ▶ Financial aid or better access to energy efficient appliances.

**Statement 2: Gradually, as more households can afford solar energy, Power and Water will have to build more electricity network for the solar energy so it can be used by others. This means households who can afford solar energy will get paid for the energy they export (this is cheaper than other forms), but everyone will pay a higher price for the higher network costs. Is this an issue? Why or why not? If so, how might we address this?**

Some participants thought that those with solar should not avoid paying for the upgrade to the network and one participant thought that only solar customers should pay for the network upgrades on the basis that those customers are likely to be able to better afford the additional costs.

A greater number of participants were concerned that charging an export tariff to solar customers (a method of passing on the network upgrade cost) would not incentivise solar and battery uptake, stating this was important for transitioning away from fossil fuels.

One participant highlighted that if everyone had access to solar, this problem may be alleviated. Another participant suggested a solar PV rental scheme whereby cost was covered by the electricity generated.

During the discussion, one group expressed opposition to project Sun Cable, an undersea cable from a planned major solar farm in the Northern Territory that could supply Singapore, stating that it would not benefit locals. Two participants (one in each location) questioned whether there had been research and development into nuclear energy as an alternative.

**Statement 3: The costs for a network are fixed, but energy prices are mostly variable (based on usage). Customers who own solar save on their energy charges and their network charges, but networks can't reduce their own costs by the same amount. Is this an issue? Why or why not? If so, how might we address this?'**

There were mixed responses to this question. The statement raised a number of interesting areas for discussion as we went into day two. Naturally, some of those who owned their own solar assumed their ability to use their own energy saved on their bills and helped the greater community. Their view was that the benefits of exporting their solar into the grid more than offset the cost of the network to ‘host’ their solar and the use of the grid when they need to import. There was some confusion and frustration in unpacking the statement.

Consensus was difficult to obtain from discussion on this statement. The exercise helped participants understand issues in planning for future networks which need to accommodate solar, even though solar customers can bypass some of the charges by using solar. Many thought that network charges comprised the fixed daily charge. Suggestions for solar customers to pay a bit more, or for solar customers network charges being used only for network upgrades as a result of solar were discussed by participants. Other suggestions included rethinking the network with community batteries and/or microgrids.

# Day 2 – Power and Water’s journey

## The big picture

Participants were welcomed to day two of the Panel, where we sought to apply some of the baseline understanding and knowledge to real world strategic issues that Power and Water’s Board is now facing.

Participants were told that day two’s activities would involve presenting to the People’s Panel as if they were the Power and Water board and asking them to consider strategic issues.

The Acting Chair of the Board, Charles Burkitt, presented to the Panels on what the Board did and how participants views were both relevant and of interest to him and the Board. It was noted that the presentation being used was largely the same as that presented to the Board a few weeks earlier, at their annual strategy session.

The first session was a presentation from Jodi Triggs, Executive General Manager Customer, Strategy and Regulation, and Stephen Vlahovic, Executive General Manager Power Services, that provided an overview of Power and Water, including a report card for past performance.

Stephen talked through the performance of Power and Water over the last 15 years from two perspectives – reliability and cost. Reliability is a key metric for the quality of service for customers. Costs represent the capital and operating expenditure to run the network.

Key points are outlined below:

- ▶ While costs were quite low (and reflected in lower prices) in 2006 and 2007, reliability deteriorated across the network, and resulted in multiple failures, blackouts and disruption. To ensure safe and reliable supply, Power and Water had to spend significantly more in a much narrower period of time, resulting in rapid price spikes followed by a focus on cost reduction.
- ▶ Power and Water does not want to repeat a ‘boom bust’ cycle of investment.
- ▶ In recent years, prices have been kept relatively low and reliability reasonably high, due to upgrades over the last decade and higher levels of solar in the middle of the day which have reduced the need to invest. Some regular asset replacement has been deferred due to increases in solar.
- ▶ Current replacement levels are not sustainable into perpetuity, but this needs to be managed against bringing forward investment that may not be necessary.

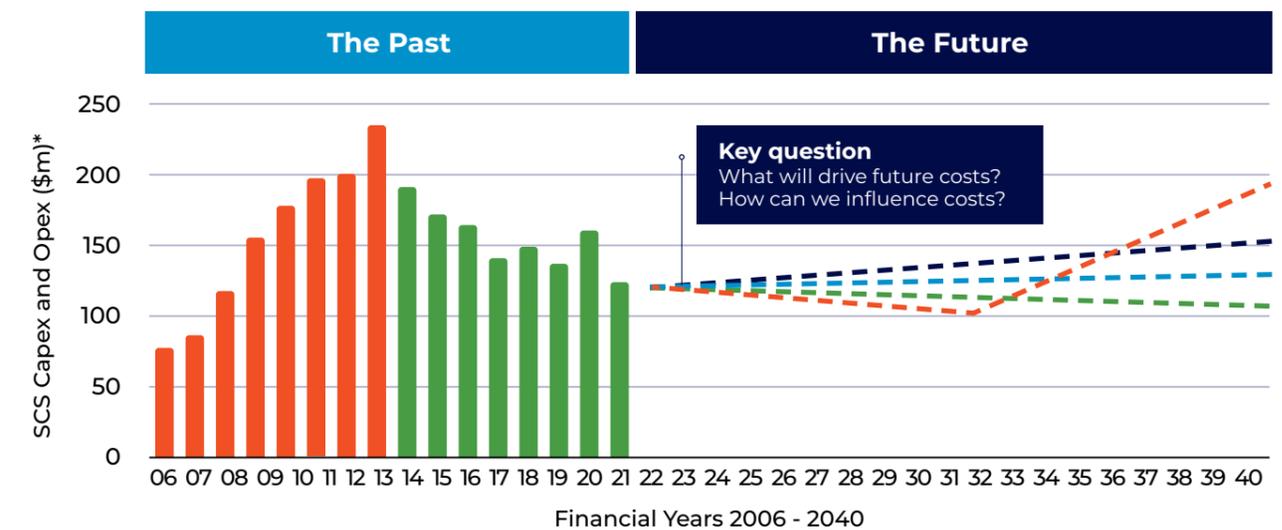
- ▶ Global trends are increasing the need for a robust, well interconnected grid. The pressures of digital change, increasing use of renewables and EVs, will all place increasing pressure on our forward expenditure. While the timing of some of these technology changes is unclear, significant change sometime in the next decade is inevitable.
- ▶ Customer expectations continue to grow over time, making it important for Power and Water to stay in front of customer expectations and experience.



### Outages experienced by customer

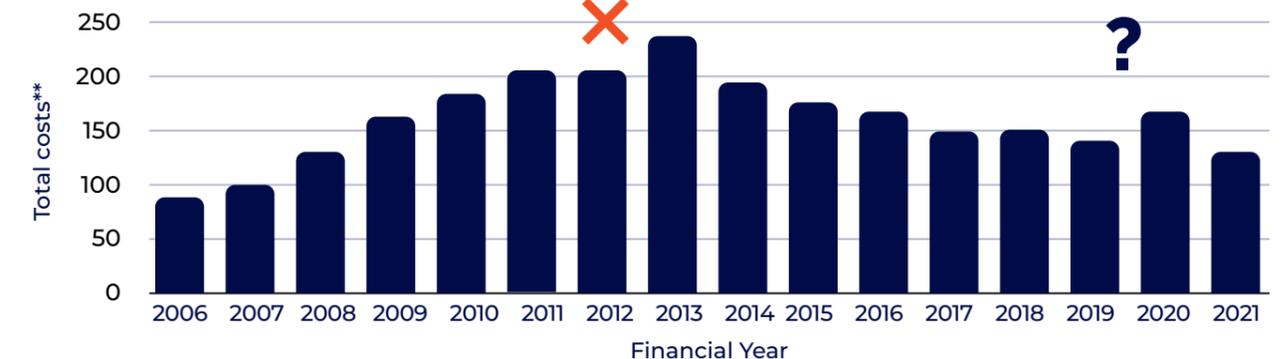


\*Whole of network unplanned SAIDI excluding MEDs, excluded outages



\* Standard control capex and opex (\$real, 2021).

### Power and Water’s costs



\*\* Standard control capex and opex (\$real, 2021)

## Day 2 – Power and Water’s journey

### Untapping rooftop solar

In this session the conversation turned to how Power and Water should support and respond to growth in renewable energy and changing customer behaviour.

This session explored the opportunities and challenges with the network needing to accommodate the predicted doubling of small scale solar by 2030, and what strategic options are available from constraining solar or enabling more solar. The challenges of building more network were also covered. This session was facilitated by Brendon Crown, Senior Manager Regulation Economics and Pricing.

#### The changing energy landscape

The Panel was presented with information around the fundamental paradigm shift in how the energy system operates. Pre-2010, the energy system was relatively simple and was characterized by flows of electricity in one direction from large gas generators connected to the transmission network, which were in turn transferred through the series of poles and wires to customers’ houses or businesses.

Over the last decade, technical advancement and innovation have driven fundamental change, with increases in large- and small-scale solar, and the introduction of two-way energy flows on electricity networks which have been traditionally designed and configured on the premise of one-way electricity flows.

Power and Water explained what the future might have in store for the Territory.

By 2030, ageing gas generators will be replaced with large scale solar farms and more generation will come from customers’ solar. Battery storage will also start to play a role capturing solar energy in the day and distributing it at night. Many customers will switch to electric vehicles.

By 2040, large-scale solar will expand with the potential of connection of wind-powered energy many kilometres away. By then, green hydrogen (where solar splits water atoms) could be slowly replacing gas. At the household level, there will be more small-scale solar, batteries and electric vehicles.

We explained the opportunities for customers in this change and the challenges for networks to deliver this change with minimal cost.



We asked a number of questions:

- ▶ What will this mean for Power and Water and what is that optimal or ‘Goldilocks’ investment pathway to facilitate the transition affordably and securely?
- ▶ Given the current network is designed for one-way flows of electricity, do we limit solar exports or increase the capacity of the network to accommodate solar exports?
- ▶ How do we get the best balance of costs and benefits?

#### Managing two-way flows

Power and Water explained that a key to unlocking greater levels of small scale renewable generation lies in improving the accuracy of locating where and when local generation causes potential problems for the safe and secure operation of the network.

Right now, Power and Water cannot see the two-way flows of energy at the street level. Even if it could see the two-way flows of energy, it cannot respond in real time if the two-way flows started disturbing reliable and safe energy supply up and down the street.

To avoid supply problems across the network, we constrain the amount of energy that can be exported from a solar system when it firsts connects – what is called a static limit. We apply this everywhere, but in some areas the static limits are becoming smaller.

We recognise that this is not sustainable long term, because as more solar is connected the risk of congestion increases, decreasing limits.

Because we don’t know exactly where and when the real problems are, we set these limits across the network, meaning that currently there are lost opportunities for more solar to be exported.

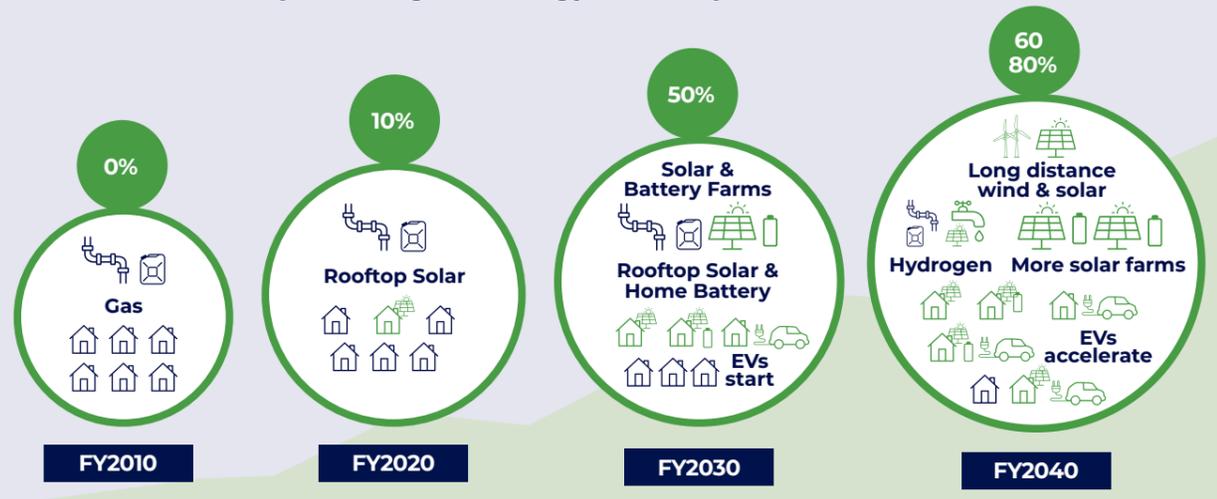
If Power and Water improves its visibility of the network capabilities and capacities in real time, it can limit its constraints to the locations and times that it knows problems will occur.

#### How can community batteries help?

Community batteries are a shared battery solution located in a local neighbourhood which allow customers and the wider community to share in the multiple benefits that batteries can provide. They can encourage greater solar uptake by making access to battery storage more equitable and accessible for all customers, particularly those who are not currently able to install their own battery, while also enabling customers without solar energy systems to benefit.

Community batteries can also offer a flexible alternative to traditional poles and wires investment, potentially reduce peak demand and provide power security and reliability, helping to place downward pressure on electricity prices.

#### Renewables as a percentage of energy consumption



## Day 2 – Power and Water’s journey

### Untapping rooftop solar

#### Panel feedback

There was general support for the idea of a community battery although participants wanted to know more about cost implications. There was general support for mandating that all new builds in the Territory have solar panels. There was some acceptance of gradual price increases to offset larger price hikes in the future, although questions around exact figures and concern about affordability, especially for low-income residents, remain.

Participants discussed the challenges with unlocking renewables, asking questions such as:

- ▶ Can Power and Water provide clear cost-benefit analysis of renewable targets?
- ▶ How much is the government contributing and then who pays for the shortfall? Private equity?
- ▶ Can money that consumers generate be put back into the cost of renewables?
- ▶ Can there be a sustainable energy tax instead of increased targets?
- ▶ What are the costs, legislation, efficiencies of retroactive solar installing versus a new build requirement?
- ▶ Who is responsible for investing in research and development of new technology? What will the overall cost of renewables be?
- ▶ Is it better for the network to have solar farms or domestic connections within the community?
- ▶ Will Sun Cable drive down prices?
- ▶ What other renewables are you looking at and will they have the same stresses on the network as solar (geothermal, wind, wave)?
- ▶ Has Power and Water considered looking at the technology and strategies used overseas?
- ▶ Is it better to push “Mum and Dad” solar to charge their own batteries rather than feed back into the network?
- ▶ Can you have both rooftop solar and wind turbines at the same time?
- ▶ How long do solar panels last?

Ideas floated included:

- ▶ Mandatory solar panels for new builds
- ▶ Community programs for community solar
- ▶ Central departments - microgrids
- ▶ Dynamic operating capabilities
- ▶ Standalone grid for Alice Springs (suggestion from the Alice Springs Panel)
- ▶ Government subsidies for solar and storage
- ▶ Trial community batteries in Alice Springs (suggestion from the Alice Springs Panel)
- ▶ Power and Water to consider its carbon footprint with their investments
- ▶ Community input to Board decisions.



### How do we compare?

This session explored the challenges with benchmarking for the Proposal and sought guidance on the most important comparisons that would enable Power and Water to deliver customer focussed outcomes. It also provided insight into the way the AER will assess the Revenue Proposal, which will be useful context for future discussions with the People’s Panel.

This session was facilitated by Jodi Triggs, Executive General Manager Customer, Strategy and Regulation.

Participants were shown graphs and data that demonstrated the difference in both size and scale of Power and Water’s network, highlighting the small customer base, large geographical area and the three distinct networks.

A summary of key points is provided below:

- ▶ There are five networks in Victoria, one in the Australian Capital Territory and South Australia, and two in Queensland. Western Australia is not part of the National Electricity Market.
- ▶ The most important thing to compare is spending, bearing in mind the NT has a fraction of the population of New South Wales and Victoria.
- ▶ One way is to examine spending per customer, which is similar to Ergon in Queensland. Both networks spend higher than the other networks.
- ▶ Another way is to examine spending per unit of energy delivered. Power and Water appears less expensive on this measure but still fairly expensive.

Participants were asked five ‘fact or fiction’ quiz questions about the Northern Territory and asked to move to a side of the room to communicate their answer. This was designed to start contemplating some of the variables which impact comparisons such as size of customer base. Participants were then asked, what is different about living and doing business in the Northern Territory? A summary of these small group discussions is provided below.

#### Living in the Northern Territory

Participants were asked about key differences in living in the Northern Territory compared to other places in Australia.

Participants in Darwin cited the following key differences:

- ▶ Geographical remoteness and the impact on cost of living, such as food, petrol and access to the rest of the country
- ▶ Weather, specifically heat, humidity and extreme weather events, and consequently the reliance on air conditioning, the reduced lifespan of goods such as electronics and car batteries and different kinds of cyclones to far north Queensland
- ▶ Size of population and costs associated with lack of competition, limited access to goods and services (in particular medical), educational opportunities and rental housing
- ▶ Lifestyle factors such as outdoor living, slower pace of life, more multicultural, higher vehicle speed limits, less traffic and easier parking and relative proximity to Asia.

Participants in Alice Springs cited these additional differences:

- ▶ Aboriginal culture, language and law including sacred sites
- ▶ Community that is friendly, inclusive, and creative but also racist
- ▶ Dust and a lack of water in the desert
- ▶ Limited public transport
- ▶ Poor quality internet.

## Day 2 – Power and Water’s journey

### How do we compare?

#### Doing business in the Northern Territory

Participants were asked about key differences in doing business in the Northern Territory compared to other places in Australia.

Participants in Darwin cited the high costs of energy due to the need for air conditioning, and higher costs for freight and travel (due to distances). Panel members noted that consumables - in particular, food, petrol and other materials (due to lack of competition) - were higher cost. Comparatively, rent was quite high in Darwin.

The cost of labour is also quite high due to the difficulty and cost of attracting and retaining productive, skilled workers. Labour is usually much more transient and there is a general need to rely on backpackers for routine jobs.

Specialist resources require contracts involving fly-in/fly-out arrangements.

There are longer wait times for freight and travel (due to needing to cover large distances and access to sites which can be difficult because of road conditions such as flooding) and longer completion times when working outside due to lower productivity when working in extreme heat.

There are differences in the make-up and culture of the workforce such as a larger government workforce.

There is a smaller customer base. Being multicultural, communication in other languages is required.

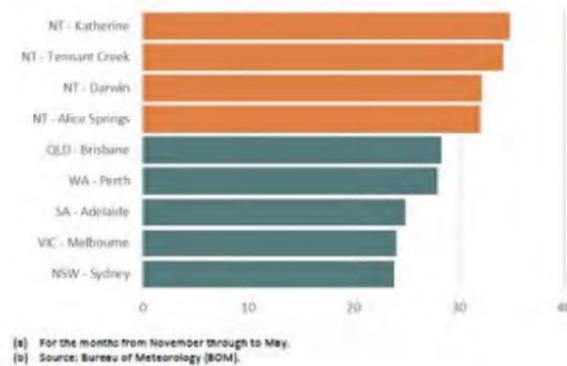
On a positive side, the business community is quite close and there is usually only one degree of separation between people, less formal communication and word-of-mouth referrals. Business networking is Territory-wide rather than being city-based and many workforces and businesses are seasonal (wet/dry season).

Participants in Alice Springs noted in particular a greater sense of networking and community within businesses and suggested higher insurance costs due to break-ins.

#### More storms



#### Hotter temperature



#### Higher rainfall



#### How should we be approaching benchmarking?

This session explored the challenges with benchmarking and sought guidance on the most important comparisons that would enable Power and Water to deliver customer focussed outcomes. It also provided insight into the way the AER will assess the Revenue Proposal.

It was explained that some comparisons are not appropriate for Power and Water’s network (e.g. total costs over customers). Other comparisons work well (e.g. cost of electrical equipment) and some comparisons can be adjusted for unique circumstances (e.g. asset age).

Participants were asked what kinds of things Power and Water should be considering when benchmarking and what participants think is the appropriate approach to benchmarking, along a continuum:

- ▶ Give up benchmarking as nothing can be compared (not an option as the AER requires benchmarking)
- ▶ Use only what is perfectly comparable
- ▶ Use what you can and adjust
- ▶ Mindlessly benchmark.

Most groups suggested the best approach would either be to ‘use what you can and adjust’ or ‘use only what is perfectly comparable’ (or suitably similar).

All participants agreed that benchmarking was helpful, not only for the AER but also for Power and Water.

Efficiency and effectiveness are important to customers. There were concerns about the cost of benchmarking for the sake of benchmarking and a strong feeling that Power and Water identify what works and use that, and find other ways to demonstrate to the AER that they are being prudent in their choices.

## Day 2 – Power and Water’s journey

### Keeping fit as you age

This session introduced the future challenge of replacing an ageing network, noting that replacement rates today are well below long-term sustainable levels. The challenge is that continuing our current approach minimises prices today but could lead to significant costs by 2035 when the assets age significantly.

The session explored the role of new technology and transformation in helping us extend the life of assets and provide opportunities to decommission rather than replace assets.

Participants were shown graphs which demonstrated the historic spend on maintenance and heard the story of the failure of Casuarina substation in 2008 and consequent blackouts, which most participants in Darwin remembered. This session was facilitated by Zubin Meher-Homji, Founder and Director of Dynamic Analysis, an expert regulatory and commercial analysis firm working with Power and Water on the Regulatory Proposal.

The session began with a budgeting exercise that involved giving each table some play money, some ‘buckets’ and a ‘persona’ or a type of household that the group will play. Groups were tasked with allocating their funds in the buckets.

The idea of this activity was to give participants an insight into different approaches for planning for the future and managing unexpected costs. Details of the personas can be found in Appendix D and broadly were:

- ▶ Nervous Nelly
- ▶ Prudent Prue
- ▶ Daredevil Dave
- ▶ Scott Pape (the Barefoot Investor).

All groups were given \$40,000 for living expenses and \$40,000 for everything else and were budgeting for four years. (In Alice Springs this was reduced to just \$20,000 as the original amount seemed too much).

Groups were told they could move the money in any way they liked, but there was no more money and borrowing and stealing from other groups was not allowed.

A scenario was then presented where unexpected maintenance costs arose each year including flooring, electrical, roofing and tree damage and groups needed to decide whether or not to spend the money that year or delay.

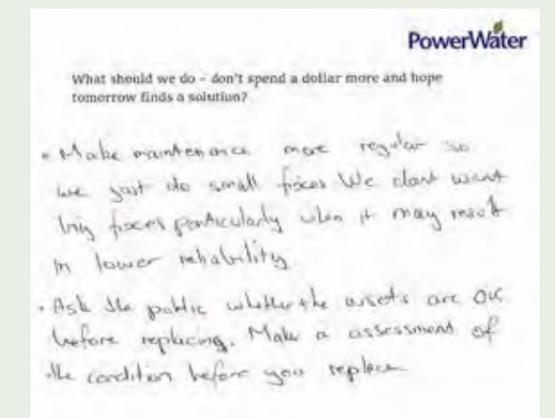
### What should we do?

Groups were asked if it would be better for Power and Water to adopt the approach of ‘don’t spend a dollar more today and hope tomorrow finds a solution’ or ‘start spending more now to stop a spike in costs in the future’.

Some groups preferred the option to wait for further technological advancement as they expressed concern about spending on assets that would become obsolete and worried that some energy users may not be able to afford an increase in cost today. However, the majority of groups were concerned about preventing price spikes in future. Many groups suggested Power and Water have a future-proofing fund or a rebated levy to help avoid price spikes.

*“Gradual increases are ok - big spikes become a shock and unfair to people on lower income - need to keep it in medium”*

*“[Are] there other options to ... build up a reserve ...allow for revenue to factor in a ‘saving factor’? Customers don’t like price spikes”*

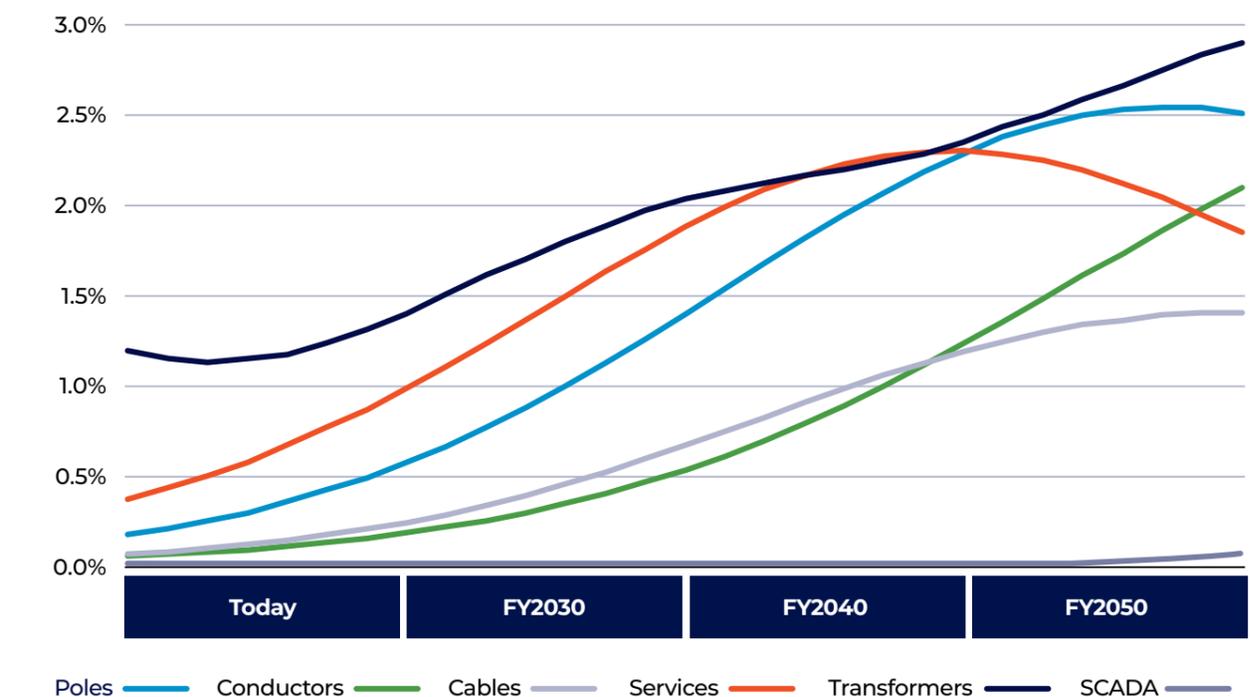


### Currently not replacing much



\* Average over last 7 years

However assets will continue to get older, and by 2035 we will need to be replacing at a far greater rates than today.



## Day 2 – Power and Water’s journey

### Electric Vehicles

This session presented the opportunities and challenges of electric vehicle (EV) uptake for the network. This includes the issues of managing network capacity, affordability and utilisation depending on the time of day customers charge their vehicles. This session was facilitated by Stephen Vlahovic, Executive General Manager Power Services.

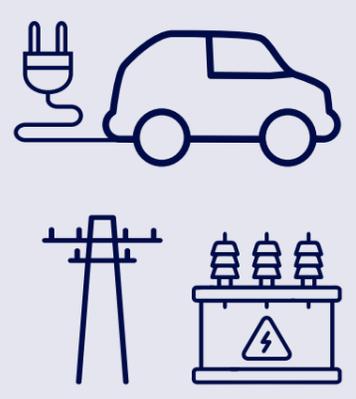
The NT Government recently produced a report which showed that range anxiety was a big barrier for taking up an EV in the NT.

There is considerable support from the public for Government and private investors to roll out public charging stations. In a survey by the NT Government, about 80 per cent of respondents said they wanted to see more charging stations.

Like any business, we want our customers to be using more of our product. EVs will mean a shift from customers using petrol to electricity, and using renewable electricity to do so.

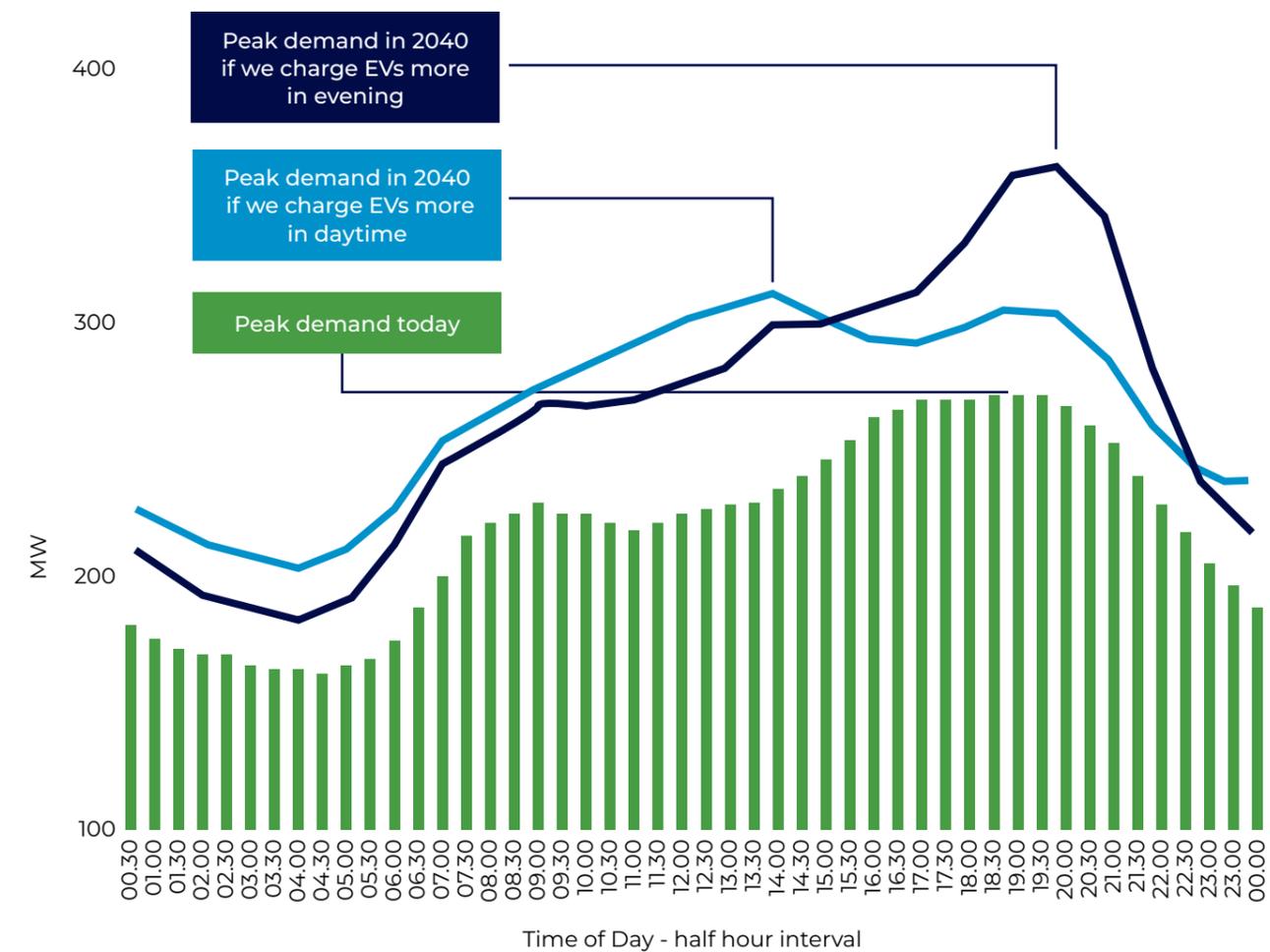
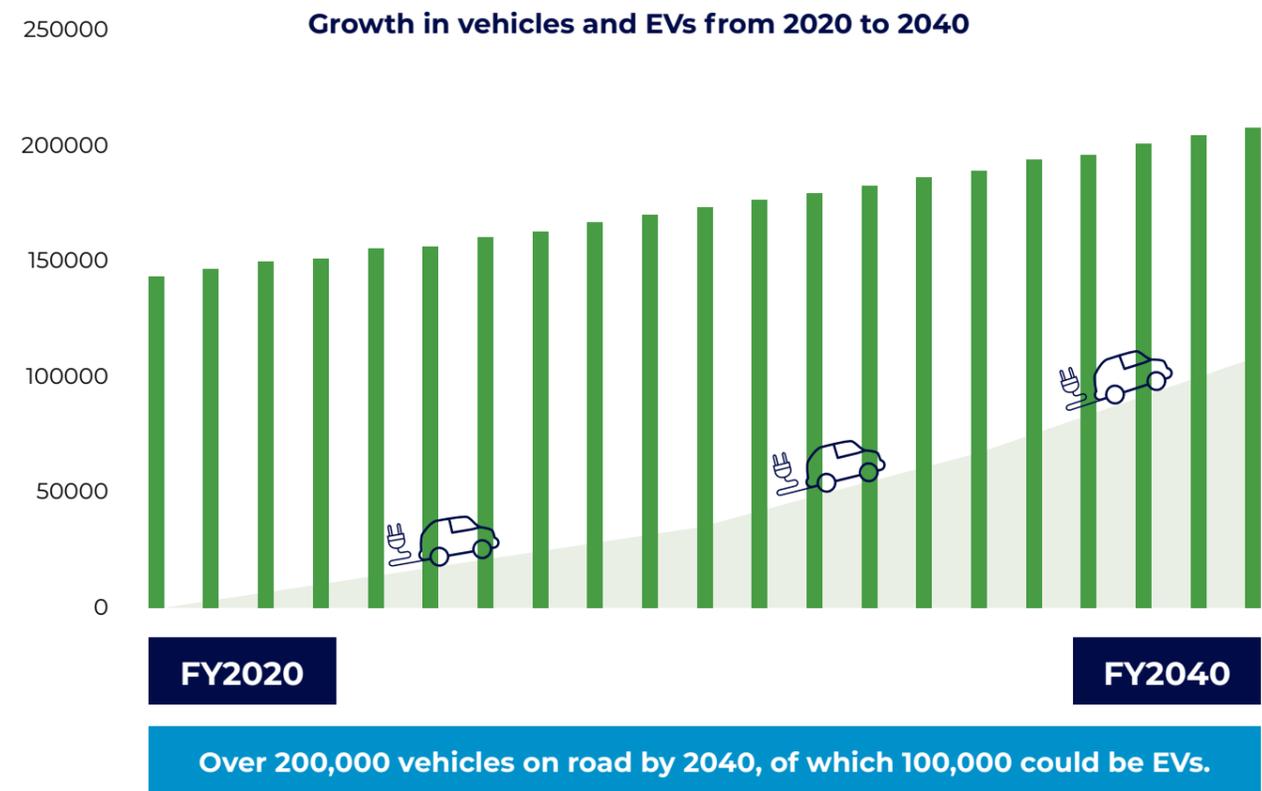
Participants were then asked quiz questions about the state of play of EVs including facts such as:

- ▶ There are currently 61 EVs in the NT out of 150,000 cars
- ▶ By 2040, 50 per cent of cars sold will be EV
- ▶ EVs will be the same cost as petrol cars by 2025
- ▶ EVs cost 60 per cent less to fill up than petrol
- ▶ EVs increase electricity consumption by 35 per cent.



Key issues were explored such as:

- ▶ Should Power and Water be facilitating public charging?
- ▶ How should Power and Water manage the impact of EVs on the network?
- ▶ How should Power and Water manage network costs, specifically managing peak demand based on charging during the day versus at night?



## Day 2 – Power and Water’s journey

### Electric Vehicles

#### What should we do?

Participants were asked ‘what approach Power and Water should take in terms of EVs, essentially if we should be ahead of the curve or wait and spend more in the long run?’ Most participants thought that investment in EV infrastructure should be made sooner rather than later.

*“START NOW!!”*

*“We should not wait and see what happens we need to get ahead of the curve and not be caught unprepared.”*

*“PWC should be ahead of the curve, the Council should pay for the stations.”*

Some participants questioned the role of Power and Water in facilitating the transition, with some participants in Darwin suggesting that partnership with the City of Darwin was important and that council should own the charging stations.

One participant suggested that upgrading solar capacity in the network to allow for two-way flows should be done prior to focussing on EV issues. Some participants suggested that building EV infrastructure was good for the local economy and given the time needed to build the infrastructure it should not be delayed.

Many participants wanted more research on this subject and emphasised that the location of charging stations was a relevant consideration impacting uptake.

Participants suggested Darwin, Palmerston, Casuarina and the Stuart Highway would be good locations for charging stations. A participant in Alice Springs mentioned the importance of having infrastructure available for tourists with EVs.

*“Charging sites are important and will determine when I buy an EV.”*

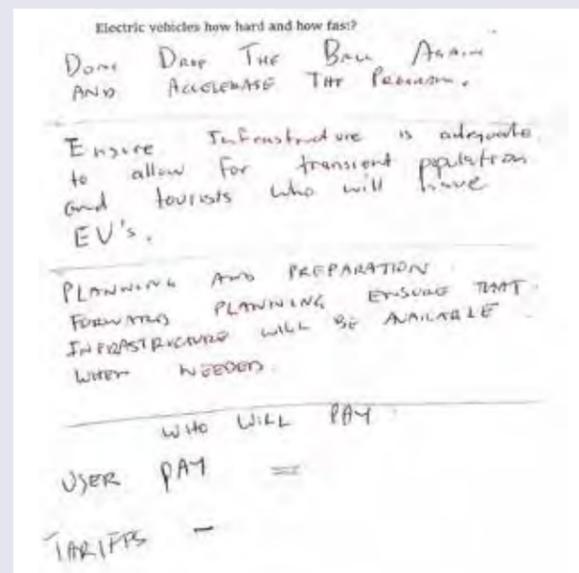
*“PWC need to identify areas where charging stations are needed and there is capacity in the network to run it.”*

A few participants asked questions about the funding of the infrastructure and if it would simply be a user-pays model, with some participants concerned that it may not be equitable for all customers to pay for network costs when they may not be using the infrastructure in the predicted time frame. One participant asked if Power and Water would be switching its fleet of cars to EVs.

Generally, participants seemed to support the use of tariffs to manage peak demand on the network.

Ideas to facilitate the transition to EVs included:

- ▶ Understanding EV uptake and intention to buy
- ▶ Using existing service stations as charging stations
- ▶ Building slowly to keep costs down
- ▶ Partnering with car manufacturers to build infrastructure
- ▶ Building now and privatising the infrastructure at a later date
- ▶ Using the luxury car tax to fund infrastructure
- ▶ Applying for Federal Government funding.



# 5

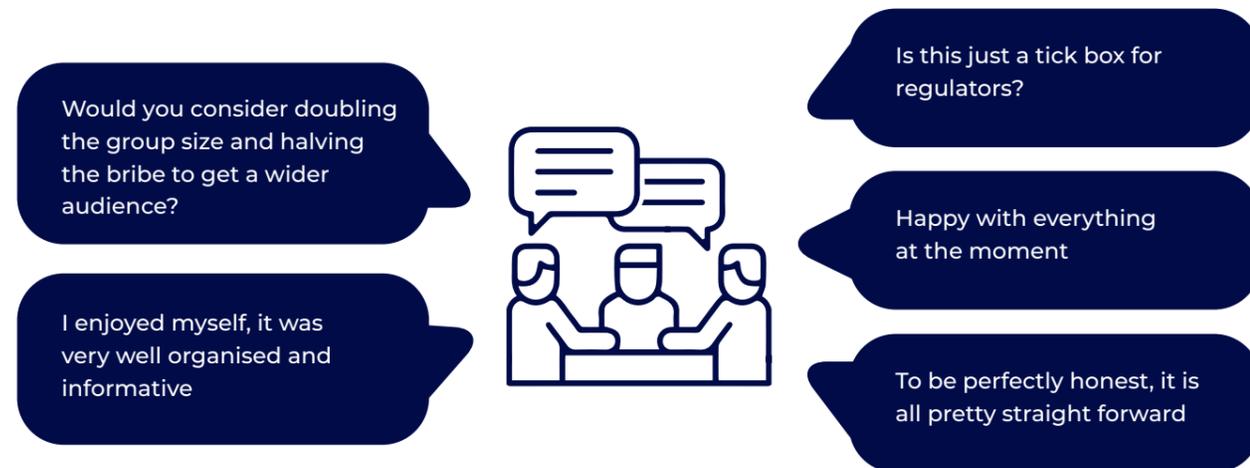
## Feedback on the event



## Feedback on the event

Throughout the session, participants were asked if they had any questions about the way we are working with them. Many participants did not have any questions or responded that they were happy. Two comments related to the genuineness of the process and one about the group size.

### Feedback from People Panel participants

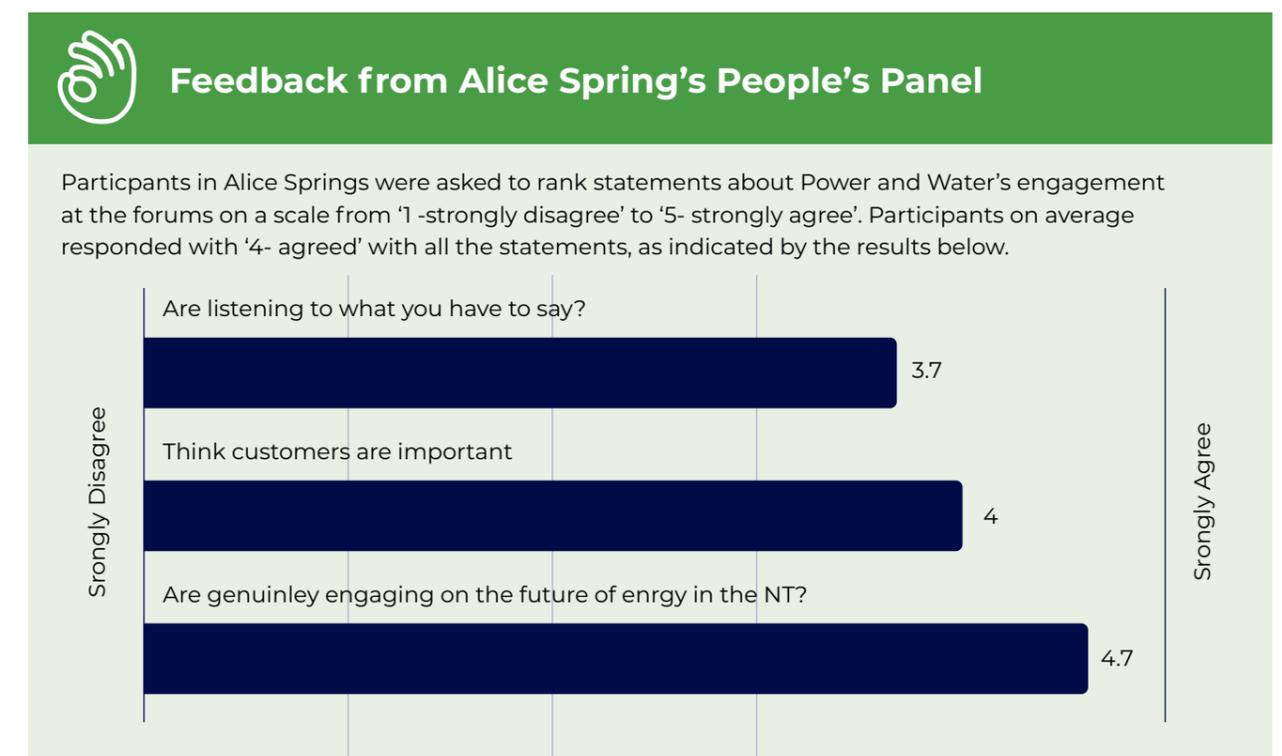
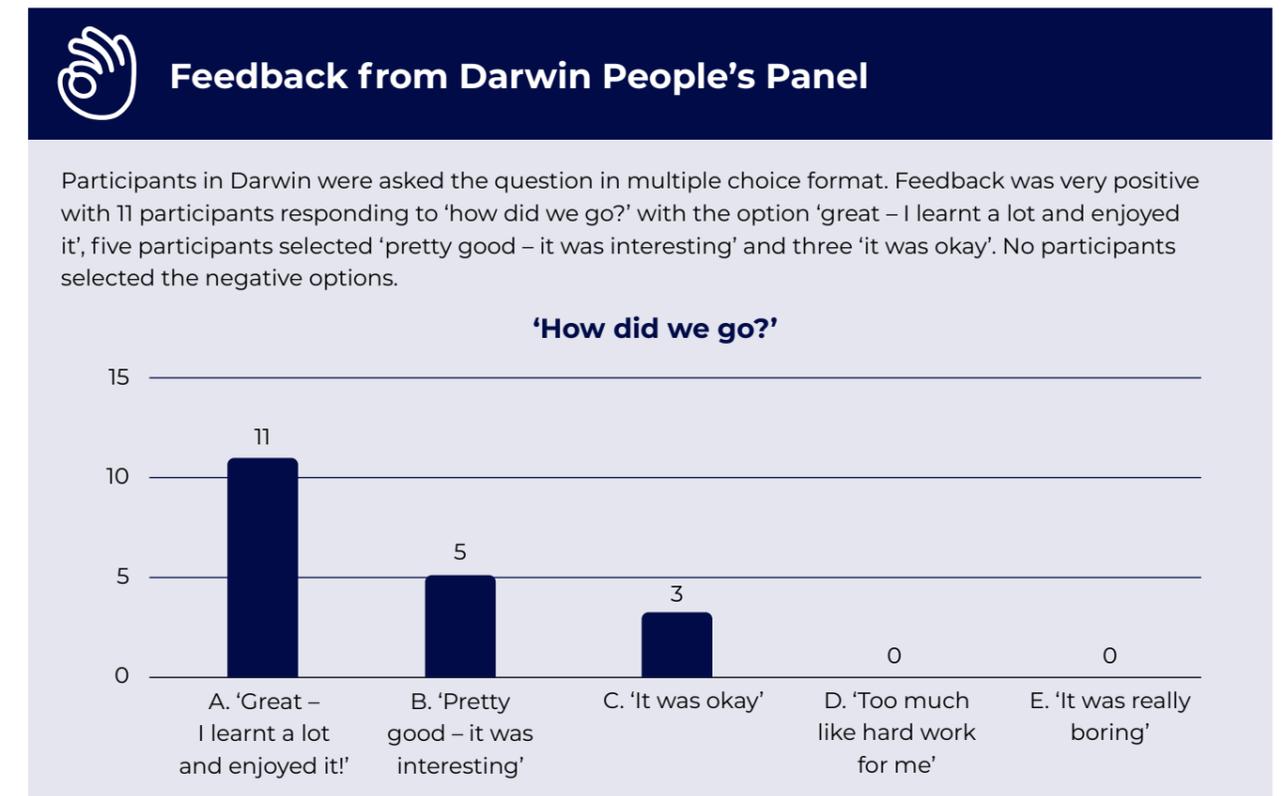


Some participants raised the need to engage with residents who are not proficient in English, have a disability or have low literacy and numeracy. One participant also suggested that more training and information should be given to Aboriginal Territorians to enable them to participate and have representation at these forums. There was also one comment about not using acronyms that may not be familiar.

Areas that participants indicated that they need a further understanding of included:

- ▶ What is the vision of Power and Water?
- ▶ Why don't we put more underground infrastructure as it's more reliable?
- ▶ What limits additional power generators joining the network?.
- ▶ Why don't Power and Water install more underground infrastructure instead of poles and wires as it is more reliable?

At the conclusion of each day, participants were asked for their feedback. Responses to the question 'how did we go today?' were extremely positive with participants stating they found the sessions interesting and informative. A summary of participant feedback from the People's Panel is provided below.



### Suggested improvements

As part of feedback on the event, we asked participants for their suggestions on how future sessions could be further improved. A summary of suggestions on how participants experience could be further improved is provided below.

- Alice Springs to be more specific to Alice Springs
- Better sound quality on videos
- Better use of microphones by presenters
- Table proposals for feedback based on known strategic plan
- Subtitles on videos
- Individual surveys
- More readable slides with larger font size
- More young people & a separate session for baby boomers
- Circulate a briefing pack prior to next session
- Provide four weeks' notice for next session
- Reduce number of table swaps
- Present an Asset Management Plan to better understand costs



## 6 Next Steps



## Next Steps

The feedback obtained during the People's Panel sessions has been reviewed by the Revenue Proposal project team and will be a key input into development of the proposal over the coming months.

Key ideas captured from the Panels the project team is seeking to investigate to determine how these might be incorporated into Power and Water's regulatory proposal are outlined below.

 Idea	 Relevancy to the proposal
▶ Community solar bank	▶ Capex – future network expenditure pricing
▶ Redirecting solar network contributions to network enhancements for solar	▶ Capex – future network expenditure pricing
▶ Microgrids – how and how much it costs	▶ Capex - demand management
▶ Internal benchmarking	▶ Capex and Opex
▶ Rainy day account to avoid price spikes	▶ Replacement
▶ Invest in innovation to avoid replacement costs	▶ Capex and Opex
▶ Further research on customer intents and triggers for EVs	▶ Capex - augmentation
▶ Building the backbone of public infrastructure for EVs now	▶ Capex - augmentation
▶ Power and Water fleet of EVs	▶ Power and Water Property

Feedback relating to other aspects of Power and Water's business, and that of retailers' operations, has been communicated to relevant individuals for consideration and action.

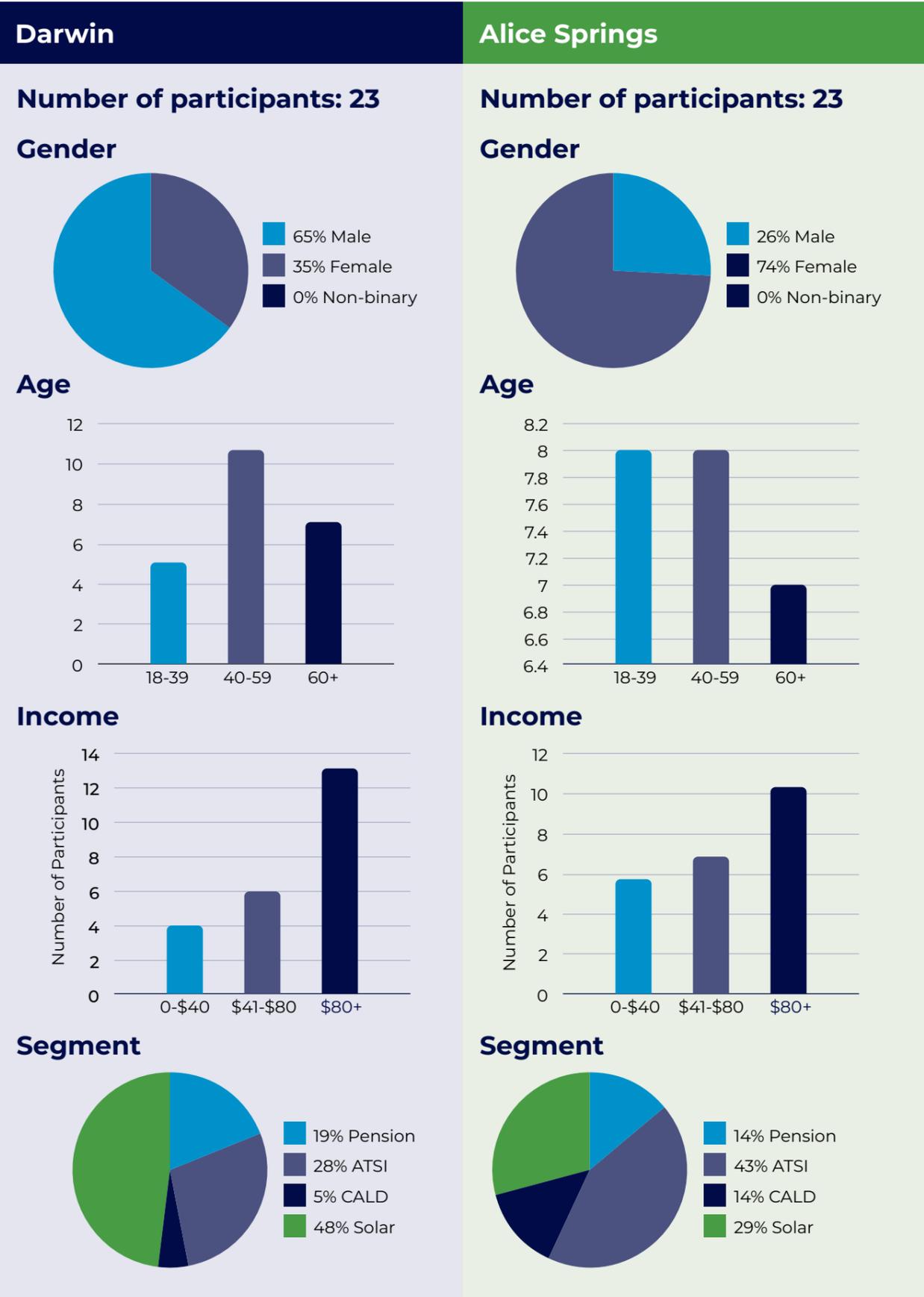
## Response to issues identified with customer journey

The following page summarises key ideas and issues raised during the People's Panel relating to their experience across the electricity customer lifecycle from connecting, being connected, power disruptions, and disconnections.

A representative from the Customer Services Division has been identified to work with, and 'champion' ideas and issues raised by customers during the engagement. A review of comments and complaints made by customers over the last 12 months has been undertaken and issues of a systemic nature have been identified and included in the list of issues and ideas being tested with the next Peoples Panel.

 Issues/Ideas	 Power and Water Response
Power and Water could improve engagement with its customers by more closely overseeing contractors who conduct meter reading.	Power and Water will raise customer experiences with the metering team and ask the contractor for response. We will look at options which are available to improve outcomes and provide feedback on our smart meter rollout (smart meters reduce the need for manual reads).
Closure of shopfronts make it harder to connect-face to face. Participants noted that phone wait times can be too long, with face-to-face considered better for people with impairment and those with cultural communication needs.	Power and Water will investigate the reasons why shopfronts were considered no longer viable, current statistics on call times and possible alternatives to address customer concerns with audio only interaction.
Importance of ensuring different methods of communication are simultaneously updated to ensure consistency.	Power and Water will report back on its current approach to using social media and other forms of communication for outages, what is in the pipeline for more work and other alternatives.
A 'Power Passport' would make connecting and disconnecting a seamless process when moving homes.	Power and Water is investigating if this is done elsewhere, how and if it would work, and the likely costs involved. We will present the outcomes for consideration at the next People's Panel.
A 'staying connected' policy, similar to arrangements in South Australia, was also suggested.	Power and Water will review policies in other jurisdictions and report back on options available.

# Appendix A – Breakdown of participants





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