Community Resilience Focus Groups

Summary Report

January 2022

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Executive Summary

Ausgrid's communities expect energy companies to provide greater support in building resilience to disruptive events

Climate change is increasing the frequency and severity of natural disasters and extreme weather events ('disruptive events'). The CSIRO forecasts that NSW will experience more frequent heatwaves, an increased intensity of extreme rainfall events, and a harsher fire-weather climate over the next decade. These types of changes increase the pressure placed on the resilience of local communities and their energy networks. The term 'resilience' refers to the ability of a system to absorb, recover from, and adapt to disruptive events in a timely and efficient manner.

In a review conducted by Nous Group, customer representatives confirmed that network resilience is a top priority for Ausgrid's communities. This reflects the substantial and widespread impact that network incidents can have on customers during disruptive events (see 'Major impacts of network incidents'). Stakeholders have called upon Ausgrid to take appropriate action to support communities in building resilience against disruptive events.

Stakeholders identified four ways that Ausgrid can support local communities in building resilience to these events in the future:

1 **Resilient network infrastructure:** Residential customers expect Ausgrid to consider all options for cost-effective investment in improving the resilience of network infrastructure.

2 **Backup power sources:** Residential customers would value greater access to backup power sources during disruptive events. Ausgrid has an opportunity to work with councils to ensure that communities have access to critical resources (e.g. gas generators) during power outages.

3 **Improved communication:** Residential customers expect personalised communication about the expected duration of unplanned power outages.

4 **Increased strategic engagement:** First responders want increased engagement with Ausgrid around planning for disruptive events. This reflects a recognition of Ausgrid's role in a community's response to a disruptive events.

MAJOR IMPACTS OF NETWORK INCIDENTS

1. Fallen powerlines represent a direct threat to the safety of nearby residents. They can also delay efforts by emergency services to evacuate residents during disruptive events by forcing the closure of arterial roads.

2. Prolonged power outages prevent customers impacted by disruptive events from charging the electronic devices they use to:
- receive updates from emergency services;
- request emergency support; and
- contact their family and friends.

3. Prolonged power outages pose a serious threat to the welfare of high-dependency residential customers. Over half of Ausgrid's life-support customers reported that they do not have a plan for addressing their life support needs in the event of a power outage.

4. Prolonged power outages increase community hardship during disruptive events by preventing residents from accessing basic amenities (e.g. hot showers, cooked food).

5. A prolonged loss of power to refrigeration devices can create significant financial hardship for low-income customers who are forced to replace spoiled food and medicine.

Background

Background

Nous was engaged by Ausgrid to deliver focus groups in four NSW communities that have been impacted by natural disasters or extreme weather events ('disruptive events').

The communities selected by Ausgrid for the engagement were:

- Hornsby and Pennant Hills
- Cessnock
- City of Canterbury-Bankstown
- Nelson Bay

The objective of these focus groups was to identify opportunities for Ausgrid to support the NSW community in building resilience against these events in the future. These insights will inform Ausgrid's upcoming Regulatory Reset program and Strategy Refresh.

For each session, Nous recruited a diverse mix of residential customers, commercial customers and first responders for each session. This included older customers, customers from culturally and linguistically diverse (CALD) backgrounds, and customers from low-income households. All participants reported lived experience of disruptive events.

Nous delivered the four focus groups over a two-week period between 26 November - 13 December 2021. Each focus group lasted 90 minutes and had a minimum of five participants.

Nous recruited a diverse mix of focus group participants*

TWELVE residential customers

THREE small- and medium-sized enterprise owners

TWO hospital representatives

FOUR first responders

OUR AIM WAS TO…

understand the impact of natural disasters and extreme weather events on affected communities

IN ORDER TO…

better define Ausgrid's role in supporting the NSW community in building resilience

AND THEREBY…

inform Ausgrid's upcoming Regulatory Reset program and Strategy Refresh.

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* Most SME owners, first responders, and hospital representatives were also local residents.

What is resilience?

Ausgrid has worked with other electricity distributors in New South Wales, Tasmania, Northern Territory and the Australian Capital Territory to develop a common definition of resilience within the context of their electrical networks. This definition, which was adapted from the definition proposed by Resilience NSW, was shared with focus group participants at the start of each session to help frame the discussion.

Resilience is the ability to RESIST, ABSORB, ACCOMMODATE, ADAPT to, TRANSFORM and RECOVER from the effects of a HAZARD.

RESIST
Building our capability to withstand impacts or avoid network destruction.

ABSORB/ACCOMMODATE
Minimising disruptions to networks and customers, and supporting communities during these events.

ADAPT/TRANSFORM
Use learnings to identify opportunities or anticipate hazards to ensure the lived experience is acceptable to customers.

RECOVER
Ensuring plans and processes provide energy supply restoration as quickly as possible.

HAZARD
Major disruptive event or chronic risk (e.g., extreme weather events, cyber-attacks, or losses in power supply from fluctuations in intermittent energy sources outside of normal operating parameters).

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How do fallen powerlines affect communities during disruptive events?

Fallen powerlines increase the risk to residents' safety during disruptive events

Certain types of disruptive events (e.g., severe storms) can cause severe damage to overhead network infrastructure. This can lead to fallen powerlines, which create a direct threat to residents' safety. Fallen powerlines can also delay an attempt by emergency services to evacuate residents from high-risk areas by blocking arterial roads. Several participants viewed more resilient network infrastructure, such as underground powerlines, as one approach to mitigating this risk.

It's a
"**life or death**"
issue.

Trees bringing down powerlines has been a **safety risk** in the last couple years.

When the overhead powerlines come down, you've got…
potential **blockage of some roads**…
[with] **whole communities cut off**.

We rely on the power companies to **clean up fallen powerlines as fast as possible**.

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How do prolonged power outages affect communities during disruptive events?

A prolonged power outage can exacerbate the hardship caused by disruptive events

Many residents expressed their frustration with their inability to access hot showers, working toilets and cooked food during prolonged power outages. Several residents reported that they replaced their existing electric stovetops with gas-powered stoves to ensure they were able to cook food during prolonged power outages.

"

We rely on electricity to run pumps and **if you don't have electricity, you can't flush the toilet or get water out of the tap** for cooking.

If we want to go to toilet, we go in the bucket and put it in [the septic tank].

We saw how people reacted when they couldn't get haircuts during the pandemic. **Just imagine if they couldn't have a shower for a week**.

The Pennant Hills area had an extensive blackout for a number of days. We saw an increase in hostility towards [first responders]… **People were really getting frustrated with not having power**.

If you have a child… you have to be able to sterilise bottles. **You're worried about the health and well-being of your youngest [child]**.

"

Residents' inability to connect with emergency services during disruptive events can undermine the efforts of first responders

During disruptive events, residential customers rely heavily on electronic devices to receive updates from emergency services and, where necessary, request assistance. During prolonged power outages, residents' inability to communicate with emergency services can severely undermine efforts by first responders to safely evacuate residents in high-risk areas. In addition, it can prevent residents from contacting emergency services with requests for assistance (such as a request for an ambulance).

Many residents who have experienced multiple prolonged power outages during previous disruptive events have invested in backup generators and power packs to charge their electronic devices. A minority have also purchased battery-powered radios to access updates from emergency services during disruptive events.

"

With many of us **getting rid of our landlines…** we are even more stuck.

Communications are really quite critical… That's how you get your updates, get help or seek other options.

[NSW Ambulance] went right back to the very basics of just patrolling streets because **some people were not able to ring 000 because [they] are using VoIP systems that rely on power**.

"

Residents' inability to access communication services during prolonged power outages also causes residents severe distress and can delay the recovery process

After disruptive events, residential customers normally use their electronic devices to access formal support services and seek informal support from friends and family. This support can include temporary accommodation, childcare and the use of gas-powered generators (see Appendix A).

Residents reported their frustration that they were unable to access this support during prolonged power outages due to their inability to charge their electronic devices. Several residents also recounted their distress when they were unable to contact vulnerable relatives (such as those with life support machines) during power outages.

"

One of the **biggest impacts**… was the lack of communication.

The first thing we have to do… is **make sure we have our communications up and running**.

"

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Will resilience become a more important issue in the future?

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Most residents recognised that resilience would become a more important issue for their community in the future

This position was often based on their lived experience of the increasing frequency and severity of disruptive events.

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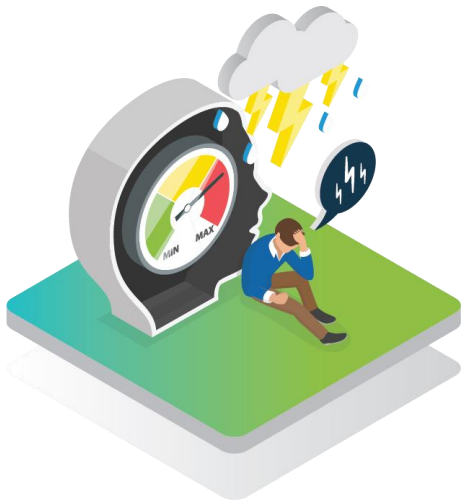
I think **we're going to be exposed to more stress**… [and] we will need to be more resilient.

I've been here for 17 years and we've never ever had a **blackout** up until the last five years. Now it **happens frequently**.

There will be **growing pains**… as we transition to renewable energy technologies.

I think **resilience will be more important in the future** because climate change seems to be causing more adverse weather events.

"

Customers with lived experience of disruptive events recognised the need to 'build back better' from disruptive events

First responders remain concerned that the complacency of formerly unaffected communities will lead to underinvestment in community resilience.

"

We took the view that we will use this opportunity to **build back better, stronger**. We replaced the tiled roof with a metal one.

Four years ago, when we got flooded, I was up to my knees, on Christmas Day, in water. We spent a **huge amount of money**… Now I smile as I walk around in poor conditions and go 'We're good, we're good'.

Those [communities] that have not been devastated by storms or impact…will just continue to be happily ignorant about it. **I think it's important for [Ausgrid] to be proactive**… and let people know that they need to be prepared.

"

How can Ausgrid support the NSW community in building resilience?

Local communities expect increased support in building resilience against disruptive events

Focus group participants identified four opportunities for Ausgrid to support their community in building resilience:

1

Resilient network infrastructure

Residential customers expect Ausgrid to consider all options for cost-effective investment in resilient network assets.

2

Backup power sources

Residential customers would value greater access to backup power sources during disruptive events.

Opportunities for Ausgrid to support the community in building resilience

3

Improved communication

Residential customers expect personalised communication about the expected duration of unplanned power outages.

4

Increased strategic engagement

First responders want increased engagement with Ausgrid around planning for disruptive events.

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1 Resilient network infrastructure

Residential customers expect cost-effective investment by Ausgrid in more resilient network assets

Residential customers notice an increase in prolonged outages due to weather events. Many residents therefore supported increased action by Ausgrid in improving network resilience. While some customers cited the undergrounding of powerlines as an example of such action, others recognised that this approach would not be the most cost-effective way of improving resilience. Instead, one Cessnock resident suggested that Ausgrid employ a 'risk-based approach' to hardening the network.
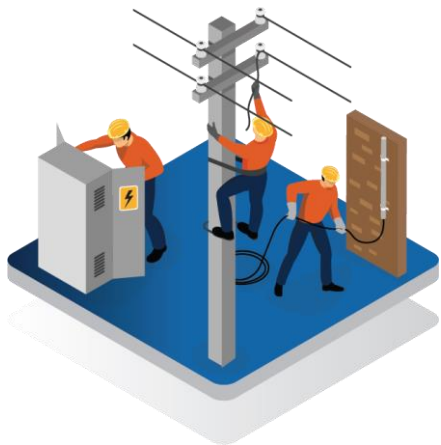
> First world countries put their **power lines underground**.

> Underground powerlines would be a lovely idea, but… **we all know everything comes down to a dollar**.

> A lot of other countries have **power lines underground**.

> **Why don't you put [powerlines] underground?**
>
> You should have done that years ago.

> **In areas where there's more risk of fire** and damage to infrastructure with timber power poles, they could **replace them with concrete power poles**.

> In high-risk areas, **there are better ways of managing a power supply** [than overhead power lines].

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2 **Backup power sources**
Residential customers would value greater access to backup power sources during power outages caused by disruptive events

Residential customers believe that Ausgrid has an opportunity to work with local councils to ensure that communities have access to critical resources (e.g., gas generators, batteries) during prolonged power outages.

"

There was a real 'run' on gas generators… I think **the community could be better prepared** in having those sort of supplies available.

During the June long weekend 'super storms'… there was an **influx of people buying generators**… and a lot of places like BCF sold out.

I think there needs to be more encouragement from Ausgrid to offer **rebates for… solar-power backup generators**.

"

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Improved communication

Residential customers expect personalised communication about the expected duration of unplanned power outages

Many residential customers expressed their frustration about the uncertainty around the expected duration of unplanned power outages. This frustration stemmed from their inability to decide on the appropriate recovery mechanisms to implement. For example, a residential customer's life support machine may have sufficient battery life to survive a one-hour power outage. In the event of a multi-day power outage, the customer may need to arrange transport to a local hospital.

Several participants also emphasised that all communications should also be delivered in a customer's preferred language.

"

When [Ausgrid] is repairing the powerlines, they are already sending messages… but these [messages don't say] how long it takes to repair them.

When I experienced the mini tornado this year in our area… the power was out for one day and one night… We couldn't do anything... **I didn't get any information about when it's going to be fixed**…

My three children were very scared.

My mum's Italian…She's almost 80 [years old] and she's lost a lot of her English… When she gets a text message, she goes, "Oh, what does this mean?" **If it was in her own language, she would understand**.

People put their own spin on things… **I prefer the one source [of information]… [from] a trusted source**.

"

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4 Increased strategic engagement

First responders want increased engagement with Ausgrid around planning for, and responding to, disruptive events

First responders recognise that Ausgrid has an important role to play in supporting communities to build resilience against disruptive events. At least one first responder observed that this role is particularly important in communities that have been previously unaffected by certain types of disruptive events (and, thus, have less developed recovery strategies).

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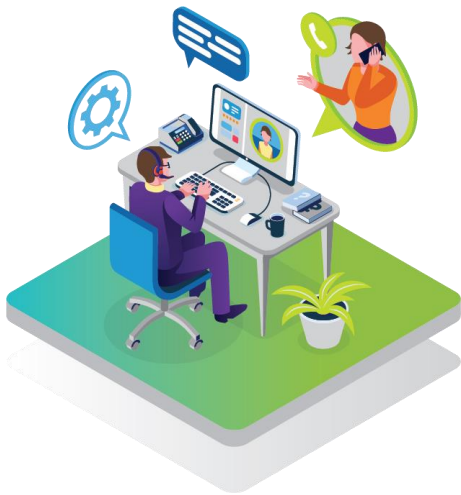
It feels like the **energy companies**… are **more reactive than proactive**.

We need to understand **how Ausgrid responds** [in an emergency], what their **procedures** are, and **how they feed into our own**.

We are **at the mercy of Ausgrid** a lot of the time in terms of our **ability to respond**.

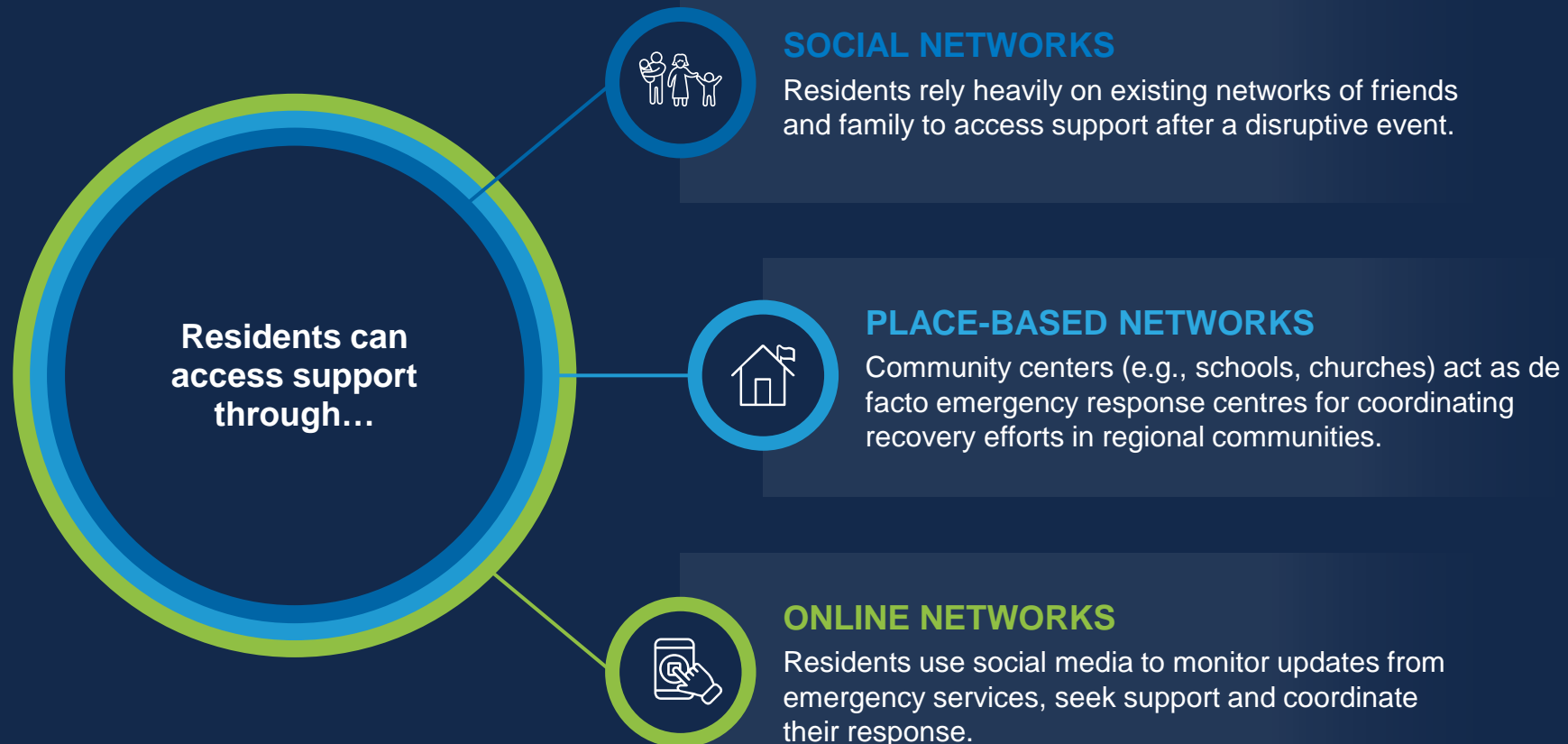It will be great to **work alongside Ausgrid.**

"

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# Appendix A
The importance of community networks in building resilience

Social, online and place-based community networks play an important role in a community's response to disruptive events

Residents can access support through…

SOCIAL NETWORKS

Residents rely heavily on existing networks of friends and family to access support after a disruptive event.

PLACE-BASED NETWORKS

Community centers (e.g., schools, churches) act as de facto emergency response centres for coordinating recovery efforts in regional communities.

ONLINE NETWORKS

Residents use social media to monitor updates from emergency services, seek support and coordinate their response.

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Social networks

Residents rely on family and friends to access short-term support

Residents rely heavily on existing networks of friends and family to access support after a disruptive event. This support can include temporary accommodation, childcare and the use of gas-powered generators. Several residents reported that, after relocating to a new community, they felt more vulnerable during disruptive events. Others expressed concern about similarly isolated members of the community (e.g., older residents) whose lack of social networks may also make them more vulnerable during such events.

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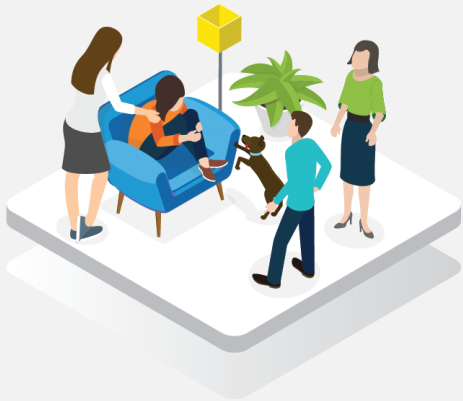
We've got a **very strong community** here. If the power is out, **we rely on the community to help**.

We lost power for seven days…I think **most people managed to find friends or family** that were in areas that still had power **to look after them**.

[The power was out for] a whole day and I had to **move meats and other food to friends' or neighbours' [fridges].**

"

Place-based networks

Community centres (e.g., schools, churches) act as de facto emergency response centers for regional communities after disruptive events

During prolonged power outages, residents congregate at community centres to receive updates from emergency services and coordinate the recovery effort. In contrast, residents in urban communities reported that they were unaware of any local community centres that acted as a hub after disruptive events.

"

The **local church was the only place that had power**… Without that I don't know what we would have done.

Nelson Bay resident

We **don't have a place** where we can **congregate and meet**.

Canterbury-Bankstown resident

"

Online networks

Social media connects communities after disruptive events

Residents use social media to monitor updates from emergency services, seek support and coordinate their response. Older customers, who expressed concern about the reliability of information on social media, were less likely to use social media. However, they were also less likely to report a high level of social resilience within the community.

> If **Facebook is one of the main sources of information**… isn't there a concern about the information they're getting and where that's coming from?

> When the power goes out… **people put maps of areas that the power is out [on Facebook] and when it's going to be put back on**.

> If there's a power outage, I'd jump onto Facebook because… you get an instant reply from other people.

> The **community Facebook page was a real eye-opener about the power of the community**… We went from a forum to complain about your neighbours and people driving too fast to a forum to connect and get people to help out, pitch in and help the more vulnerable in the community.