

# TRANSCRIPT

## LEGISLATIVE COUNCIL ENVIRONMENT AND PLANNING COMMITTEE

### **Inquiry into Climate Resilience**

Melbourne – Wednesday 20 November 2024

#### **MEMBERS**

Ryan Batchelor – Chair

David Ettershank – Deputy Chair

Melina Bath

Gaelle Broad

Jacinta Ermacora

Wendy Lovell

Sarah Mansfield

Rikkie-Lee Tyrrell

Sheena Watt

#### **PARTICIPATING MEMBERS**

John Berger

Ann-Marie Hermans

Evan Mulholland

Rachel Payne

Aiv Puglielli

Richard Welch

**WITNESSES**

Andrew Linnie, Executive General Manager, Distribution, and

Charlotte Eddy, General Manager, Strategy and Regulation, Distribution, AusNet; and

Renate Vogt, General Manager, Regulation, and

Adam Gellie, General Manager, Network Services, Powercor.

**The CHAIR:** Welcome back to the Legislative Council Environment and Planning Committee's Inquiry into Climate Resilience in Victoria. In this session we are joined by representatives from AusNet and from Powercor.

All evidence that we take is protected by parliamentary privilege as provided by the *Constitution Act 1975* and the provisions of the Legislative Council standing orders. Therefore, the information that witnesses provide during the hearing is protected by law. You are protected against any action for what you say during the hearing, but if you go elsewhere and repeat the same things, those comments may not be protected by this privilege. Any deliberately false evidence or misleading of the committee may be considered a contempt of the Parliament.

All evidence is being recorded, and you will be provided with a proof version of the transcript following the hearing. Transcripts will ultimately be made public and posted on the committee's website.

Welcome. My name is Ryan Batchelor. I am the Chair of this committee and a Member for the Southern Metropolitan Region here in Melbourne. I will ask the rest of the committee to introduce themselves.

**David ETTERS HANK:** Hi. I am David Ettershank, Western Metropolitan Region and Deputy Chair.

**Sarah MANSFIELD:** Sarah Mansfield, Member for Western Victoria.

**Wendy LOVELL:** Wendy Lovell, Member for Northern Victoria.

**Melina BATH:** Good afternoon. Melina Bath, Eastern Victoria Region.

**Gaelle BROAD:** Hi. I am Gaelle Broad, Member for Northern Victoria.

**John BERGER:** John Berger, Member for Southern Metro.

**The CHAIR:** Welcome. If I can begin by asking you to each state your name and the organisation you are appearing on behalf of for the Hansard record, then we will get into opening statements. You get to choose who starts.

**Charlotte EDDY:** Charlotte Eddy, AusNet services.

**Andrew LINNIE:** Andrew Linnie, AusNet services.

**Renate VOGT:** Renate Vogt, Powercor.

**Adam GELLIE:** Adam Gellie, Powercor.

**The CHAIR:** Thanks very much for joining us. We will invite you now to make opening statements. I believe there are some presentations as part of that. Renate, did you want to go first?

**Renate VOGT:** Yes, thank you. Thank you, Chair, and thank you to the committee for inviting Powercor to appear today on this important issue. My name is Renate Vogt. I am the General Manager of Regulation at CitiPower and Powercor. Today I am joined by my colleague Adam Gellie, General Manager of Network Services.

**Visual presentation.**

**Renate VOGT:** As an essential service, we know Victorians rely on reliable electricity supply to power their lives more than ever before. Managing and investing in our network to make it even more resilient to the changing climate is central to how we are planning and managing our operations today and into the future. We have been invited today as Powercor representatives; however, I do want to acknowledge we also operate two other largely urban networks, CitiPower and United Energy. Powercor is our largest network. Powercor moves electricity to and from 920,000 homes and businesses from the western suburbs of Melbourne through central and western Victoria and up to the South Australian and New South Wales borders. We are also critical to the state's clean energy transition and have more than 2519 megawatts of small- and large-scale renewable energy connected to our network. Our 2000 people, including an insourced field team, operate from 14 depots, and we have a 24/7 customer contact centre based in Bendigo.

Powercor customers experience some of the highest performance standards in the national electricity market in terms of reliability and price. According to the Australian Energy Regulator's most recently published network performance report, we are the most reliable rural distribution network in Australia. Powercor is also one of the most affordable networks. In a time when our customers are experiencing cost-of-living pressures, this is a critical focus for us.

As a regulated business, our expenditure, investment plans and customer cost are assessed by the Australian Energy Regulator. Every five years, informed by extensive community and customer consultation and engagement, we submit a proposal to the regulator on what we need to invest in to manage the network safely and reliably. We are currently finalising our 2026–31 plan, which will be submitted to the regulator in January.

Frequent and severe weather events are now occurring in Victoria nearly every year. On the weekend we saw bushfires in the state's west and rain and storm damage in the northern parts of our network. Indeed, since 2021, major flooding, wind and lightning storms and bushfires have caused extensive damage to the Powercor network, leading to sustained power outages which have affected over 923,000 Victorians. When these events hit we have a highly experienced and trained workforce which is well prepared to respond and get power back on quickly for our customers. During the February 2024 storms we had 257,612 customers across our CitiPower and Powercor networks who experienced an outage. We restored 96 per cent of customers within 16 hours from the peak of this event on 13 February at 4 pm and had supply restored to all customers just over 48 hours later.

During extreme weather events Powercor works closely with other emergency agencies, authorities and central service providers to restore power as quickly and safely as possible. We also make sure our customers have timely and detailed information, including through providing updates through our websites, proactive text messages, social media, traditional media and customer contact centre, and we deploy two emergency response vehicles, named MERV and VERA, to provide an on-the-ground presence in our communities.

While it is important to have the right resources and processes in place to respond quickly, we are also focused on proactive measures to make our network more resilient. Every year Powercor spends hundreds of millions of dollars on making our network as strong as possible to withstand extreme weather events. This includes conducting aerial inspections of our power assets, a vegetation cutting program, inspecting and replacing poles and upgrading other assets. Every year we inspect over 200,000 poles, a third of our network. On average we replace 4250 poles per year. In 2023 we repaired just under 51,000 poles. Powercor will spend \$170 million this year on asset maintenance and replacement and over \$62 million on vegetation management.

Between 2026 and 2031 Powercor wants to invest \$104 million in climate resilience initiatives. This proposed investment is in addition to the work I just outlined that we do to keep the network safe and reliable. This \$104 million would allow us to introduce 17 new standalone power systems, four tie lines to support reliability and resilience, four microgrids and new communication sites; to replace 780 poles in flood-prone areas with taller poles; and to provide new fire-resistant poles in bushfire areas, three additional emergency response vehicles and seven customer support officer roles.

Of course it is important to recognise that it is not possible to prevent all outages from occurring. That is why we are focused on building community resilience. Following destructive wind events in 2021 we invested in the beginnings of a fleet of mobile emergency response vehicles which provide on-the-ground presence in communities. MERV and VERA, which I mentioned earlier, are small trucks equipped with phone charging facilities, satellite wi-fi and onboard generators and support communities facing prolonged power outages.

They were put to good use during the February and September wind storms earlier this year. We are proposing to increase our fleet as well as invest in a team of community support officers who would be dedicated to local regions to support efforts to prepare for, respond to and recover from major weather events.

While we have a robust resilience plan proposed, I would like to take this opportunity to briefly outline how the regulatory environment shapes how we invest in our network. As I mentioned earlier Powercor's expenditure is ultimately determined by the Australian Energy Regulator. Unfortunately the current rules and framework were developed years ago and have not kept up with the changing climate and how this is affecting electricity networks and the community. The fact is there is currently no explicit requirement on the regulator to consider resilience when it is assessing networks capital investment proposals. However, a rule change has been proposed, which we support, as it will allow networks like ours to deliver stronger, more resilient infrastructure for our communities as we experience more frequent and intense weather events.

Thank you. Adam and I would be happy to take any questions.

**The CHAIR:** Right. I might hand over to AusNet to do your opening statement.

**Andrew LINNIE:** Firstly, thank you for the opportunity to be part of this from an AusNet perspective. Andrew Linnie, Executive General Manager of the distribution business. The AusNet distribution network covers the east of the state – basically everything opposite to Powercor's area.

### **Visual presentation.**

**Andrew LINNIE:** We would like to just take the opportunity to really set a little bit of a scene. From an industry perspective we are all seeing that these events are more frequent and are becoming more severe, and what this graph is showing is really the most recent history. You can see to the right of the graph where we saw the February event in 2024, which was challenging for a number of utility sectors, not just the electrical industry but also the telco industry as well. Going back into June 2021 we saw another significant storm that ripped through our area and really impacted our communities and customers.

We have done a number of things in regard to changing the way that we work, and we most recently saw learnings from our February event that we made changes and implemented – and we will share a little bit more in a minute – with the most recent storm that impacted our network in September. That was really powerful for the customers and the communities that we serve. Those learnings were really important, but what this has really shown is that the traditional way that we operate our networks needs to change significantly and it needs to change rapidly, and at the core of that need to be our customers and communities that we work for and serve.

That is where we have taken an approach in regard to the here and now where we have taken a number of actions specifically around service and operations, communication and information, and community engagement. They are really core learnings that we took not only out of the network outage review but also out of our own learnings from the February storm and most recent events. What we have seen in this space is we have made changes in and around our communications. We really found that that is really important to customers and community, about the accuracy of information during these events, to build resilience within those communities. Most recently we enacted our pre-deployment of mobile generations to critical areas where we know they are heavily vegetated and impacted frequently from storm events. We saw that in Mirboo North and Cockatoo most recently, where we were able to deploy that generation and keep the communities somewhat with life as normal as we repaired the network around them. We got some very good, positive feedback on that.

Moving into one of the other key elements, we have introduced emergency mobile vehicles. We have got four of these out and around our network, and we have seen that in the time of need, providing that information on the ground is really critical, especially when communication from telcos is not available and they are impacted as well. We have also seen that we can use these in times when there are no storms to educate communities as to what they can do in regard to resilience. They are fitted out, they are purpose-built, but we are looking at how we can use them 365 days a year, which is really important for us.

We have also, from the February storm, established our Energy Resilience Community Fund. This is a \$12 million fund funded by the business. We have just gone through our first round of grants, and we are into a review of our major grants program. This will see in the very near future that we will have donated around

\$5 million of this fund into local and regional communities. This is really around providing support to them in regard to how they can become more resilient, and some of those are in regard to literacy programs across some of the communities, but also funding. For one of our grant awardees, the local shop is their resilience hub, so by providing some funding in regard to generation and also batteries helps that community in these times of need while we rebuild these networks.

I will pass on to Charlotte, who will step through some of the things we are planning to do.

**Charlotte EDDY:** We are proposing holistic investment plans to improve network and community resilience in our upcoming price review. This slide shows our draft plans, which total close to \$500 million. They will be refined further following customer feedback, specifically on the balance with affordability in the current cost-of-living crisis before we submit these to the AER in January next year. Our plans include investment to reduce the likelihood of power outages following extreme weather events, and also to further uplift our operational response to support communities and get power back on quicker. These have been developed in line with the recommendations of various reviews that have been undertaken into extreme storm events in 2021 and also in February 2024.

The regulatory framework for investing in network resilience is still developing, and various frameworks have been suggested. Key issues include how to quantify benefits of investment, which include broad social and economic costs. We will support a more outcomes-based framework than is currently in place, and this would regulate minimum levels of service across each feeder, which would include the impact of extreme events, and that is consistent with the recommendation in the network outage review. Over time we believe that that approach would result in a consistent and equitable outcome for Victorians.

Thank you. Andrew and I are happy to take any questions.

**The CHAIR:** Wonderful. Thank you. I might ask each of you just to outline for the committee what you think the biggest climate-related risks are to each of your businesses.

**Adam GELLIE:** From a Powercor perspective the bushfire risk still remains the biggest risk to our business and the communities we operate in. You know, we control an area that is traditionally quite dry. A lot of people rely on the network. There is a lot of network in those remote communities. From our perspective that remains the biggest risk in the business. We are seeing more fierce extreme wind events and lightning events across the network, as we have seen since 2021, and that has put a lot more pressure on our readiness and response as a business. We continue to learn through every one of those events about how to respond and prepare for the event as well as how to improve our investments to mitigate against some of those. Examples of that would be some of the extreme floods we experienced in recent years. We have proactively built some levees around our substations after we had some flooded in an event.

From a climate point of view, we are seeing more floods, we see heightened bushfire risks with more fuel and more extreme heat and storms, and particularly those elevated areas of our network where there are lots of trees, those areas are at highest risk from those wind events. The amount of lightning strikes we have experienced in the last 24 months has been enormous across the western side of the state, so we are also seeing a considerable amount of lightning damage across our network as well. For example, the February storm had somewhere around 100,000 lightning strikes in the Powercor network. They are ground-based strikes of lightning. So considerable change in the weather –

**The CHAIR:** I was going to say, there is change – you have noticed a change?

**Adam GELLIE:** Yes. It is more – we are not seeing, I guess, increased frequency so much in terms of the big events, but a fierceness that is far greater than what we have experienced.

**The CHAIR:** AusNet?

**Andrew LINNIE:** Yes. I mean, I share Adam's point that from a bushfire perspective, that is our number one risk as a business. It is something that we are hugely focused on. But coupled with that is definitely the recent history in regard to these greater storm events that are coming through our network and ensuring that we can move with the need to respond to those both from a network perspective, but also from a customer and community perspective. That is our focus.

**The CHAIR:** Just on the wind side, because we had a fair bit of evidence about that, are the standards of your towers and poles robust enough to meet these new intense wind events?

**Adam GELLIE:** I might answer from a Powercor perspective. I think the misconception is that our assets are failing directly in the wind in terms of distribution assets, and 99 per cent of the failures are because there are trees falling and failing and falling across our assets and pulling them down. So the trees themselves – it is very hard to develop assets that will withstand that. However, I think through some of our response techniques, some smart design and taller poles in certain areas, you can avoid some of that risk.

**Andrew LINNIE:** Definitely with ours, our network topography is very mountainous and heavily vegetated, and in these events it is exactly that: 99 per cent of the time it is vegetation that is damaging our assets. We have implemented a number of programs in regard to hazard tree management to try and reduce some of that risk, and that involves us inspecting our network assets, maintaining obviously our clearance aspects, but also looking for trees that are adjacent to the network that are hazardous – should they fall, they will impact our network.

The other thing I would add is we have also expanded our recent investigations around network hardness, and that has taken us to discussions in the US in Florida in regard to a couple of businesses there. Florida Power and Light, to be specific, have just been hit with a number of hurricanes in the last couple of weeks, and we look at how they are going about making sure that they can recover their assets in a really relatively quick time after mass destruction. We also expanded out into Energy Queensland. They have the cyclone season that comes through, and we are understanding what they are doing from a design and engineering perspective to see what we can learn.

**The CHAIR:** Just briefly in conclusion from me, obviously you are developing plans to build resilience into your networks and obviously they need to be approved by the regulator. Ultimately, where is the cost borne? Would that be with consumers in power bills?

**Renate VOGT:** Yes. Ultimately, it is borne by consumers. All costs are passed on to consumers. I mean, we have five distribution networks, and they all have different licences, they all have different regulatory resets. That is why it is really important when we make these assessments that we engage with the communities, particularly given that affordability is such a big issue.

**The CHAIR:** How do you strike that balance between affordability and toughness?

**Charlotte EDDY:** It is very difficult. We have got a lot of customers on our network, unfortunately, with lived experience of what it is like to experience a power outage, and there is a cost to that as well, like, food, accommodation, loss of income.

**The CHAIR:** Mr Ettershank.

**David ETTERS HANK:** Thank you, Chair. I am interested in perhaps following Mr Batchelor's line of inquiry. You talked about the resilience and tree strikes on lines and suchlike. I guess for most people in Victoria, if you asked them what their lasting image was, it would be Cressy, where I do not think there were trees. I think they were just out in paddocks, weren't they? How do we understand that in that context, and will it happen again?

**Adam GELLIE:** We have got, across Powercor, 600,000 or so poles across our network, and they are inspected on a three-year cycle, as we currently have it. Each of those gets inspected from a visual point of view by an asset inspector who is qualified, and repairs get categorised, prioritised and completed within strict timeframes, which are in our asset management manuals. There will be, from time to time, assets that become damaged over time between those inspections, and occasionally those assets fail. In terms of incidents where we have assets fail in paddocks and those types of environments, some of the ways in which they fail are that they have been damaged in a previous storm and we have also had poles that have been damaged by vehicles that we have not been able to inspect in between inspection intervals. So there are a whole lot of reasons for which assets might fail. Sometimes there are assets that corrode and whatnot as well. Every time we have an asset failure, we continue to refine our asset inspection practices and our maintenance practices, and where we see a failure that affects an asset type, we look at proactive replacements of those assets as well.

**David ETTERS**HANK: Can I follow up? Ms Vogt, you raised the fact that there are no explicit resilience standards, so in terms of how robust or how hard the system is, is that purely an internal decision?

**Renate VOGT**: No. When I made that comment, that was in reference to the National Electricity Rules. When the AER assesses our capital expenditure, they have to take into account a number of factors in making that determination – reliability, system security, power quality, but not resilience – so we really welcome the proposed rule change by DEECA, which actually requires the AER to explicitly take into account the resilience of the network when assessing capital expenditure.

**David ETTERS**HANK: I know the outage review's report is still only a few months old or five months old, but would those revised standards from DEECA underpin the attestation requirements that are being proposed, the annual attestation that is being proposed, if that proceeds?

**Charlotte EDDY**: I think that is a slightly different framework. The annual attestation is a Victorian framework where every year we have to attest to the minister that we are prepared, should an emergency event arise, whereas the DEECA rule change is more about longer term investment in the network and the sorts of factors that need to be considered by the national energy regulator when assessing our proposals.

**David ETTERS**HANK: So those attestation requirements strike purely to risk management, rather than the actual physical state of the network. Is that correct? If I have missed something, you can just say, 'You've missed something.'

**Adam GELLIE**: I guess we will work through the process of gathering all the data for the attestation, and internally already we have a process of attestation that we have prepared. It is a governance process in CitiPower and Powercor. We already have those types of processes in place, so it depends entirely on the definition of what we are attesting to. However, we have got a whole lot of policies and procedures that prepare us well. Those procedures are reviewed by our energy safety regulator. We go through a process of getting feedback and whatnot, and we attest that we have adhered to those policies and procedures that are a written guideline of how we balance safety, reliability and customer cost in terms of the investments in our network.

**David ETTERS**HANK: Okay. So could I ask in terms of, again, the recommendations that came out of the review. One of those struck to the question of working more closely with local emergency services and suchlike. Could you perhaps just tell the committee what has happened since then. I mean, has that actually started to be given life, and how has that manifested itself, that recommendation of the review?

**Andrew LINNIE**: Yes, definitely. We have opened up conversations with the REMPCs around how we can make sure that we have got greater accountability and clarity, especially around that coordination of the on-the-ground response. We have definitely been engaged with that level, but also down into the municipality emergency response and making sure that we are very clear, and there have been a couple of councils in the inner north that we have been targeting in that space. And that is really around making sure that it is clear as to who is providing response to community, and we are responding to getting the network back together and making sure that there are no double-ups. That coordination piece is still ongoing, and it is going to take us a number of months to have those conversations right across our network.

**Adam GELLIE**: From a Powercor perspective, we have got 14 depots across our network. We are a part of those communities across our customer base, and we have got the advantage, I guess, of having people living in those towns who can attend the local emergency management hubs that are set up. We have found that there is tremendous value from being a part of that from a perspective of being able to help with the overall effort coordinating different response services together. We have also got benefits, in terms of restoring our customers, from working with the other authorities.

Two examples of that – one would be the Mooroopna floods, where we had to reconfigure our network, a very innovative solution to get some customers on through those floods, and they were quite substantial. We could not access our assets and inspect them before we re-energised them, so we worked with the military to be able to inspect those via drone and boats or amphibious vehicles. That is one example of how being available in those hubs allows us to support other efforts, but also they can support ours.

More recently where we were more a part of the support effort was the fires at Mount Cole last year, where there are communications towers that were potentially impacted by those storms and we were able to work

around different solutions with the CFA and the authorities down there to be able to keep customers on supply and outline critical assets as well that if they could be defended, we would. So they are the types of things that we are finding really useful across the Powercor network, and particularly at a local level we find those areas and those emergency response hubs extremely useful in terms of coordinating an effort.

**The CHAIR:** Thanks. Ms Bath.

**Melina BATH:** Thanks, Chair. I am going to be slightly parochial here and direct myself to AusNet.

**The CHAIR:** We are shocked!

**Melina BATH:** You are shocked, I am sure, but please feel free to jump in when you have some context too. We were actually at a hearing in Ballarat, and I came back into Mirboo North on the Wednesday. After the event there was 5 minutes of terror, really, in that area and the whole little region, and there were lines over the road. So I want you to speak to how you can more quickly – and they seemed to be over the road for a little while; whether they were alive or not, in people's minds they could be either, and that is dangerous. Therefore then in that first 24, 48 hours where there was no power, you can speak to that. What have you learned from that, particularly in 24 hours? You have mentioned, I think it is affectionately called EMMA, is it? So EMMA mark 1, 2 and 3. But also how do you, how do communities and how does government play a role in building more resilience in those more frequent storm or emergency events?

**Andrew LINNIE:** I will take them one by one.

**Melina BATH:** Please.

**Andrew LINNIE:** I will start with the conductors on the ground. All major events and even small events will see conductors on the ground. As an example, we had a large tree go through a main town yesterday – significant damage, conductors on the ground. Maintaining safety around our assets is paramount. What we learned during the February storm, especially in Mirboo North – we were out there a couple of days after that event and heard very early discussion around that community aspect of understanding what the status is of conductors. Traditionally, it has been very much, from a community campaign: conductors down, do not touch, stay away. The thing that we took from that major event, which impacted almost half our customer base, was ensuring that we can get confidence into the community around the status of those assets, and that is where we have taken learnings from that and developed a new approach in regard to how we inspect them, because we do go through the networks and after events inspect, understand and scope what effort is required to restore the network.

Looking at those times, when we went through, we did not touch base with every customer. There were a couple of situations specifically where conductors were across driveways. We went through, inspected and understood, yes, it was isolated, it was not on supply. It was making sure that that community or that home owner was aware of it. We are working towards getting a new approach where we see labelling and signalling of the status of those assets on the ground but still maintaining that distance. You have got to maintain distance and not touch. So we have taken learnings in there, and we are going to implement and have started to implement a new approach into that management.

In regard to – what was the next one?

**Melina BATH:** Building more resilience in the community.

**Andrew LINNIE:** Yes, building more resilience. Again, Mirboo North – I was there as part of the network outage review for the community feedback sessions, and also in Cockatoo, Gembrook and elsewhere. What we found is that the commentary from the community was one of a thirst for information not just in regard to power but, more generally, vegetation, opening of roads, clearing of rubbish. People had lost the roof off their house. How were they going to get rid of the roof that was sitting in their front yard? We heard really, really strongly that we have a role to play from an energy perspective, but then how do we work with local government in regard to whether it is coordination of response? But then also from a state level, forest fire management –

**Melina BATH:** FFMV, yes.



**Andrew LINNIE:** How do we work with them to get greater access? Because there are a lot of big trees that come down that need professionals to remove them. There are things where we have our vegetation crews that are able to create access, but there are others where we need help as well as clearing access tracks. What can we do in regard to resilience? From an energy perspective, we are very much around the safety and information around restoration. We have found that that is critical – and status updates in between as to when their power will be back.

**Melina BATH:** Outage tracker?

**Andrew LINNIE:** Outage trackers. We openly publicly apologised for outage trackers in February. We have learned that people can use it, but it needs connectivity.

**Melina BATH:** Yes, that is right. Absolutely.

**Andrew LINNIE:** It needs connectivity, and that is really important and something that really came to fruition through that February storm across a number of areas in our network where that telco connection was lost. That is where we really saw some of the heart and feedback from communities around resilience.

**Melina BATH:** I am running out of time, and I have got many more questions.

**Andrew LINNIE:** Sorry.

**Melina BATH:** No, you have been fantastic. Thank you. We are going to report to government with recommendations to state government. That is our purview. What can we do to assist you to assist our residents and Victorians?

**Andrew LINNIE:** I am going to be quick here because I know Charlotte will want to have something to say.

**Melina BATH:** You can drag over – I just cannot ask more than that.

**Andrew LINNIE:** No, no. For me, it is that coordination. But vegetation is something that is critical to our response time and having that early understanding of where that needs to be done is really, critically important. I am not sure whether you want to talk about support into reg frameworks.

**Charlotte EDDY:** Yes. I think supporting some of the recommendations in the *Network Outage Review* which go to future investment in improving the resilience of the system.

**Melina BATH:** And do you have specifics, or all of them, or just in and around the resilience?

**Charlotte EDDY:** The one about the minimum standards, in particular, for service levels on feeders.

**The CHAIR:** Thank you. Dr Mansfield.

**Sarah MANSFIELD:** Thank you. And thank you for appearing today. I am interested in the comments you made about accounting for resilience in the cost of infrastructure. That was a recommendation following the 2021 events. I am just wondering if you can provide any insights into why nothing has happened in that space. Even still, it sounds like it is being considered, it is getting there, but it has still not actually been incorporated into that assessment process.

**Charlotte EDDY:** Yes. We actually used the network resilience review recommendations to develop our draft proposal because they are quite consistent with the national framework approach to setting resilience investments that uses a cost-benefit analysis, so in some ways we have incorporated the learnings of the review, and we are closely monitoring it and have an eye to how it might shape our future plans if it is fully implemented.

**Renate VOGT:** And so have we. The Australian Energy Regulator is doing a number of initiatives, including one on the value of network resilience that is looking at customers' value in getting their power restored after an outage of 12 hours and more. The challenge is that it is not just about hardening the network, and we talked about this before, and about investing in the network, it is about investing in our communities as

well. Because there is a cost in reducing outages by hardening the network, so if we can support our communities in preparing and responding to outages, that is a positive as well. That is something that needs to be factored into the regulatory framework, and I think this rule change is a really positive step.

**Sarah MANSFIELD:** And there are alternatives to hardening the network to ensure reliability of supply for people, because ultimately that is what communities want. They just want to know that they are going to have power to do the things they need to do and get through the emergency.

**Renate VOGT:** Exactly.

**Sarah MANSFIELD:** Hardening the entire network is not necessarily the best approach. What other work has been done in that space around ensuring reliability for communities, regardless of how you achieve that?

**Adam GELLIE:** I might be able to touch on that a little bit. After every major event that we have, we do a pretty thorough debrief on what we can improve and how we can improve it. If I take the example of 2021 that you mentioned, that was a pretty severe storm – the biggest we had had in Powercor for many years. I think United Energy around October had a similar event, and AusNet got hit with both of those, from memory.

But when I take a Powercor perspective, we have built our depots to house crews from other depots. We have built out stock levels to respond faster. A huge effort has gone into response and speeding up our response. We have worked on our industrial instruments with our employees to allow more flexibility in moving people around the network, and we have also bought in a specialist fleet that helps us respond through some of those sorts of events.

There have also been reviews of our asset management standards and whatnot. A lot of the new equipment that has been designed and put up is more robust, perhaps, than what was there in the past, as you take into account different wind loading and whatnot, which is all covered through our national standards.

There has been a lot of work that has gone on in between times. If I use the February storm as an example and look back through the history for Powercor, usually it would have taken six days to respond to a storm of that severity – when we look at our historical response – and we responded and got most customers back within two days and some impacted by fires within three days.

We are definitely preparing and getting better. One of the tactics that has worked particularly well is being, how would I put it, more proactive about how we move crews around the state into impacted areas. But we have to weather the storm and see what is impacted first, and then we start mobilising crews from our depots.

**Renate VOGT:** Probably just to add on to Adam's comment, there is no-one-size-fits-all; there are different solutions, and it is really location-based. For example, we are proposing 17 standalone power systems for really isolated communities along the Victorian–South Australian border, while in other locations microgrids are more appropriate. Then in some of our areas where our worst performing feeders are we are proposing tie lines to have a more meshed network. So it really needs to be determined on a case-by-case basis.

**Sarah MANSFIELD:** For AusNet I notice that the experience in 2021 and 2024 was quite different, I guess, from what is being described, just in terms of the severity and the length of outages for customers. I do not know if you have any comments on what might have been different about your approach or experience.

**Andrew LINNIE:** There are probably a couple of things. In the 2021 storm – one part of our network, the Dandenongs, is one of the most highly populated densely vegetated areas. During that storm we saw an abnormal wind direction – it actually came from the south-east, which is really abnormal; I have lived in that region my life – and what we saw in that storm is that it was like trees got picked up, pulled out of the ground and literally tipped over. That brought down a lot of our network in dense areas, so that customer population was off supply for three weeks. Before we could get into the mountain it was four days before we could actually remove trees to actually get up there to even understand it. Fast-forward to February and a very different type of storm: we saw a lot of vegetation, big trees, snapped halfway up, and I think it was 5 minutes of fury down at Mirboo North that came through, and we had other areas of our network that were heavily impacted. Again, there was huge destruction across our network. But what we did learn from June to February in 2024 is we were more prepared but what we were not prepared for was the volume. We have got just over 800,000 customers; we saw about 400,000 of them impacted. So that scale of 50 per cent of our network being

impacted through the storm was just a sheer scale, and responding to that, this is where we are taking again that learning of where we need to be in regard to an event and making sure that we are thinking about what is a really, really bad situation that we may have from storms coming forward.

**The CHAIR:** Ms Broad.

**Gaelle BROAD:** Thank you very much for your contribution today. I guess I just want to continue that line of thought, because that was something that I have been concerned about. With the floods we saw 63 local government areas impacted, and then you mentioned then just with the storms 400,000 were impacted. When you see events of that scale – when it comes to workforce it is a fairly specialised field – how do you go responding on that scale?

**Andrew LINNIE:** I might take the most recent one in September. In February we saw both networks, both Powercor and AusNet networks, significantly impacted. Everyone is working towards getting their customers on, all resources are utilised; whether it be insourced, outsourced, contractor, everyone is mobilised. One thing that we did do most recently in the August–September storm is we coordinated mutual aid, as we refer to it, really early, so prior to the event, which we knew was coming, and we had discussions from a business perspective. Adam and I had a clear discussion as to when someone might be available to have additional resources that could cross across from a network perspective to assist with responding. Powercor was able to do that in September, again giving us the opportunity to get customers back on earlier.

**Gaelle BROAD:** I know there are some towns – we have been to Emerald and heard about the access restrictions there and huge trees, like you said – where you need that special assistance. And I know places like Warburton are very hard to access. You mentioned that communication is really important too, because you do not have the equipment. Has that been put in place now to have that really rapid response to ensure that access enables you to get in quicker?

**Andrew LINNIE:** This is where we have been talking, starting that conversation with the regional emergency planning teams around how we best do that. I think to date we have seen a lot of local engagement, so directly after the event, ‘Who can assist to actually do that?’ I know fire management Victoria – I think that is what it was – have limited resources as well, and in these large events they cannot be everywhere. They are really some of the questions that we need to start to ask. What we have recognised collectively, though, is that vegetation and the clearing of vegetation early is definitely critical to both getting those communities able to move in and out freely but also getting that required support in and around those communities early.

**Gaelle BROAD:** It seems to be a pretty important conversation to be having. I am just interested: it sounds like you are going directly to local communities too. Do you see Emergency Management Victoria having a role to play?

**Andrew LINNIE:** There are already conversations when it comes to an escalated event as to where resources are going, but I think we can improve on that and really understand where we are working from networks, what areas we need to focus on and where we need that direct support. I do not think that we have been hugely successful, to be honest, in that coordination, so we need to focus on getting better at it.

**Adam GELLIE:** From my experience the local emergency response hubs are the most effective way to coordinate that, otherwise you are going through a number of layers up and down from a central sort of emergency response perspective. Once we get our people into those emergency response teams, we are able to work together to get things to happen.

**Gaelle BROAD:** Are you talking about the emergency response teams that practise prior to an event or are you talking about the incident control centres in an event?

**Adam GELLIE:** The incident control centres that are local to the emergency or the event. Whether that is led by the fire side of things for those types of events or the SES, they are by far the areas where we have had the most ability to not only support the community from what we can do but also have the rest of the community support us in our efforts.

**Gaelle BROAD:** Do you have a seat at the table with the incident control centres? Is that automatic?

**Adam GELLIE:** Yes.

**Gaëlle BROAD:** Okay. That is great. You mentioned asset inspection practices being refined. I am interested, there was a company that did a presentation, IND Technology, that was about boxes that sit above the lines and pick up very quickly if there is any break.

**Adam GELLIE:** I think we have both got these on our networks.

**Gaëlle BROAD:** Yes. I am just interested, because they seem to be selling to other parts of the world but have had limited success here, although they are manufactured in Victoria. Can you speak to that type of technology and what is being done to pick things up more automatically?

**Adam GELLIE:** Definitely. Across our networks it is being trialled, as I understand it, at the moment. We gather information through those trials. There is a bit of work to tuning it to try and work out locations and whatnot, from my understanding of it. However, once these technologies are trialled we then look at where would we apply them, where we get the best value for the community in terms of where we would locate those sorts of technologies or devices. There are also more traditional technologies that we can use to work out where the damage might be. I think the challenge in these really extreme and ferocious weather events is with our assets. Where we know the asset is damaged and where we first located where a fault occurred, there can be damage right the way down on that particular line or feeder, so you might have five or 10 locations where it is damaged. We might be able to estimate it is pretty easy to fix one, but then you have to go down the line and fix the rest.

**The CHAIR:** Mr Berger.

**John BERGER:** Thank you, Chair. And thank you, all, for your appearance today. I am just going to cast your mind back to last weekend to the fire in Dereel and Rokewood. You would have gone in that scenario with your assets. Do you have much involvement with the people fighting the fires on the ground as to how you might prioritise asset protection?

**Adam GELLIE:** If I use Mount Cole as the latest incident, where it went for several days or a week or more until the weather sort of turned, we were involved daily in those incident response centres, working with coordinating not only access to repair assets but also where our assets were and what they were feeding so they could prioritise their efforts to defend assets against the fire. What we felt is that right the way through that process they definitely took the input and listened. Obviously, they had a lot on their mind as well. And through that, as well, we realised where to locate our emergency community response vehicles to support not only the fires but the communities as well. Working with the fire brigade about where those fire fronts were forecast to go, we could manage the safety of our people around that but also help them manage the fatigue from the other firefighters, our people and the community itself. As I stated before, I find that if there is a local incident response centre, we coordinate exceptionally well when we have got our people rotating through it, through the length of the event. What we find with floods and fires is the length of those events is quite considerable, so you have got to be prepared to resource it for weeks.

**John BERGER:** Do you see any value in communications with your customers after an event when the power does not go out, that you reassure them that everything was okay?

**Adam GELLIE:** We have not generally done that. It is not a bad idea to just remind them we are here. I guess for our industry most of our customers only notice that we are around when they do not have power. It is definitely a good idea. We do warn them for the event, so they definitely know to prepare, and we use a number of different mediums or channels to communicate that. With socials, we directly text message our customers. The effectiveness of those sorts of channels is only as good as the data you have got, so definitely getting accurate data about our customers through the retailers is an important part of that whole communication process. We are able to message specific customers and communities as well, so we are often in a large event preparing specific customer lists for different messaging based on when they might come back on or certain issues we are encountering as we respond to their outages.

**John BERGER:** Well, you must have your thoughts tuned for this weekend.

**Adam GELLIE:** Yes.

**John BERGER:** Ready to go again.

**Adam GELLIE:** We are always ready through the summer; the weather is so unpredictable. Certainly for us, obviously if I could have one wish, it would be that we can get better at the forecasting and then I can prepare better, but we tend to just be a little overly conservative in terms of our efforts to prepare, and it has served us well.

**John BERGER:** Do you have any cooperation between the fire services people and your assets when you look at them from a distance, where you see ‘Oh, this is not looking too good, we’d better do something about this’?

**Adam GELLIE:** Definitely. We have found that working with the fire services has been really good. They have got a lot to think about when there is a bushfire, and at times you feel a little bit shy about saying, ‘Hey, can you look after these assets? They are important because they feed these customers or this communications tower or this pumping station from a water perspective.’ From our perspective, we continue to inform them so that they can take that information in and work on their strategies to fight the fire.

**John BERGER:** Thank you.

**The CHAIR:** Ms Lovell.

**Wendy LOVELL:** Thank you. I live in Shepparton, so I knew you were around on Sunday morning. I just want to raise a thing that we were talking about this morning about the triple whammy that we tend to have in Gippsland and northern Victoria of these storms, floods and bushfires. We are seeing more and more incidents and incidents where people are out for quite some time. In the Yarra Ranges following the storms people were out for days on end. Someone mentioned earlier the Mooroopna floods, where Toolamba and Mooroopna were without power for four or five days. And of course the bushfires – we know the role that the powerlines played in starting the 2009 fires at Kilmore. Also, if we go back to about 2006-ish, there was the impact on Melbourne when the transmission lines went down, and we were without trains, trams and lifts, and everyone was walking home from work that day – it was pretty significant.

As we are seeing more and more events, how close are we coming to saying, ‘Well, the traditional way of delivering the infrastructure is not sustainable because of the maintenance that is required on it from all these additional events and we need to look to some other form of delivery’? I am not sure if undergrounding is the only other form. But particularly as we embark on big new projects like VNI West, it is probably important to understand whether we are coming closer to having another viable way of delivering infrastructure.

**Andrew LINNIE:** We have been evolving as a network continually over the last – I have been in the industry just over 20 years and I have seen a number of changes in and around how we deliver energy through our networks, and I see that continuing. I see that undergrounding is one of our elements, but technology is also developing in this space where there is now a normal covered conductor, which again improves reliability into vegetated areas. I see that that continued development will occur and needs to occur, but I think it also comes down to ensuring that we do balance the affordability piece. From an AusNet perspective, something that we are genuinely focused on is making sure that we are looking at these events and how we transition the status of a network over a longer period of time, because we know that it is not feasible to do it instantly. But we do need to continue to evolve our networks, and they will continue, especially in light of the events that we are seeing with windstorms and bushfires.

**Adam GELLIE:** I think from a network perspective we are continuously challenging ourselves to improve our design and the engineering that goes into this infrastructure as well as the response, which I touched on before. I think the AER provides a whole lot of incentives around reliability and prudent expenditure, and I think they work really well, and they are even in both ways; there are upsides and penalties. I think around resilience it would be interesting to explore a similar concept for that, but I think we need to agree a common view on what resilience is, and if it is outages longer than a certain period, that is a good definition of it. I think the balance of cost versus benefits in terms of the economic benefits to a community needs to be explored. For us, we have had a look at undergrounding. We definitely did it with the help of the Victorian government around some of the bushfire mitigation programs through high-risk bushfire area undergrounding services. We have got such a huge community risk and safety risk, it is easier to justify that as the solution for those communities. We also look at new technologies to see what the most cost-effective way to bring risk down is.

I think whilst our assets are above or underground there are still risks. Underground assets traditionally are a lot more expensive. To underground Powercor you are probably talking a 20- to 50-year program and \$70-plus billion. I think trying to be pragmatic –

**Wendy LOVELL:** But you have got to start somewhere, so with new projects maybe that is –

**Adam GELLIE:** Yes, trying and be pragmatic about it. When I think about your area, it has been a magnet for lightning storms and small-cell storms, little tornadoes and white light, and they are super destructive. Certainly over the last five years I have definitely seen that area from Cobram down to Shepparton just constantly hit from spring to summer, and then it calms down a little bit. But yes, the types of storms are changing. There are design standards too that exist, like some of the lightning protection standards. Victoria has not traditionally been considered a tropical environment, so the standards are perhaps a bit more relaxed on that, but it feels like it is becoming one in certain parts of Victoria, so perhaps they are considerations we would look at changing.

**Wendy LOVELL:** Thank you, Adam. That is about it.

**The CHAIR:** It is just about it. Charlotte, Andrew, Renate, Adam, thanks so much for coming in and providing this evidence to the committee. We really appreciate it. You will be provided with a copy of the transcript to review in about a week before it is made public.

With that the committee will take a short break.

**Witnesses withdrew.**