



Document No EPG030M
Procedure AGL Loy Yang Bushfire Mitigation Plan
Revision See Footer
Site Loy Yang

Document Approval

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1. Objective

The objectives of this bushfire mitigation plan are:

- To implement plans, strategies and policies to reduce as far as practicable the risk of fire initiation and spread from mine overhead electrical assets including lines, pole subs and switches
- To comply with the requirements of the Electricity Safety Act and the Electricity Safety (Bushfire Mitigation) Regulations
- To inform internal and external stakeholders of the strategies and contacts relevant to a fire associated with electrical assets at AGL Loy Yang mine
- To link the existing fire plans and policies together in one document to demonstrate how AGL Loy Yang will respond to a bushfire emergency

This plan has been specifically created to address those fire risks and strategies associated with overhead electrical assets. For general fire mitigation and emergency response to fires the AGL Loy Yang Emergency Management Plan – HSM0001C and Fire Risk Mitigation Plan – P000330 Mine fire risk, Period specific fire readiness TARP Should be consulted.

2. Policy

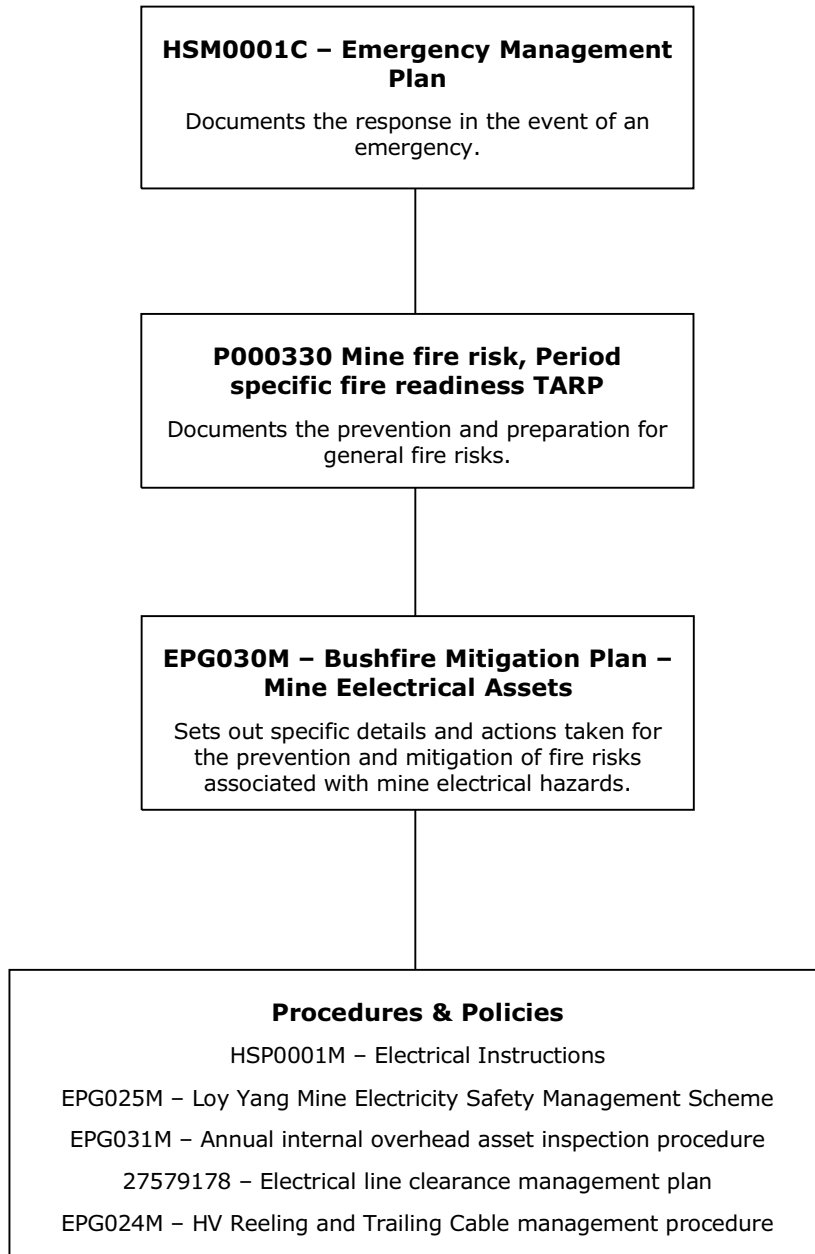
AGL Loy Yang mine is committed to the implementation of bushfire mitigation strategies that reduce the risk, spread and initiation of fire associated with electrical assets. This will be achieved through a combination of strategies including:

- Periodic 3 year inspections of all at risk lines and assets by an independent assessor and annual internal inspection of all overhead assets
- Comprehensive maintenance plans
- Electric line clearance
- Safe operating practices on days of high fire risk
- Installation and replacement of high fire risk plant and systems with low fire risk equipment

3. Purpose and Structure

Loy Yang Mine has no current exemptions from the Electricity safety (Bushfire Mitigation) Regulations 2013.

This document is a subordinate of P000330 Mine fire risk, Period specific fire readiness TARP. This document has been specifically created to address the risks associated with electrical assets at AGL Loy Yang mine and ensure compliance with the Electricity Safety Act and the Electricity Safety (Bushfire Mitigation) Regulations.



4. Prescribed Particulars

The following section documents the response or action as appropriate to address the specific requirements of the Electricity Safety (Bushfire Mitigation) Regulations in accordance with regulation 6 Prescribed particulars for bushfire mitigation plans – Specified Operators.

Regulation	Requirement	Reference
6(a)	the name, address and telephone number of the specified operator;	Section 5
6(b)	the name, position, address and telephone number of the person who was responsible for the preparation of the plan;	Section 5
6(c)	the name, position, address and telephone number of the persons who are responsible for carrying out the plan;	Section 5
6(d)	the telephone number of a person who can be contacted in an emergency that requires action by the specified operator to mitigate the danger of bushfire;	Section 5
6(e)	the bushfire mitigation policy of the specified operator to minimise the risk of fire ignition from its at-risk electric lines;	Section 2
6(f)	the objectives of the plan to achieve the mitigation of bushfire danger;	Section 1
6(g)	a description, map or plan of the land to which the bushfire mitigation plan applies, identifying all hazardous bushfire risk areas and the location of all the specified operator's at-risk electric lines in those areas;	Drawing No. LV43/07-01/001 (Assets owned by others are not part of this plan) All overhead lines identified in blue are located in a hazardous bushfire risk area and are identified as at-risk electric lines. A copy of this map is in the appendix. Section 13
6(h)	the preventative strategies to be adopted by the specified operator to minimise the risk of the specified operator's at-risk electric lines starting fires;	Section 6 Section 7 EPG031M - Annual Internal Overhead Asset Inspection Procedure
6(i)	a plan for inspection that ensures that all of the specified operator's at-risk lines are inspected at regular intervals of no longer than 37 months;	The distribution system poles, switches and substations at AGL LOY YANG MINE are inspected on a three yearly rolling basis with one third completed every year.



		<p>All findings are reported to the EOA, risk ranked and appropriate actions taken.</p> <p>HSP0001M – Electrical Instructions – Section 6.3.15</p>
6(j)	<p>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</p>	<p>The competency of inspectors will be audited by the Electrical Coordinator prior to inspection work being undertaken.</p> <p>HSP0001M – Electrical Instructions – Section 6.3.15</p>
6(k)	<p>details of the processes and procedures for ensuring that only persons (other than persons referred to in paragraph (J) who carry out functions under the plan are competent to do so.</p>	<p>Pole, substation and switch testing and inspection is carried out by trained inspectors who are authorised to carry out this work by the EOA; these inspectors are usually contracted in as required. Personnel completing this audit shall be trained and competent in the inspection of HV apparatus. Persons shall have completed a training course recognised by the Victoria Electricity Safety Regulator for the purposes of performing electricity asset inspection The competency of inspectors will be audited by the Electrical Coordinator prior to inspection work being undertaken.</p> <p>HSP0001M – Electrical Instructions – Section 6.3.15</p>
6(l)	<p>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;</p>	<p>AGL Loy yang mine has 24 hour 7 days a week coverage by HV operators, in the event of a fire all electrical equipment in the area will be de-energised and all fire damaged equipment will be removed from service. During periods of high fire danger switching and operating is restricted . more detail is contained in</p> <p>HSP0001M – Electrical Instructions – Section 6.3.17 & 6.3.18</p> <p>HSM0001C – Emergency Management Plan – Volume 4: Combating Agencies</p>



6(m)	the investigations, analysis and methodology to be adopted by the specified operator for the prevention of fire ignition from its at-risk electric lines;	Section 8 HSP0001M - Electrical instructions
6(n)	<p>details of the processes and procedures by which the specified operator will—</p> <ul style="list-style-type: none"> (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 if any deficiencies are identified under subparagraph (iii); and (v) monitor the effectiveness of inspections carried out under the plan; and (vi) audit the effectiveness of the inspections carried out under the plan; 	<p>This bushfire mitigation plan is a controlled document and is automatically sent to all relevant parties for review on an annual basis. This review is conducted prior to the commencement of fire season and is completed during the annual overhead line inspections.</p> <p>Pole, substation and switch testing and inspection is carried out by trained inspectors who are authorised to carry out this work by the EOA</p> <p>The competency of inspectors will be audited by the Electrical Coordinator prior to inspection work being undertaken.</p> <p>HSP0001M – Electrical Instructions – Section 6.3.15</p> <p>Section 9</p>
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.	<p>In the country area as defined by legislation, as of July 2020 – fire rescue Victoria (FRV) will always investigate the cause of a fire that that they attend. Consequently the preservation of evidence in the vicinity of the fire is critical. Only work that is necessary to actually extinguish the fire in the area should be conducted and no further hose down or clean up be performed until approved by the CFA incident controller.</p> <p>HSM0001C – Emergency Management Plan – Volume 4: section F Action with respect to statutory & other investigations.</p>

5. Responsibilities

Responsibility	Specified Operator
Name	AGL Loy Yang – mine
Address	Bartons Lane, Traralgon, 3844
Phone Number	5173 3000
Responsibility	Preparation
Name	Anthony Adams
Position	Mine Maintenance Manager
Address	AGL Loy Yang - Mine Electrical Team, Bartons Lane, Traralgon, 3844
Phone Number	5173 2552
Responsibility	Carrying out of the plan
Name	Michael Allgood
Position	Electrical Coordinator
Address	AGL Loy Yang - Mine Electrical Team, Bartons Lane, Traralgon, 3844
Phone Number	0409558832
Responsibility	24/7 Emergency Contact (Electrical Fire Emergency)
Phone Number	5173 3377

The contacts identified are in relation to a fire emergency associated with electrical assets. For general fire matters reference should be made to HSM0001C – Emergency Management Plan.

6. Preventative Strategies

The preventative strategies adopted by AGL Loy Yang mine to minimise fire risk are:

- Management of electrical assets, line clearance, total fire ban days in accordance with AGL Loy Yang mine procedures and policies including:
 - HSP0001M – Electrical Instructions
- Management of hot works, fire fighting, vehicles, fire detection and reporting and emergency response in accordance with AGL Loy Yang mine procedures including:
 - HSM0001C – Emergency Management Plan
 - P000330 Mine fire risk, Period specific fire readiness TARP

7. List of Works

The following works are undertaken as part of minimising the risk of fire associated with electrical assets:

Activity	Details	Due Date
Overhead Line inspections (External audit)	A third of the system is completed each year; this inspection includes pole condition assessment, conductor condition, insulator condition and thermography.	Prior to the start of fire season each year.
Pole, Cross-arm, Substation inspection	A third of the system is completed each year.	Prior to the start of fire season each year.
Thermography	A third of the system is completed each year.	Prior to the start of fire season each year.
Pole strength measurements (wooden poles only)	A third of the system is completed each year.	Prior to the start of fire season each year.
Electric Line Clearance (External Audit)	A third of the system is completed each year.	Prior to the start of fire season each year.
Electric Line Clearance (Internal Audit)	Full system audit is completed each year by internal personnel. System is audited for compliance with the Electricity Safety (Electric Line Clearance) Regulations.	Prior to the start of fire season each year.

There are additional works are completed as part of the general fire mitigation strategies such as slashing and site clean-up, the details of these activities can be found in P000330 Mine fire risk, Period specific fire readiness TARP.

8. Investigations

All fires initiated by electrical apparatus at AGL Loy Yang mine will be investigated to minimise and eliminate the risks associated with bushfire. All investigations will be in accordance with AGL Loy Yang mine procedures and will be reported to Energy Safe Victoria in accordance with the requirements of the AGL Loy Yang mine Electricity Safety Management Scheme.

Loy Yang Mine has no at-risk electric lines.

Incident Investigation from the previous year:

- Decemeber 17th 2021 – Event ID 20090968, Small grass fire occurred due to a bird contacting the overhead conductors at a 22kV overhead gas switch. Incident reported to Energy Safe Victoria and Worksafe Victoria. (Worksafe I.D – 135898, ESV # 17881342)

- Only a basic investigation was conducted as it was very clear the bird had come into contact between the phases of the recently installed spare supply switch and fallen to the ground causing the fire.

9. Monitoring, Auditing & Reviewing

This bushfire mitigation plan is a controlled document and is automatically sent to all relevant parties for review on an annual basis. This review is conducted prior to the commencement of fire season and is completed during the annual overhead line inspections. Monitoring and auditing of the plan, inspections, maintenance strategies and electric line clearance is completed at this time and any updates to this document or other relevant procedures is completed at this time.

10. Plan Access & Inspection

This bushfire mitigation plan will, on acceptance, be made available via the AGL website www.AGL.com.au and will be available during normal business hours at the Mine Administration building main entrance foyer.

11. Details / Description of assets

AGL Loy Yang overhead lines surround the mine and overburden dump. All overhead lines are 22Kv with the longest feeder being 10.5 Km in length.

Feeder Number	Number of poles	Number of wooden poles
13	1	0
14	9	0
15	43	2
25	8	0
27	150	4
31	174	6
11	1	0
21	23	1
22	141	3
23	39	6
26	66	9
32	57	2
12	126	18
16	78	38
18	1	0
19	46	27
34	22	7
35	1	1

12. Site Details

Address:

AGL Loy Yang mine

Administration - Main Entrance Foyer

Bartons Lane

Traralgon 3844

Hours:

7:30 – 16:00

The document will be available on the site intranet via document no **EPG030M**.

13. Appendices

Reference Documents:

HSP0001M Loy Yang Mine Electrical instructions	Rev. 10	Approved 30/11/2021
HSM0001C Emergency Management Plan	Rev. 18	Approved 08/12/2021
EPG031M Annual Internal overhead asset inspection Procedure	Rev. 2	Approved 29/11/2012
P00330 Mine Fire Trigger Action Response Plan (TARP)	Rev. 6	Approved 21/03/2022

