

Valley Power Gas Power Station (VPPS) Owned By Snowy Hydro Ltd

Bushfire Mitigation Management Plan 2023-2024



1st JULY 2023 – 30th JUNE 2024

Table of Contents

1. CONTACTS & APPROVALS	4
1.1 Specified Operator – Snowy Hydro Ltd, owner of Valley Power Gas Power Station	4
1.2 Person Responsible for Plan Preparation & Authorisation: Gary Blanch	4
1.3 Person Responsible for Carrying out the Plan: Phillip Gibson	4
1.4 VPPS Emergency Contact - Phone Number, 24hrs, Everyday:	4
1.5 Country Fire Authority, District 27 Headquarters	4
2 DOCUMENT REVISION HISTORY	5
DEFINITIONS & ABBREVIATIONS	6
3 COMPLIANCE INFORMATION	7
4 BACKGROUND AND CONTEXT	9
4.1 Site description	9
4.2 Responsibilities	9
4.3 Significant Vegetation	9
4.4 Stakeholders	9
4.5 BMP process	10
5 LEGISLATION	11
5.1 Electricity Safety Act 1998	11
5.2 Bushfire Mitigation Regulations 2023	11
5.3 Electric Line Clearance Regulations 2020	11
6 AVAILABILITY	11
7 BMP SCOPE & POLICY	11
8 OBJECTIVES	12
9 SITE - VALLEY POWER POWER STATION (VPPS) & 220kV TRANSMISSION LINE	12
10 OPERATING & PREVENTATIVE MAINTENANCE PROGRAM	13
10.1 Asset Inspection/Monitoring	13
10.2 Assessment and Analysis	13
10.3 Site Maintenance	14
10.4 220kV Line Protection	15
10.5 Fire Risk & Fires	15
10.5.1 Declared Fire Season	15
10.5.2 Total Fire Ban Days	15
10.5.3 Fires	16
10.6 Incident Management	16
10.7 Auditing	16
11 TRAINING	17
11.1 Training and qualifications for BMP implementation	17
11.2 Qualifications for preparation of this BMP	18

12 REVIEW	19
13 SUBMISSION REQUIREMENTS	19
14 Appendix A	20
Part 1 – Switchyards & Line Route: Aerial Photograph Overlay	20
Part 2 – Switchyards & Line Route Schematic Diagram	21
Part 3 – Valley Power Power Station	21
15 Appendix B - Program of Asset Inspection and Monitoring	23

1. CONTACTS & APPROVALS

1.1 Specified Operator – Snowy Hydro Ltd, owner of Valley Power Gas Power Station

Snowy Hydro Ltd CEO:	Dennis Barnes
Registered Company Name:	Valley Power Pty Ltd
ACN:	083964470
VPPS Address:	Barton's Lane, Traralgon, VIC, 3844
Mailing Address:	PO Box 988, Traralgon, VIC,3844
Telephone:	03 9425 5525

1.2 Person Responsible for Plan Preparation & Authorisation: Gary Blanch

Position:	Area Manager Gas & Diesel
VPPS Address:	Barton's Lane, Traralgon, VIC, 3844
Mailing Address:	PO Box 988, Traralgon, VIC,3844
Telephone/Email:	Mob 0417 453 320 E: Gary.Blanch@snowyhydro.com.au

1.3 Person Responsible for Carrying out the Plan: Phillip Gibson

Position:	Plant Manager
VPPS Address:	Barton's Lane, Traralgon, VIC, 3844
Mailing Address:	PO Box 988, Traralgon, VIC,3844
Telephone:	Mob 0407018966 E: Phillip.Gibson@snowyhydro.com.au

1.4 VPPS Emergency Contact - Phone Number, 24hrs, Everyday:

Generation Operations	02 6453 2484
Operator In Charge (OIC)	03 5173 9380

1.5 Country Fire Authority, District 27 Headquarters

Address:	20 Hazelwood Road, Morwell, Victoria 3840
Telephone:	(03) 5120 3700

2 DOCUMENT REVISION HISTORY

Version	Date	Summary of Revision	Reviewed	Approved
1	3 Apr 08	Initial Release		
	27 Jan 10	Minor changes to contacts list		
3	17 Feb 11	No Changes		
4	7 Nov 11	Plan updated in response to ESV audit		
5	11 Sep 13	Plan reviewed and updated		
6	24 Oct 13	Plan updated in response to ESV audit		
7.1	6 Jun 15	Review & redraft by Worley Parsons for approval		
7.2	12 Jun 15	Plan Approved		
7.3	Oct 15	Review following ESV comments		
7.4	Jan 16	Update plan period to yearly		
8	June 16	Update for 2016-2017 financial year. Update information on SHL competencies to manage the plan (section 12)		
9	July 17	Update for 2017 2018 Financial Year	Amanda Weston - Snr Env Advisor Marden Taylor - Plant Manager	Gary Blanch - G&D Area Manager
10	June 18	Update for 2018 2019 Financial Year	Rachael Williams - Snr Env Advisor Marden Taylor - Plant Manager	
10.1	Aug 18	Review following ESV comments		
10.2	Sep 18	Review following ESV comments		
11	July 19	Update for FY20		
12	June 20	Review and minor updates for FY21	Rachael Williams - Snr Env Advisor Marden Taylor - Plant Manager & David Jones - MAA	
13	Oct 20	Review following ESV comments	Rachael Williams - Snr Env Advisor Paul Melrose - Plant Manager & David Jones - MAA	
13a	June 21	Review and minor updates for FY22		
14	Sept 21	Review following ESV comments	Rachael Williams - Snr Env Advisor Paul Melrose - Plant Manager	
15	June 22	Review and minor updates for FY23		
16	June 23	Review and minor updates for FY24	Rachael Williams - Snr Env Advisor Phillip Gibson - Plant Manager Sam Zumbo - MAA	
17	Oct 23	Review following ESV comments	Rachael Williams - Snr Env Advisor Phillip Gibson - Plant Manager	

Version	Date	Summary of Revision	Reviewed	Approved
18	Oct 23	Review following ESV comments	Rachael Williams - Snr Env Advisor Phillip Gibson - Plant Manager	
19	Oct 23	Updates following ESV comments	Rachael Williams - Snr Env Advisor	

DEFINITIONS & ABBREVIATIONS

Act	<i>Electricity Safety Act 1998</i>
AMGD	Area Manager Gas & Diesels
AEMO	Australian Energy Market Operator
BMP	Bushfire Mitigation Management Plan
CFA	Country Fire Authority
DFS	Declared Fire Season
ESI	Electricity Supply Industry
ESV	Energy Safe Victoria
Fire Danger Period	means a period declared under section 4 of the <i>Country Fire Authority Act 1958</i> to be a fire danger period
HBRA	Hazardous Bushfire Risk Area
LBRA	Low Bushfire Risk Area
OiC	Operator in charge
Gen Ops	Snowy Mountains Control Centre, COOMA, NSW (24hr everyday)
TFB	Total Fire Ban
Total Fire Ban Day	means a day that has been declared to be a day of total fire ban under section 40(1) of the <i>Country Fire Authority Act 1958</i> .
VPPS	Valley Power Gas Power Station
VMP	Vegetation Management Plan

3 COMPLIANCE INFORMATION

The below table provides a quick reference guide to easily locate the specific items required in Regulation 6 of the *Electricity Safety (Bushfire Mitigation) Regulations 2023*.

Snowy Hydro notes that the VPPS has not been issued an exemption by ESV under sub regulation 13 (1).

Reg.	6 - Prescribed particulars for bushfire mitigation plans - specified operators. For the purposes of section 83BA(2)(b) of the Act, the following are the prescribed particulars:	BMP Section
(a)	the name, address and telephone number of the specified operator.	1
(b)	the position, address and telephone number of the person who was responsible for the preparation of the plan.	1
(c)	the position, address and telephone number of the persons who are responsible for carrying out the plan.	1
(d)	the 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.	1
(e)	the bushfire mitigation policy of the specified operator to minimise the risk of fire ignition from its at-risk electric lines.	7
(f)	the objectives of the plan to achieve the mitigation of fire danger arising from the specified operator's at-risk electric lines.	8
(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.	9 & App A
(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.	10
(i)	a plan for inspection that ensures that all of the specified operator's at-risk electric lines are inspected at regular intervals of no longer than 37 months.	10.1
(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 is competent to carry out such inspections.	10 & 11
(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.	11
(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.	10.5
(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.	4.5 & 10

Reg.	6 - Prescribed particulars for bushfire mitigation plans - specified operators. For the purposes of section 83BA(2)(b) of the Act, the following are the prescribed particulars:	BMP Section
(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.	10.1, 10.2 and 13
(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.	10.5.3

4 BACKGROUND AND CONTEXT

This section provides background to this Bushfire Mitigation Management Plan (**BMP**) and outlines the process described within.

4.1 Site description

The VPPS site and transmission line (as depicted in the Appendices) which are the subject of this plan, are located in a Hazardous Bushfire Risk Area (**HBRA**). There are no sections of the line located in a Low Bushfire Risk Area (**LBRA**).

The transmission line is relatively short, approximately 1.5 km in length, and is located in a highly disturbed area that has been developed for power station operations over a number of decades, and maintained in that condition. The majority of the line is without surrounding vegetation of any kind, other than low lying grasses, with one section of the line located towards the Loy Yang switchyard having some trees in the vicinity of the transmission line easement.

4.2 Responsibilities

The persons identified in section one are ultimately responsible for ensuring that each stage of the plan is prepared, implemented and managed effectively. Due to the small nature of the asset and BMP, these responsibilities have not been repeated in each stage of the BMP.

4.3 Significant Vegetation

The location has been heavily disturbed for many years, since the development of the Loy Yang power station complex, and maintained in that condition. The Council planning scheme and available online information does not identify the presence of any significant vegetation in the location, including grasses.

As such, there is no indication that significant vegetation might exist in the easement or fringe area. As the stakeholders require the location of the transmission easement for ongoing power station operations, there is no interest in establishing significant vegetation in the line route or fringe area.

4.4 Stakeholders

Due to the small scale and location of the site there are no stakeholders other than the neighbouring Loy Yang B power station. Loy Yang and Valley Power representatives responsible for this Plan preparation and implementation are in regular contact regarding activities that may interact.

As such a dispute resolution process is not included in this BMP. Similarly, there are no mandatory notifications required as part of the maintenance work. Snowy Hydro representatives would inform Loy Yang of works and identify themselves to Loy Yang while gaining access to the transmission line.

4.5 BMP process

The overall process for implementation of the BMP is set out in **Figure 1** below. This process is the overarching methodology used for mitigation of risk of fire from the Valley Power transmission line, classified as an 'at-risk electric line' under the Regulations.

Figure 1 Overall process of Valley Power BMP



5 LEGISLATION

5.1 Electricity Safety Act 1998

Version No. 081 incorporating amendments as at 1 January 2021.

In accordance with the *Electricity Safety (Bushfire Mitigation) Regulations 2023* this Bushfire Mitigation Management Plan provides the prescribed particulars as specified in Regulation 6 applicable to specified operators.

5.2 Bushfire Mitigation Regulations 2023

This plan is developed to comply with the *Electricity Safety (Bushfire Mitigation) Regulations 2023* which came into effect on 16 June 2023.

5.3 Electric Line Clearance Regulations 2020

Vegetation is cleared according to the *Electricity Safety (Electric Line Clearance) Regulations 2020* S.R. No. 50/2020 dated 27 June 2020 and the Valley Power Vegetation Management Plan (**VMP**) which is updated annually.

6 AVAILABILITY

A copy of the current accepted bushfire mitigation plan is available on request from the Area Manager Gas & Diesels via reception at the VPPS office address nominated in the Contact Details section of this plan. Office business hours are 7 am to 4 pm Monday to Friday.

A copy of the plan is also available from the Snowy Hydro website.

<https://www.snowyhydro.com.au/about/reports/>

This plan is a living document and will evolve as the fire danger period approaches. Appendices to this document will be reviewed and additional information will be added to the appendices as it becomes available.

7 BMP SCOPE & POLICY

VPPS's BMP includes asset inspection, maintenance, repair, vegetation management and performance monitoring of the site. The planning and scheduling of this program is based principally on the system of asset inspection, maintenance reporting, faults and regular review.

The scope of the plan is specific to the VPPS transmission line asset.

This plan is to be read as the Bushfire Management Policy for the site.

This plan makes reference to other plans, manuals, standards, policies, procedures, service providers and work instructions which, when combined with this plan, cover all of the activities that contribute to the reduction of bushfire risk at VPPS.

8 OBJECTIVES

The objectives of this plan are to:

- minimise the risk of fire starts from the VPPS and associated 220kV Transmission Line Assets
- achieve compliance with the relevant legislative and regulatory requirements
- define the companies approach to the management of the risk of bushfires caused by electricity assets

9 SITE - VALLEY POWER POWER STATION (VPPS) & 220kV TRANSMISSION LINE

VPPS is an established site owned by Snowy Hydro Ltd and is located at Barton's Lane, Traralgon. The surrounding area is industrial with some open grassed areas in proximity. The ground surface of each switchyard is crushed rock gravel. All trees have been cleared to grasslands under the line route. There are areas of vegetation along the boundary of the line easement.

There are:

- no Distribution Network connections to the transmission line
- no trees of cultural or environmental significance on the site
- small sections along the line route easement where new tree growth could enter the clearance space if not maintained
- no Private Overhead Electric Lines or Distribution Network connections to the transmission line.

Vegetation management of the station and transmission line is detailed in the site's VMP which is reviewed and updated annually.

The Site is remotely monitored by Generation Operations (Gen Ops) 24hrs a day 7 days a week. Gen Ops is located in Cooma NSW. The site is locally managed by the Plant Manager, and there are local staff on call outside normal business hours for emergency response via the Gen Ops callout. The site is electrically connected via an overhead 220 kV line from the 220kV Switchyard to the nearby Loy Yang Power Station 500kV Switchyard. The six generators are connected to the generator transformers located in the 220kV switchyard via 11kV cables situated underground in concrete culverts.

In summary, the at risk electricity line comprises three 220kV transmission line/feeder's consisting of an aluminium outer conductor on a steel core suspended from transmission

towers. Construction of the line was completed in November 2001. It is 1.97 km in length and has 9 towers (8 located within the easement and 1 within the 500kV Switchyard) with 11 segments (spans) all of which are under 300m in length.

Appendix A Parts 1 to 3 present the site map and location of Valley Power and its 220kV Switchyard (including the overhead 220 kV line to Loy Yang Power Station 500kV Switchyard).

10 OPERATING & PREVENTATIVE MAINTENANCE PROGRAM

Snowy Hydro corporate procedures, Access Rules and site specific Operating Instructions are designed to ensure that all activities conducted on site are performed in a safe manner by competent personnel. Transmission inspection and maintenance activities are undertaken only by service provider personnel who comply with the applicable training requirements detailed within this plan.

If defects or deficiencies are identified that require an item's replacement they will be replaced like for like or with an improved option if suitable.

Regular planned inspections are completed of the site switchyards and the 220KV Transmission Line. All maintenance identified is completed to agreed timeframes within this plan. The frequency is set out in the following section.

Snowy Hydro will employ the services of an experienced Service Provider to inspect and maintain the site in relation to the BMP activities nominated in the following table. Snowy Hydro Service Providers are required to have proven safe work practices prior to engagement and have a system of work that meets Snowy Hydro's contract qualification requirements.

A scheduled review is completed of the site performance and fire risk prior to each summer (Bushfire Scorecard Review) and changes incorporated into the plan if required. The capabilities, progress and services provided by the Service Provider will be assessed by Snowy Hydro annually as part of the pre-season review.

10.1 Asset Inspection/Monitoring

A program of asset inspection is scheduled and records of completion using the Snowy Hydro "Ellipse" works management system is undertaken. This is detailed in the Table provided in **Appendix B**. In summary, no significant issues were identified and recommendations are being actioned by SHL as required.

10.2 Assessment and Analysis

Results and observations identified in the inspection program above and during operations are assessed against performance specifications for the Asset (Valley Power Transmission

line), potential for safety incidents, and potential fire risk, by local site engineering and the Snowy Hydro Asset Engineer responsible for the Asset.

Each recommendation identified by the qualified external service provider who conducts the inspections is reviewed and the action agreed upon with the person responsible for implementing this plan (the Plant Manager identified in **Section 1**) before being uploaded into the Snowy Hydro "Ellipse" works management system to be completed.

Completion of this recommended work is tracked using the Snow Hydro "Ellipse" works management system.

The effectiveness of the inspections is monitored through the above process and through scheduled site inspections that are undertaken by Snowy Hydro personnel by tracking of actual versus planned activities (ie closeout of workorders).

Reports received from the qualified external service provider are stored in Snowy Hydro's internal document management system.

Should any results or observations indicate this plan should be amended, this is done as part of the annual review process outlined in **Section 13**, or immediately as required.

10.3 Site Maintenance

Maintenance strategies exist to maintain assets to a high standard of operational reliability and minimal risk of in service failure.

All defects (or faults) found during inspections, are planned and executed as soon as practical, ensuring rectification work packages are completed by competent resources. Defects are assessed in accordance with SHLs QP14-02 Defect Management procedure and prioritised in accordance with SHLs SP12-30 Maintenance Work Order Prioritisation. The following table should be used as a guideline to planning maintenance works required.

Maintenance Completion Required	TFB	Declared Fire Season (DFS)	No Declared Fire Season
Line or Vegetation	Immediately	<7 days	Prior to DFS

All employee activities likely to cause naked flames, sparks & high temperatures are required to be conducted in accordance with Snowy Hydro Hot Work Procedures and a job specific risk assessment (Work Method Statement).

Service Providers engaged for actions under this plan are required to have a safe system of work to inspect and maintain the assets and use only competent personnel for the activities allocated under this plan. Training qualifications are identified in a subsequent section of the plan. Service Providers qualifications are verified during contract engagement with Snowy Hydro, which operates a pre-qualification process, and then

again when engaged for a specific task. This requirement is identified in the engagement documentation with each Service Provider.

SHL maintains the Valley Power Vegetation Management Plan (**VMP**) which details the requirements for undertaking vegetation clearance along electrical lines including training in accordance with legislative requirements (see **Section 11**). The VMP is aligned with this plan.

10.4 220kV Line Protection

Protection tripping settings for the line route are fixed at the highest sensitivity level at all times. Therefore the settings require no further level of adjustment to take place during the declared fire season, high fire danger or (**TFB**) days.

Upon a 220kV line protection operation there is no auto reclose feature. Protection relay data has to be downloaded and reviewed before permission is granted to restore supply. For a genuine line protection operation the line must be physically inspected before permission is granted to restore supply.

This 220kV operating procedure applies at all times and no extra operational procedures apply for high Fire Danger or TFB days. VPPS will cease generation upon request by the relevant agency (**CFA, AEMO**) e.g. fire approaching. At that point VPPS personnel will evacuate the site.

10.5 Fire Risk & Fires

10.5.1 Declared Fire Season

Prior to each summer season the site will apply to the CFA for exemption to use the "Hot Works Procedure " during the Declared Fire Season, alternatively works may be carried out by the Service Provider under their permits/approvals.

10.5.2 Total Fire Ban Days

On days of Total Fire Ban:

Although no 'hot' work is intended to be carried out, this sort of work will not, as a matter of policy, be carried out during total fire ban days. In the event of an emergency VPPS may arrange permits allowing this work under particular circumstances e.g. cable repair. Any required work on the overhead lines would be carried out by the Service Provider and they would operate under their particular constraints and permits.

- No vegetation works will be completed with anything but saw/axe i.e. no chainsaws etc
- If vehicles are required to access the line route for any reason it will be a diesel vehicle and carry a large volume hand held extinguisher

10.5.3 Fires

If there is a known fire risk approaching or within the site, inside or outside a declared fire season:

- VPPS will implement Snowy Hydros G23-G Valley Power Emergency Response Handbook including:
 - liaison with the relevant fire control agency regarding appropriate actions underway/or as required as well as assist with any ensuing investigation
 - VPPS will cease generation and/or de-energise the 220KV line upon request by the relevant agency (CFA, AEMO). At that point VPPS personnel will evacuate the site
 - The Transmission Line is to be de-energized as soon as possible until the risk has dissipated

10.6 Incident Management

Any fires involving the VPPS at risk electricity line would be reported and investigated in accordance with the Snowy Hydro QP14-07 Incident management procedure and reported to ESV as required. SHL utilises the ICAM process to investigate significant incidents.

No fires initiated by the at risk electricity line or assets have occurred.

10.7 Auditing

VPPS has a series of audits to ensure the BMP plan is effective in fire prevention as follows:

- Audit and review of the BMP including review of Ellipse Inspection work order closeouts noting any further actions and comments (ie the effectiveness of the inspections)
- Bushfire Management Scorecard reviews prior to and post the DFS
- Request for relevant competencies of employees and service providers employees that inspect and maintain the site to meet the training requirement in this plan prior to starting works
- Management review and approval of the BMP plan prior to the DFS.
- The site is certified to ISO 9001, 14001, and 45001 standards and is audited by an independent external auditor to verify certification
- Internal Snowy Hydro audits of the effectiveness of the environmental and safety management systems.

External audits required in accordance with ISO 9001, 14001 and 45001 are conducted annually across Snowy Hydro, with recertification on a 3 yearly cycle. Inclusion of Valley Power in the schedule is determined by the independent external auditors based on previous performance of the site and audit coverage required to demonstrate compliance to the Standards.

Non-conformances from all audits are recorded in the Snowy Hydro incident management database together with responsibilities and timings for action completion. These may be preventative or corrective actions. If relating to asset management, actions will be

recorded in the Snowy Hydro defect management system, which similarly identifies responsibilities and timings for completion.

11 TRAINING

11.1 Training and qualifications for BMP implementation

Snowy Hydro personnel and contractors undertaking works as part of this plan include the Plant Manager, Production technicians and suitably qualified external contractors.

Records of employee training and employee and contractor induction records are kept in the company's Learning Management System (**LMS**). Requalification and refresher training intervals are also monitored and managed through SHL's LMS.

Contractors and service provider competency is assessed through pre-qualification processes and managed through SHL's contractor engagement portal, (**Gatekeeper**).

Snowy Hydro personnel managing this plan are experienced Operational Managers in the electricity industry, selected through Snowy Hydro's recruitment process. They are also experienced in coordinating the preparation and implementation of management plans required for operational sites.

All Snowy Hydro employees are performance managed as per Snowy Hydro's internal system with their performance reviewed on a yearly basis against their position description. The Operational Managers identified on the plan are also supported by the Snowy Hydro Environmental Group which comprises professional environmental advisors.

Evidence of relevant ESV approved competencies of Service Provider's employees that inspect and/or maintain assets and vegetation in the 220kv easement are requested prior to starting works; and are required during the Snowy Hydro contract qualification process prior to the Service Provider being appointed. The minimum qualifications for people carrying out works under the plan are listed in the table below.

Role of Worker	Description of Work	Training Requirements/Experience
Asset Inspector	Engaged in asset inspection.	• Cert 11 in Asset Inspection
Thermographers	Engaged in Asset Inspection	• ISO 18436-7 Cat 1 Minimum
Protection Testers	Line Protection Testing	• Signed off by SHL Protection Manager

Role of Worker	Description of Work	Training Requirements/Experience
Vegetation / Assessor	Engaged in assessing and scoping vegetation near live electrical apparatus. Determine cutting requirements to confirm compliance for vegetation near live electrical apparatus	<ul style="list-style-type: none"> • National Certificate III in Arboriculture including the "Perform a ground-based tree defect evaluation" unit of competency, or an equivalent qualification; • At least 3 years of field experience in assessing trees.
Arborists	Engaged to assess and remove hazardous trees.	<ul style="list-style-type: none"> • National Certificate III in Arboriculture including the "Perform a ground-based tree defect evaluation" unit of competency, or an equivalent qualification; • At least 3 years of field experience in assessing trees.
Auditor	Engaged in Quality (Asset) and Compliance (HS&E) Field Auditing	Subject matter experts (SME) or completed nationally recognised auditor training

As specified in schedule 1 of the Electricity Safety (Electric Line Clearance) Regulations 2020, where a suitably qualified arborist is required they shall have the following:

- A. As a minimum, the qualification of National Certificate III in Arboriculture including the "Perform a ground-based tree defect evaluation" unit of competency, or an equivalent qualification; and
- B. At least 3 years of field experience in assessing trees.

11.2 Qualifications for preparation of this BMP

Snowy Hydro engaged an external expert for preparation of the BMP. This was Mr Gary Bennett from Worley Parson's who prepared the original version of this plan. His qualifications include extensive asset management experience in the Victorian, Queensland and New Zealand power distribution industries such as;

- Establishing Powercor's first 5 year Asset Maintenance Strategy and risk tolerances, updating major asset inspection, replacement cycles materially reducing operating and insurance costs.
- Management of Ergon Energy's Work Plan from 2008-2010, including delivery of asset maintenance and regulatory compliance with respect to transmission lines; and

- Responsibility for Tenix network business from 2011-2015.

12 REVIEW

The BMP is reviewed each year and adjustments/improvements are made to better meet the objectives of the plan. The review includes;

- The Bushfire Scorecard Review (Pre Fire Season Review) which is held before the start of the fire declaration period. It provides an opportunity to report on the progress of BMP activities and to approve review change updates, if the need arises, to meet the requirements of the plan
- Asset Inspection and fault performance findings
- During the declared fire season report to the monthly management meeting compliance level to the BMP requirements
- ESV Directions, applicable codes/Acts updates.

13 SUBMISSION REQUIREMENTS

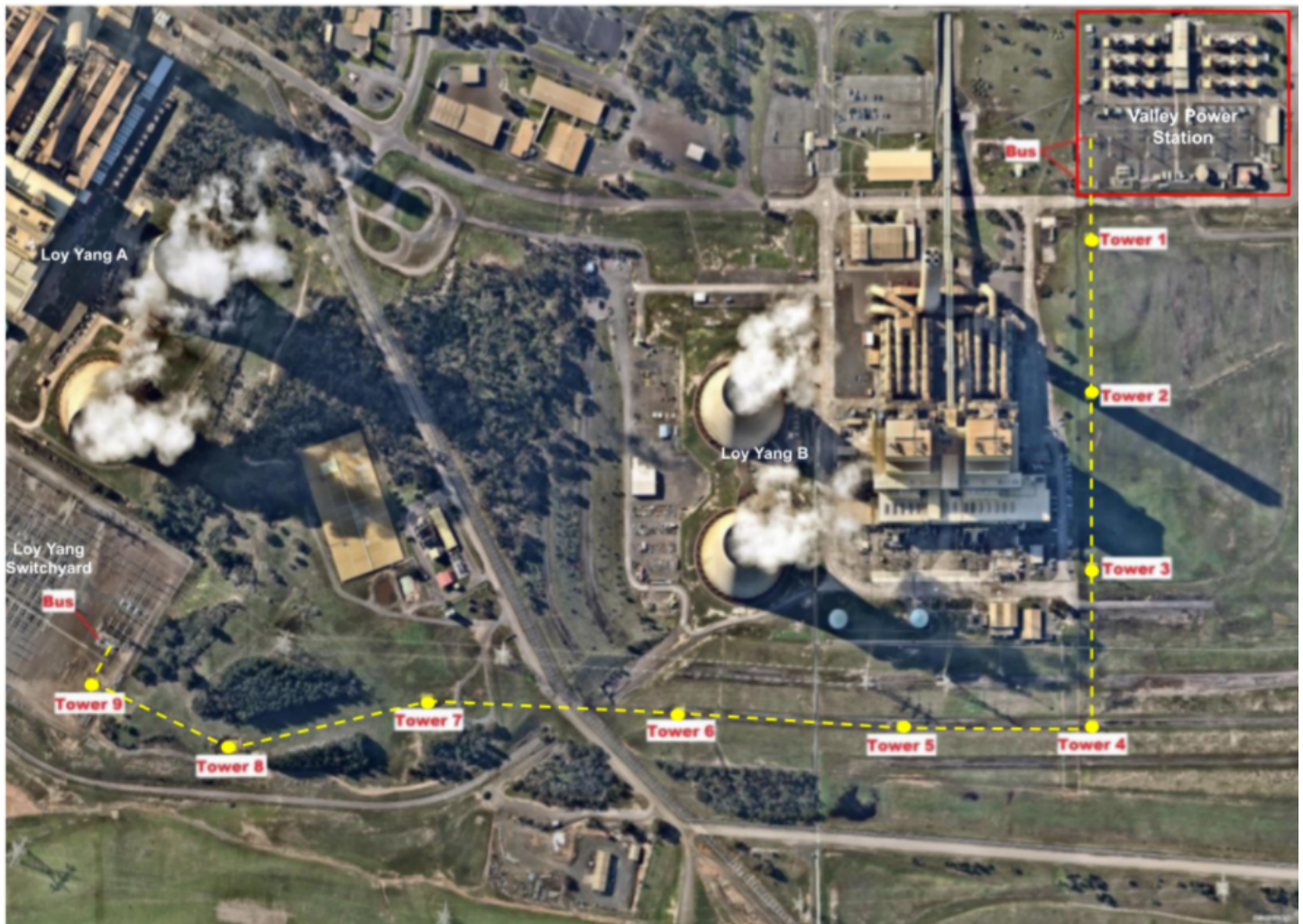
The Bushfire Mitigation Management Plan is required to be submitted to ESV annually by 1 July.

It is noted that the Valley Power Vegetation Management Plan is reviewed annually by 31 March. The VMP is published on Snowy Hydros external website and made available to ESV upon request but is not required to be submitted.

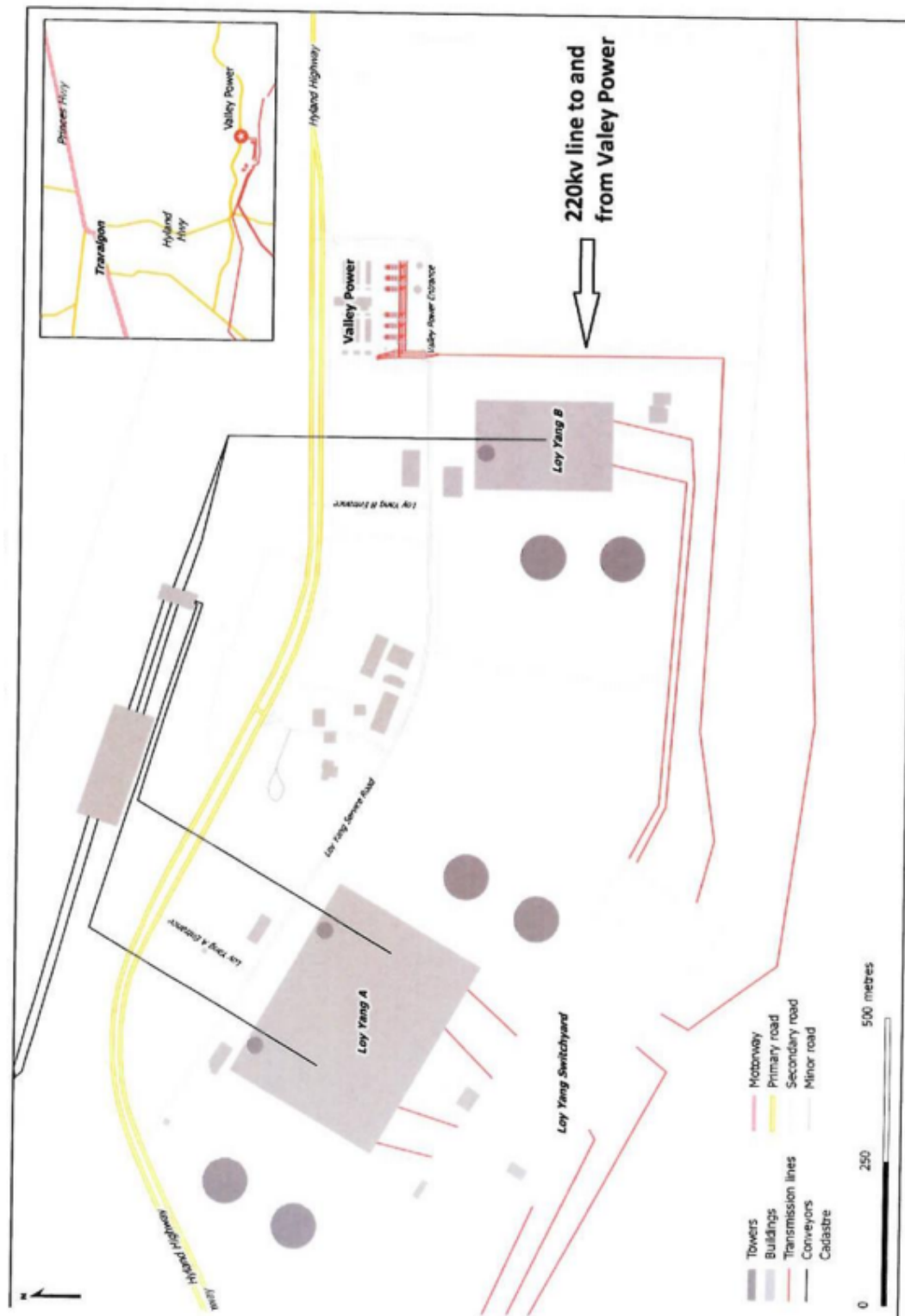
14 Appendix A

Part 1 – Switchyards & Line Route: Aerial Photograph Overlay

The Valley Power power station site and transmission assets shown below are located in a Hazardous Bushfire Risk Area (HBRA). The 220kV line is shown in yellow.



Part 2 - Switchyards & Line Route Schematic Diagram



Part 3 - Valley Power Power Station



Aerial Photograph of site taken April 2019.

15 Appendix B - Program of Asset Inspection and Monitoring

Item	Method	Frequency	Competent Resource	Last Completed	Findings
Thermographic Survey of 220 kV line	Thermographic imaging equipment	Annually	Service Provider	June 2022	No reported Issues
Line Route Inspection	Visual inspection	3 Monthly	VPPS Personnel	October 2023	No reported Issues
Line Route Vegetation Inspection	Visual inspection	Annually	Service Provider	November 2022	Reported issues all complete. 1 Pine tree removed.
Switchyard Earthing	Visual inspection	Annually	VPPS Personnel	May 2023	No reported Issues
Tower & Line Inspection	Drone imaging inspection	3 yearly	Service Provider	June 2022	No reported Issues
Line Protection Testing	Visual inspection and test	4 yearly	Protection Team	June 2021	No reported Issues
BMP & VMP Plan Reviews	Desktop activity	Annually	VPPS Management	June 2023	Minor updates to plans
Bushfire ScoreCard Review (pre season management review)	Meeting	Annually	SHL Management	Sept 2023	No significant issues
3 Yearly ISO 9001,14001 and 48001 recertification Annual surveillance inspections	Site inspection and document review	3 yearly (across SHL operations)	Service Provider	November 2022	No significant non conformances were identified.