CITIPOWER

Bushfire Mitigation Plan

CitiPower Australia Ltd

CP-PL-0009

Based on CPPAL Style Guide, CP-TP-0009 CitiPower Plan Template Revision 231117
Document controlled in accordance with ST-1750 INMS Document Management Standard

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1.1 Contacts

Table 1: Contacts

Responsibility	Title	Address	Contact Details
BMP Responsible Organisation	CitiPower Pty Ltd, ACN 064 651 056	40 Market Street Melbourne, 3000 Victoria	Phone: 13 22 06
BMP Preparation	Network Risk and Assurance Manager	40 Market Street Melbourne, 3000 Victoria	Phone: 13 22 06 General enquiry | CitiPower & Powercor NetworkSafety@powercor.com.au
BMP Carrying Out	Network Risk and Assurance Manager	40 Market Street Melbourne, 3000 Victoria	Phone: 13 22 06 General enquiry | CitiPower & Powercor NetworkSafety@powercor.com.au
BMP Emergency Contact			Phone: 13 24 12 (24 x 7 emergencies and faults contact number for members of the public)

1.2 Regulation Compliance Information

Table 2 provides a cross reference of the sections of the CitiPower Bushfire Mitigation Plan (BMP), to the specific items required in Regulation 7 of the "*Electricity Safety (Bushfire Mitigation) Regulations 2023*".

Table 2: Regulation Compliance Information

Regulation	7 – Prescribed particulars for bushfire mitigation plans – major electricity companies.	CitiPower Plan Reference
7(1)(a)	the name, address and telephone number of the major electricity company;	Section 1.1
7(1)(b)	the position, address, email address and telephone number of the person who was responsible for the preparation of the plan;	Section 1.1
7(1)(c)	the position, address, email address and telephone number of the persons who are responsible for carrying out the plan;	Section 1.1
7(1)(d)	the email address (if any) and telephone number of the major electricity company's control room so that persons in the room can be contacted in an emergency that requires action by the major electricity company to mitigate the danger of bushfire;	Section 1.1
7(1)(e)	the telephone number of the major electricity company that members of the public can call in an emergency that requires action by the major electricity company to mitigate the danger of bushfire;	Section 1.1
7(1)(f)	the bushfire mitigation policy of the major electricity company to minimise the risk of fire ignition from its supply network;	Section 3.1

Regulation	7 – Prescribed particulars for bushfire mitigation plans – major electricity companies.	CitiPower Plan Reference
7(1)(g)	the objectives of the plan to achieve the mitigation of fire danger arising from the major electricity company's supply network;	Section 3.2
7(1)(h)	a description, map or plan of the land to which the bushfire mitigation plan applies;	Sections 2.2 & 4.2
7(1)(i)	the preventative strategies and programs to be adopted by the major electricity company to minimise the risk of the major electricity company's supply networks starting fires;	Section 6
7(1)(j)	details of the preventative strategies and programs referred to in paragraph (i) (including details in relation to timing and location) by which the major electricity company will ensure that, in its supply network, each polyphase electric line originating from every zone substation specified in Schedule 1 has the required capacity;	N/A
7(1)(k)	details of testing that will be undertaken before the specified bushfire risk period each year by which the major electricity company will ensure that its supply network can operate to meet the required capacity in relation to each polyphase electric line in accordance with paragraph (j);	N/A
7(1)(l)	details of the preventative strategies and programs referred to in paragraph (i) (including details in relation to timing and location) by which the major electricity company will ensure that, within an electric line construction area, each electric line with a nominal voltage of between 1 kV and 22 kV that is constructed, or is wholly or substantially replaced, in its supply network is a covered or underground electric line;	N/A
7(1)(m)	details of the preventative strategies and programs referred to in paragraph (i) by which the major electricity company will ensure that, in its supply network, each low voltage overhead electrical cable or wire that is constructed after the commencement of these Regulations in a hazardous bushfire risk area is insulated;	N/A
7(1)(n)	details of the processes and procedures by which the major electricity company will ensure that the major electricity company installs and maintains in operation an Automatic Circuit Recloser in relation to each SWER line in its supply network;	N/A
7(1)(o)	a plan for inspection that ensures that: a) the parts of the major electricity company's supply network in hazardous bushfire risk areas are inspected at intervals not exceeding 37 months from the date of the previous inspection. b) the parts of the major electricity company's supply network in other areas are inspected at specified intervals not exceeding 61 months from the date of the previous inspection.	Section 6.1
7(1)(p)	details of the processes and procedures for ensuring that each person who is assigned to carry out inspections referred to in paragraph (o) and of private electric lines a) has satisfactorily completed a training course approved by Energy Safe Victoria; and b) is competent to carry out such inspections;	Section 6.10

Regulation	7 – Prescribed particulars for bushfire mitigation plans – major electricity companies.	CitiPower Plan Reference
7(1)(q)	details of the processes and procedures for ensuring that persons (other than persons referred to in paragraph (p)) who carry out or will carry out functions under the plan are competent to do so;	Section 6.10
7(1)(r)	the operation and maintenance plans for the major electricity company's supply network: a) in the event of a fire b) during a total fire ban day c) during a fire danger period	Section 6.11 to Section 6.16
7(1)(s)	the investigations, analysis and methodology to be adopted by the major electricity company for the mitigation of the risk of fire ignition from its supply network;	Section 8 Section 9.2 Section 9.3
7(1)(t)	details of the processes and procedures by which the major electricity company will; a) monitor the implementation of the bushfire mitigation plan; and b) audit the implementation of the plan; and c) identify any deficiencies in the plan or the plan's implementation; and d) change the plan and the plan's implementation to rectify any deficiencies identified under subparagraph (iii) e) monitor the effectiveness of inspections carried out under the plan; and f) audit the effectiveness of inspections carried out under the plan; and g) before the specified bushfire risk period each year, report to Energy Safe Victoria the results of testing undertaken in that year in accordance with regulation (k);	Section 10.1 Section 10.2 Section 11 Section 11 Section 10.1 Section 10.2 N/A
7(1)(u)	the policy of the major electricity company in relation to the assistance to be provided to fire control authorities in the investigation of fires near the major electricity company's supply network;	Section 6.11
7(1)(v)	details of processes and procedures for enhancing public awareness of; a) the responsibilities of the owners of private electric lines that are above the surface of the land in relation to maintenance and mitigation of bushfire danger; and b) the obligation of the major electricity company to inspect private electric lines that are above the surface of the land within its distribution area.	Section 6.12 Section 6.16
7(1)(w)	a description of the measures to be used to assess the performance of the major electricity company under the plan.	Section 11
7(2)	In subregulation (1)(l),covered, in relation to an electric line, means that a system of insulation is installed on any bare open wire forming part of the electric line.	N/A
7(3)	In subregulation (1)(m)— electrical cable or wire means the whole or any part of a cable, wire or similar thing used or to be used for the	N/A

Regulation	7 – Prescribed particulars for bushfire mitigation plans – major electricity companies.	CitiPower Plan Reference
	purpose of transmitting, distributing or supplying electricity, but does not include— (a) any thing enclosing or supporting the cable, wire or similar thing; or (b) a cable, wire or similar thing directly used in converting electrical energy into another form of energy; *Insulated*, in relation to an electrical cable or wire, means an electrical cable or wire that is separated from any adjoining conductive material by a permanently affixed protective layer of non-conductive material.	
7(4)	In subregulation (1)(o), supply network does not include a terminal station, a zone substation or any part of the major electricity company's underground supply network that is below the surface of the land.	Section 6.1.2

1.3 Referenced Documents

All documents referenced throughout this plan except those listed in Appendix E do not form part of the Bushfire Mitigation Plan (BMP).

2. Introduction

2.1 Legislation

Section 113A (1) of the *Electricity Safety Act 1998* requires that a major electricity company must prepare and submit to Energy Safe Victoria (ESV) a plan every 5 years for the mitigation of bushfire in relation to the company's supply network.

In accordance with the *Electricity Safety (Bushfire Mitigation) Regulations 2023* this BMP provides the prescribed particulars as specified in Regulation 7.

A copy of the current accepted bushfire mitigation plan will be available for inspection:

a) on the company's intranet site

b) at the company's principal office in the State during ordinary business hours

c) on the company's website.

2.2 CitiPower

CitiPower Pty Ltd (CitiPower) operates the electricity distribution network in Melbourne's central business district and inner suburbs. Statistics regarding the CitiPower distribution network are shown in Table 3.

Table 3: CitiPower Distribution Network Statistics

Attribute	Statistic
Network area	157 square kilometres
Underground lines	50.14%
Number of poles and towers	57,955
Number of zone substation transformers	90
Number of distribution substation transformers	5,049
Total number of customers	349,689
Customer density	2,218 per square kilometre
Network availability	99.996%

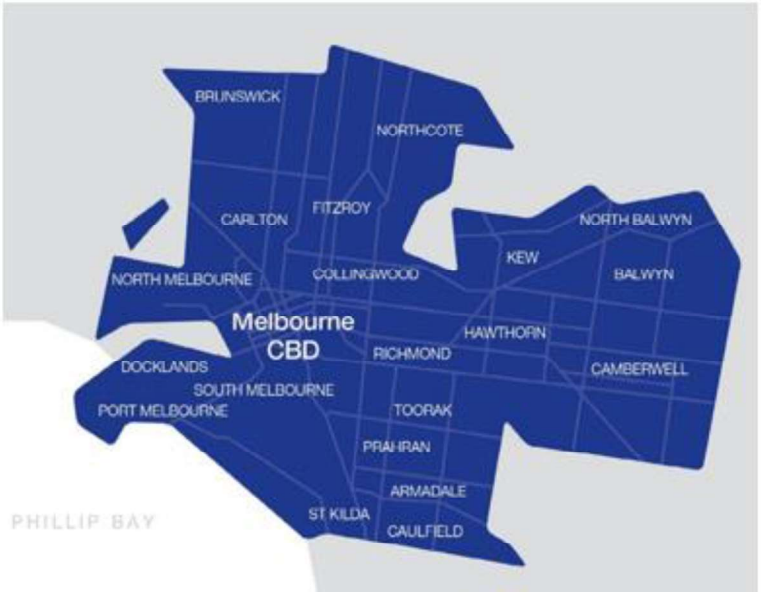

Figure 1: CitiPower Distribution Area

3. Bushfire Mitigation Policy & Objectives

3.1 Bushfire Mitigation Policy

In accordance with the Bushfire Mitigation Policy (PO-0003), CitiPower is committed to providing our customers with safe, reliable and affordable electricity network services through the application of an effective asset management framework. We are committed to bushfire mitigation activities and making our communities safer. Therefore, we plan, design, construct, operate, maintain, and decommission the network to minimise As Far As Practicable (AFAP) the bushfire danger arising from the electricity network.

3.2 Objectives

The objectives of this BMP are to:

- Minimise the risk of fire starts from electrical assets.
- Achieve compliance with the relevant legislative and regulatory requirements while providing flexibility within the business to encourage innovation, continuous improvement, and the effective use of resources.
- Define the companies approach to the management of the risk of bushfires caused by electricity assets.
- Reference the policies and procedures that explain how CitiPower achieves the commitments in the BMP in a single document.
- Demonstrate a high level of commitment to meeting bushfire mitigation responsibilities.

4. Document Scope

4.1 Bushfire Mitigation Framework

CitiPower's bushfire mitigation framework is shown in Figure 2 and demonstrates a comprehensive and whole of business approach. The proactive planning and scheduling of this program is based principally on a whole of asset life approach that includes design, construction, operation, maintenance and decommissioning. The annual governance systems of vegetation and asset inspection and maintenance activities are supported by a regime of reporting and auditing.

The continuous improvement elements encompass a large body of proactive capital works, trialling and adoption of new technologies, and our response to audit outcomes.

The response aspects of the plan include our operational processes to faults and Total Fire Ban (TFB) days, asset failure investigations, and fire start reporting.

The framework also has a significant aspect of proactive stakeholder management, including Private Electric Line (PEL) owners, Councils (vegetation management), other agencies, specific community messaging and our ongoing interface with customers.

Figure 2: Bushfire Mitigation Framework

This BMP applies to assets that could cause fire ignition in all areas of CitiPower's supply network. Electricity networks have been a source of fire ignition since their construction and consequently a considerable amount of investigation has been and continues to be undertaken into the causes to enable preventative actions to be taken.

This BMP forms part of the CitiPower Electricity Safety Management Scheme (ESMS) (JEQA4UJ443MT-173-116) pursuant to section 113D of the Electricity Safety Act.

4.2 Electrical Network Map

The CitiPower HV overhead network is shown in Figure 3 and is colour coded as follows:

66kV Sub-transmission Lines
22kV lines
11kV lines

To maintain clarity, the LV overhead network has not been shown. Full network details are available from CitiPower's Geographical Information System (GIS).

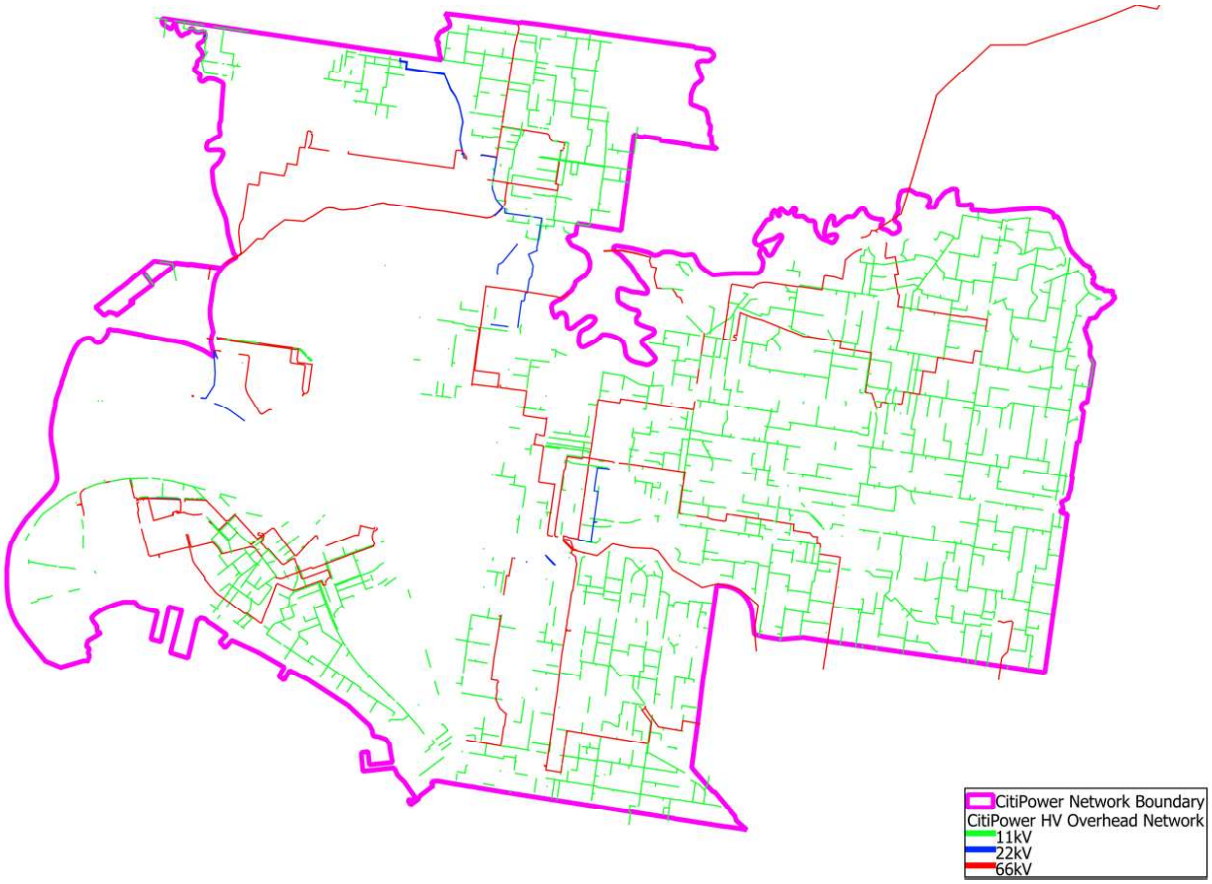

Figure 3: CitiPower Overhead Network

4.3 Bushfire Risk Areas

CitiPower's network assets are all located in Low Bushfire Risk Areas (LBRA). These areas are updated as part of the Country Fire Authority (CFA) Fire Hazard Mapping Project and may change as areas are reviewed across the state.

5. Management Structure

The implementation and control of bushfire mitigation related activities are discharged via many roles throughout CitiPower. Each role has a position description which lists the key activities. The carrying out of bushfire related activities contained within this plan is overseen by the Network Risk and Assurance Manager.

6. Bushfire Mitigation Strategies and Programs

CitiPower has developed policies, strategies, frameworks, plans, procedures, and work instructions to support its bushfire mitigation activities. These are described in the following sections.

6.1 Monitoring Asset Condition

Preventative maintenance strategies have been created for all CitiPower's zone substations, sub-transmission and distribution assets. These strategies were developed from Reliability Centred Maintenance (RCM) methodologies and involve undertaking on-condition tasks based on a program of condition monitoring of the electrical network assets. The RCM rules are configured in CitiPower's Asset Management Enterprise System, SAP, which automatically generates time-based work orders for inspection and maintenance planning.

Operational procedures for developing, reviewing and implementing asset maintenance plans, procedures and policies are set out in:

- Developing, Updating or Retiring an Asset Management Plan (PR-0009). This procedure outlines the process/actions to be followed when a Asset Management Plan (AMP) or Maintenance Policy / Procedure related to electrical network assets is reviewed or a new AMP or Maintenance Procedure is developed.
- Electricity Safety Management Scheme (JEQA4UJ443MT-173-116).

These documents outline how CitiPower identifies needs, develops, and manages policies and provides a systematic process through the identification of strategic, operational and program/project level risks to:

- determine accountability for risks
- provide an assessment of controls and the control environment
- analyse and evaluate risks
- manage the risks to AFAP levels.

6.1.1 Pole and Tower Inspection

CitiPower's network assets are all located in LBRA, and the inspection of poles and towers is carried out on a 5-year full inspection cycle.

CitiPower is transitioning to a 1-year (+ one month) full inspection cycle for all Added Controls Serviceable (AC Serviceable) poles, replacing the existing 2-year interval and discontinuing the current 1-year above ground only inspection. This change aligns with industry best practice and minimises the risk of unassisted wood pole failures as far as practicable.

An implementation plan has been developed to support the transition to a 1-year inspection cycle for AC serviceable poles, which is planned to commence in April 2025, with full compliance expected by June 2028.

Pole and tower inspection is carried out in a dedicated program conducted over the cycles (referred to as cyclic inspections) summarised in Table 4.

Table 4: Asset Inspection Cycle (LBRA)

Asset Type	Type of Inspection	Inspection frequency	Tolerance
All serviceable poles	Full inspection	5 years	+ one month
AC serviceable poles[1]	Full inspection	1 years	+ one month
Towers	Full inspection	5 years	+ one month
	Close inspection	5 years	+ one month

[1] AC Serviceable Poles are referred to as Limited Life poles in SAP records.

Poles

A full inspection shall include the inspection of electrical assets between poles and/or other structures to include these key activities:

- assessment of pole condition from ground level to two metres above
- visual assessment of pole condition from two metres above ground level to the top of the pole using binoculars
- assessment of pole condition below ground level
- identifying wood destroying insects
- undertaking of preservative treatment of hardwood poles
- assessment of the surrounding area for safety issues.

Towers

A full inspection shall include the inspection of electrical assets between towers and/or other structures to include these key activities:

- visual assessment of all components of a tower and its attachments from ground level to the top of the tower
- assessment of tower footing condition below ground.

A close inspection shall include a close-range detailed inspection and assessment of all above ground components of the tower.

Further information relating to the full inspection of poles and towers is defined within the Maintenance Procedure - Poles and Towers (PR-5062.01).

Operational instructions for the inspection, testing and assessment of assets are contained in the Asset Inspection Manual (CPPAL-MA-0450).

This manual describes the various types of electrical assets and the observations or tests necessary to identify and assess their condition. It also gives a detailed description of items that need to be identified for replacement or repair. The manual sets out criteria for categorising the priority for remedial maintenance actions, and the reporting and information recording requirements.

Operational instructions for the inspection of poles and towers located in inaccessible locations are contained within the Inaccessible Asset Procedure (18–20–P0004) which allows for a risk assessment to be undertaken if the asset is not accessible. The risk assessment considers when access is expected to become available for the inspection and a workflow for the inspection to be completed.

The Asset Inspection Officer is responsible for preparation of the asset inspection program using maintenance plans established within SAP and monitoring of the performance of the asset inspectors in adhering to the program. Each maintenance plan covers all the poles and towers within a specific electrically isolatable section of the network. The management of maintenance plans are contained within the Asset Inspection Procedure (18–20–P0002).

6.1.2 Above Ground Asset Inspection

In addition to the inspection of poles and towers, other above ground assets are also inspected as summarised in Table 5. The Asset Inspection Manual (CPPAL-MA-0450) details all relevant work instructions except for indoor substations, which are detailed in the Maintenance Procedure - Distribution Transformers (CPPAL-PR-5071.01). Identified defects are assigned repair priorities as detailed within the Maintenance Defect Priority Standard (CPPAL-ST-5060.01).

Table 5: Other Above Ground Asset Inspection Cycles

Asset Type	Inspection Timeframes
	LBRA
Pole type substations and switchgear Pole type substations are visually inspected for condition and ground clearances. Pole mounted switchgear are visually inspected.	5-years
LV services LV services are visually inspected for condition using stabilised binoculars. Clearances are visually assessed and measured where required with an approved device.	5-years (+ one month)
Conductors Conductors and associated hardware (such as spreaders and spacers) are visually inspected for condition using stabilised binoculars.	5-years (+ one month)
LV pillars LV pillars are visually inspected for condition.	5-years (+ one month)
Ground type substations Ground type substations are visually inspected for condition.	6-months
Indoor substations Indoor substations are visually inspected and maintained by the completion of inspection tasks to identify defects.	2-years (+/- 3 months)
Kiosk substations and switching cabinets Kiosk substations and switching cabinets are visually inspected for condition.	6-months
Pole top assemblies Pole top assemblies are inspected for condition from the ground using stabilised binoculars as well as an elevated camera where required. The inspection generally extends from two metres above ground to the pole top and includes assessment of all pole top assets including conductors, insulators, cross-arms, attachments, pole mounted plant and equipment etc.	5-years (+ one month)

6.1.3 Resistograph Non-Destructive Wood Pole Inspection

In July 2024, CitiPower implemented the Resistograph (RESI) drill to replace the traditional intrusive drilling (13mm drill) used in the current sound, dig and drill (SDD) method as part of the normal wood pole cyclic full inspection testing to assess wood pole condition.

The RESI drill works as a resistograph to measure timber resistance from wood poles to detect rot and decay in determining the sound wood thickness of the outer timber.

CitiPower has adopted the use of the RESI drill as an alternative to WoodScan, using a 4-Point method for inspection. The 4-point methodology requires the inspection and measurement at 4 locations 900 apart and using the average of the 4 measurements to calculate the section modulus of the pole.

Operational instructions for the use of the RESI drill for the internal inspection of wood poles (drilling) to determine the condition assessment of assets are contained in the Asset Inspection Manual (CPPAL-MA-0450).

6.1.4 LiDAR Conductor Clearance Inspections

In line with the annual aerial Light Detection and Ranging (LiDAR) inspection surveys, CitiPower has leveraged remote sensing and software tools to generate a 3D digital model of assets and the surrounding environment data to identify potential conductor clearance breaches as described in the Maintenance Procedure – Conductors Aerial Line Clearances (PR-5064.02).

The LiDAR methodology and approach is used to assess overhead conductor clearances at the pole or in-span to ensure minimum clearances are maintained for the following scenarios:

- Conductor to Ground clearances
- Pole Top and Midspan Circuit to Circuit Clearances
- Pole top and Midspan Phase-to-Phase Clearances
- HV/Sub-transmission Phase-to-phase Clearances on all T-on, T-off and two-way T-offs.

The LiDAR excludes capturing conductor clearances from buildings and structures.

As the use of LiDAR technology for determining potential conductor clearance breaches is in its early days of maturity, the LiDAR methodology will be used to complement the existing CitiPower cyclic ground-based inspections by asset inspectors for identification of potential conductor clearance defects.

6.1.5 Thermal Imaging

Thermal imaging technology is used to assist identify assets exhibiting elevated temperatures or causing leakage currents. The adoption of this technology can assist in preventing asset failures which could result in a fire start.

The thermographic inspection program includes yearly inspection of sub-transmission lines, selected sections of distribution overhead HV feeders, covered HV lines and LV assets in coastal areas.

Thermal imaging is undertaken using vehicle mounted equipment for overhead network assets whilst hand-held devices are used within indoor substations.

Operational procedures for conducting thermal imaging inspections are contained within the Maintenance Procedure – Distribution Thermographic Inspection (CPPAL-PR-5060.01). Procedures for prioritising defects identified through thermal imaging are contained within the Maintenance Procedure – Distribution Thermographic Inspection (CPPAL-PR-5060.01) and the Maintenance Defect Priority Standard (CPPAL-ST-5060.01).

6.2 Priority Classifications

The defect priority classification applies to all defects found on above ground assets. Asset defects identified by the inspection program or reported from internal or external sources are assessed for their associated risk and prioritised for remedial action.

Procedures for reporting of a network defects are contained within the Maintenance Defect Priority Standard (CPPAL-ST-5060.01).

This policy sets out the criteria for classification of defects as shown in Table 6.

Table 6: Defect Classification

Allocation	Symbol	Allocated to items assessed to be at risk of failure within the following timeframes[1]	Need to be actioned within[1]
Priority 1	P1	0 – 42 days	24 hours
Fault Follow Up 42 Days	FFU42	> 42 days	42 days
Priority 42	P42	42 days – 32 weeks	42 days
Priority 2	P2	32 weeks - 3 years	32 weeks
Priority 3	P3	> 3 years	3 years
Priority Opportunistic	POPP	Not applicable	No set timeframe – actioned on an opportunity basis
Priority Notification for Information	PN	Not applicable	No set timeframe - information record only

[1] Note: all time periods mentioned in the table are based on calendar days.

6.3 Remedial Maintenance

CitiPower's maintenance programs are generated from a number of different sources, the main one being the asset inspection program (refer Section 6.1).

Maintenance defects can also be raised via:

- Employees or contractors.
- Customer calls.
- BFM vegetation inspections/audits.
- The "Report It" Application.

Refer Section 10.2 for more information on audits.

Defect Management

Maintenance works identified through the inspection program, audits, observations or raised by customers are issued for remediation. Resources are scheduled to match the needs of the issued projects to achieve the required response times. The defect priority and rectification timeframes are detailed in Section 6.2.

Faults/Fault Follow-up

Operational procedures for the repair of defects identified through the Network Faults/Outage process, including temporary repairs are contained within:

- Manage Network Faults Procedure (JEQA4UJ443MT-149-83)
- Manage Fault Follow-Up and Repair Guideline (JEQA4UJ443MT-149-115).

Customer fault calls are received by the CitiPower Customer Contact Centre 24 hours a day, 7 days a week. Likewise, fault calls may also be received by CitiPower's System Control Centre directly from asset inspectors, operators, and emergency services. The Dispatch Group has responsibility for prioritising trouble orders and assigning to field crews. Trouble orders are prioritised as either high, medium, or low using the following principles:

- Safety of the public and our workforce.
- Customer satisfaction.
- Supply reliability and quality.
- Field crew workload management – including stand-down impacts.

There are two trouble order classifications:

- No-service (NS) which relate directly to supply issues including all supply fail, part supply fail, dim lights, and intermittent supply.
- In-service (IS) which include faults which may or may not have supply impacts such as wires down, car hit pole, wire low, animal on asset etc.

Priorities assigned to NS trouble orders are generally based on the number of customers impacted as shown in Table 7, however, the priority of the order may change if:

- there is immediate safety risk to the public or employees (priority is assigned as High)
- the customer is a dairy farm or commercial business (priority is assigned Medium).

Table 7: NS Trouble Order Priority Assignment

Customers Affected	Priority
1	Low
2-10	Medium
>10	High

Priorities assigned to IS trouble orders are based on the type of fault, the information in the trouble order and additional information collected during validation. Where there is an immediate risk to public or employee safety, these trouble orders are assigned a High priority.

Where the fault crew have undertaken partial or temporary repairs a Fault Follow-Up repair action is created. All items assigned for Fault Follow-Up are issued to the appropriate work group, scheduled for completion, and actioned within 42 days.

Audits/Observations

Asset defects identified during audits/observations are communicated in accordance with the particular audit process.

Non-Cyclic Maintenance

Maintenance items found out of cycle are reported using the "Report It" Application where defects are prioritised and attended to within the timeframes specified in Table 6.

6.4 Asset Replacement/Modification for Specific Assets

CitiPower has several specific maintenance procedures and policies that deal with the replacement and modification of CitiPower assets. These include:

- High Voltage Fuses Policy (D-320): High voltage fuse failures can result in fire starts. HV fuses are inspected as part of the cyclic asset inspection program.
- Distribution Surge Arresters Policy (D-540): Surge arresters protect electrical assets from damage which may otherwise result in a fire start. Surge arrestors are inspected as part of the cyclic asset inspection program.
- Maintenance Procedure - Pole Top Assembly (PR-5063.01):
  - Crossarm failures may result in conductors or other associated assets falling to the ground which may result in a fire start. Crossarms and securing hardware, which include crossarm braces, kingbolts and anti-split bolts are inspected as part of the cyclic asset inspection program.
  - Defective high voltage insulators may lead to wooden crossarm and pole fires. These failures may also lead to conductors or other hardware falling to the ground which may result in a fire start. Bird covers provide insulation between live and conductive parts of structures, which prevent bird and animal related faults which may also result in fire starts. These assets are inspected as part of the cyclic asset inspection program.
- Maintenance Procedure - Poles and Towers (PR-5062.01):
  - Poles and towers classified as unserviceable need to be actioned by replacement or repair within the prescribed timeframes. Failure to do so may result in the pole or tower failing and starting a fire. Unserviceable poles and towers are identified as part of the cyclic asset inspection program.
  - Permanent reinforcement systems maintain the functional performance of a wooden pole. Reinforcement systems that fail to perform their intended function may lead to the pole failing and starting a fire. Permanent reinforcement systems are inspected as part of the cyclic asset inspection program.
- Maintenance Procedure - Overhead Conductors (PR-5064.01):
  - Conductor failures may result in fire starts. Overhead conductors are inspected as part of the cyclic asset inspection program.
  - Spreaders and spacers prevent conductor clashing and hence potential fire starts. These assets are inspected as part of the cyclic asset inspection program.

Defects identified via the above strategies are assigned repair priorities as detailed within the Maintenance Defect Priority Standard (CPPAL-ST-5060.01).

6.5 Vegetation Management

CitiPower is responsible for the management of vegetation around power lines and other electricity assets in the network. In some urban locations there are "Declared Areas", where the Councils are managers of public land and are responsible for keeping trees clear of electric lines.

CitiPower's vegetation activities are managed in accordance with the Electric Line Clearance (Vegetation) Management Plan.

CitiPower's accepted Electric Line Clearance (Vegetation) Management Plan outlines management processes, programs and cycles for maintaining clearances between vegetation and network assets.

6.6 Private Electric Lines

Inspections

CitiPower has an obligation under the *Electricity Safety Act 1998* to inspect Private Electric Lines (PELs) that are above the surface of land within its distribution area, other than any prescribed parts of those lines as defined in Regulation 9 of the *Electricity Safety (Bushfire Mitigation) Regulations 2023*. Point of Supply definitions are determined as per the *Electricity Safety Act 1998.* PELs are inspected to identify any defects, or infringing vegetation, which may affect the fire and/or electrical safety of the line.

Electricity Safety (Bushfire Mitigation) Regulations 2023

The *Electricity Safety (Bushfire Mitigation) Regulations* were amended in 2023, which included additional requirements associated with PELs:

- inspection of clearances
- hazard tree inspection by qualified arborists.

Inspections are undertaken to include the prescribed standards of inspection contained in section 10 of the *Electricity Safety (Bushfire Mitigation) Regulations 2023*. There are three variations to these prescribed standards of inspection being applied by CitiPower.

CitiPower meets the required outcomes of regulation 11(1)(j), 11(1)(k) and 11(1)(l) by the inspection techniques shown below.

1. The condition of hardwood PEL poles located in concrete is determined by drilling down at an angle to inspect the condition of the pole below concrete level to determine the millimetres of wood free of decay and the presence of termites.
2. The condition of treated pine PEL poles is determined by assessing the degree of external rot and also measurement of the pole girth. CitiPower meets the required outcomes of regulation 11(1)(l) by the inspection technique shown in (3) below.
3. The condition of steel PEL poles located in concrete is determined by a visual inspection down to the point where the pole enters into the concrete to ensure that the pole retains 75% of steel thickness in the corroded area when compared against a non-corroded area on the pole.

Operational procedures for CitiPower's PEL inspection program are contained within the following documents:

- Maintenance Procedure - Private Electric Lines (PR-5062.02).
- Asset Inspection Manual (CPPAL-MA-0450).

CitiPower's asset inspectors attempt to liaise with PEL owners regarding PEL inspection requirements before commencing any work. If the PEL owner is not home or is not spoken to, the asset inspector is required to leave a pamphlet informing PEL owners that an inspection of their PEL was undertaken, a summary of inspection findings and general information regarding PELs including the requirement for CitiPower to inspect PELs as required under the *Electricity Safety Act 1998*. A copy of this pamphlet is contained in Appendix C.

The annual PEL mail out ensures that all CitiPower customers who have a PEL will receive a letter and a brochure. The letter provides relevant information as well as our policy on defective PEL's. The brochure covers topics including ownership, responsibilities, maintenance, vegetation clearance, electrical safety, disconnection, and a guide to PEL inspection. The mail out of these normally commences in early November.

CitiPower notifies the owners of up-coming PEL inspections, as required in the *Electricity Safety (Bushfire Mitigation) Regulations 2023*. These letters notify the owner which part of the line we will be inspecting and what will happen if defects are found (Refer Appendix D). Notice is given not less than 21 days and not more than 45 days before inspection.

Disconnection

PELs that are identified as having a fire risk defect are disconnected on TFB days. Landowners, or occupiers, who are responsible for a defective PEL, are given up to 30 days to rectify vegetation infringements or other urgent defects. Every attempt is made to contact the customer by phone as soon as CitiPower becomes aware of the defect during the

declared fire danger period. If such defects are not corrected within this time the owner, or occupier, is given further written notice following which they are advised that the matter has been referred to the ESV as required, according to referral advice provided by ESV.

CitiPower regularly contacts the responsible landowner, or occupier, by telephone to monitor the progress of corrective action. The requirements for reinspection of PELs referred to ESV for non-compliance are contained within the Identification, Recording and Rectification of Defective PELs (LV) Procedure (JEQA4UJ443MT-158-503).

Any hazardous PEL found during inspections are disconnected to ensure fire and/or electrical safety. Supply is not restored until the installation is safe to reconnect.

ESV has approved the disconnection of PELs with urgent fire defects on TFB days. When a disconnection is necessary, CitiPower's Customer Compliance Group advises the customer and creates an entry in the Outage Management System (OMS) which prompts the System Control Centre to dispatch a crew to disconnect supply.

Operational procedures for the identification and rectification of defective LV PEL are contained within the Identification, Recording and Rectification of Defective PELs (LV) Procedure (JEQA4UJ443MT-158-503).

6.7 New Technologies

CitiPower is committed to continuous improvement. This often involves trialling or developing new technologies, which if successful and meets AFAP requirements will be adopted as normal business practice. CitiPower will keep ESV informed of inflight initiatives (listed below) and new initiatives on a quarterly basis.

6.7.1 Smart meter detection algorithms

CitiPower continues to leverage AMI smart meter data to develop algorithms to reduce network safety risk. CitiPower has developed and recently implemented an algorithm that assists detect deteriorating LV assets including Fused Overhead Line Connection Boxes (FOLCBs) and Fused Switched Disconnect (FSDs). The performance of the algorithm is currently being monitored and adjusted to achieve optimum sensitivity detection levels.

CitiPower is also currently developing and trialling algorithms to identify potential HV fuse candling and overloaded distribution transformers.

6.8 Conductor Clearances (T-On and T-Off Structures)

CitiPower has implemented an asset inspection-based program to identify, prioritise, and rectify conductor clearance defects to improve the management of conductor clearances.

This section should be read in-conjunction with section 6.1.4 which describes the implementation of CitiPower's LiDAR conductor clearance inspection methodology to support the management of conductor clearances at the pole or in-span to ensure minimum clearance heights are maintained.

In assessing these risks, CitiPower has considered the factors associated with designing, operating, constructing, and maintaining electricity networks in our differing environments, which potentially contribute to increasing the risk of fire ignition due to conductor clashing or flashover, to include:

- Changes in design and construction standards that have varied over the asset's life cycle.
- Incorrect inspection and maintenance practices for identifying conductor clearance breaches.
- Incorrect application of design and construction standards.
- Asset condition change or deterioration over time impacted by environmental conditions (weather, wind, ground subsidence etc).

CitiPower is committed to reducing the risk of bushfire ignition arising from conductor clashing or flashover associated with vertical clearance for crossing at T-on and T-off structures, by implementing the following high-level summary of key controls:

- For new assets, application of its design and construction standards to the requirements of *AS/NZS 7000:2016 Overhead Line Design*, to mitigate the risk and potential consequence(s) of a conductor clearance breach leading to a clash or flashover, based on fire area.
- Application of the Maintenance Procedure - Overhead Conductors Clearances (PR-5064.02) to manage the identification, measurement, priority, and actions - setting out the reporting triggers and rectification time frames for clearances between conductors on the same or different circuits at all T-on and T-off structures.
- Removal of high voltage T-on structures as a standard structure and can only be adopted, where no alternative design solution is viable, following the completion of a safety in design risk assessment and approval of a non-standard design as set out in the procedure.
- Inspection and measurement of vertical clearance for high voltage and sub-transmission (attached) crossings at T-on and T-off structures.

- Any leaning poles identified through the cyclic inspection program that have a T-on structure on the same pole or at the other side of the span will have their lean measured and recorded, and the clearance between conductors will be measured by an asset inspector. Where a clearance breach is identified it will be recorded as a higher priority defect.

CitiPower is committed to continuous improvement, as evidenced by the implementation and use of new technology to manage the risk associated with conductor clearance breaches, to complement our existing cyclic ground-based inspections by asset inspectors.

CitiPower's governance and assurance processes for monitoring and ensuring the effectiveness of controls, specifically relating to training and reporting, monitoring, and auditing, are contained within sections 6.10, 7 and 10.

6.9 Resourcing

CitiPower ensures appropriate resources are available to carry out the activities outlined in this plan.

A detailed asset inspection program, of the following years work, is developed and provided to our Asset Inspection Group to enable them to plan their resource requirements to meet the program's needs.

CitiPower is responsible for the overall vegetation program management with sub-contractor/s engaged to complete inspection and cutting tasks.

6.10 Training

CitiPower has an established and documented system to ensure that employees and contractors who are working on or near the electricity network are suitably competent and adequately trained to carry out their duties.

The key steps that CitiPower has in place to manage competency and training requirements are illustrated in Figure 4.

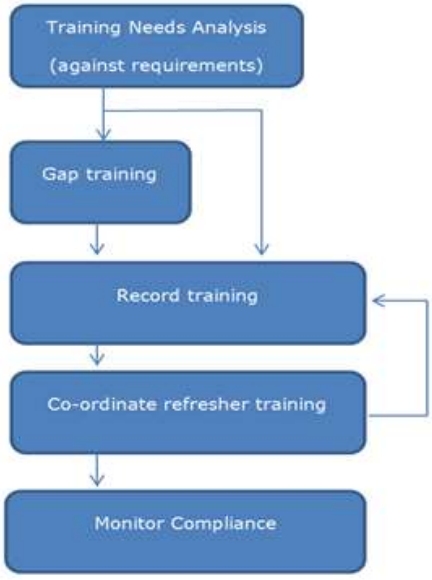

Figure 4: Competency and training process

In CitiPower, the Electricity Networks business unit sets the training standard for workers who are working on or near the electricity network. The training standards are established through the industry committee VESI Skills and Training Reference Committee for consistency within the State and nationally through Industry Reference Committees.

If training is required specifically for CitiPower this is co-ordinated as Enterprise training for employees. For contractors, requirements for additional training would be included in a contract agreement.

Further detail can be found in the Technical Training Compliance Policy (JEQA4UJ443MT-173-25) and Technical Training Guideline (JEQA4UJ443MT-173-28).

All Asset Inspectors are required to meet the training requirements as specified in the *VESI Skills and Training Matrix.* These training requirements are confirmed by CitiPower when an application request is made for an Asset Inspector to work on the network.

Where the qualification (being Cert II in ESI Asset Inspection UET20612 or subsequent version) has been attained in a State or Territory of Australia other than Victoria, induction to CitiPower requirements (including our procedures) is conducted by a person holding a Certificate IV in Training and Assessment.

CitiPower has developed enterprise specific competency standards for the activity of asset inspection. These standards provide contractors and training providers with the information necessary to develop appropriate training courses that will enable individuals to become approved to inspect CitiPower assets.

Ongoing competency

Audit processes are in place to ensure that there is consistent application of knowledge and skill to the standard of performance required for asset inspectors.

Asset Inspector audit findings are rated and the cause of the finding identified. This may result in the need for refresher training or mentoring of the Asset Inspector to ensure the required competency is achieved.

Overall performance of the asset inspector is monitored whereby frequency rates of audits are determined based on their performance.

CitiPower has implemented the Australian ESI Skills Passport in 2010. The Australian ESI Skills Passport system has enhanced the portability of the ESI workforce by mutual recognition of agreed training standards. Training is recorded in the passport and can be viewed to confirm currency of training for the task being undertaken. Further information can be located at www.esipassport.com.au.

The training programs for specific job roles in bushfire mitigation activities are described below.

Asset Inspection

As per ESV's *Training Approval Statement, Asset Inspectors*, asset inspectors working on the CitiPower network are required to hold a Certificate II in Asset Inspection (Course Code: UET20612 or subsequent version).

The *VESI Skills and Training Matrix* stipulates the requirements and frequency of refresher training for Asset Inspectors. The matrix is available at www.vesi.com.au.

Vegetation Management

All training requirements for vegetation management are covered in the Electric Line Clearance (Vegetation) Management Plan.

Line Work

The *VESI Skills and Training Matrix* stipulates the qualifications and refresher training for a line worker. The employing company is required to organise training to the standards referred to in the matrix. The employing company will keep records of all training undertaken.

Line worker apprentices are engaged in bushfire mitigation activities from time to time. This provides experience in a broad range of tasks. When companies engage apprentices, they work under the *VESI Apprentice Supervision Guidelines* as published on the VESI website www.vesi.com.au.

Formal training of apprentices, in line work, is conducted by a Registered Training Organisation (RTO) and this training is supported "on the job" by designated mentors and tradespersons.

Technical Standards

CitiPower's Technical Standards group provide information to CitiPower employees and contractors with regard to new initiatives in the design and construction of network assets, generally on a monthly basis. If a significant new item of equipment or a significant new technical standard is being introduced, then specially convened information sessions may be conducted.

All contractors or other external persons associated with works on CitiPower assets can register with CitiPower to gain "read only" access to CitiPower's technical standards.

Information sessions are also stored in the "Source" document portal on CitiPower's Intranet System for future viewing.

6.11 Liaison with Other Organisations

CitiPower has a procedure for coordinating BFM activities and emergency procedures with relevant organisations which may include any of the following:

- ESV
- Fire Rescue Victoria (FRV)
- State Emergency Service (SES)
- DEECA
- Department of State Development, Business & Innovation (DSDBI)

- Municipalities
- Mutual Aid Plan Planning Committee (MAPPC)
- Bureau of Meteorology (BOM)
- Other Distribution/Transmission Network Operators.

Actions to be undertaken in the event of a major event or emergency are contained in the Incident Management Procedure (JEQA4UJ443MT-185-28490) and Crisis Management Plan (JEQA4UJ443MT-154-386)

These documents include the responsibilities for communications with emergency services and other relevant organisations during events such as:

- Loss of the System Control Centre
- Major supply outages
- Major plant faults
- Lack of supply capacity (load shedding)
- Fires and incidents.

6.12 Public Awareness

In an effort to maintain community awareness of bushfire hazards, CitiPower provides information to the public concerning various BFM activities. CitiPower is committed to enhancing public awareness of:

- the potential risks associated with PELs
- the risks of planting inappropriate vegetation near electrical lines
- vegetation species suitable for planting near powerlines
- inspection timeframes
- other fire related matters.

As part of its Vegetation Management and PEL inspection programs, CitiPower makes the following information available to its customers, via the CitiPower website:

- Planting Trees Near Power Lines
- PELs - Understanding Your Responsibilities.

CitiPower prepares an annual BFM communications plan with a high-level objective of being recognised as an organisation which values genuine engagement with its key stakeholders and local communities.

The communications plan may be outworked using various forms and channels including social media posts, traditional media releases, newspaper articles & advertisements, radio advertisements & interviews, TV interviews and face to face meetings with various stakeholders.

CitiPower releases an annual communication to Registered Electrical Contractors (RECs) within our service territory, in an effort to raise awareness and appreciation of the importance of PEL maintenance works and complying with the regulations and CitiPower's processes.

For details of communication with PEL owners refer to Section 6.6.

6.13 Assistance Provided to Fire Agencies

The Fire Rescue Victoria (FRV) is the fire-fighting services, operating within CitiPower's service area.

CitiPower will provide assistance and work with the relevant fire control agency in the investigation of fires near our supply network.

CitiPower's Emergency Management Liaison Officers (EMLOs) are available to attend fire agency command centres and provide information or assistance with issues relating to our distribution assets. An EMLO is a person that acts as a go-between or the link between two organisations to communicate and coordinate their activities.

Emergencies

Any requests for resources to assist fire agencies are coordinated by the Network Controller, from CitiPower's System Control Centre.

Fire emergencies are communicated directly to the System Control Centre via a direct phone number for emergency services organisations. Fault Crews are then promptly dispatched according to the information received.

CitiPower will work with the relevant fire control agency to provide safe access to a fire or accident scene involving CitiPower assets. This may include de-energisation of electrical assets upon request.

Further detail of actions to be undertaken in the event of a major event or emergency are contained in the Incident Management Procedure (JEQA4UJ443MT-185-28490) and Crisis Management Plan (JEQA4UJ443MT-154-386)

CitiPower also has representation on the State Control Centre (SCC) electricity industry roster for EMLOs. An EMLO will provide the technical or subject matter expertise relating to the electricity industry and embeds an EMLO into the SCC to provide face-to-face coordination.

Information Exchange

There are a number of different forums for information exchange that take place between the fire agencies and CitiPower, including through engagements with Emergency Management Victoria.

Each year prior to the fire danger period, the FRV is requested by ESV to hold an information day to provide a briefing and forecast for the coming season. Information presented includes the likely severity of the season and identification of high-risk areas. This information day is attended by Victorian electricity distributors (including CitiPower), transmission operators and representatives from the ESV.

Information relating to the Fire Season declaration dates is provided to CitiPower by FRV both through the receipt of Fire Season Declaration notices and also through discussions with FRV Regional Community Safety Managers.

6.14 Total Fire Ban Days

The communication of TFB days is carried out by the Control and Operations Group after notification from the CFA.

As the CitiPower service area is LBRA, there are no auto reclose suppressions or fault energy reduction undertaken, defective PELs are not disconnected, and observers are not posted or patrols undertaken of items outside policy on a day of TFB.

For works involving welding, cutting, grinding, or use of naked flame, permits from the appropriate organisation (e.g. FRV) are used and adhered to.

6.15 Declared Fire Danger Period

During the Declared Fire Danger Period, CitiPower will continue with normal operation of its electrical assets. Most of CitiPower's operational and maintenance activities are configured to be undertaken for the full 12 months of the year, irrespective of Declared Fire Danger Periods.

6.16 Fire Management

In the event of a fire, CitiPower's operational and maintenance activities include:

- Receiving notification from or supplying notification to the relevant fire control agency regarding a fire event.
- Liaison with the relevant fire control agency regarding appropriate actions as required.
- Dispatching field crews for fault rectification or as directed/requested by the relevant fire control agency.
- Deployment of EMLOs if required to any Incident Control Centre established by the relevant fire control authority.
- Managing the fire event as set out in the Incident Management Procedure (JEQA4UJ443MT-185-28490) and Crisis Management Plan (JEQA4UJ443MT-154-386).

7. Program Timing

CitiPower has produced a set of combined BFM program milestones which specify the completion dates required for key BFM activities. A copy of the BFM program milestones document is attached in Appendix A.

The asset inspection program dates are determined by the maintenance plan, in accordance with the relevant asset policy and are generated from SAP.

Remedial maintenance and asset replacement/modification is completed in accordance with the priority classification referred to in Section 6.2 and the Maintenance Defect Priority Standard (CPPAL-ST-5060.01).

Timing of vegetation management activities are undertaken in accordance with CitiPower's Electric Line Clearance (Vegetation) Management Plan.

8. Fire Investigation

Any fire starts initiated by CitiPower assets according to ESV reporting guidelines are reported to ESV. The System Control Centre identifies any fire starts from outage information or from external advice and notifies the Network Availability Officer (NAO) who investigates each situation according to the information provided. The NAO then sends completed reports to the Network Risk & Assurance team for checking and collation and forwarding to ESV as per the ESV reporting guidelines.

At the annual BFM post season review, ground fire start statistics are presented and discussed.

Operational procedures for the reporting of fire starts are contained within:

- Incident Management Procedure (JEQA4UJ443MT-185-28490)
- Update ESV and AER Reportable Incidents in Cintellate Procedure (JEQA4UJ443MT-173-45)

The operational procedures for the reporting of fires contained within the Incident Management Procedure (JEQA4UJ443MT-185-28490) are in accordance with the requirements stipulated in ESV's *Incident and Safety Performance Reporting Guidelines - Major electricity companies* located on the ESV website:

https://www.esv.vic.gov.au/sites/default/files/2022-12/Electrical-Safety-Performance-Reporting-Guidelines-Rev-05072022.pdf.

The procedure ensures that CitiPower meets its responsibilities to employees, customers, members of the public and regulatory requirements.

9. Key Measures

9.1 Fire Starts

Reporting of ground and pole fires is undertaken as they occur and reported to ESV. Reporting procedures are contained within the following documents:

- Incident Management Procedure (JEQA4UJ443MT-185-28490)
- Update ESV and AER Reportable Incidents in Cintellate Procedure (JEQA4UJ443MT-173-45)

9.2 Asset Failures

As part of continuous improvement towards the mitigation of bushfires, CitiPower records the causes of fire ignition which are attributed to failures of electricity assets. Analysis of asset failures and failure trends are carried out in order to develop improvements to maintenance policies, technical standards, work practices and enhanced preventative actions which all contribute to risk management strategies. Investigation of failed assets is the responsibility of the Asset Investigation section.

The Asset Failure Investigation and Reporting Procedure (18-06-P0001) details the reporting, analysis, and investigation of failed assets.

9.3 BFM Milestones

CitiPower has produced a set of BFM program milestones which specify the completion dates required for key Electricity Networks BFM activities. These BFM activities are:

- Submit the Vegetation Management Plan (if required) to ESV.
- Conduct an annual BFM post season review.
- Submit the Bushfire Mitigation Plan (if required) to ESV.
- Complete the PEL mail out to CitiPower customers.
- Conduct the annual summer pre-season briefing to Senior Management.

The achievement of these milestones is closely monitored and a copy of the BFM Program Milestones is attached in Appendix A.

10. Reporting, Monitoring and Auditing

10.1 Report and Monitoring

The Bushfire Mitigation Committee provides management and governance of the bushfire mitigation processes and fire season readiness activities.

Reporting processes are established which ensures that all levels of the BFM management structure, including executive management levels and ESV, are informed of the status of the company's preparedness and fire performance.

The reporting process incorporates requirements for:

- Prior to the Declared Fire Danger period
- During the fire danger season

- On Total Fire Ban days

Asset Inspection

The Asset Inspection program is monitored by the Asset Inspection Group.

An automated daily exception report is generated from SAP and distributed by e-mail to relevant employees who monitor the asset inspection program. The Asset Inspection Group investigates any overdue poles, towers and associated assets to ensure appropriate action has been taken (including PEL poles).

Maintenance

An automated daily Priority 1 report is generated from OMS and distributed to relevant employees by e-mail. The Operational Faults Manager checks any outstanding items to ensure prompt action.

An automated daily Priority 2 exception report is generated from SAP and distributed by e-mail to alert relevant employees of defects that are overdue for rectification or close to becoming overdue. Operational procedures for the Maintenance Program Group to investigate outstanding defects and follow up actions are contained within the Maintenance Risk Assessment Procedure (SRCE 44719848-38419).

Vegetation Clearance

CitiPower produce a weekly report which is distributed to key stakeholders. This report provides program status updates on all vegetation management programs. Status reporting on vegetation outside policy is included into the BFM Status report.

ESV

CitiPower's reporting schedule to ESV, on its BFM activities, is listed below:

- Annual Vegetation Management Plan (supplied every 5 years, minimum).
- Bushfire Mitigation Plan (supplied every 5 years, minimum).
- BFM Status Report (reported monthly or weekly during the Declared Fire Danger period).
- Vegetation Compliance (reported monthly or weekly during the Declared Fire Danger period).
- Ground and pole fire starts (reported as they occur).
- Fire Start Statistics (reported to ESV as per the ESV reporting requirements).
- Safety Program Report (Quarterly).

Reporting on issues found through ESV audit processes is carried out on request.

10.2 Auditing

CitiPower's Audit and Inspection Programme Requirements Policy (JEQA4UJ443MT-175-29) provides information for the preparation of audit and inspection programmes.

Considering the range of audit and inspection programmes conducted across the organisation, each programme is required to determine the:

- scope of review or focus area
- classification of review activity as Audit or Inspection
- training/competency/qualification requirements of the auditors/inspectors executing
- frequency of review activities
- method of selecting or prioritising the items/aspects to review.

CitiPower also has a program of system audits to validate the effectiveness of BFM processes, policies and systems used to manage or monitor BFM activities, these include:

- Internal audits of the maintenance management programs and processes which are carried out by Audit Services. These audits are conducted to an internal audit schedule.
- An annual ESV audit which is conducted in the lead up to the fire danger period and concentrates on adherence to the BFM plan and the processes and procedures that support the plan.

Audit improvement recommendations are documented and followed up for completion.

Other audits undertaken are described below.

Asset Inspection Audits

CitiPower's Asset Inspection Group have a self-audit program that they manage and maintain. Any findings require a follow up audit of all inspectors where sub-standard work is identified. An intensified audit program is then established for that inspector until the attainment of satisfactory results.

Additionally, an independent third-party service provider is engaged to audit the performance of the asset inspectors.

CitiPower's Asset Inspection Group monitor the results of their completed audits (including PEL inspections) and corrective actions proposed/undertaken as part their monthly asset inspection reporting.

Operational procedures relating to these audits are contained within the Audit and Inspection Programme Requirements Policy (JEQA4UJ443MT-175-29), the Asset Inspection Audits (Internal) procedure (SRCE-447194848-38356), and the External Audit of Asset Inspectors procedure (SRCE-447194848-38495).

Monitoring and auditing of the effectiveness of inspections and the competence of persons assigned to carry out inspections under the plan shall be done by monitoring and auditing the adherence to works practices which demonstrate skills and knowledge in Asset Inspection.

Maintenance Audits

Maintenance project field audits are undertaken by the Network Services Field Audit and Quality Group, who have an audit program that includes random audits of completed projects, to ensure that the relevant technical standards and design specifications have been achieved in the finished project. Any additional audits are completed upon request.

This program results in a number of maintenance projects being audited each year.

Network Services have a structured audit program that audits key maintenance works and involves Program Managers, Construction Project Leaders and Maintenance Officers.

Vegetation Audits

CitiPower's Vegetation Quality & Engagement Team audit the activities and effectiveness of our vegetation management contractor in accordance with a documented audit schedule.

The vegetation management contractor also has their own internal audit program which addresses two key issues:

- Accuracy of vegetation identification and classification.
- Vegetation trimming/removal to the requirements of the code.

11. Reviewing

The CitiPower BMP is frequently reviewed and amended as required. There are various means by which feedback is obtained and potential improvements are identified including:

- Changes in Regulation.
- Post Fire Season Review – this review meeting is held at the end of the fire danger period to review performance under the plan. Attendees include CitiPower senior managers, corporate risk personnel, internal auditors, and key personnel involved in the BFM program. Presentations are delivered on the business's performance in each of the key BFM activities. Improvement opportunities are discussed and included into the BMP if required.
- Summer Pre-Season Briefing – this briefing is held before the start of the fire declaration period. It provides an opportunity to report on the progress of BMP activities and to plan contingencies, if the need arises, to meet the requirements of the plan.
- Internal and external audit findings.
- Technology changes.

Operational procedures for the review and update of the BMP is contained within the Bushfire Mitigation Plan Creation & Update Procedure (JEQA4UJ443MT-161-523).

12. Referenced Documents

Table 8: Internal References

Title	Document No.
Asset Failure Investigation and Reporting	18-06-P0001
Asset Inspection Audits (Internal) Procedure	SRCE-447194848-38356
Asset Inspection Manual	CPPAL-MA-0450
Asset Inspection Procedure	18–20–P0002
Audit and Inspection Programme Requirements Policy	JEQA4UJ443MT-175-29
Bushfire Mitigation Plan Creation & Update Procedure	JEQA4UJ443MT-161-523
Bushfire Mitigation Policy	PO-0003
Crisis Management Plan	JEQA4UJ443MT-154-386
Developing, Updating or Retiring an Asset Management Plan	PR-0009
Distribution Construction Standard DC 161 Clearances - Conductors on the Same Support	DC 161
Distribution Surge Arresters Policy	D–540
Electric Line Clearance (Vegetation) Management Plan	CPPAL & UE 2021-2026 ELCMP V2.3
Electricity Safety Management Scheme	JEQA4UJ443MT-173-116
Facilities for REFCL Performance Testing	CP_PAL_REFCL_105
High Voltage Fuses Policy	D–320
High Voltage Private Electric Lines Policy	05-C001.D–431
Identification, Recording and Rectification of Defective PELs (LV)	JEQA4UJ443MT-158-503
Inaccessible Asset Procedure	18–20–P0004
Incident Management Procedure	JEQA4UJ443MT-185-28490
Maintenance Defect Priority Standard	CPPAL-ST-5060.01
Maintenance Procedure – Conductors Aerial Line Clearances	PR-5064.02
Maintenance Procedure – Distribution Thermographic Inspection	CPPAL-PR-5060.01
Maintenance Procedure - Distribution Transformers	CPPAL-PR-5071.01
Maintenance Procedure - Private Electric Lines	PR-5062.02
Maintenance Procedure - Poles and Towers	PR-5062.01
Maintenance Procedure - Pole Top Assembly	PR-5063.01
Maintenance Procedure - Overhead Conductors	PR-5064.01
Maintenance Procedure - Overhead Conductors Clearances	PR-5064.02
Maintenance Risk Assessment Procedure	SRCE 44719848-38419
Manage Fault Follow-Up and Repair Guideline	JEQA4UJ443MT-149-115
Manage Network Faults Procedure	JEQA4UJ443MT-149-83
Management of Maintenance Items Outside Policy Work Instruction	JEQA4UJ443MT-158-543
Planting Trees Near Power Lines	
PELs - Understanding Your Responsibilities	
Serviceability Assessment of Poles Standard	CPPAL-ST-5062.01

Title	Document No.
Technical Training Compliance Policy	JEQA4UJ443MT-173-25
Technical Training Guideline	JEQA4UJ443MT-173-28
Update ESV and AER Reportable Incidents in Cintellate Procedure	JEQA4UJ443MT-173-45

Table 9: External References

Title	Document No.
Country Fire Authority Act 1958	
Country Fire Authority Regulations	
Electricity Safety Act 1998	
Electricity Safety Amendment (Bushfire Mitigation Civil Penalties Scheme) Act 2017	
Electricity Safety (Bushfire Mitigation) Amendment Regulations 2016	
Electricity Safety (Bushfire Mitigation) Regulations 2013 (amended 2020)	
Electricity Safety (Bushfire Mitigation) Regulations 2023	
Electricity Safety (Bushfire Mitigation) Regulations 2023 Regulatory Impact Statement	
Electricity Safety (Electric Line Clearance) Regulations 2020	
ESV Incident and Safety Performance Reporting Guidelines - Major electricity companies	
ESV Training Approval Statement, Asset Inspectors	
Knapsack Spray Pumps	AS 1687 - 1991
Overhead Line Design	AS/NZS 7000 - 2016
Portable Fire Extinguishers	AS 1841.2 - 1997
Review of Voltage Standards for Bushfire Mitigation 2018	
VESI Apprentice Supervision Guidelines	
VESI Skills and Training Matrix	

13. Definitions

Table 10: Terms and Definitions

Term	Definition
CitiPower	CitiPower Pty Ltd
Fire Danger Period	A period declared under section 4 of the Country Fire Authority Act 1958 to be a fire danger period
Private Electric Line	Any low voltage line used to take electricity from the point of supply, whether or not that line is vested in the electricity supplier
Total Fire Ban Day	A day that has been declared to be a day of total fire ban under section 40(1) of the Country Fire Authority Act 1958

Table 11: Acronyms, and abbreviations

Acronyms, abbreviations	Definition
ABC	Aerial Bundled Conductor
ACR	Automatic Circuit Recloser
ACT	Annual Capacity Test
AER	Australian Energy Regulator
AFAP	As Far As Practicable
AIM	Asset Inspection Manual
AMP	Asset Management Plan
AS	Australian Standard
BFM	Bushfire Mitigation
BMP	Bushfire Mitigation Plan
BOM	Bureau of Meteorology
CBRM	Condition Based Risk Model
CP	CitiPower
DAPR	Distribution Annual Planning Report
DB	Distribution Business
DEECA	Department of Energy, Environment and Climate Action
DSDBI	Department of State Development, Business & Innovation
EDO	Expulsion Drop Out
EMLO	Emergency Management Liaison Officer
ESC	Essential Services Commission
ESMS	Electricity Safety Management Scheme
ESV	Energy Safe Victoria
FMC	Field Mobile Computing
FOLCB	Fused Overhead Line Connection Box
FRV	Fire Rescue Victoria
FSD	Fused Switch Disconnect
GIS	Geographical Information System
HBRA	Hazardous Bushfire Risk Area
HV	High Voltage
HVC	High Voltage Customers
HVCC	High Voltage Covered Conductor
ICT	Initial Capacity Test
IS	In-service
LiDAR	Light Detection and Ranging
LBRA	Low Bushfire Risk Area
MAPPC	Mutual Aid Plan Planning Committee
NAO	Network Availability Officer

Acronyms, abbreviations	Definition
NS	No-service
OMS	Outage Management System
P1	Priority 1
P2	Priority 2
P3	Priority 3
PDA	Portable Data Assistant
PEL	Private Electric Line (previously POEL – Private Overhead Electric Line)
PINS	Pole Inspection Orders
PN	Priority Notification for Information
POPP	Priority Opportunistic
REC	Registered Electrical Contractor
RESI	Resistograph
RCM	Reliability Centred Maintenance
RTO	Registered Training Organisation
SCC	State Control Centre
SDD	Sound, Dig, Drill
SES	State Emergency Service
TFB	Total Fire Ban
VESI	Victorian Electricity Supply Industry
VMS	Vegetation Management System
VP	Vegetation Priority

Appendix A: BFM Program Milestones

Table 12: BFM Program Milestones

Item No.	BFM Milestone Description	Activity	Responsible Officer/Business Stream	Target Date
1	Submit Electric Line Clearance (Vegetation) Management Plans to ESV.	Management Plan submission is a regulatory requirement.	Vegetation Manager	As required
2	Conduct the annual BFM Post Season Review.	Review previous fire season.	Head of Network Risk and Performance	31 May
3	Submit BFM Plan to ESV.	BFM Strategy plan submission is a regulatory requirement.	Network Risk and Assurance Manager	As required
4	Complete mail out to CitiPower PEL customers.	Letters will raise awareness / importance of PEL maintenance works with PEL owners.	Network Risk and Assurance Manager	30 November
5	Conduct the annual BFM Pre Season Review.	Review the upcoming fire season preparedness	Head of Network Risk and Performance	30 November

Appendix B: Vehicle Fire Equipment & Vehicle Movement

B.1 Vehicle Fire Equipment & Vehicle Movement

Declared Fire Danger Period & Total Fire Ban (TFB) Days

This applies for all CitiPower personnel including contractors and sub-contractors when travelling off-road. All drivers are to be advised that vehicles with hot exhausts entering grassed areas can initiate fires.

Definition of Off-road

"Vehicle travelling off a formed roadway or a paved or gravel surface".

During "Declared Fire Danger Periods" - for all travel on non-formed roadways or surfaces other than paved or gravel surfaces, a risk assessment must be undertaken.

The following checks should be included:

- Vehicle Clearance – Check that grass and other combustible material will not come in prolonged contact with the vehicle exhaust system whilst accessing/leaving the work site.
- Vehicles should be checked to ensure they are fitted with an efficient exhaust silencing device.
- Vehicles should be checked to ensure no grass or other combustible material is trapped on or near the exhaust system, both before going off-road and before leaving the work site.
- Vehicles must carry the prescribed fire suppression equipment prescribed in the *Country Fire Authority Regulations* i.e. At least one knapsack spray pump or stored pressure fire extinguisher of at least 9 litres capacity. (See below for more details).
- Check the worksite before leaving, looking for any signs of possible ignition.

Other Items for Consideration:

- During "Declared Fire Danger Periods", off–road activities should be limited as much as possible.
- Vehicles with greater ground clearance i.e. 4 wheel drive vehicles, are preferred to be used when travelling off-road.
- Drivers are to use already formed roads/tracks where possible, to access the work site, to limit contact with combustible material (If risk assessed as safe to do so).
- At the work site, park vehicles in areas where there is the least amount of combustible fuel.

B.2 Total Fire Ban Days (TFB)

On Total Fire Ban (TFB) days - off-road activity should be restricted to emergency/fault situations and other works necessary to maintain the network, which is risk assessed as safe to undertake.

Requirements applicable to the following items are described in procedure Minimising Fire Start Risk on Total Fire Ban Days (PR-0016):

- Fire Fighting Equipment; and
- Non-Vehicular Heat Engines (Examples: Generators, Hoggers, Chainsaws etc.)

Appendix C: Inspecting Powerlines on your Property Brochure

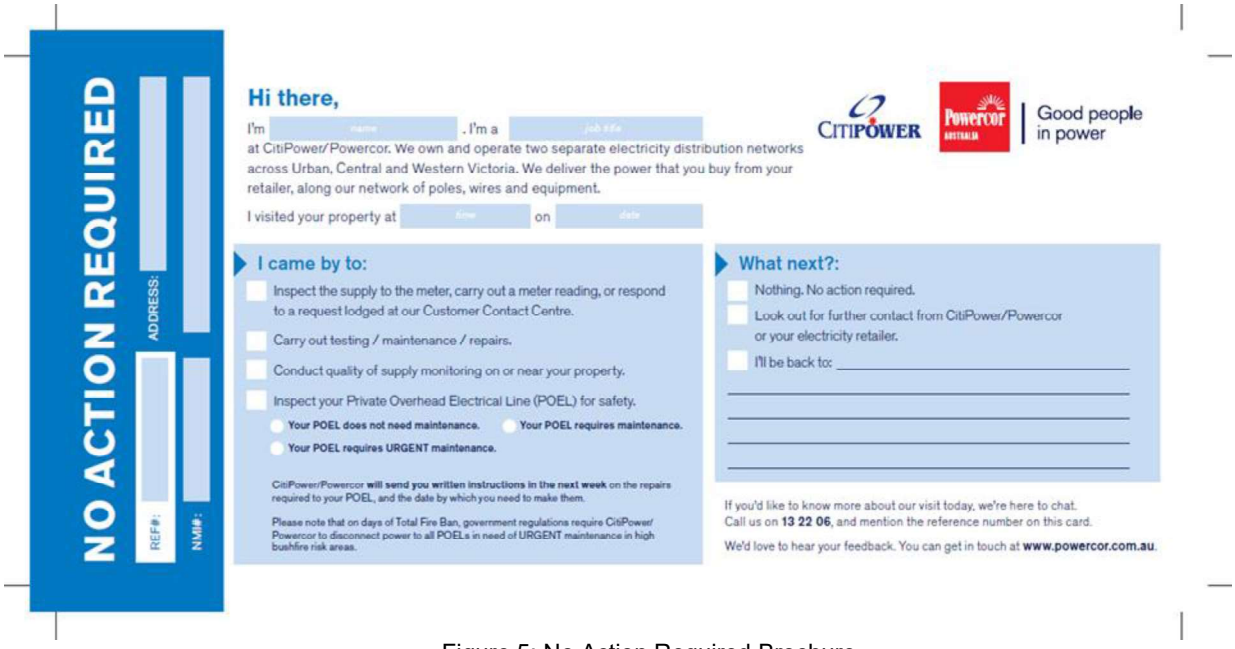

Figure 5: No Action Required Brochure

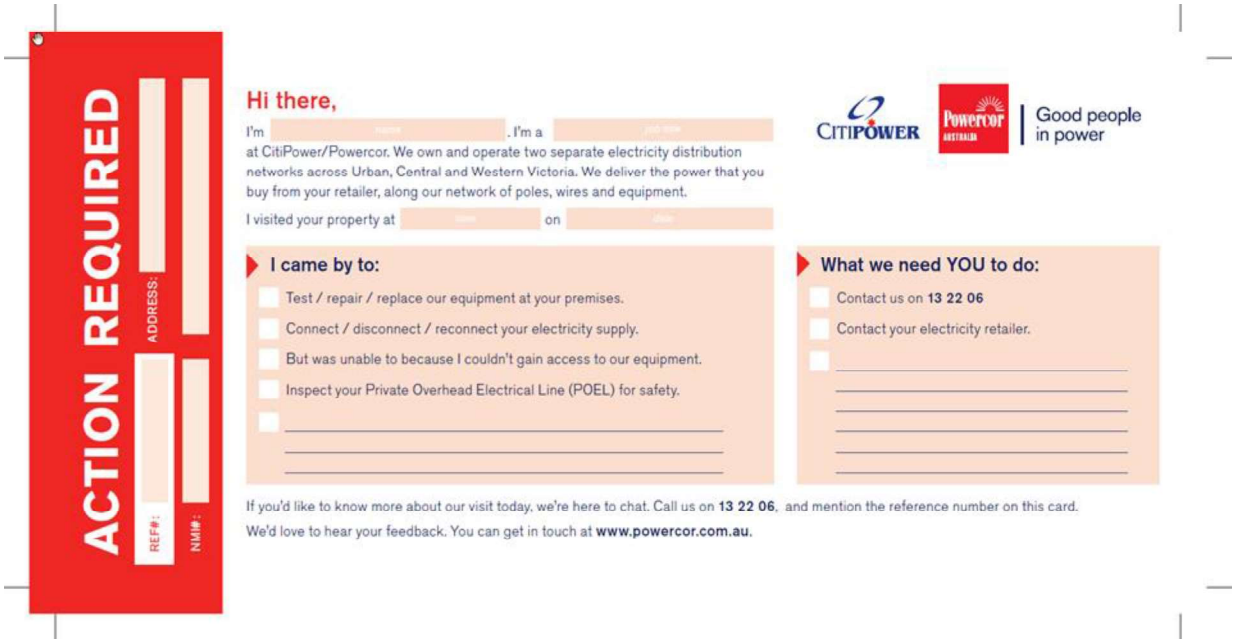

Figure 6: Action Required Brochure

Appendix D: PEL Inspection Notification Letter

CitiPower Pty
ABN 76 064 651 056
www.citipower.com.au

Head Office: 40 Market Street Melbourne Victoria
Telephone: (03) 9683 4444 Facsimile: (03) 9683 4499 DX 433 Melbourne
Postal address: Locked Bag 14090 Melbourne Victoria 8001 Australia

Powercor Australia Ltd
ABN 89 064 651 109
www.powercor.com.au

[*insert date*]

(Customer Name)
(Postal Address)

Supply Address:-
(Supply Address)

Account Number:-
(Account Number)

NOTICE OF INSPECTION

Dear Customer/Name

CitiPower and Powercor is inspecting Assets in your area as part of our routine 2.5 year inspection cycle.

In accordance with Section 113F of the **Electricity Safety Act**, please be advised that on or about [*insert date*] our asset inspector will inspect all private electric lines above the surface of land on the property you occupy that contain one or more private poles, except for those parts of the lines that are installed after the point at which they are connected to a building or other structure (not including a pole).

Our asset inspector requires safe, unhindered access to these lines for the purpose of this inspection. If the asset inspector is unable to gain safe, unhindered access to your private electric line, we will provide you with written advice that a time and date for inspection must be arranged.

The inspection may reveal that defects exist and maintenance is required on a private electric line on the property that you occupy. If this is the case, we will provide you with written notice of the maintenance work required to be carried out.

Please contact CitiPower and Powercor's Customer Contact Centre on telephone 132206 to speak with Mr John Perry if you have any queries.

Nick Osborn
Maintenance Planning Team Leader
CitiPower and Powercor

Figure 7: PEL Inspection Notification Letter

Appendix E: Bushfire Mitigation Plan Documents

Table 13 lists the documents that CitiPower will not change without first seeking ESV approval and are the only documents that form part of the BMP. References within these documents do not form part of the Bushfire Mitigation Plan.

Table 13: Bushfire Mitigation Plan Documents

Count	Document Title	Document No.	Revision Number	Date
1.	Maintenance Defect Priority Standard	CPPAL-ST-5060.01	1	14 October 2024
2.	Maintenance Procedure - Poles and Towers	PR-5062.01	1	3 December 2024