Powercor
AUSTRALIA

RESILIENCE ADDENDUM

PAL RRP BUS 3.5.01 - PUBLIC

2026–31 REVISED PROPOSAL

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1. Overview

Following extreme storm events that lead to over 923,000 sustained outages across our network in the 2021–26 regulatory period, we have been working with our customers to better understand their lived experience during prolonged outage events. Throughout this journey, our customers have repeatedly outlined the significant value they place on a resilient network and our role in supporting communities before, during and after major outages.

Our resilience investments, therefore, are targeted at improving our network's ability to withstand and recover from the effects of extreme weather. This includes both proactive measures to minimise outages due to major events or through reactive measures to minimise the time taken to recover when an outage does occur.

This business case addendum sets out our response to the AER's draft decision, and describes the further work we have undertaken since our regulatory proposal. It should be read in conjunction with our regulatory proposal business case.[1]

In its draft decision, the AER fundamentally reduced our proposed resilience investments. We consider this outcome placed limited weight on the express views of our stakeholders, and recent Victorian Government reviews setting clear direction and expectations on distributors.

Notwithstanding this, we have reflected on the AER's feedback and have accepted much of the AER's draft decision. This has reduced our resilience program from our regulatory proposal, but still includes expenditure above the AER's draft decision. The majority of our revised expenditure relates to:

- our bushfire resilience program, where we are proposing to undertake a hybrid approach incorporating both concrete pole replacements and fire-resistant pole wraps to make select feeder line sections more resilient to bushfires
- an additional investment linked to key recommendations from the Network Outage Review, where we propose to install quick connect points in a number of towns at risk of prolonged outages. These quick connect points will speed up the connection of a mobile generator, on average resulting in power being restored to key community infrastructure five hours earlier.

Our revised forecast for resilience is presented in table 1.

[1] PAL BUS 5.01 – Resilience, January 2025

TABLE 1 REVISED PROPOSAL: RESILIENCE ($M, 2026)

INVESTMENTS	REGULATORY PROPOSAL	DRAFT DECISION	REVISED PROPOSAL
Bushfire resilience program	49.3	4.3	22.9
Flood resilience program	19.6	8.4	8.4
Microgrids	12.7	6.4	6.4
IT situational awareness	5.8	3.1	3.1
MERVs	1.0	1.0	1.0
Community support officers	3.8	-	-
Radio site resilience program	1.4	1.4	1.4
Quick connect points	-	-	5.2
TOTAL	**93.6**	**24.6**	**48.5**

Note: Our regulatory proposal for IT situational awareness and community support expenditure included operating expenditure components

2. Background

This section summarises our proposed investment in resilience in our regulatory proposal and the AER's draft decision.

2.1 Our regulatory proposal

In our regulatory proposal we put forward a number of investments to improve both network and community resilience. Our approach was focused on how we can better prepare, adapt and respond to extreme weather events, and recognised the growing government and community expectations around having a resilient supply of electricity. This included:

- recognising the impact from extreme weather events on our assets is likely to continue to grow as weather events become more frequent and severe
- understanding that, as customers increasingly electrify their households and modes of transport they, will become more dependent on a resilient supply of electricity
- acting on recent Government reviews into extreme storm events in both 2021 and 2024, including recommendations that we reduce both the likelihood and impact of prolonged power outages.

In developing our regulatory proposal, we undertook significant customer engagement to understand our customer's lived experiences through historical extreme weather events. Our customers consistently showed strong support for both network and community resilience investments over the 2026–31 regulatory period.

We also undertook robust climate modelling to identify areas exposed to extreme weather and understand how these weather events were likely to impact our network and communities. In line with this modelling, we proposed to harden select areas of our network where our modelling was most robust (bushfire and flood), alongside investments to better support our communities during an extreme weather event.

2.2 AER draft decision

The AER's draft decision did not accept our proposed resilience expenditure and instead allowed a materially lower substitute estimate (as shown previously in table 1). While the AER deemed all of our proposed investments were prudent, it made significant reductions to our proposed bushfire and flood programs and considered that only two of our four proposed microgrids were economic (after adjusting some of our modelling assumptions).

Across all our resilience modelling the AER determined that we had not applied the most recent value of customer reliability (VCR) values and that we had incorrectly applied the value of network resilience (VNR). When updated, benefits associated with our programs are reduced.

In relation to specific investments and programs, the AER determined that:

- our bushfire program had overstated benefits due to assumptions around the effectiveness of concrete poles, a lack of adjustments for benefits occurring across programs (resulting in a double count of benefits) and had overstated bushfire risk when compared with historical bushfire outage data. It also considered the cost of our proposed solutions were too high. As a result, it proposed an alternative estimate based solely on a fire-resistant pole wrap solution
- our flood program had overstated benefits due to assumptions around the effectiveness of taller poles and a lack of adjustments for benefits occurring across programs (resulting in a double count of benefits). As a result, it proposed a reduced flood program

- we did not sufficiently justify why a worst served feeder value should be included in addition to the VCR. As a result, two microgrids are no longer economic in the 2026–31 period
- our proposed operating expenditure step changes relating to community resilience were immaterial.

The AER, however, did accept our proposed radio site resilience program, capital expenditure associated with our IT situational awareness project and an additional three mobile emergency response vehicles (MERVs).

3. Our revised proposal

Our revised proposal has taken into account the feedback received from the AER. As such, our proposed resilience program has reduced from our regulatory proposal, however, it is still above the AER's draft decision.

Specifically, we have accepted the AER's draft decision in a number of areas across our resilience program, including in relation to our:

- flood resilience program
- microgrids
- IT situational awareness
- MERVs
- community support officers
- radio site resilience program.

In contrast, we do not accept the AER's draft decision for our bushfire resilience program. We consider the basis of the AER's alternative estimate—a full fire-resistant pole wrap rollout—would not be a prudent investment given the uncertain effectiveness of the proposed technology in high density bushfires. We respond more fulsomely on this topic in the section below.

We have also introduced an additional investment in our revised proposal which relates to improving mobile generation deployment times for select towns at risk of prolonged outages. This is consistent with the Victorian Government's network outage review. We outline this project further in the sub-section below and include a complete business case in appendix A.

3.1 Response to AER draft decision

As set out in section 2.2, the AER raised concerns with certain aspects of our proposed resilience expenditure. These concerns are addressed in the following sub-sections, for areas we are re-proposing capital expenditure that differs from the AER draft decision.

3.1.1 Bushfire resilience

Our bushfire resilience program aims to harden our poles against bushfires. It is distinct from our bushfire mitigation programs, which aim to minimise fire starts by our network assets.

We have updated our modelling for new VCRs and revised VNR methodology

In its draft decision, the AER stated that 2024 VCR values were not used in our modelling and that the VNR had been applied incorrectly, leading to an overestimation of the value of unserved energy.

In our revised proposal, we have updated our modelling to include 2024 VCR values, with the underlying VCR values also used to calculate the VNR. The 2024 VCR values were not available at the time we developed our regulatory proposal.

In 2024, following direction from the Energy and Climate Change Ministerial Council (ECMC), the AER commenced a review to develop a value of network resilience (VNR). In the AER's draft decision on the VNR, the AER acknowledged that:

> *given the insights from network business customer engagement on resilience and prolonged outages, many customers place a higher value on avoiding prolonged outages compared to standard outages.*[2]

In the draft VNR decision, the AER also suggested that the VCR be used as the base for developing the VNR, with multiples of the VCR deployed over different time periods to reflect the additional value that customers attribute to avoiding prolonged power outages. This initial analysis, which identified that the VNR should be greater than the VCR, concurred with our own customer engagement, where our own customers demonstrated a willingness to pay for a range of network and community resilience investments. On a $/kWh basis, the values that our customers were willing to pay far exceeded the VCR.

In its final decision on the VNR, however, the AER set out an updated methodology for calculating the VNR that we consider materially undervalues resilience investments. Specifically, the AER adapted its draft methodology to only capture the 6–12 hour VCR value as the base for the VNR. Based on the AER's VCR methodology, the $/kWh associated with 6–12 hour outages are materially lower than the standard VCR. By using this subset of the VCR, the VNR therefore materially decreased.

The AER's final decision document included no explanation related to this change in approach, which appears to contradict entirely the feedback the AER has received from customers and network providers.

To contextualise the magnitude of this change, the average VCR values based on 2024 updates across our network are provided in the table below. When applying the 6–12 hour VCR the value is substantially lower. Even with the multiples applied to the base value (ranging from 0.5 to 2 depending on the type of customer and duration of outage), the VNR remains below the full VCR in all circumstances. The AER has made clear that the VNR is not intended to be additive to the VCR, therefore applying the VNR leads to a lower benefit than continuing to provide the standard VCR for the full extent of an outage.

TABLE 2 AVERAGE VCR VALUES ACROSS THE POWERCOR NETWORK ($/KWH)

VCR TYPE	VCR
Standard VCR	36.77
6–12 hour VCR	15.47

We have updated our VNR values to incorporate only the 6–12 hour VCR outage values based on AER feedback, however, we consider that the VNR should be calculated using the full VCR value. We would encourage the AER to revisit the extensive customer engagement that has been undertaken by networks in relation to resilience and reconsider which VCR value best reflects this customer feedback.

Our program is based on independent bushfire modelling undertaken by bushfire experts

In its draft decision, the AER stated that we had likely overestimated the bushfire risk to the network based on historical exogenous bushfire outage data.

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[2] AER, Value of Network Resilience 2024 – Draft decision, July 2024, p. 44

We consider the use of recent historical bushfire outage data to forecast future bushfires would materially under-represent the bushfire risk to our network assets, as:

- severe bushfires are low likelihood but high impact events, therefore the lack of a recent bushfire outage in a particular area does not reflect a lack of bushfire risk
- burnt areas need to regrow significantly for a subsequent bushfire to occur, so deploying investments in areas recently experiencing bushfire outages would not address the highest risk areas
- historical outage data does not accurately reflect the increasing climate change we are experiencing and the changing patterns of bushfires.

Our bushfire resilience program is based on independent bushfire modelling by bushfire experts from Commonwealth Scientific and Industrial Research Organisation (CSIRO) and Blunomy. CSIRO simulated 4.5 million bushfires across our network and areas bordering our network that could spread into our network and impact our poles. The model simulated the potential fire intensities of these bushfires based on terrain, fuel load and weather data.

The extent to which the AER engaged fully with this modelling approach was not evident in its draft decision. However, we consider this analysis is a far more robust approach to modelling the risk of bushfires.

As part of an information request to the AER we also provided a report from CSIRO that examined the top 10 ranked line sections from our NPV modelling and validated the bushfire risk associated with each of these line sections. We have re-submitted this report with our revised proposal.[3]

We have removed any potentially double counted benefits from our situational awareness program

The AER stated that we had not adjusted our program for the same benefits occurring across our resilience programs, specifically the improved customer average interruption duration index (CAIDI) associated with our IT situational awareness investment.

To address the AER's concerns that we have double counted the four per cent reduction in customer CAIDI that we expect to achieve from our situational awareness program, we have reduced the average bushfire outage duration in our modelling by four per cent. This has not altered the ranking of our options.

We have reduced the assumed effectiveness of concrete pole solutions

The AER raised concerns that our bushfire resilience program assumed the installation of a concrete pole will eliminate all energy at risk associated with a bushfire event. The AER considered this overstated the benefits of our preferred solution.

We included a full reduction of energy at risk when a wood pole is replaced by a concrete pole because historically we have not lost any of our concrete poles to bushfires. This applies across our population of over 142,000 concrete poles installed in our network.

Notwithstanding this, to address the AER's feedback we have reduced the effectiveness of concrete poles to 90 per cent when in a forested area.

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[3] PAL RRP ATT 5.01 - CSIRO - Geospatial appreciation of wooden pole replacement, December 2025

Fire resistant pole wraps remain unproven in high intensity bushfires

In its draft decision, the AER concluded that fire-resistant pole wraps are a more cost-effective solution to address the resilience of our poles during bushfire, citing its acceptance of pole wraps in its Ergon Energy and Energex decision and the success of pole wraps during a wildfire in North America.[4]

We do not consider that fire-resistant pole wraps have been sufficiently tested in south-east Australian conditions and have significant concerns regarding their effectiveness in high intensity forest fires such as those experienced in Victoria.

Fire mesh is tested and rated to a heat flux of 50 kW/m^2.[5] According to CSIRO, the radiant heat flux from a thick bushfire flame can reach 100 kW/m^2 and heat fluxes in excess of 150 kW/m^2 have been measured in high-intensity fires in south-east Victoria.[6] Fire mesh will therefore not protect assets under conditions of a moderate to high-intensity forest fire.

As part of our innovation program, we proposed a trial of fire-resistant products to ascertain their likely effectiveness in high intensity conditions. However, the AER rejected this trial in its draft decision on the basis that this technology has been trialled in other networks.

We consider it would not be prudent to roll out a technology that has not been tested under scenarios that are likely to be encountered on our network. To date, the majority of real-world pole wrap events have related to lower density grass fires, such as those experienced on the Ergon Energy network.

Updated option analysis

Regardless of our general concerns around deploying fire resistant pole wraps without sufficient evidence of their effectiveness to high-intensity bushfires, we have included pole wrap options in our modelling. Specifically, we have updated our bushfire resilience model to include the following:

- new options that include fire resistant pole wraps
- effectiveness ratings for poles and fire resistant pole wraps under different conditions
- unplanned replacement costs, where we need to replace poles in instances where our bushfire resilience investments have not been effective
- we have also reduced the scope of our proposed program. When we updated our bushfire resilience model for 2024 VCR values, some of the feeders in our top five line sections were replaced with alternative feeders. We have only progressed with the line sections that were included in our top five line sections under both the 2023 and 2024 VCR values.

Based on these updates, our bushfire resilience model now includes two additional options:

- option three: wrap wood poles with fire resistance mesh. This option would entail wrapping the base of the wood poles with a fire-retardant mesh from slightly below ground level to a few metres above ground. Wrapping the base of wood poles is intended to protect the poles from grass fires that burn at a lower height but will not prevent canopy fires with embers at height or flying embers from burning wood poles. Should the pole wrap experience a bushfire, it will activate and swell up to form a protective barrier around the pole to protect it from the fire. However, the pole wrap needs to be replaced every time it is activated (i.e. one time use only)
- option four: combination of pole wrapping and replacing with concrete poles. This option entails wrapping poles with fire resistance pole wraps where lower intensity grassfires are expected, while maintaining our replacement of wood poles with concrete poles in higher fire density

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4 AER, Draft decision: Powercor 2026–31 electricity distribution determination – Attachment 2 – Capital expenditure, September 2025, pp. 52–53

5 Genics fire mesh, Fire Mesh: Fire Retardant Services & Product

6 CSIRO, Bushfire in Australia: understanding 'hell on Earth'

locations. We relied on CSIRO to identify poles that are suitable for pole wraps based on its simulated fire intensity at each pole. There is a total of 1,093 wood poles across the relevant line sections, of which CSIRO has identified a total of 131 wood poles that are suitable for pole wraps. The remaining 962 wood poles will be replaced with concrete poles under our combined pole wrap and concrete pole option.

Based on this updated modelling, option four is the preferred option for each of the relevant line sections. We also note that the AER's suggested option of wrapping all poles was the lowest ranked solution.

Table 3 shows the results of this quantitative option evaluation against our base case.

TABLE 3 OPTION EVALUATION RESULT ($M, 2026)

OPTION		PV COST	PV BENEFITS	NET BENEFITS
1	Base case (do-nothing)	-	-	-
2	Replace wood poles with concrete poles	(14.0)	84.0	70.0
3	Wrap wood poles with fire resistant pole wraps	(1.0)	52.9	51.9
4	Combination of pole wraps and concrete poles	(12.4)	83.4	71.0

As a sensitivity we have also tested the robustness of our preferred option to changes in effectiveness of our proposed solutions. For example, increasing the effectiveness of pole wraps by 10 per cent did not alter the preferred option.

Overlaps with our condition-based pole replacement program have been identified

In its draft decision, the AER included the cost of overlapped poles with our condition-based program in our bushfire resilience capital expenditure. We have therefore included the replacement cost for the 67 overlapped poles (based on our reduced program) in our bushfire resilience program and removed these poles from our condition-based program.

Further details regarding our bushfire resilience modelling can be found in our updated bushfire resilience model.[7]

3.1.2 Rapid mobile generation

In addition to our re-proposed resilience investments, we have also included an additional investment that seeks to reduce the time taken to install mobile generation during prolonged outages. This investment is based on key recommendations from the Victorian Government's recent outage reviews, that seek to have customers back on supply within 12 hours of an outage. This included recommendations that:

- electricity distribution businesses deploy larger mobile backup generators to restore electricity to essential services, community hubs and network sections[8]

[7] PAL RRP MOD 5.01 – Bushfire resilience, December 2025

[8] Electricity Distribution Network Resilience Review Expert Panel, Electricity Distribution Network Resilience Review Final Recommendations Report, May 2022, p. 41

- main streets and key community assets in areas at high risk of prolonged power outages to be connected to temporary generation within 12 hours of a weather event.[9]

A business case for this investment is set out in appendix A.

3.2 Revised forecast

A summary of our revised forecast is presented in table 4 below. This includes our revised bushfire resilience program and quick connect points. We have accepted the AER draft decision for the remainder of our proposed resilience investments.

TABLE 4 REVISED RESILIENCE PROGRAM ($M, 2026)

INVESTMENT	FY27	FY28	FY29	FY30	FY31	TOTAL
Fire-wraps and concrete poles	4.6	4.6	4.6	4.6	4.6	22.9
Quick connect points	1.0	1.0	1.0	1.0	1.0	5.2
Flood resilience program	1.7	1.7	1.7	1.7	1.7	8.4
Microgrids	-	3.2	3.2	-	-	6.4
IT situational awareness	2.9	0.2	-	-	-	3.1
Mobile emergency response vehicles	1.0	-	-	-	-	1.0
Radio site resilience program	0.3	0.3	0.3	0.3	0.3	1.4

[9] Network Outage Review, February 2024 Storm and Power Outage Event Final Report, September 2024, p. 7

A

QUICK CONNECT POINTS

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A Quick connect points

In response to network outages due to extreme weather events, we generally undertake a hierarchical process:

- we first attempt to switch customers to an alternative source of supply or, if possible, repair the network
- if we are not able to switch supply or repair the network, we then dispatch mobile generators to locations that are expected to have the longest outage interruptions.

Once we decide to deploy a mobile generator, we need to transport the generator from its current location to the required site, which can take extended periods of time depending on how the extreme weather event has impacted road and access conditions. When the generator arrives at the specific site, we then need to undertake enabling works to connect the mobile generator to the network to restore supply. This end-to-end process (from initial outage) can take up to 24 hours before supply is restored with a mobile generator.

The deployment of mobile backup generators also requires experienced generator crews.[10] These experienced generator crews are required for the enabling works to deploy mobile generators on site, including:

- selecting a suitable location for the mobile generator and obtaining relevant permissions
- identifying area to be supplied by the mobile generator, including consideration of rooftop solar generation
- setting up the mobile generator
- performing switching to island the area to be supplied by the mobile generator
- cutting into existing electricity network infrastructure to enable the mobile generator to be connected to the network.

These enabling works take from four to six hours per site. Undertaking these tasks following an extreme weather event leads to longer outage duration for customers at a time when customers in vulnerable towns need electricity the most. It also constrains the number of mobile generators that can be deployed at any given time due to the need for our generator specialists to perform these enabling works.

A.1 Identified need

Two Victorian Government initiated storm reviews have recommended mobile generators to be deployed rapidly to restore electricity supplies to key town infrastructure after extreme weather events:

- the 2022 Electricity Distribution Network Resilience Review in response to the June and October 2021 storms
- the 2024 Network Outage Review following the 13 February 2024 storm.

[10] Electricity Distribution Network Resilience Review Expert Panel, Electricity Distribution Network Resilience Review Final Recommendations Report, May 2022, p. 43

The 2022 Electricity Distribution Network Resilience Review recommended electricity distribution businesses deploy larger mobile backup generators to restore electricity to essential services, community hubs and network sections (Recommendation 4.3.2).[11]

The 2024 Network Outage Review recommended main streets and key community assets in areas at high risk of prolonged power outages to be connected to temporary generation within 12 hours of a weather event (recommendation two).[12] It also recommended installing network connection points to enable rapid installation of temporary generation in key township locations (recommendation 13b).[13]

Based on the findings of these reviews, there is a need to more quickly deploy mobile generators in high-risk areas following an extreme weather event.

To avoid overlap with expenditure related to our situational awareness business case (which focused on improving the speed and availability of data following an extreme weather event through improvements to our IT systems), this business case focuses on improving mobile generator deployment time once a decision has been made to deploy a mobile generator to a specific site.

A.2 Identifying at-risk communities

We have undertaken a multi-stage approach to identify the proposed townships that would benefit most from rapid mobile generation.

A.2.1 Stage one: identifying a broad subset of towns that are likely to be at risk of prolonged outages

We identified 105 towns that are at risk of prolonged outages from extreme weather events based on:

- detailed analysis of worst served customers, townships and feeders across our network
- towns supplied by radially fed zone substations[14]
- our subject matter experts' knowledge and experience of towns most at risk.

The wide geographical dispersion of these 105 towns across our network is shown in figure 1.

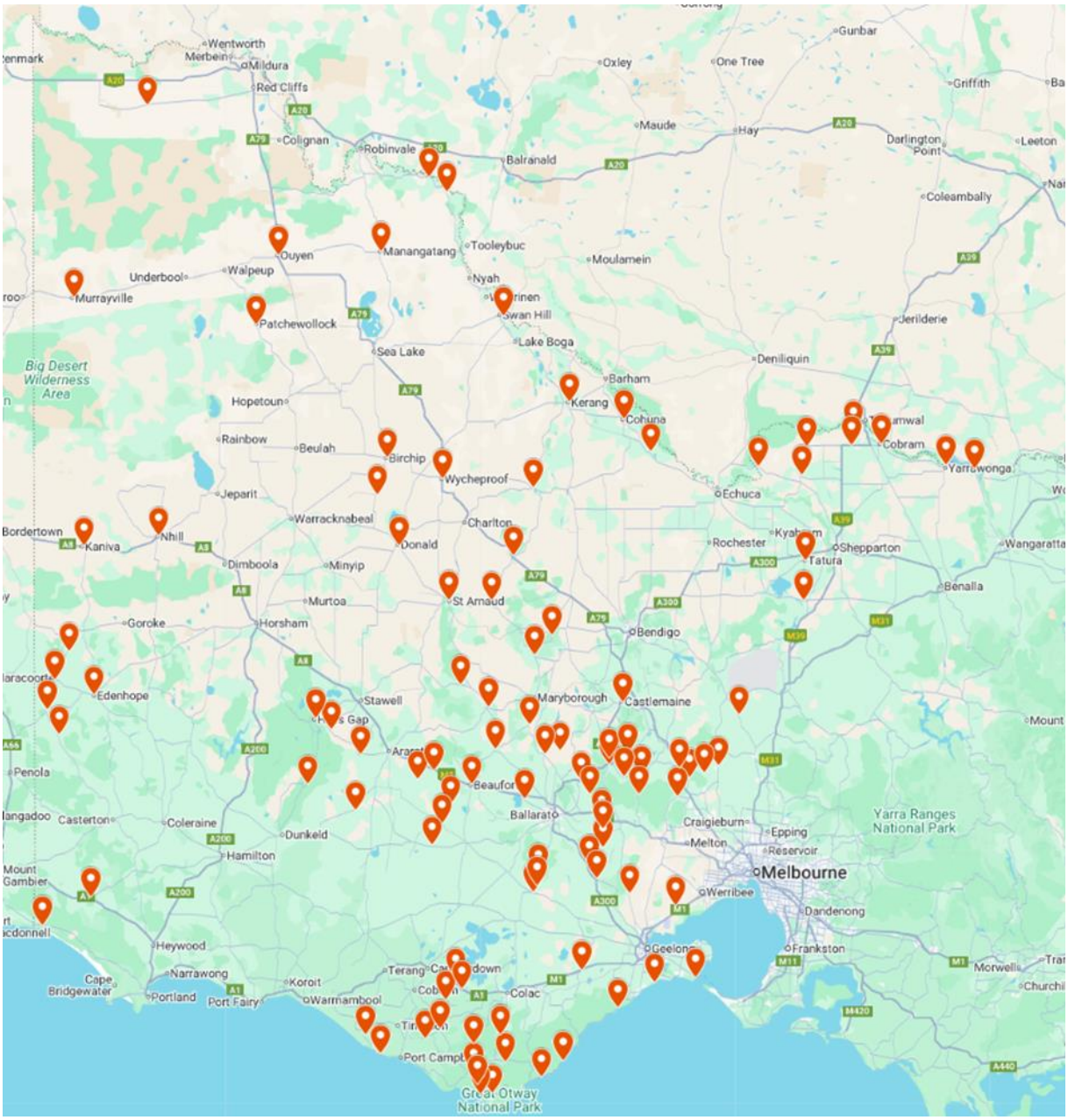
11 Electricity Distribution Network Resilience Review Expert Panel, Electricity Distribution Network Resilience Review Final Recommendations Report, May 2022, p. 41

12 Network Outage Review, February 2024 Storm and Power Outage Event Final Report, September 2024, p. 7

13 Network Outage Review, February 2024 Storm and Power Outage Event Final Report, September 2024, p. 37. Note: This particular recommendation was directed at AusNet Services.

14 If the single 66kV radial line feeding the zone substation experiences a fault, it will result in a station blackout and the loss of electricity supply to all customers supplied by the zone substation; given the radial nature of the zone substation there are limited options for an alternative source of supply.

FIGURE 1 AT RISK COMMUNITIES TO PROLONGED OUTAGES



A.2.2 Stage two: using informed criteria to shortlist towns that are likely to be most exposed

Following the identification of potential at risk towns, we developed a number of criteria to further shortlist towns. This included considerations such as:

- no other existing or proposed works to improve resilience (e.g. microgrids and tie lines)
- presence of a main street with key community assets that require electricity to support the community such as supermarkets, banks, petrol station and shops
- town population size (i.e. larger towns were selected to maximise customer benefit as restoration of supply to the town's main street could benefit both the town and communities of smaller neighbouring towns, who could travel to the larger town for supplies)

- distance from another town where investments are proposed (to ensure a wide dispersion across the state)
- the difficulty in accessing the town (prioritising towns that are likely to be cut off during an extreme weather event)
- the relative vulnerability of the town.

We used two vulnerability metrics to identify towns with lower disaster resilience and higher socio-economic challenges:

- the disaster resilience is based on Natural Hazards Research Australia's Australian Disaster Resilience Index (ADRI-2)[15]
- socio-economic challenges were based on the Australian Bureau of Statistics' Socio-Economic Indexes for Areas (SEIFA), in particular the index of relative socio-economic advantage and disadvantage (IRSAD).

We used both indices based on Statistical Area Level 2 (SA2) geographical location to assess the relative vulnerability of each town, with shortlisted towns those that are considered more vulnerable. Using all the above criteria we shortlisted 29 of the initial 105 towns for further analysis.

A.2.3 Stage three: identifying shortlisted towns with historical prolonged outages

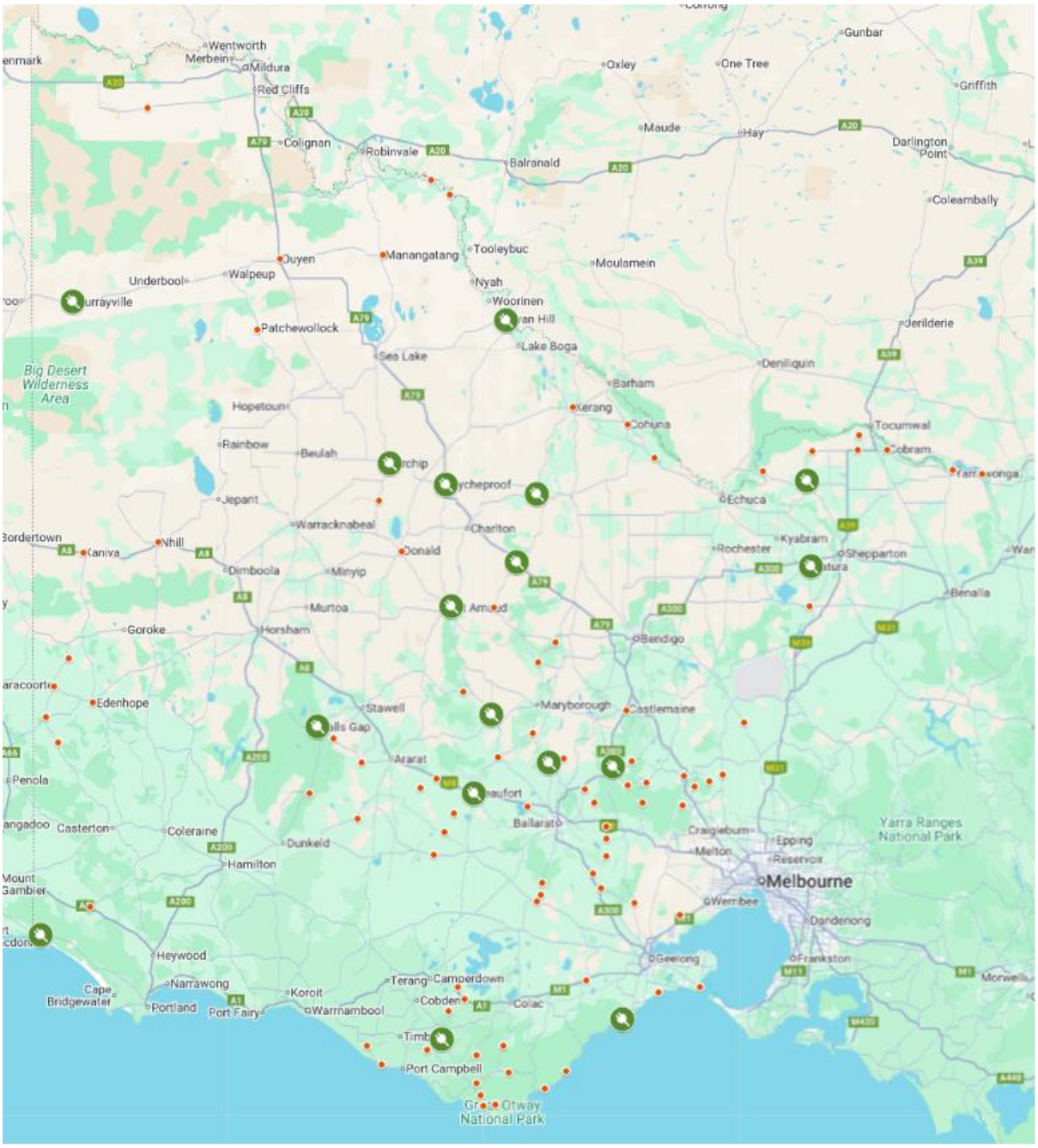
Lastly, for the 29 shortlisted towns we have assessed the frequency and duration of historical weather-related outages that had a duration of 12 hours or more. This timeframe was selected based on timeframes identified in the 2024 Network Outage Review, which recommended main streets and key community assets in areas at high risk of prolonged power outages to be connected to temporary generation within 12 hours of a weather event.

Our analysis revealed that 17 of these 29 shortlisted towns have experienced weather-related outages lasting longer than 12 hours. We therefore consider these communities represent locations where rapid mobile generation will deliver the most significant customer and economic benefits.

The 17 towns identified for intervention consideration are set out in figure 2 with green circles and are detailed in our model.[16]

[15] Natural Hazards Research Australia, Australian Disaster Resilience Index, June 2025
[16] PAL RRP MOD 3.5.02 – Quick connection points, December 2025

FIGURE 2 TOWNS IDENTIFIED FOR INTERVENTION



A.3 Options considered

A.3.1 Option one: base case

This option maintains the existing mobile generator deployment process and equipment. Under this process, towns may remain without power for up to 24 hours following extreme weather events.

A.3.2 Option two: install mobile generator quick connection points

This option would install mobile generator connection points at vulnerable towns to enable rapid connection, which will reduce mobile generator deployment time. It includes:

- identifying a suitable location for the mobile generator in the town's main street

- obtaining relevant permissions for the mobile generator location
- identifying the area to be supplied by the mobile generator
- installing appropriate infrastructure such as switches and padmount kiosks, to enable the mobile generator to quickly connect to the network when it is needed.

The installation of these quick connection points will allow the generator to be delivered to the pre-determined location and plug into the network with minimal additional installations works required, which does not require the expertise of a generator specialist. Therefore, it will reduce the mobile generator deployment time.

A.4 Options analysis

The credible options were evaluated individually for each vulnerable town using cost-benefit analysis. The analysis compares the cost of the option against the quantified risk reduction benefits.

A.4.1 Cost-benefit analysis

The benefits associated with each option are avoided energy at risk and community resilience.

Energy at risk was calculated based on the following:

- the annual likelihood of an outage due to extreme weather event based on historical weather-related outages experienced by the town, including annual climate escalation (as detailed below)
- the reduction in outage duration (i.e. five hours of saved time based on the mid-point of four to six hours for enabling works)
- estimated load to be supplied by mobile generator based on latest annual average historical load
- the cost of consequence, calculated using the value of network resilience (VNR) where outage duration exceeds 12 hours, and the value of customer reliability (VCR).

We also undertook a willingness to pay survey in 2023 to determine the value customers placed on key areas, including community resilience. The willingness to pay for community resilience was conservatively applied only to the town population, which does not consider the benefit to neighbouring towns or the surrounding community who are likely to also benefit from having supply to local services restored more quickly.

Cost estimation for mobile generator quick connection

We have used actual costs from a recent similar project as the basis for our cost estimation. While each site may have specific characteristics that alter the cost to install a quick connect point, we have not yet undertaken detailed site-specific investigations and therefore assumed a uniform cost of $307,274 ($2026) per site.

A.4.2 Results summary

Table 5 shows the results of the quantitative option evaluation against our base case.[17]

[17] PAL MOD 5.02 – Quick connect points, December 2025

TABLE 5 OPTION EVALUATION RESULT ($M, 2026)

OPTION TWO	PV COST	PV BENEFITS	NET BENEFITS
Install quick connect points	(3.1)	46.8	43.7

In addition to testing the options under a central scenario, we undertook sensitivity analysis, including for higher costs and lower benefits. Option two remained economic under all sensitivity scenarios.

A.4.3 Preferred option

Installing mobile generator quick connection points (option two) is the preferred option, with all 17 vulnerable towns yielding a positive NPV. As outlined previously, these works are also consistent with the expectations on distributors following the Victorian Government's Network Outage Review.

Table 6 shows the capital expenditure profile for quick connection points over the 2026–31 regulatory period.

TABLE 6 RAPID MOBILE GENERATION: CAPITAL EXPENDITURE ($M, 2026)

OPTION TWO	FY27	FY28	FY29	FY30	FY31	TOTAL
Install quick connect points	1.0	1.0	1.0	1.0	1.0	5.2

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