

Document No EPG030M
Procedure AGL Loy Yang Electrical Systems
Bushfire Mitigation Plan
Revision 7
Site Loy Yang

Document Approval

Document Authorisation	Position	Approved Date
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Stakeholders (Delete if not applicable)

Stakeholder	Position	Consulted Date
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Contents

1. Objective.....3

2. Plan management particulars.....3

3. Policy3

4. Purpose and Structure4

5. Prescribed Particulars5

6. Responsibilities8

7. Preventative Strategies8

8. List of Works9

9. Investigations..... 13

10. Monitoring, Auditing & Reviewing..... 13

11. Plan Access & Inspection..... 14

12. Site Details..... 14

13. Details / Description of assets 14

14. Qualifications and Experience Requirements..... 15

15. Appendices 16

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, Mine Fire Instructions – HSM001M and Fire Risk Mitigation Plan – P000330 Mine fire risk, Period specific fire readiness TARP Should be consulted.

2. Plan management particulars

AGL Loy Yan Mine is the owner and specified operator of the at-risk lines associated with this Bushfire mitigation Plan.

AGL Loy yang Mine operates under company name AGL Loy Yang Pty Ltd, ACN 077985758, ABN 62077985758.

3. 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:

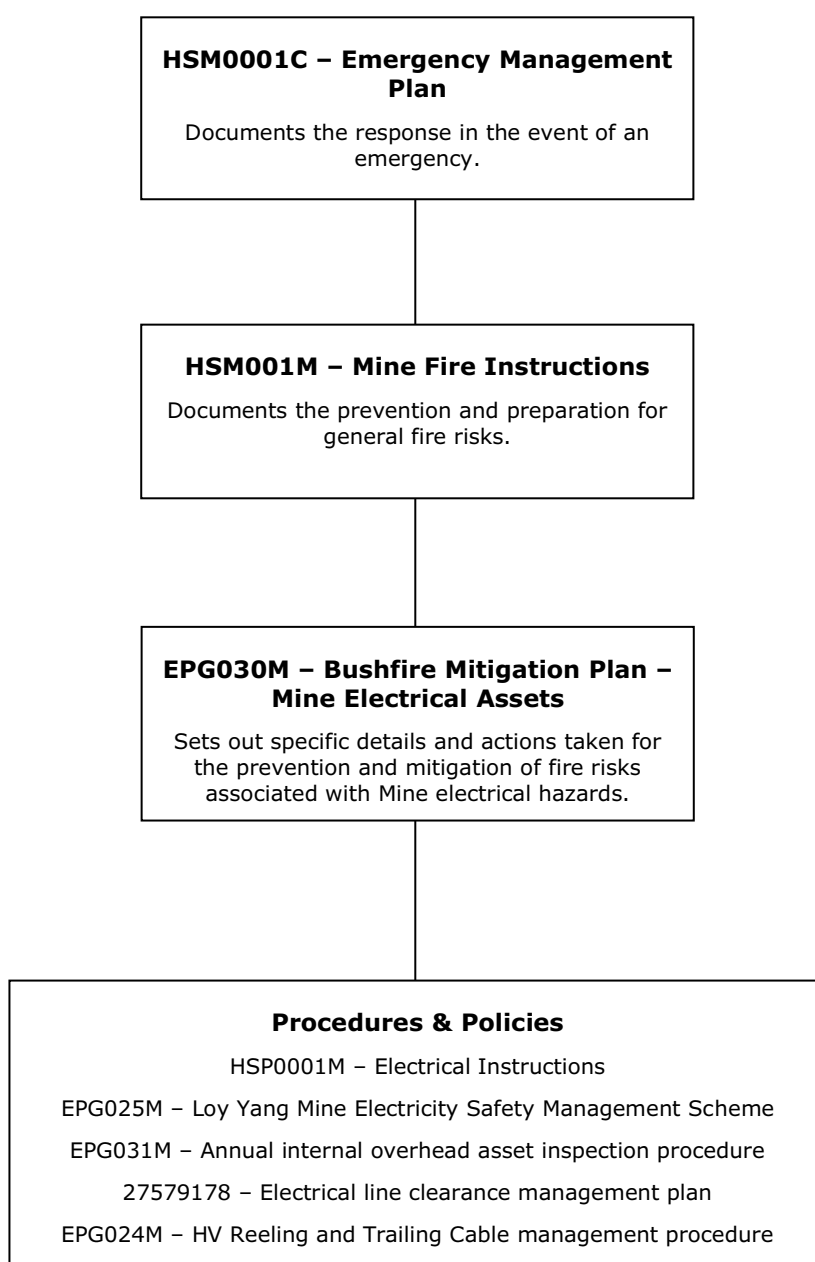
- Periodic 3 year inspections of all at risk lines and assets by an independent assessor and annual internal inspection of all overhead assets
- Comprehensive maintenance plans
- Electric line clearance
- Safe operating practices on days of high fire risk

4. Purpose and Structure

Loy Yang Mine has no current exemptions from the Electricity safety (Bushfire Mitigation) Regulations 2023.

This document is a subordinate of HSM001M – Mine Fire Instructions.

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.



5. 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, email address and telephone number of the specified operator;	Section 6: Responsibilities
6(b)	the position, address, email address and telephone number of the person who was responsible for the preparation of the plan;	Section 6: Responsibilities
6(c)	the position, address, email address and telephone number of the persons who are responsible for carrying out the plan;	Section 6: Responsibilities
6(d)	the email address (if any) and telephone number of the specified operators control room so that persons can be contacted in an emergency that requires action by the specified operator to mitigate the danger of bushfire;	Section 6: Responsibilities
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
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 1: Objective
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 12: Site details. Section 13: Asset description. Section 15: Location plan Drawing No. LV43/07-01/001
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;	Section 7: Preventative Strategies Section 8: List of works
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. All findings are reported to the Electrical

		<p>Coordinators, 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 (ii) is competent to carry out such inspections;</p>	<p>Section 14: Qualifications and Experience requirements</p> <p>HSP0001M – Electrical Instructions – Section 6.3.15</p>
6(k)	<p>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.</p>	<p>Section 14: Qualifications and Experience requirements</p> <p>All external contractors are vetted to ensure that they have the competencies described in Section 14 by the electrical co-ordinator.</p>
6(l)	<p>the operation and maintenance plans for the specified operator's at-risk electric lines—</p> <p>(i) in the event of a fire; and</p> <p>(ii) during a total fire ban day; and</p> <p>(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. When a fire emergency is declared other combating agencies may become involved and take over the control of the situation.</p> <p>During periods of high fire danger, Mine fire alerts and total fire ban days switching and operating is restricted to emergency use only.</p> <p>During a fire danger period any level of high fire danger and above, including days of total fire ban as highlighted by the fire danger rating for West & South Gippsland will restrict the operation and maintenance on at-risk electric lines to emergency use only.</p> <p>For more information reference HSP0001M – Electrical Instructions – Section 6.3.17 & 6.3.18 HSM0001C Volume 4 – Combating Agencies</p>
6(m)	<p>the investigations, analysis and methodology to be adopted by the specified operator for the mitigation of</p>	<p>Section 9: Investigations</p>

	fire ignition from its at-risk electric lines;	
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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 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 the inspections carried out under the plan; 	<p>The Mine Electrical coordinator is responsible for this plan is also the responsible person for the implementation of the plan.</p> <p>Section 10: Monitoring, Auditing and Reviewing.</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 3 : Management Arrangements - section H : Action with respect to statutory & other investigations.</p>

6. Responsibilities

Responsibility	Specified Operator
Name	AGL Loy Yang Mine
Address	Bartons Lane, Traralgon South, Victoria, 3844
Email Address	loyyang@agl.com.au
Phone Number	(03) 5173 2000
Responsibility	Preparation
Position	Electrical Asset Engineer - Mine
Address	AGL Loy Yang Mine, Bartons Lane, Traralgon South, Victoria, 3844
Email Address	zsteyn2@agl.com.au
Phone Number	0498252341
Responsibility	Carrying out of the plan
Position	Mine Electrical Coordinator
Address	AGL Loy Yang Mine, Bartons Lane, Traralgon South, Victoria, 3844
Email Address	mallgood@agl.com.au
Phone Number	0409558832
Responsibility	24/7 Emergency Contact (Electrical Fire Emergency)
Phone Numbers	Mine Control Centre (03) 51733117 or (03) 51733119

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.

7. Preventative Strategies

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

- All new feeder poles used in the Mine distribution system shall be concrete. Long term replacement of wooden poles shall be scheduled when maintenance requires.
 - HSP0001M – Mine Electrical Instructions

- Management of electrical assets, line clearance, total fire ban days in accordance with AGL Loy Yang mine procedures and policies including:
 - HSP0001M – Mine Electrical Instructions
- Management of hot works, firefighting, vehicles, fire detection and reporting and emergency response in accordance with AGL Loy Yang mine procedures including:
 - HSM0001C – Emergency Management Plan
 - HSM001M – Mine Fire Instructions
 - P000330 - Mine fire risk, Period specific fire readiness TARP

8. 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)	<p>A thorough inspection of a third of the system is completed each year; this inspection checks the condition of poles, insulators, crossarms, switches, substations, and all other associated equipment. The methods of inspection include visual using binoculars, camera and drone footage as well as conducting thermography and pole strength measurements (woodscan) for wooden poles.</p> <p>These inspections will be conducted using the external inspector's Asset Inspection Manual (AIM) and be conducted by a qualified overhead lines inspector.</p> <p>A visual inspection is also conducted on the remaining system feeders each year.</p> <p>The inspector will provide a report prioritising any defects. These defects are to be added to the Overhead asset inspection – Maintenance progress sheet.</p>	Prior to the start of fire season each year.
Overhead Line inspection (Internal audit)	Full system visual inspection is completed each year by internal personnel. This inspection checks for line clearance as well	Prior to the start of fire season each year.

	<p>as condition of poles, insulators, conductors, crossarms, switches, substations, and all other associated equipment.</p> <p>The method of visual inspection includes the use of binoculars and camera.</p> <p>This inspection will be undertaken by the Electrical Co-Ordinator</p> <p>Any defects identified are to be risk ranked and added to the Overhead asset inspection-maintenance progress sheet.</p>	
Overhead asset inspection – Maintenance progress sheet remediation works.	Suitably qualified external contractor linesmen and A grade electricians to complete remedial works as required.	Prior to start of fire season each year or as soon as reasonably practicable taking into consideration the AGL Loy Yang Maintenance Priority Setting Matrix.
Overhead Line clearance inspections (External audit)	The entire overhead line network is audited each year by an external Arboriculture inspector with a report provided.	Prior to the start of fire season each year.
Tree trimming and works as recommended by the external audit report	External tree contractors are engaged to conduct any required works detailed by the external arboricultural report. This work will be undertaken by a qualified arborist.	Prior to the start of fire season each year.
Weed spraying	External contractor to spray any weeds within power distribution centre compounds, around portable power distribution centres and 22kV poles which have switches or substations attached.	Prior to the start of fire season each year.

There are additional works which 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 HSM001M – Mine Fire Instructions.

All defects identified during the above inspections will be risked ranked as P1 (emergency work) to P5 (outage work) priority as per the AGL Loy Yang Maintenance priority setting matrix. This priority will determine the timeframes for scheduling of repairs where P1 work is to be completed within 24 hours, P2 work within 2 weeks, P3 and 4 as soon as reasonably practicable beyond the 2 week period and P5 work when time allows, usually in an outage. A priority of High corresponds to a P1, Medium to P2 or P3 and low to P4 or P5. This priority setting matrix applies to all results of inspections including full inspections, visual inspections and thermographic inspections.

See the following maintenance progress sheet which was updated from the 2023 overhead asset inspection report. It shows the maintenance defect priorities and notes repair completions. Limited life wooden poles are noted as limited life and reinspected annually until unserviceable and replacement is necessary.

AGL Loy Yang Electrical Systems Bushfire Mitigation Plan



Overhead asset inspection report 2023						
Report Year	Pole ID	HV Ref Tag #	Outstanding issue	Priority	Status	Predicted Repair Date
Feeder 12						
2022	LY 12000023	34	Limited Life wooden pole/ replace pole	Medium	Complete 6/2/2024	
2021	LY 12000034		Concrete pole damaged 1.2 m above ground	None	Monitor	
2023	LY 12000037 Spare S/Sw2	27	Broken earth at switch handle, unused ABS	None	Complete 8/2/2024	
2023	LY 12000037 Spare S/Sw2	27	L/A lead off, unused ABS	None	Unused switch	
2023	LY12000054	23	chipped insulator blue phase	Low	Complete 6/2/2024	
2023	LY 12000070		Slack stay wire	Low	Complete 8/12/2023	
2023	LY 12000066		2x Slack stay wires	Low	Complete 8/12/2023	
2023	LY 12000079 12-3		Broken earth tie	Low	Complete 6/2/2024	
2023	LY 12000097 12-5		Slack stay wire	Low	Complete 6/2/2024	
2023	LY 12000097 12-5		Birds nest on gas switch	Medium	Complete 6/2/2024	
2023	LY 12000047		Slack stay wire nearly touching earth	Medium	Complete 6/2/2024	
2023	LY 12000080		Broken earth wire rubbing on slack stay 8/12	Medium	Complete 6/2/2024	
2023	LY 12013001 Art Monitoring sub	3	Rusty sub bottom	None	Monitor	
2023	LY 12000057	1	slack stay wire	None	Complete 8/12/2023	
Feeder 15						
2023	LY15015008 PDC24 S/Sw	17	Bushing cover fallen off	Medium	Complete 7/2/2024	
Feeder 16						
2022	LY 16006002, S/Stn 13 S/Sw	37	Limited Life wooden pole	Low	Re-inspect in 12 months	
2022	LY16000028	unsure	Limited Life wooden pole/ replace pole	Low	Monitor	
2021	LY 16000011 FDR16 EMS STN Sw	20	Possible weeping on transformer bushings	Medium	Could not detect leak, slight rust, Monitor	
2021	LY 16000007		Pole has 4 degree lean	Negligable	Monitor	
2023	LY 16000030		pole missing concrete and reo rust, Limited life pole	Low	Re-inspect in 12 months	
2023	LY 16028010 RTL sub		HV bridging insulator small chip	Low	Monitor	
Feeder 19						
2022	LY 1900022 S/STN 42		Limited Life wooden pole	Low	Re-inspect in 12 months	
2023	LY 19034003 sub 49	24	slack stay wire and rust at eye bolt	Low	Complete 7/2/2024	
2023	LY 1900022 S/STN 42	21	LV bushing cover missing	Low	Cover not required.	
2023	LY 19000017 S/STN 55	26	HV bushing covers deteriorated	Medium	Waiting for access, inspected and still serviceable	
Feeder 21						
2023	LY 21000023 FS P53 sub	50	LV bushing covers removed	Low	Complete 8/2/2024	
2023	LY 21000021 Sub 70	4	LV bushing cover missing	Low	Complete 8/2/2024	
Feeder 22						
2023	LY 22000036	45	broken conductor strands blue phase	High	Complete 6/12/2023	
2023	LY 22000036	45	Broken HV glass disc blue phase	High	Complete 6/12/2023	
2023	LY 22000064	8	Broken HV tie centre phase	High	Complete 7/2/2024	
2023	LY 22000062	44	Slack stay wire	Low	Complete 8/12/2023	
2023	LY 22000063	9	Slack stay wire	Low	Complete 8/12/2023	
2023	LY 22000071	19	Slack stay wire	Low	Complete 6/12/2023	
2023	LY 22000072		Slack stay wire	Low	Complete 8/12/2023	
2023	LY 22000073	42	Chipped HV insulator	Low	Complete 7/2/2024	
2023	LY 22000076		Slack stay wire	Low	Complete 8/12/2023	
2023	LY22000082		Slack stay wire	Low	Complete 8/12/2023	
2023	LY 22000091		Slack stay wire	Low	Complete 8/12/2023	
2023	LY 22000096		Slack stay wire	Low	Complete 8/12/2023	
2023	LY 22000096		Missing split pin on connector nut W phase	Medium	Complete 7/2/2024	
2023	LY 22090002 Spare S/Sw 3		Conductor to LA disconnected, unused switch	None	Complete 7/2/2024	
2023	LY 22076004		HV bird cover moved	Low	Complete 7/2/2024	
2023	LY 22076007		broken earth strands on pole near L/A	Low	Complete 7/2/2024	
Feeder 23						
2021	LY 23002005		Bird nest just below crossarm	None	Not there, monitor for return.	
2023	LY 23000010 S/STN 9 S/Sw	18	LV bushing cover missing	Low	Complete 11/1/2024	
2023	LY 23000020 23-3 1801 S/Sw	39	HV cable head has burn marks near L/A	Low	Complete 11/1/2024	
Feeder 25						
2023	LY 25000001	25	HV conductor broken strands and loose D clamp, White phase	High	Complete 6/12/2023	
2023	LY 25000004	7	HV strain insulator nut loose	Medium	Complete 6/12/2023	
Feeder 26						
2023	LY 26045003 PDC31	30	birds nest on switch	Medium	Complete 8/2/2024	
Feeder 27						
2023	LY 2701609 Spare S/Sw 6	AGL	Gas switch failure, replacement	Low	Complete 5/12/2023	
2023	LY 27000072		2 x slack stay wires	Low	Complete 8/12/2023	
2023	LY 27000076		Slack stay wire	Low	Complete 8/12/2023	
2023	LY 27000066		2x Slack stay wires	Low	Complete 8/12/2023	
2023	LY 27000056	41	Connecting bolt missing split pin W phase	Medium	Complete 6/2/2024	
2023	LY 27012001	46	Slack stay wire	None	Monitor	
Feeder 31						
2023	LY 31000033	29	broken tie centre phase	High	Complete 7/12/2023	
2023	LY 31069002	10	HV and LV bushing covers missing	High	Complete 6/12/2023	
2023	LY 31017005X1	35	Pole has termites/ replace earth pole	Low	Complete 7/12/2023	
2023	LY 31017003	11	slack stay wire and rust at eye bolt	Low	Complete 7/12/2023	
2023	LY 31017002	47	slack stay wire and rust at eye bolt	Low	Complete 7/12/2023	
2023	LY 31000061	43	Slack stay wire	Low	Complete 8/12/2023	
2023	LY 31000084		Slack stay wire	Low	Complete 8/12/2023	
2023	LY 31000085		Slack stay wire	Low	Complete 8/12/2023	
2023	LY 31000070		2x slack stay wires	Low	Complete 8/12/2023	
2023	LY 31000095		Slack stay wire	Low	Complete 8/12/2023	
2023	LY 31000104A		Slack Stay wire	Low	Complete 8/12/2023	
2023	LY 31000106A 31-6		Earth insulation chewed by cattle	Low	Complete 8/2/2024	
2023	LY 31000106A 31-6		Slack Stay wire	Low	Complete 8/12/2023	
2023	LY 31069008		Chip on insulator	Low	Monitor	
2023	LY 31106022	16	Birds nest on gas switch	Medium	Complete 5/2/2024	
Feeder 32						
2023	LY 32000036	32	HV strain insulator pin and bolt fallen out	High	Complete 6/2/2024	
2023	LY 32029004 S/Stn L701 S/Sw	48	Birds nest on gas switch	Low	Complete 8/12/2023	
2023	LY 32029004 S/Stn L701 S/Sw	48	HV strain bird damaged	Medium	Complete 8/12/2023	
2023	LY 32041003 PDC 31	12	Birds nest on gas switch	Medium	Complete 8/12/2023	
2023	LY 32000005		Pole leaning 5 degrees	None	Monitor	
Feeder 34						
2023	LY 34000010 S/STN 24 S/Sw	49	LV bushing cover missing	Low	Complete 6/2/2024	
2023	LY 34000011	38	Bird damaged poly insulators W top, R bottom	Low	Complete 6/2/2024	
2023	LY 34000018		HV poly insulators minor bird damage	Low	Complete 6/2/2024	
2023	LY 34000015E 34-T-36	33	Broken tie on W insulator (Agl or Ausnet)	Medium	Ausnet Asset	
2023	LY 34000016E S/Stn 65	2	LV bushing cover moved	Low	Complete 6/2/2024	
2023	LY 34000018 S/STN stockpile conv.	13	LV bushing cover missing	Low	Complete 6/2/2024	

Approved Date: 15/01/2025

Document ID: 12558992

Approved By: Christo van Niekerk (A30008754)

Next Review Date: 12/01/2028

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9. Investigations

All fires initiated by electrical apparatus or all events that have the potential to initiate fires at AGL Loy Yang Mine will be investigated to minimise and eliminate the risks associated with bushfire. This includes HV line failures, permit issues resulting in incorrect switching and any other HSE events that have the potential to initiate a fire.

All investigations must be recorded in the myHSE incident reporting system. The level of investigation (i.e. Basic, 5 Whys or ICAM) will be automatically determined by the risk ranking.

The AGL Fully Integrated Risk Matrix (FIRM) must be utilised to determine the risk ranking associated with all events entered into the myHSE system.

The Investigation Lead will be assigned by the Event Manager. The Investigation Lead must commence the investigation within 2 calendar days of receiving the myHSE workflow.

Wherever practicable, the investigation must be completed within 14 calendar days of the workflow being received. Where the investigation is unable to be completed within the allocated time frame the Investigation Leader must seek approval for an extension from the appropriate line manager, prior to the due date.

Once the appropriate approvals have been received, the completed Investigation must be uploaded into myHSE and the Major Root Cause selected prior to the investigation being closed in the myHSE system.

Upon completion of the Investigation the Investigation Lead is responsible for developing a Lessons Learnt. Lessons Learnt must be prepared and distributed as soon as is reasonably practicable upon completion of the investigation.

All fires initiated by Loy Yang Mines at-risk electric lines 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 dangerous or failed at-risk electric lines.

Incident Investigation from the previous year:

- January 24th 2023 – Event ID 20109769, Small grass fire occurred below power lines, after fire was extinguished a charred bird was noticed in the vicinity. It is believed this was the cause of the fire. No damage was noted to the power line of feeder switch. Incident reported to Worksafe Victoria. (Worksafe I.D – 219811)
- Only a basic investigation was conducted with the conclusion being the bird had come into contact at the feeder switch causing it to catch fire.

10. 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 after the completion of the annual overhead lines inspections and resulting maintenance repairs. If any deficiencies are identified within this plan during these works, the plan will be rectified and sent to the relevant parties for approval.

The Electrical Coordinator conducting Loy Yang Mines Internal Inspection will compare it to the external inspection to gauge its effectiveness. They will also compare previous years maintenance

and fire incidents to measure the effectiveness of the inspections and repair works and review the plan if required.

Monitoring and auditing of the plan, inspections, maintenance strategies are completed during the review and any updates to this document or other relevant procedures is completed at this time.

All year around as well as in declared fire danger periods, Mine fire alerts and total fire ban days the Mine Electrical Coordinator has the responsibility to monitor and implement the appropriate actions as required in this plan.

11. Plan Access & Inspection

This bushfire mitigation plan will, on acceptance, be made available via the AGL website www.AGL.com.au or the AGL Enterprise Library (AEL) via document number: **EPG030M**.

Or a hard copy can be collected from:

AGL Loy Yang Main Gate

Bartons Lane

Traralgon South, Victoria, 3844

24 hours 7 days a week.

12. Site Details

Address:

AGL Loy Yang Mine

Bartons Lane

Traralgon South, Victoria, 3844

13. Details / Description of assets

AGL Loy Yang Mines overhead lines surround the mine and overburden dump. All overhead lines are 22Kv with aerial earths and the longest feeder being 11.5 Km in length. See details of each feeder in the following table.

Feeder Number	Number of poles	Number of concrete poles	Number of wooden poles
13	1	1	0
14	9	9	0
15	43	41	2
25	8	8	0
27	150	146	4
31	183	177	6

11	1	1	0
21	23	22	1
22	151	148	3
23	40	34	6
26	79	70	9
32	74	72	2
12	121	103	18
16	78	40	38
18	1	1	0
19	46	19	27
34	21	14	7
35	1	0	1

14. Qualifications and Experience Requirements

Overhead Lines Inspector (External):

- Minimum Certificate II in ESI – Asset Inspection and Testing (UET20621)
- 3 years industry experience

Overhead Lines Inspector (Internal):

- Must hold an A Grade Electrician's License
- Must be an Unrestricted High Voltage Operator
- Must be a V Class Electrical Inspector
- Minimum of 3 years Mine Overhead Lines experience

Lines Workers:

- Completed training as an electric line worker on high voltage aerial lines
- Hold a current Lineworker license for distribution network (D)
- Completed training for 'Apply ESI safety rules, codes of practice and procedures for work on or near electrical apparatus' and 'Apply access procedures to work on or near electrical network infrastructure'

Thermography Inspector:

- Minimum of Level 1 Infrared Thermographer qualification

Arboriculture Inspector:

- Minimum Certificate Level III Horticulture (Arboriculture), including "assess" and "identify" modules
- 3 years industry experience

Arborist:

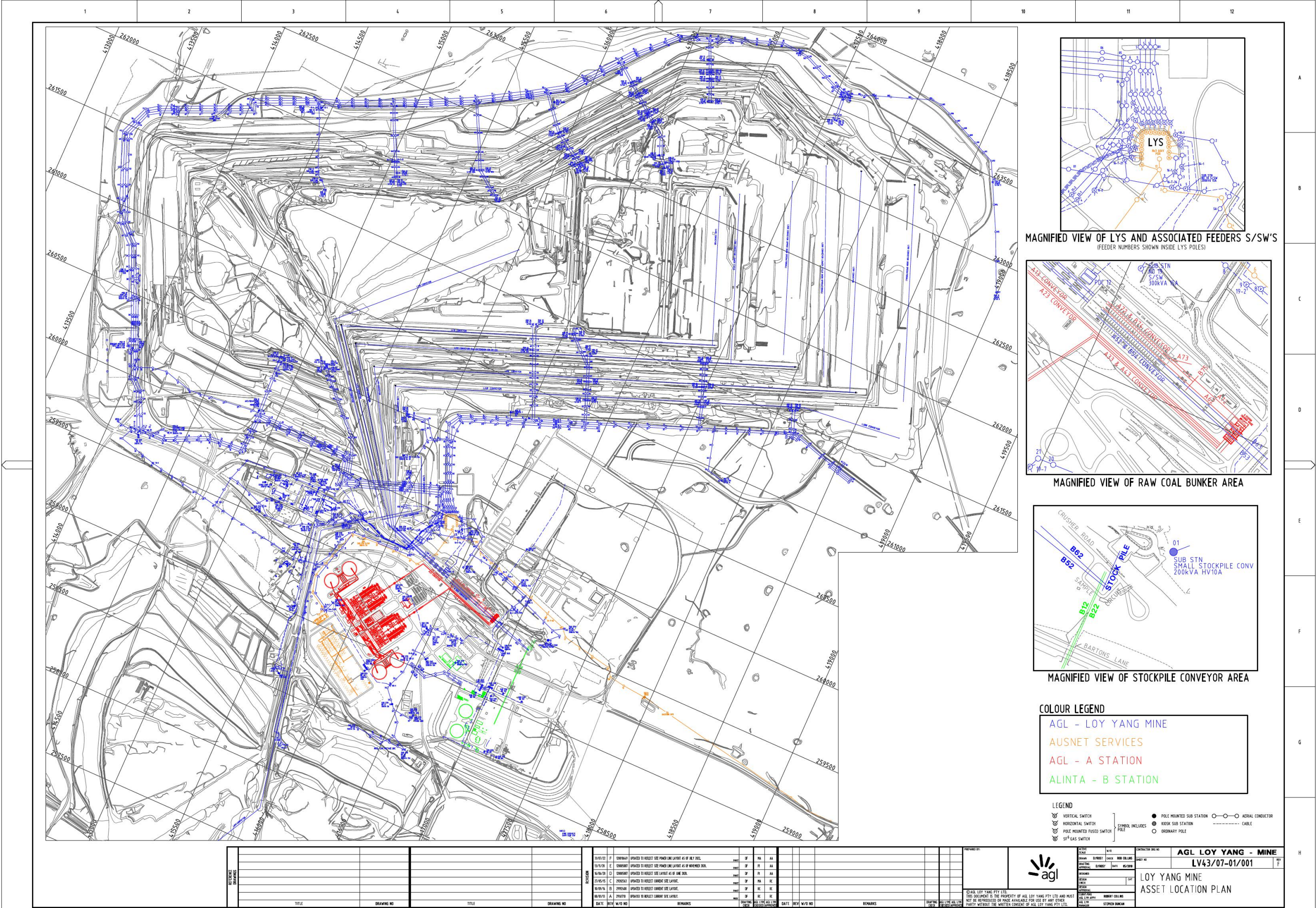
- Minimum Certificate Level III Horticulture (Arboriculture), Certificate II in ESI – Power line Vegetation Control
- 3 years industry experience

Prior to any works commencing and through the Authority to mobilise (Contractor pre-start), the Electrical Coordinator will confirm the qualifications and review previous experience to ensure competency requirements are met.

15. Appendices

Reference Documents:

HSP0001M Loy Yang Mine Electrical Instructions	Rev. 12	Approved 18/08/2023
HSM001M Mine Fire Instructions	Rev. 14	Approved 28/06/2023
HSM0001C Emergency Management Plan – Volume 3 : Management Arrangements	Rev. 19	Approved 22/12/2022
HSM0001C Emergency Management Plan – Volume 4: Combating Agencies	Rev. 2	Approved 21/12/2022
EPG031M Annual Internal overhead asset inspection Procedure	Rev. 3	Approved 05/10/2023
P000330 Mine Fire Trigger Action Response Plan (TARP)	Rev. 8	Approved 04/08/2023
F000162 AGL Loy Yang Maintenance Notification Priority Setting Matrix	Rev. 7	Approved 22/02/2023
22517855 Authority to Mobilise (Contractor Pre-Start)	Rev. 2	Approved 08/10/2020
HSP001 Loy Yang HSE Incident, Near Miss and Hazard Management Procedure	Rev. 13	Approved 01/09/2021
Overhead asset inspection – Maintenance progress sheet.		06/02/2024



AGL Loy Yang Electrical Systems Bushfire Mitigation Plan



AGL Loy Yang Maintenance Notification Priority Setting Matrix P000162

Document No. F000162 Revision 07

LIKELIHOOD				
1	2	3	4	5
Low	Moderate	High	Very High	Almost Certain
PROACTIVE WORK Preventive Maintenance, Condition Monitoring, Work Statutory Work, Project Work, Unit Outage, Corrective Work				
Very Rare to have negative consequences if not done by scheduled date	Rare to have negative consequences if not done by scheduled date	Possible to have negative consequences if not done by scheduled date	Almost certain to have negative consequences if not done by scheduled date	Certain to have negative consequences if not done by scheduled date
REACTIVE WORK Unscheduled - Corrective Work including Forced Outages				

Consequence	Safety / People	Environmental	Legal or Regulatory	Generation Plant	Mine Condition	Likelihood of functional failure within 12 months or greater of work request date	Likelihood of functional failure within 6 to 12 months of work request date	Likelihood of functional failure within 3 to 6 months of work request date	Likelihood of functional failure within 14 days of work request date	Functional Failure has occurred OR Likelihood of functional failure within 24 hours of work request date
5.0	Fatality or Injury resulting in permanent disability Or Serious Injury (LTI)	Significant environmental damage. Definite prosecution	Inquiry by Regulator with potential loss of contract/s or substantial fines or major litigation	Forced Outage / Unit Trip / Plant failure WILL result in an outage of a Unit, [or delay the Unit Return To Service] > 4 GWhrs Trading Market Alert Day	Catastrophic Critical Tarp No Coal supply. Mandatory offload. No spare machine. No stockpile	P3	P2	P2	P1	P1
4.0	Injury Requires Medical Treatment (MTI)	Significant environmental damage. Risk of prosecutions/large fines	Probable prosecution or investigation and major fine from Regulator	Plant failure MAY result in an outage of a Unit OR WILL significantly reduce capacity or operability. >1 GWhrs <4 GWhrs Within next 48hr period Market Demand / pricing forecast to be significant	TARP 2 No coal supply. Low Bunker stock. Stockpile available. Machines can Repo to coal.	P4	P3	P2	P2	P1
1.5	First Aid Injury (FAT)	Moderate environmental damage. Potential for EPA action	Possible prosecution or moderate fine or Regulator investigation	Plant failure MAY result in slightly reduce capacity or operability < 1 GWhrs Within next 72hr period Market Demand / pricing forecast to be significant	TARP 1 Impact to coal supply. High bunker contingency Machines can Repo to coal	P5	P4	P3	P3	P2
1.0	No Injury	External incident report. Potential for off-site impact	On the spot fine or non-compliance from Regulator	No existing Generation Loss / Redundant* Plant NOT Available	No Impact to coal supply / Redundant* Plant NOT Available	P5	P4	P4	P4	P3
0.5	No Injury	Internal incident report. No off-site impact	Prosecution unlikely	Normal Operation No Generation Loss / Redundant* Plant Available	Normal Operation No Impact to coal supply, Redundant plant available	P5	P5	P5	P4	P4

	PRIORITY	REACTIVE WORK RESPONSE	PROACTIVE WORK RESPONSE	OUTAGE RESPONSE
REACTIVE WORK Breakdown/Emergency Work	P1	Breakdown/Emergency. Immediately allocate all necessary resources, prioritise work and do the job, within 24 hours. On Duty Shift Manager authorised to initiate out of hours call in as required.		Outage Soft Spot
REACTIVE WORK Break In Work	P2	Break In Work. Immediately plan and prepare to do the job within the current week of the "2 week work schedule" period.		Outage Soft Spot
PROACTIVE WORK High Priority	P3		High Priority Planned Work. With high priority, work planning/scheduling to commence in week 1 to 2.	Forced Outages, Maintenance Outages, Planned Outages & Major Outages work, may consist of a combination of Reactive & Proactive Work. The work list will be conditional on the Response Priority and Due Date of the work..
PROACTIVE WORK Medium Priority	P4		Medium Priority Planned Work. In a timely manner, work planning/scheduling to commence in week 2 to 4.	
PROACTIVE WORK Low Priority	P5		Low Priority Planned Work. In a timely manner, work planning/scheduling to commence in week 5 and beyond.	

Note: When judging a 'Redundant Plant' scenario, Plant System Reliability needs to be taken into account when assessing the level of Consequences and its Likelihood of Functional Failure.