Coliban WATER

Bushfire Mitigation Plan

Powerlines (Bendigo WRP)

2024-2025

Version 7.0
October 2024

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Plan Authorisation

This Bushfire Mitigation Plan – Powerlines outlines how Coliban Water Corporation manages our overhead powerlines and associated electrical assets to mitigate bushfire risk and ensure our assets are safe and reliable.

As the owner and operator of electrical assets Coliban Water Corporation has prepared this plan in accordance with Section 83BA of the Electricity Safety Act 1998 and Section 6 (Prescribed particulars for bushfire mitigation plans—specified operators) of the Electrical Safety (Bushfire Mitigation) Regulations 2023, for approval by Energy Safe Victoria.

This plan is subject to annual review to ensure it describes current management regimes and processes, and to allow for continuous improvement.

Updated By:	Reviewed By:	Approved By:
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Asset Management Coordinator	Operations Manager – Bendigo & Castlemaine WRP	Program Director – Bendigo & Castlemaine WRP

Document Control and Version History

Version	Description	Approved By	Date
1.0	Document created	Mick Dunne	
1.1	Updated plan post ESV review	Mick Dunne	
2	2019-20 Final Plan	Mick Dunne	10/04/2019
3	2020-21 Final Plan	Mick Dunne	27/07/2020
4	2021-22 Final Plan	Mick Dunne	30/03/2021
5	2022-23 Final Plan	Danny Childs	30/06/2022
5.1	2022-23 Updated plan post ESV review	Danny Childs	21/10/2022
5.2	2023-24 Final Plan	Danny Childs	30/06/2023
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6	2024-25 Updated Plan	Danny Childs	20/06/2024
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7.0	Published on QA Docs	QA System Admin	7/10/2024

Definitions

Term	Definition
Annual Works Plan (AWP)	Coliban Water's preventative maintenance program conducted by Coliban Water's O&M Provider.
At-Risk Powerlines	High voltage powerlines located above the surface of land in HBRA.
BMPP	Bushfire Mitigation Plan - Powerlines
Coliban Region Water Corporation (Coliban Water)	Coliban Water is a large Victorian Regional urban water corporation that manages, maintains, and operates 35 reservoirs and water storage basins across North-Central Victoria and provides water and wastewater services to rural and urban customers across an area of 16,500 square kilometres.
ELCMP	Electric Line Clearance Management Plan
Electrical Asset	Any wire, fitting, cable, conduit, or apparatus (including lines, poles, transformers, switching devices and other associated equipment) used in the distribution or control of electricity.
Electric Line or Powerline	Whole or part of any wire, cable or component used for the purpose of transmitting, distributing, or supplying electricity.
ESV	Energy Safe Victoria (Regulator)
HBRA	Hazardous Bushfire Risk Area – An area that a fire control authority has assigned a fire hazard rating of "high" under section 80 of the Act; or an area that is not an urban area and has not been assigned a fire hazard rating of "low" under section 80 of the Act.
High Voltage Powerline	An overhead powerline which carries a voltage greater than 1000V (22kV for Coliban Water assets).
Maintenance	Works required to be undertaken on vegetation to maintain the minimum required clearance space to overhead powerlines. Includes pruning, clearing, cutting, or removing.
Minimum Clearance Space	Refers to the minimum clearance space (air gap) between electric lines and vegetation as per the requirements of the code.
Operations and Maintenance Contractor (O&M Contractor)	The O&M Contractor is responsible for the operation and maintenance of Bendigo WRP (among other plants) under a service agreement, including the organisation and management of grounds maintenance.

Regulatory Compliance Summary

This table is aligned with the structure of Section 83BA of the Electricity Safety Act 1998 and Regulation 6 of the Electricity Safety (Bushfire Mitigation) Regulations 2023 indicating which section(s) of the plan describes how compliance will be achieved.

Act / Regulation	Requirement	Section reference in this plan	Page
Part 8, 3(BA)	Submission of bushfire mitigation plans for acceptance.	Section 2: Particulars of the BMPP	8
6(a)	The name, address, email address and telephone number of the specified operator.	Section 2: Particulars of the BMPP	8
6(b)	The position, address, email address and telephone number of the person who was responsible for the preparation of the plan.	Section 2: Particulars of the BMPP	8
6(c)	The position, address, email address and telephone number of the persons who are responsible for carrying out the plan.	Section 2: Particulars of the BMPP	8
6(d)	The email address (if any) and telephone number of the specified operator's control room so that persons in the room can be contacted in an emergency that requires action by the specified operator to mitigate the danger of bushfire.	Section 2: Particulars of the BMPP	9
6(e)	The bushfire mitigation policy of the specified operator to minimise the risk of fire ignition from its at-risk electric lines.	Section 3: Policy and Objectives	9
6(f)	The objectives of the plan to achieve the mitigation of fire danger arising from the specified operator's at-risk electric lines.	Section 3: Policy and Objectives	9
6(g)	A description, map, or plan of the land to which the bushfire mitigation plan applies, identifying the location of the specified operator's at-risk electric lines.	Section 4: Asset Description	10
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6(i)	A plan for inspection that ensures that all the specified operator's at-risk electric lines are inspected at regular intervals of no longer than 37 months.	Section 6: Procedures	12
6(j)	Details of the processes and procedures for ensuring that each person who is assigned to carry out the inspections referred to in paragraph (i) has satisfactorily completed a training course approved by Energy Safe Victoria; and ii) is competent to carry out such inspections.	Section 6: Procedures	12

6(k)	Details of the processes and procedures for ensuring that persons (other than persons referred to in paragraph (j)) who carry out or will carry out functions under the plan are competent to do so.	Section 6: Procedures	13
6(l)	The operation and maintenance plans for the specified operator's at-risk electric lines— (i) in the event of a fire; and (ii) during a total fire ban day; and (iii) during a fire danger period;	Section 6: Procedures	14
6(m)	The investigations, analysis, and methodology to be adopted by the specified operator for the mitigation of the risk of fire ignition from its at-risk electric lines.	Section 7: Performance Monitoring and Auditing	15
6(n)	Details of the processes and procedures by which the specified operator will — (i) monitor the implementation of the bushfire mitigation plan; and (ii) audit the implementation of the plan; and (iii) identify any deficiencies in the plan or the plan's implementation; and (iv) change the plan and the plan's implementation to rectify any deficiencies identified under subparagraph (iii); and (v) monitor the effectiveness of inspections carried out under the plan; and (vi) audit the effectiveness of inspections carried out under the plan.	Section 7: Performance Monitoring and Auditing	15
6(o)	The policy of the specified operator in relation to the assistance to be provided to fire control authorities in the investigation of fires near the specified operator's at-risk electric lines.	Section 7: Performance Monitoring and Auditing	17

Section 1: Introduction

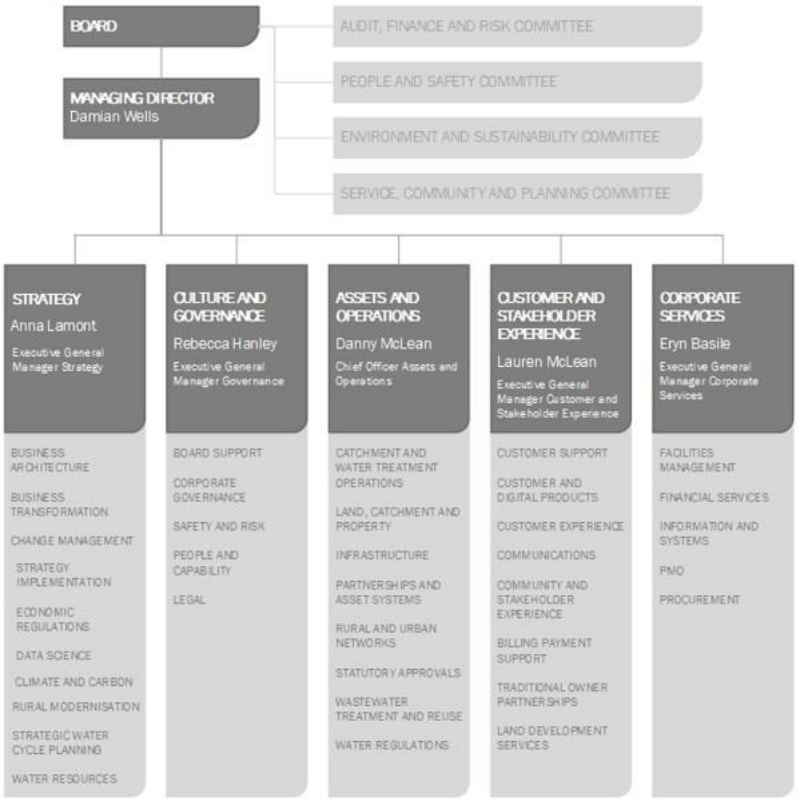
1.1 Responsible person

Coliban Region Water Authority was established on 1 July 1992 under the Water Act 1989 as a Regional Urban Water Authority. The Authority became the Coliban Region Water Corporation on 1 July 2007 and operates as Coliban Water. Our shareholder is the Victorian Government.

We manage, maintain, and operate 35 reservoirs and water storage basins across North-Central Victoria and provide water and wastewater services to rural and urban customers across an area of 16,500 square kilometres.

1.2 Management structure

The Service Delivery team is responsible for managing the activities associated with this plan. The Group engages and manages an Operations and Maintenance Contractor (O&M Contractor) to undertake the activities associated with carrying out this plan.



1.3 Access to the management plan

In accordance with the Electricity Safety Act 1998, Section 83BA, Coliban Water publishes the most current management plan each year to its website. The plan can be accessed at the following location:

https://coliban.com.au/help-advice/bushfire-readiness

A hard copy of the management plan is also available for viewing at the Coliban Water Head Office located in Bridge Street, Bendigo during normal business hours.

Should a request be received from Energy Safe Victoria for the Management Plan to be submitted the Manager Wastewater Treatment and Reuse Operations will be responsible for making a copy available. A copy is to be made available within 14 days of the request being received by Coliban Water.

Section 2: Particulars of the BMPP

Management Plan Particulars	***Document Title / Identification Number***
Bushfire Mitigation Plan – Powerlines (Bendigo WRP)	
Act – Part 8 83(BA)	***Submission of bushfire mitigation plans for acceptance.***
This is an updated BMPP of the first document prepared by Coliban Water. Following approval of the BMPP the document will be placed in the Coliban Water document management system "QA Docs" and managed as a controlled document. The most current version will be accessible to all Coliban Water staff via the QA Docs on the intranet and the O&M Contractor via the SharePoint Collaboration Site. Coliban Water will complete an annual review of the BMPP prompted by its controlled document management system. The review process will be initiated to ensure the annual review and approval process is completed prior to July 1st each year.	
Regulation 6(a)	***The name, address, email address and telephone number of the specified operator.***
Name of Specified Operator: Coliban Water Corporation Address: 37-45 Bridge Street, Bendigo, Victoria 3550. Email address: coliban@coliban.com.au Telephone: 1300 363 200 ABN: 96 549 082 360	
Regulation 6(b)	***The position, address, email address and telephone number of the person who was responsible for the preparation of the plan.***
Name: Danny Childs Position: Program Director – Bendigo & Castlemaine WRP Address: 37-45 Bridge Street, Bendigo, Victoria 3550 Email address: danny.childs@coliban.com.au Telephone: 1300 363 200	
Regulation 6(c)	***The position, address, email address and telephone number of the persons who are responsible for carrying out the plan.***
Name: Nathalie Lopez Position: Operations Manager – Bendigo & Castlemaine WRP Address: 37-45 Bridge Street, Bendigo, Victoria 3550 Email address: nathalie.lopez@coliban.com.au Telephone: 1300 363 200	

Regulation 6(d)	***The email address (if any) and telephone number of the specified operator's control room so that persons in the room can be contacted in an emergency that requires action by the specified operator to mitigate the danger of bushfire.***

Name: Coliban Water 24hr Contact Phone

Emergency Contact Number (24 hours): 1300 363 200

Email address: None

Section 3: Policy and objectives

Regulation 6 (e)	***The bushfire mitigation policy of the specified operator to minimise the risk of fire ignition from its at-risk electric lines.***

Coliban Water ensure assets are operated and maintained to ensure, as far as practicable:

- Delivery of safe, effective, and reliable services.
- Protect and improve the environment.
- Meet regulatory, corporate and community obligations in an efficient and cost-effective manner.
- Minimise the risk of fire ignition by Coliban Water owned and operated high voltage powerlines.

Coliban Water's established Emergency Management Plan (Part 1 to 12) articulates the organisations commitment to emergency management, including fire. The purpose of the Coliban Water Emergency Management Plan is to, as far as practicable:

- Establish the manner in which all incidents are to be managed.
- Define the responsibilities of Coliban Water employees and contractors in the reporting process.
- Define the responsibilities and actions of Coliban Water employees and contractors in the event of an incident.
- Ensure the plan makes due recognition of provisions of the Emergency Management Act 2013.
- Ensure that control and support agencies are provided with a reliable source of information if they are called upon to address an incident associated with assets controlled by Coliban Water.
- Ensure the plan provides guidance that clearly establishes the procedures to be followed if an incident occurs, and to deal with that incident in a quick, efficient, and safe manner.

Coliban Water has an established Hazard and Risk Management Procedure which is used to determine risk and risk management strategies in line with international standard ISO31000 (Risk Management – Principles and Guidelines).

Coliban Water has developed an Electric Line Clearance Management Plan (ELCMP) which outlines our policies and procedures in relation to managing vegetation clearance to our overhead powerlines and ensuring compliance with the relevant regulations.

Coliban Water maintains a Bushfire Preparedness Plan which outlines the activities undertaken in preparation for and in management of a bushfire event that has potential to impact Coliban Water staff, contractors, or service delivery. The mitigation actions within the plan are communicated to the relevant Coliban Water employees, contractors, and service providers.

Coliban Water has submitted its HV at-risk powerlines on the Victorian Fire Risk Register.

Regulation 6 (f)	***The objectives of the plan to achieve the mitigation of fire danger arising from the specified operator's at-risk electric lines.***

The objectives of the BMPP to mitigate the risk of fire starts, to the community, the environment, and Coliban Water assets, from overhead powerlines and associated assets, are to ensure:

- Vegetation is managed along the route of overhead powerlines to mitigate against the risk of fire starts.
- Electrical assets are maintained to a high standard to minimise the risk of ignition or failure.

- Works completed on electrical infrastructure is completed by suitably qualified people.
- Access to all electrical infrastructure and assets is managed to allow safe access for emergency and maintenance crews.

Section 4: Asset description

Regulation 6 (g)	***A description, map, or plan of the land to which the bushfire mitigation plan applies, identifying the location of the specified operator's at-risk electric lines.***

This management plan applies to the 22kV overhead powerlines and associated electrical assets supplying electricity to the Bendigo Water Reclamation Plant located at Howard Street, Epsom located approximately 7km from the CBD of Bendigo.

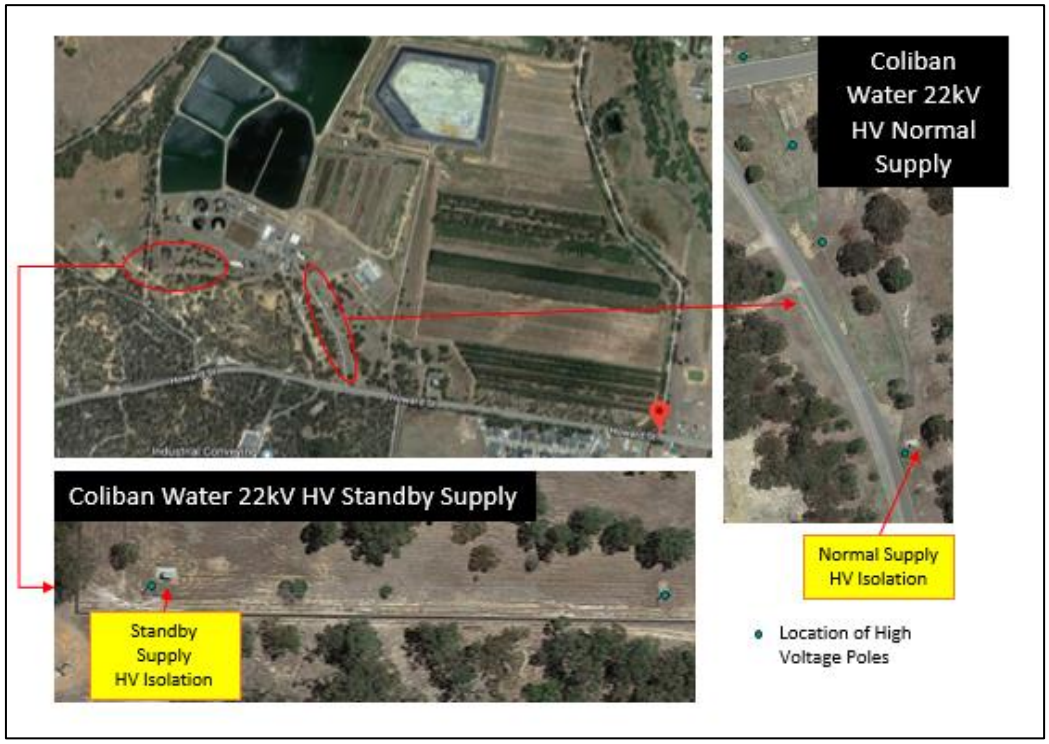


Figure 1: Map Showing Location of High Voltage Powerlines at Coliban Water Reclamation Plant (Epsom)

Electrical assets located within Water Treatment Facility include:

- Line 1: Ex-Powercor Pole 56 (Burnside / Millman Road) – Standby Supply
  - High voltage underground cable between Pole 1 and Coliban Water High Voltage Metering Structure and Isolation Switch.
  - One span of 22kV uninsulated overhead conductor from Pole 1 to Pole 2 (145m).
  - Separate High Voltage underground cables from Pole 2 and the High Voltage Standby Supply Main Switchboard connect to the Water Reclamation Plant main switchboards.
- Line 2: Ex-Powercor Pole 8 (Howard Street) – Normal Supply
  - High voltage underground cable between Pole 8 (Powercor owned) and Coliban Water High Voltage Metering Structure and Isolation Switch.
  - High voltage underground cable from Coliban Water Metering Structure to Pole 1.

- 22kV overhead conductor from Pole 1 to Pole 4 (197m).
- Separate High Voltage underground cables from Pole 4 and the High Voltage Normal Supply Main Switchboard connect to the Water Reclamation Plant main switchboards.

Section 5: Management strategy

Regulation 6 (h)	***The preventative strategies and programs to be adopted by the specified operator to minimise the risk of the specified operator's at-risk electric lines starting fires***

Coliban Water uses an established and effective Asset Management approach to manage our assets through their full-service lifecycle. In relation to electrical assets relevant to this plan Coliban Water strategies to mitigate bushfire risk are covered by two broad programs:

- Vegetation clearance; and
- Asset condition monitoring and maintenance / renewal.

The vegetation clearance program and associated strategies are documented in the Coliban Water "Electric Line Clearance Management Plan (Bendigo WRP, see also associated SOP, appendix 4)".

Asset condition monitoring and maintenance / renewal program (Vegetation Inspection of Overhead Powerlines, see appendix 4) currently includes:

- Quarterly visual inspection of overhead powerlines during ground maintenance activities
- Planned maintenance activities resulting from vegetation clearance and quarterly inspection and programs.

Since assuming ownership for the high voltage electrical assets referred to within this plan strategies have been established for the monitoring and maintenance of high voltage assets inclusive of underground cables, metering structures, high voltage switching points and substations.

Coliban Water relies on assessment of overhead powerlines is conducted by maintenance staff and contractors to monitor their serviceability and identify potential hazardous defects, deteriorating and damaged assets.

Coliban Water scheduled inspection programs for the overhead component of its electrical assets to occur at intervals not exceeding 6 months. This will be complemented by inspection of pole top assets in addition to vegetation clearance strategies and implemented maintenance schedules for other electrical assets.

These plans are managed via the Coliban Water Asset Management Information System (AIMS).

Any required maintenance activities identified during inspection programs can be classified into one of four different priority ratings:

- Priority A (Planned completion within 24 hours)
- Priority B (Planned completion within 14 days)
- Priority C (Planned completion within 30 days)
- Priority D (Planned completion within 60 days)

All vegetation trimming and removal identified in most recent inspection has been completed to standard on site.

Preparing for REFCL

Powercor Australia has installed isolating transformers at the beginning of each of the two lines supplying high voltage electricity to the Water Treatment Plant at Epsom.

The resulting impact of these installations has been the assets owned and operated by Coliban Water will be isolated from the potential over-voltage impacts that may be experienced through an operation

of the REFCL system deployed on the Powercor owned distribution feeder(s) (via Eaglehawk Zone Substation) supplying the facility.

To further minimise the risk of a fire starting as a result of its overhead powerlines, as far as practicable, Coliban Water will undertake the following steps:

- Remove any combustible vegetation (including shrubs and grass) from beneath the powerlines and maintain clearances to trees as per ELCMP.
- Undertake annual formal inspection and maintenance of the ground beneath the powerlines as part of its annual BMPP.
- As part of normal day to day operations, undertake ongoing checks and maintenance of the ground beneath the powerlines as required to ensure no regrowth of combustible vegetation.
- From the identification of any regrowth, maintenance will be actioned no later than 30 business days to ensure no combustible vegetation is present under the power lines.
- Investigate further bushfire protection options.

Section 6: Procedures

Regulation 6 (i)	***A plan for inspection that ensures that all the specified operator's at-risk electric lines are inspected at regular intervals of no longer than 37 months***

Coliban Water assets and activities, including inspection and maintenance works, are managed via Annual Work Plans using its Asset Management Information System (AIMS).

Preventative maintenance activities for all at-risk powerlines will be scheduled within AIMS to ensure maintenance activities are completed as planned and inspection of at-risk powerlines is completed within an interval not longer than 37 months.

Scheduled preventative maintenance and inspection activities include:

- Inspection of overhead powerlines (inclusive of poles and attached assets) – every 6 months.
- Inspection and testing of underground electrical assets and associated equipment (e.g. high voltage metering, switchgear, and substations – annually.
- Inspection of vegetation relating to overhead powerlines – Quarterly and 6 monthly.

Coliban Water's O&M Contractor is responsible for completing the Annual Work Plans as scheduled.

Regulation 6(j)	***Details of the processes and procedures for ensuring that each person who is assigned to carry out the inspections referred to in paragraph (i) has satisfactorily completed a training course approved by Energy Safe Victoria and ii) is competent to carry out such inspections.***

Coliban Water's O&M Contractor will engage suitably qualified contract resources to conduct inspections of its overhead powerlines relating to this plan.

As a minimum, asset inspection contractors are required to have completed a UET20621- Certificate II in ESI - Asset Inspection and Testing or equivalent.

The training and qualifications of Asset Inspectors engaged to inspect Coliban Water assets is reviewed and verified against the minimum requirements as set by the Victorian Electricity Supply Industry (VESI) to ensure they meet the minimum Victorian industry requirements and therefore, the Australian Qualification Framework (AQF) requirements or equivalent.

Where an Asset Inspector has obtained the qualification in a state other than Victoria it is a Coliban Water requirement that the contractor engaged provide evidence of induction for conducting asset inspection works in Victoria. The induction evidence shall include details of the inducting party (minimum Cert IV – Training and Assessment), and content of the induction process (including Victorian Acts, Codes and Regulations, safety rules, asset identification and general industry guidelines).

Induction of all asset inspection contractors shall be undertaken prior to commencing or accessing the site. All employees and contractors must be inducted into the safety requirements for the

contract and the site prior to being permitted to undertake works on the site. The asset inspector will be required to complete a Job Safety Analysis (JSA) or equivalent procedure which will document the occupational safety and environmental risks associated with the use of the appropriate technique(s), plant, and equipment. Coliban Water will review and approve the JSA prior to implementation.

Contractor authorisations and review are valid for a period of three years and shall be monitored by the O&M Contractor.

Regulation 6 (k)	***Details of the processes and procedures for ensuring that persons (other than persons referred to in paragraph (j)) who carry out or will carry out functions under the plan are competent to do so.***

Coliban Water engages suitably qualified contract resources to conduct maintenance activities of its overhead powerlines relating to this plan.

The training and qualifications of maintenance personnel engaged to carry out maintenance on Coliban Water electrical assets is reviewed and verified against the minimum requirements as set by the Victorian Electricity Supply Industry (VESI) to ensure they meet the minimum Victorian industry requirements, and therefore, the Australian Qualification Framework (AQF) requirements or equivalent.

Contractors engaged by Coliban Water to carryout rectification works identified during inspection activities must hold one of the following qualifications (relevant to the task being performed) as a minimum:

- Electrical Fitter Certificate III
- Lineworker (Distribution Overhead) Licence
- Cable Jointer ESI (level 3)
- Holder of Registered Electrical Contractors License

Contractors engaged to undertake vegetation works near overhead powerlines must hold the following qualification (as a minimum):

- Certificate II – ESI Powerline Vegetation Control (UET20312)

Contractors engaged to complete vegetation and (or) rectification works on Coliban Water electrical assets have a responsibility to ensure their workers are suitably trained, assessed as competent and authorised for the work they are performing.

Coliban Water will be provided with and review evidence of all contract worker training records prior to engagement, those are also attached to the work order. Coliban Water will maintain records of all approved contract workers authorisations and ensure they are reviewed, and re-authorisation occurs at periods not exceeding three years from the date of issue.

Regulation 6 (l)	***The operation and maintenance plans for the specified operator's at-risk electric lines—*** ***(i) in the event of a fire; and*** ***(ii) during a total fire ban day; and*** ***(iii) during a fire danger period.***

Fire Event Plan

Coliban Water's response to emergency events is carried out in accordance with our Emergency Management Plan.

In the event of a fire in the Bendigo Water Reclamation Plant or surrounding area the following protocols will be followed by Coliban Water staff and contractors:

- Immediately contact Emergency Services.
- If the fire is likely to impact Coliban Water high voltage assets suitably trained technicians will conduct appropriate switching activities to safely isolate supply prior to combatting the fire.

Coliban Water is not a statutory firefighting authority however our staff are trained to and utilise basic firefighting equipment to combat a fire where it is safe to do so.

Total Fire Ban Day Plan

Coliban Water recognises the increased risk of workers being caught in a dangerous environment or certain activities starting a fire on declared Total Fire Ban (TFB) days. In response to these risks Coliban Water has established protocols that shall be adhered to on TFB days, including declared Severe, Extreme or Code Red conditions under the National Fire Danger rating System.

Protocols that shall be adhered to include:

- Defer, where practical, High Voltage Switching Operations, or restrict operations to essential activities to maintain critical services.
- In the event the plant experiences a High Voltage Feeder fault a visual inspection of all electrical assets is to be conducted to ensure the fault has not initiated a fire.
- Only emergency works critical to the health and safety of the general public are to be undertaken on a TFB day and only where appropriate control measures are implemented.

To ensure emergency works involving tasks such as welding, grinding, cutting or the use of naked flames can proceed on TFB days, Coliban Water applies annually for Hot Work Permits from the CFA (under Section S40 - CFA Act, 1958). The O&M Contractor's Risk Assurance Manager is responsible for applying for permits from relevant authorities and communicating expectations for their use to relevant employees and contractors.

Fire Danger Period Plan

Coliban Waters inspection and maintenance programs are scheduled to be completed prior to declaration of the fire danger period to ensure:

- Vegetation is clear of the minimum clearance space for overhead powerlines.
- Electrical assets are operational and in good condition.

Completing these programs prior to the commencement of the declared fire danger period ensures only essential operating activities and emergency works (including fault investigation) are required on electrical assets during this period, hence lowering the risk of potential fire starts.

These obligations are managed as part of the Annual Works Plan by the O&M Contractor.

Established Procedures

Coliban Water has established and implemented the following plans and procedures relevant to fire event planning and management:

- Emergency Management Plan (inclusive of Incident and Crisis Management Plans)

  Provides an overview of the system and processes to be used to control any incident. The system covers all abnormal business situations involving the site and surrounding areas for which Coliban Water has legal, ethical or community responsibilities from the point of purchase to the point of sale.
- Bushfire Preparedness Plan

  Outlines the activities undertaken in preparation for and in management of a bushfire event that has potential to impact Coliban Water staff, contractors, or service delivery.

Section 7: Performance monitoring and auditing

Regulation 6 (m)	***The investigations, analysis, and methodology to be adopted by the specified operator for the mitigation of the risk of fire ignition from its at-risk electric lines.***

Coliban Water applies a condition monitoring based approach to minimise the risk of fire starts by its assets. Periodic inspections are undertaken of electrical assets to ensure the possibly of fire ignition from electrical assets is minimised by:

- Completing annual inspections and completing actions identified to ensure vegetation remains clear of overhead powerlines.

- Completing quarterly and 6 monthly inspections of overhead powerlines and associated hardware and completing identified actions to ensure electrical assets are in good working order and are operating in a way to minimise the risk of fire starts.

Coliban Water have a Risk Management Framework document. Coliban Water's risk management framework is based on ISO 31000:2018 Risk Management Principles and Guidelines. Hazards are identified and reported as per Hazard and Risk Management Procedure.

Any safety issues or incidents relating to electrical assets, including fire starts, are managed under Coliban Water's established Risk Management Framework and Emergency Management Plan. Hazards are reported and recorded as per the Hazard and Risk Management Procedure. Incidents, injuries, near misses and hazards (including environmental) are reported utilising the hazard and incident management system (Lucidity). These are reviewed by the manager responsible for the area and the Health, Safety and Wellbeing Coordinator to ensure appropriate actions are allocated and completed in a timely manner. Actions not completed within the designated timeframe are escalated as per Coliban Water's escalation process through Incident Manager.

Incidents rated level 1 (Moderate) to level 3 (Crisis) as defined in Part 0: Emergency Management Plan will have appointed an on-duty Incident Manager who will declare, escalate, or de-escalate the incident level as deemed necessary.

All incidents declared Level 1 to Level 3 will be reported to the Chief Operating Officer at the time of declaration and the Leadership Team notified (as required). All relevant documents associated with the incident are stored on Lucidity to track incidents.

Where a Level 1 or 2 Incident that requires the activation of the Incident Management Team to manage the operational and customer impacts, the on-duty Incident Manager will determine which roles within the Incident Management Team shall be activated based on the complexity of the incident.

Coliban Water hold an Incident Debrief post every incident that has been raised to at least the Level 1 (Moderate) threshold under the Emergency Management Plan. As part of this debrief the Incident Team identify the cause for the incident (if not already known), confirm actions that were undertaken as part of incident response and recommend actions to prevent or assist with any similar incidents in the future.

When investigating and reviewing large or critical incidents post event, Coliban Water may adopt a formal Incident Cause Analysis Method (ICAM). Appropriate staff have been trained to undertake this investigation method and these staff members act as the lead in these investigations.

Regular meetings are held amongst Incident Managers to review recent incidents and ensure that the actions identified have been implemented. Findings and information from both the Incident Debrief and/or ICAM may be fed through to improve the Bushfire Mitigation Plan via the actions generated from these investigations.

In accordance with relevant regulations Coliban Water will establish an annual review process focusing on the effectiveness of the BMPP. As an outcome of this review Coliban Water will submit revised versions of the Bushfire Mitigation Plan – Powerlines and Electric Line Clearance Management Plan to Energy Safe Victoria for acceptance. The annual review involves Coliban Water and the O&M Contractor and are monitored by the Assets and Operations Group.

Coliban Water and its O&M Contractor engage suitably qualified contractors specialising in inspection and maintenance activities associated with electrical assets. Defects and issues identified during these inspection and maintenance activities are managed via Coliban Water maintenance management schedules. Where longer term deterioration in the condition of currently serviceable assets is identified Coliban Water will engage, as required, suitably qualified contract resources to establish monitoring and actions plans as appropriate.

Up to this date (June 2024), no previous fire starts from the at-risk electric line has been recorded.

Regulation 6 (n)	***Details of the processes and procedures by which the specified operator will –*** ***(i) monitor the implementation of the bushfire mitigation plan; and*** ***(ii) audit the implementation of the plan; and*** ***(iii) identify any deficiencies in the plan or the plan's implementation; and***

(iv) change the plan and the plan's implementation to rectify any deficiencies identified under subparagraph (iii); and

(v) monitor the effectiveness of inspections carried out under the plan; and

(vi) audit the effectiveness of inspections carried out under the plan.

Monitor the Implementation of the Plan

Prior to the declaration of the fire danger period the Manager Wastewater Treatment and Reuse Operations shall review the status of activities detailed within this plan and provide a report to the Manager Governance as to Coliban Water's state of readiness and compliance with relevant legislation leading into the fire season.

It is expected this review will be conducted prior to October 1st annually (or prior to the declaration of the fire danger period – whichever is earlier) with any identified issues managed via Coliban Water's Asset Management Information System () to ensure they are addressed prior to the fire danger period being declared.

Audit the Implementation of the Plan

Coliban Water and its O&M Contractor undertake regular inspections of its electrical infrastructure to ensure they remain clear of vegetation and operate effectively.

In addition to regular inspections of electrical infrastructure Coliban Water's Assets and Operations Team:

- Audits and reviews the implementation of this plan annually as part of its reviews of both its BMPP and ELCMP; and
- Completes monthly status reviews of required maintenance programs and the implementation of any actions to address deficiencies in plan.

Identify Deficiencies in the Implementation or Effectiveness of the Plan

Annual review of the plan and auditing of key processes associated with the plan are designed to consider both deficiencies and the effectiveness of the plan.

In addition to planned review and auditing processes other processes which may identify deficiencies in the implementation or effectiveness of the plan include:

- Regulatory reviews, audits, and feedback.
- Incident investigations.
- Information and feedback from other relevant bodies e.g. VESI members, Worksafe, CFA, DEECA etc.
- Ad-hoc internal or external auditing processes.

Change the Plan and the Plan's Implementation to Rectify Deficiencies

As part of Coliban Water's annual review of its BMPP and ELCMP deficiencies are identified and addressed in revised plans submitted to ESV for approval.

In addition to annual reviews of the plans described above Coliban Water may also review this plan to account for changes in context or risk. Events which may trigger a review of the plan include, but are not limited to:

- Changes in organizational structure and (or) responsibilities.
- Changes in legislation.
- Directions from ESV or fire management authorities.
- Changes to bushfire risk within the area.
- Changes to the electrical assets covered by this plan (e.g. implementation of new technologies or additional supply points etc.).
- Outcomes of risk assessments, incident investigations or shared industry knowledge.

The implementation of additional or revised control measures will be documented within revised versions of plan and submitted to ESV for approval. Coliban Water acknowledges that consultation with ESV, prior to implementing changes to the previously approved plan, is to be undertaken.

Monitor the Effectiveness of Inspections Carried Out Under the Plan

Contractors employed to perform inspections are regularly checked and audited.

All contractors working on site are subject to routine inspections and audit under Coliban Water contract management framework. Generally, works relating to this plan will subject to inspection and audit by the O&M Contractor as part of the Annual Works Plan.

This procedure requires a check and induction for the contractor to confirm that all health and safety requirements are being met, that the contractors' personnel are qualified and licensed for the work they are performing, and documented work procedures are being followed to the required standard.

Audit the Effectiveness of Inspections Carried Out under the Plan

The effectiveness of quarterly, 6 monthly inspection programs, and works will be monitored by a review of inspection reports and completion of required activities within planned timeframes by the O&M Contractor.

Annual reviews of the BMPP and ELCMP will also consider the outcomes of inspection and maintenance cycles, asset defects reported, operational reliability of the assets and details of any preventable events or incidents.

Regulation 6 (o)	***The policy of the specified operator in relation to the assistance to be provided to fire control authorities in the investigation of fires near the specified operator's at-risk electric lines.***

Coliban Water will assist fire control authorities in their investigation of fires near our at-risk electric lines by:

- Assisting with safe access to assets.
- Making assets safe prior to the commencement of investigations including, where appropriate, isolating power.
- Sharing appropriate information regarding an incident.
- Sharing appropriate information and records relating to inspection and maintenance reports.
- Inviting external authorities to attend and participate in incident investigation processes as appropriate.

Regulation 13 (1)	***Energy Safe Victoria may, in writing, exempt a specified operator or major electricity company from any of the requirements of these regulations***

Exemptions from Regulations

Coliban Water currently **does not** have any exemption issued by Energy Safe Victoria for the Electricity Safety (Bushfire Mitigation) Regulations 2023.

APPENDIX 1: REFERENCE DOCUMENTATION

Electricity Safety Act 1998

Electricity Safety (Bushfire Mitigation) Regulations 2023

Electricity Safety (Electric Line Clearance) Regulations 2020

Australian Standard AS4373 – Pruning of Amenity Trees

Electricity Safety (General) Regulations 2019 for work on or near high voltage electrical apparatus (The Blue Book)

Electricity Safety Electric Line Clearance Guidelines 2020

Information to better understand the Electricity Safety (Electric Line Clearance) Regulations 2020 and to assist in preparing an Electric Line Clearance Management Plan Rev C 2017

ESV's ELCMP evaluation matrix

Coliban Water Management System Documents

- Risk Management Framework – Revision Number 19.0, November 2023
- Bushfire Preparedness Plan – Revision Number 13.0, October 2022
- Hazard and Risk Management Procedure – Revision Number 11.0, June 2022

APPENDIX 2: POLE DETAILS

This Bushfire Mitigation Plan relates to the management and maintenance of two separate overhead powerlines, totaling four spans, carrying a voltage of 22kV. A description of the assets is provided below.

Coliban Water At-risk Electric Lines

	Line (feeder) denomination	Voltage (kV)	Number of Spans	Length (m)	Insulated Conductor (Y/N)	If insulated, type of insulated conductor	Number of Poles	Pole material	Year of Construction
1	Bendigo WRP Standby 22kV HV Incoming Supply	22	1	145	N	N/A	2	Reinforced concrete	N/A
2	Bendigo WRP Normal 22kV HV Incoming Supply	22	3	197	N	N/A	4	Reinforced concrete	N/A

Line 1: Ex-Powercor Pole 56 (Burnside / Millman Road):

Coliban Water Pole No	Serial No	Pole Type	Pole Date	Last Inspected	Inspection Notes
1 (Asset ID: ESA000009)	957256	Reinforced concrete	Aug 1988	Mar 2024	No issues
2 (Asset ID: ESA000008)	957270	Reinforced concrete	Aug 1990	Mar 2024	Refit lightening arrestor cap. (Priority D – Planned completion within 60 days) *(COMPLETED)*

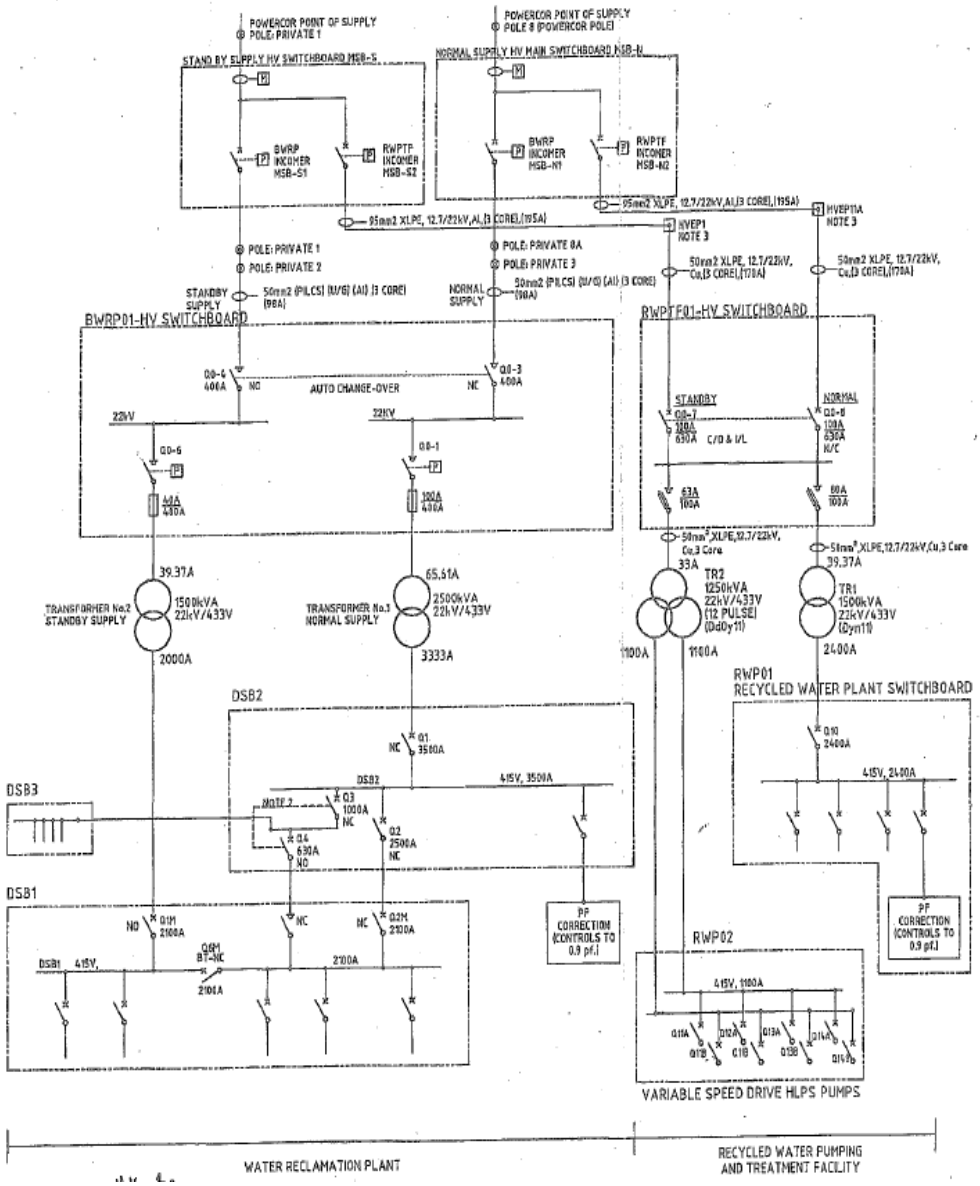
Line 2: Ex-Powercor Pole 8 (Howard Street):

Coliban Water Pole No	Serial No	Pole Type	Pole Date	Last Inspected	Inspection Notes
1 (Asset ID: ESA000004)	868615	Reinforced concrete	Dec 2007	Mar 2024	Raychem leads close – separation of leads required. Not urgent (Priority

					D – Planned completion within 60 days). Replace poly insulator – centre (Priority D – Planned completion within 60 days). *(COMPLETED)*
2 (Asset ID: ESA000005)	405923	Reinforced concrete	Dec 1993	Mar 2024	No issues
3 (Asset ID: ESA000006)	405924	Reinforced concrete	Dec 1993	Mar 2024	No issues
4 (Asset ID: ESA000007)	405925	Reinforced concrete	Dec 1989	Mar 2024	Raychem leads close. Separate leads. Not urgent (Priority D – Planned completion within 60 days). *(COMPLETED)*

APPENDIX 3: PLAN DIAGRAM OF ELECTRICAL INSTALLATION

Line Diagram of High Voltage Electrical Layout



APPENDIX 4: SOP FOR VEGETATION INSPECTION OF OVERHEAD POWERLINES

Coliban WATER

Activity Code	VegPwrLInspV3
Activity Description	Vegetation Inspection of Overhead Powerlines V3
SOP	**Vegetation Inspection of Overhead Powerlines** • Engage a suitably qualified Vegetation management Contractor (VMC) to conduct an inspection of the identified overhead powerlines to ensure vegetation likely to encroach the minimum clearance space is identified and actioned prior to the declared fire danger period including details of action required, plant and equipment required and competencies to complete the task) in accordance with section 3.6.2 of the Guide to Electrical Safety Regs 2020 (Electric Line Clearance) for those resources. • Service Stream to review the assessed works required and confirm training compliance of operators in accordance with section 3.6.2 of the Guide to Electrical Safety Regs 2020 (Electric Line Clearance) for those resources • Scan and attach above compliance training records to the work order • Service Stream and the lead contractor complete the Fatal Risk Protocol for "Tree trimming in the vicinity of Live HV electrical conductors" prior to undertaking the actual works. • Contractors must have as a minimum completion of Certificate 2 - ESI in Powerline Vegetation Control UETTDRVC24A - Assess vegetation and recommend control measures in an ESI environment or equivalent • • VCM must consider span length and minimum clearance requirements (including sag and sway) • VCM must consider previous inspection span data • VCM must consider type of vegetation and expected growth/re-growth • VMC inspections will evaluate potential hazards to the clearance space • VMC inspections will evaluate Dead and dangerous limbs • VMC inspections will evaluate physical defects in trees (e.g. deterioration through disease or natural stresses) • VMC inspections will evaluate other trees or limbs that may be unstable and could fail under the range of weather conditions that can be reasonably expected • Ensure contractor provides service report, attach report to work order • **Before closing this PM WO**, all identified remedial work to be booked to PCRM by: • Going to Additional Work Required Tab o Ticking the Additional Work Required Tick Box. o Filling out the Description of the Additional Work Required o Raise PCRM WO for Additional Work o Ticking the PCRM job has been raised tickbox o Add PCRM WO Number to the PCRM Field