1. Bushfire Risk Management Plan



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1 Introduction

The purpose of this procedure (plan) is to summarise the AGL Macquarie Bush Fire Risk Management Plan, which covers the property in and around the Bayswater and Liddell Power Stations.

The following plan has been developed to effectively manage the bushfire risk, which the AGL Macquarie land holdings and surrounding properties are exposed to, in such a manner as to meet the requirements of the Rural Fires Act 1997 and amendments and the Rural Fires Regulation 2013.

The plan requires review every two years to ensure that adequate measures are in place before the next fire season. It is considered necessary that the plan be reviewed and in place by September of the reviewing year so that the plan will be in place prior to the commencement of the declared bush fire danger period. The declared bush fire danger period normally commences 1 October and concludes 31 March the following year. However, the Commissioner of the NSW Rural Fire Service may declare variations to starting and finishing dates for specific local government areas.

The land belonging to AGL Macquarie differs, as well as the surrounding land, in terms of vegetation type and use. Therefore, the fire management plan needs to address the variation that exits.

The methods and techniques required to manage the risks associated with fire include the following:

- Passive management
- Management of access to perimeter lands
- Fuel Load reduction by clearing
- Maintenance of grassed zones; and
- Liaison with surrounding landholders.

AGL Macquarie is obliged under the Rural Fire Act 1997 and amendments to have in place a plan to reflect bushfire management. There are also the requirements to comply with the following:

- Protection of the Environment Operations (POEO) Act 1997
- Environmental Planning and Assessment Act 1979
- Protection of the Environment (Clean Air) Regulation 2016
- Local Land Service Act 2013
- Biodiversity Conservation Act 2016
- Commonwealth Environment Protection and Biodiversity Conservation Act 1999; and,
- To consider the environmental effects associated with bushfire management strategies, specifically the need to obtain a bushfire hazard reduction certificate for a ground fuel reduction burn-off.

Additionally, the Muswellbrook Shire Bushfire Management Plan (2011) requires AGL Macquarie to update and review the Bayswater and Liddell Bushfire Risk Management Plan.

The fire management plan must consider two important features:

- Strategies involving the protection of life and property
- Strategies involving preserving the activities occurring on the land such as wildlife conservation, grazing and the built environment



The perimeter lands around the power stations and dams in the buffer zones are being managed in such a way that the natural environment is being protected and some selected areas are being used for grazing. However, the neighbouring properties exhibit a wide variation in use.

These uses include:

- Residential
- Coal mines
- Farming
- Road and rail transportation
- Public recreation

Fire management practices must aim to protect the bio-diversity throughout the perimeter lands. Individual sections of the land may require different strategies for fire control as a reflection of the type of vegetation present and the type of activities being undertaken on the neighbouring properties.

As part of the strategy, records of all fires, which occur on AGL Macquarie lands are kept and can be used to ascertain if a cycle involving fire frequency or likelihood exists. Fire records are retained within the myHSE reporting system.

2 Scope

This Procedure applies to AGL Macquarie land holdings for Bushfire Risk Management. The principle locations are Liddell and Bayswater Power Stations along with Ravensworth Void Rehabilitation areas, Ravensworth and Antiene Rail Coal Unloaders, and Barnard River Pumping Station.

The protocols outlined in this Procedure are intended to apply to all works carried out on site by AGL Macquarie employees and contractors.

3 Accountabilities and Responsibilities

3.1 General Manager AGLM

Shall ensure that:

- Authority is delegated to enable implementation, monitoring and review of the Bushfire Risk Management Plan
- Adequate resources are available for the implementation and enforcement of the Bushfire Risk Management Plan

3.2 Heads of Generation

Shall ensure that:

Resources are allocated to identify risks in the workplace associated with bushfire and to implement appropriate risk control measures



3.3 Head of Engineering

Shall ensure that:

• Resources are allocated to update and maintain the Bushfire Risk Management Plan including fuel loading assessment, as required

3.4 Head of Fuel and Services

Shall ensure that:

- Compliance with the Bushfire Risk Management Plan is monitored and reported on prior to the beginning of the nominated bushfire season to the senior leadership team on the completion of the maintenance plans
- Adequate resources are made available to implement controls as detailed in the Bushfire Risk Management Plan
- Adequate resources are made available to review, develop and update Trigger Action Response Plan in relation to Bushfire, in consultation with site Health and Safety Business Partner along with site Emergency Response Team
- Ensure the firefighting equipment are well maintained and the maintenance plans in relation to this are completed
- Adequate resources are made available to assist to ensure access to AGL Macquarie property is managed and monitored for ease of access.

3.5 Health and Safety Business Partner

Shall ensure that:

- The bushfire risk, in consultation with the Head of Generations is managed appropriately
- Technical support is provided to employees and contractors in relation to bushfire risk
- · Information is conveyed to employees and contractors about the presence of bushfire risk
- Resources are allocated to assist with updating and maintaining Bushfire Risk Management Plan, in consultation with the Environment Business Partner
- Adequate resources are made available to review, develop and update Trigger Action Response Plan in relation to Bushfire, in consultation with Head of Fuel and Services
- The Total Fire Ban Days (TOBAN) exemption and any changes within the government gazette schedule are reviewed regularly in consultant with Production Managers
- Bushfire related concerns that have been discussed in WHS meetings, myHSE reports and/or through other means are raised with the Head of Generations

3.6 Environment Business Partner

Shall ensure that:

- Adequate resources are available to assist with implementing controls as detailed in the Bushfire Risk Management Plan, in consultation with the Health and Safety Business Partner
- Technical support is provided to employees and contractors in relation to management of bushfire risk



3.7 Production Managers

Shall ensure that:

- Procedures for the emergency response for all bushfire related incidents are effectively managed in consultation with Health and Safety Business Partner
- Site employees and contractors are informed when bushfire management related work is undertaken by means of broader communications

3.8 Maintenance Managers

Shall ensure that:

- The work management policies and procedures identify the requirements of housekeeping around the assets to manage the bushfire related risk
- The TOBAN day when declared are strictly followed and appropriate procedures are developed to manage the requirements and to seek site specific exemptions
- Ensure the firefighting equipment are well maintained and the maintenance plans in relation to this are completed in timely manner

3.9 Workers

Shall ensure that:

- Any concerns/faults/incidents relating to Bushfire Risks are reported to their Team Leader. Reports are to be recorded in myHSE.
- All policies, Procedures and instructions as stipulated in this Bushfire Risk Management Plan are complied with.

4 The Assessment of Bushfire Risk

AGL Macquarie land holdings have been divided into 6 zones reflecting the stations and dams within the respective zone. These zones are further divided into individual units based on locality, accessibility and more importantly the amount, type, and degree of similarity of vegetation that exists. Ground fuel loadings are derived based on the method used by the rural fire brigades for these areas of similar vegetation. For the purposes of any bushfire management practice, fuel loadings assessments should be undertaken during early autumn and are to be done by qualified bush fire engineer or equivalent.

The calculation of the ground fuel loading is important as it gives the estimation of how much fuel hazard reduction is required in certain areas before the next official bushfire season.

The natural features on any landscape dictate the rate of fuel accumulation and the risk posed to life and the built environment. These features are:

- Composition of vegetation
- Area of the bushland or grassland
- Aspect
- Slope of the terrain
- Type of the understorey



- Amount and type of leaf-litter
- Prevailing winds
- Amount and type of surface vegetation

A Risk Assessment can be accessed via this link <u>JSEA Bush Fire Risk Management</u> or viewed via the portal.

4.1 Access to AGL Macquarie Property

There are various keys required to gain access to AGL Macquarie property. The key series is the same in each fire management zone.

Individual access requirements for each zone are outlined in Section 5 of this plan.

Access keys are available from Security at Bayswater and Liddell Gatehouse buildings and from Shift Managers at both sites out of hours.

Drawing No BW805700 showing the AGL Macquarie land holding (Refer to Appendix 3) highlights the external property access gates which may be used for access in the event of a bushfire. The gates must be kept closed to ensure that cattle do not escape onto the main roads.

4.2 Roads within AGL Macquarie Property

All roads are to be kept in reasonable to good order and are negotiable by fire service tankers and by 4-wheel drive vehicles. Roads are inspected on an occasional basis and maintenance is undertaken by a contractor on a time-based routine or following adverse condition such as rainfall that results in deterioration.

4.3 Access to Water

Water is available from Plashett Dam, Freshwater Dam, CW Make-Up Dam, Liddell and Bayswater Ash Dam, and Liddell Cooling Water Dam. Access is available by tanker and the access is shown on Drawing No BW805700. Fire hydrants are located around the inner perimeters of the power stations, to allow for refilling of tankers if required.

Water for firefighting also gets made available in the form of fire trolley tanker towable by 4-wheel drive vehicles, contractors water tankers are also made available during the peak of the season as required and driven by the Trigger Action Response Plan (TARP).

4.4 Ploughed Fire Breaks

AGL Macquarie maintains number of ploughed fire breaks annually prior to the bushfire season – normally commencing on 1 October each year. Location of the Ploughed Fire Breaks are shown in Appendix 4.



5 The Fire Management Zones

There are six zones to be considered and each zone is divided up into the smaller units as previously stated. The zones are:

•	Bayswater Power Station buffer zone	-	Yellow Colour
•	Liddell Power Station buffer zone	-	Pink Colour
•	Ravensworth Void Rehabilitation Site	-	Green Colour
•	Ravensworth Rail Coal Unloader	-	Brown Colour
•	Antiene Rail Coal Unloader	-	Red Colour

Barnard River Pumping Station
 - Not Shown

The local zones are shown in sections 5.1 to 5.6 of this document and each zone is described in terms of its vegetation and topography. A further description relates to entry, exit and internal roads. With each zone description, included is the approximate area in hectares.

Note the requirement to obtain A Bushfire Hazard Reduction Certificate from the Rural Fire Service prior to undertaking new hazard reduction activities. Hazard reduction includes activities such as slashing and ploughing fire breaks and hazard reduction burning. It does not include fuel reduction by stock grazing or the annual maintenance of fire breaks.

Full details are provided in Section 6.



5.1 Bayswater Power Station Buffer Zone

This buffer zone is comprised of that area between the New England Highway to the North East of the station to the Hunter River to the South and Mt Arthur mining lease to the West.

Access to Bayswater Power Station is via the Main Security Gatehouse located at the entrance to the site, an SS 1 key is required to gain access to AGL Macquarie property off the New England Highway and other public roads.

Area	Description	Risk
B1	The area on the Western side of the New England Highway which is generally vegetated with grass and tree cover. 1500 hectares	Risk is HIGH due to grass build-up and the possibility of fires being started by passing traffic
B2	The area South of the Station including grazing country on either side of the River Road for a distance of approximately 10 km to where it meets the Hunter River. 3000 hectares	Because of the slopes the risk is HIGH especially if a Westerly wind is blowing
B3	The area to the West of the Station including the MA 2B/3B conveyor formation which continues out to the Mt Arthur Mine lease. 25 hectares	Risk is HIGH due to topography. Access is good.

The area has been divided into three units, prefixed by the letter 'B' as follows:



5.1.1 Control Measures

- 2. Plough ~10m wide fire breaks along the inside the Highway boundary fence where possible prior to October each year.
- 3. Ensure access roads are in good order, with access readily available when necessary.
- 4. Control unwanted vegetation growth by means of slashing and/or weed spraying along the edges and under the coal conveyors.
- 5. Continue grazing leases to selected portions of land within the buffer zones to assist the fire hazard reduction.
- 6. Mow the downstream dam embankments every 2 3 years.
- 7. Ensure all shrub or tree growth within each transmission line easement and from under power lines is removed every 2-3 years. There has been history of fires being started by failure of components on power poles.
- 8. For Coal conveyors external to the main station plant; a fire break is to be maintained along each side of each conveyor and coal spillages at transfer points regularly removed to minimise the possibility of a bushfire or grass fire causing damage to the conveyors.
- 9. Ensure a fire break at least 3 metres wide is maintained around all remote electrical switchrooms/switchyards.
- 10. Ensure all grass around contractor's offices, workshops or storage compounds is removed on a regular basis by mowing/slashing and/or weed spraying and all firefighting equipment properly maintained to minimise the risk of a grass fire spreading through the area. All combustible material is to be stored in appropriate locations and contractor staff are to observe hot work procedures when working in these areas as required.



5.2 Liddell Power Station Buffer Zone

This buffer zone is comprised of that area between the Bayswater Power Station Buffer Zone to the South West of Liddell Power Station to Lake Liddell to the East and Drayton mining lease to the West.

Access to Liddell Power Station is via the Main Security Gatehouse located at the entrance to the site and entry to the Liddell Buffer zone requires an SS 1 key. Access to M3 Conveyor Drive will require a HS 4 key and Liddell Ash Dam a (BW) LD 17 key via the sliding gate.

This area has been divided into three areas with area given	n the prefix 'L' as follows:
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Area	Description	Risk
L1	The North/East half of the buffer zone which includes the area East of the New England Highway between the Antiene road and the Pikes Gully turn-off intersection and includes the area around the Liddell Cooling Water Dam. 1500 hectares	Risk is HIGH due to grass cover and Westerly winds There is a possibility of fires being started by passing traffic.
L2	The Liddell Ash Dam and buffer zone is located on the Western side of the New England Highway and extends from the point opposite the Antiene Road Southward to the Bayswater Gatehouse just off the New England Highway and abuts to the Drayton Mine Lease to the West 1150 hectares	Risk is HIGH due to grasslands and Westerly winds. Possibility of fires being started by passing traffic.
L3	Includes the 'M' series conveyor corridor area from Pikes Gully intersection down to the Ravensworth Rail Unloader boundary fence. It also includes the corridor for the 'L' series conveyors to the New England Highway underpass and the area surrounding the Gas Turbines and 33 kV Switchyard 50 hectares	Risk is HIGH due to the grass cover as well as coal fines along the edge of the conveyor. There is a possibility of fires being started by passing traffic.



5.2.1 Control Measures

- 1. Plough 10m wide firebreaks along the inside of the Highway boundary fence where possible prior to October each year.
- 2. Ensure access roads are in good order, with access readily available when necessary.
- 3. Control unwanted vegetation growth by means of slashing and/or weed spraying along the edges and under the coal conveyors.
- 4. Continue grazing leases to selected portions of land along the 'M' series conveyor and the areas North of the Station and around Gas Turbines and 33 kV Switchyard.
- 5. Mow the downstream dam embankments every 2-3 years.
- 6. Ensure all shrub or tree growth within each transmission line easement and from under power lines is removed on a regular basis.
- 7. For Coal conveyors external to the main station plant; a fire break is to be maintained along each side of each conveyor and coal spillages at transfer points regularly removed to minimise the possibility of a bushfire or grass fire causing damage to the conveyors.
- 8. Ensure a fire break at least 3 metres wide is maintained around all remote electrical switchrooms/switchyards.
- 9. Ensure all grass around contractor's offices, workshops or storage compounds is removed on a regular basis by mowing/slashing and/or weed spraying and all firefighting equipment properly maintained to minimise the risk of a grass fire spreading through the area. All combustible material is to be stored in appropriate locations and contractor staff are to observe hot work procedures when working in these areas as required.
- 10. Ensure all grass around the external plant workshop, including storage areas and around items stored in the Large Items Storage Area, are regularly mowed or slashed to minimise the risk of grass fires. All combustible material is to be stored in appropriate locations and staff are to observe hot work procedures when carrying out any work as detailed in PSSI 114 Safe Working in a Confined or Controlled Access Space and Hot Work in High Risk Areas.
- 11. Keep all gates securely locked at the South end of the 'M' series conveyors near Pikes Gully



5.3 Ravensworth Void Rehabilitation Site

The area is described as all that AGL Macquarie owned land that is included within the confines of the Ravensworth Void Rehabilitation Site.

At the Ravensworth Void Restoration Site, an RW or SS1 key is required to gain access off the from the (New) Lemington Road. All other gates internal to the site are generally unlocked.

The area has been split up into two discrete areas with area given prefix 'R' as follows:

Area	Description	Risk
R1	Areas 1A, 1B, 2A, 2B, 3A, 3B and 4A Approximately 60% of the site has been rehabilitated by grassing and tree planting. With the introduction of bio-solids the grass cover is extremely good. 600 hectares	Risk is HIGH due to grass growth. Neighbouring property could be affected. Possibility of fires starting from passing traffic on the highway boundary.
R2	Pockets of Spontaneous combustion on the site require continued action to ensure that it is actively controlled and does not pose a fire risk. These areas are treated with ash to smother the hot spots. 10 hectares	Risk is HIGH due to grass growth. Neighbours to the South could be affected.

5.3.1 Control Measures

Contact the AGL Macquarie Environment team for requirements in relation to ground disturbance or vegetation clearing prior to any works.

- 1. Continue grazing of all rehabilitated sections of the site on a rotating basis to ensure that all the grass growth is controlled and the fire hazard reduced.
- 2. Slash 10m wide grass along external boundary fences and in particular along the Highway boundaries.
- 3. Keep all interior gates in areas R1 closed but unlocked.
- 4. Continue actively managing spontaneous combustion.
- 5. Clearing of vegetation and tree growth from under power lines annually.
- 6. Ensure all shrub or tree growth within each transmission line easement and from under power lines is removed on a regular basis.

5.4 Ravensworth Rail Coal Unloader

Includes all the land within the external perimeter person-proof fence around the Coal Unloader Site which is located South-East of Liddell Power Station along the New England Highway.



At the Ravensworth Rail Unloader Site, a R4 key is required to gain access off the New England Highway. All other gates within the site are unlocked. Aurizon should be notified if an emergency exists.

This area has been divided into two areas with area given the prefix 'RU' as follows:

Area	Description	Risk
RU1	The general site is covered with vegetation and small clumps of tube stock trees. There are two earth mounds located along the inside of the southern perimeter fence and are sparsely planted with trees for screening purposes. 6 hectares	Can be HIGH due to the grass growth.
RU2	The AGL Macquarie land around the perimeter of the site is generally grassland with the occasional tree cover. 16 hectares	Risk can be HIGH due to varying vegetation and cleared zones.

5.4.1 Control Measures

- 1. Plough the 10m wide fire breaks inside the boundary fence where possible prior to October each year
- 2. Slash & Brush Cut were practicable, portions of RU1 and RU2.
- 3. Clean up any spilt coal along the edges of the rail loop tracks.



5.5 Antiene Rail Coal Unloader

Includes all the land within and external to the perimeter person-proof fence around the Coal Unloader Site which is located North of Liddell Power Station along Hebden Road.

Access to the Antiene Rail Unloader Site located on Hebden Road can be gained either through the locked gate which uses an RC EA 123 key or alternatively access can be gained through the sliding gate at the front of the facility. The facility is fully fenced and has a sliding gate into the AC2 conveyor corridor which is 5.5kms long, or alternatively access to the conveyor corridor can be gained through the Bayswater Power Station end, this access will require Damstra pass to open the sliding gate or contact the Aurizon operations coordinator, access to the middle section of the conveyor line is off the New England Hwy in the event of an emergency an R4 key is required to unlock this gate. Aurizon should be notified if an emergency exists.

Area	Description	Risk
AU1	The general site is covered with vegetation and small clumps of tube stock trees. There are two earth mounds located along the inside of the southern perimeter fence and are sparsely planted with trees for screening purposes. 10 hectares	Can be HIGH due to the grass growth.
AU2	The AGL Macquarie land around the perimeter of the site is generally grassland with a considerable amount of tree cover. 50 hectares	Risk can be HIGH due to varying vegetation and cleared zones.

This area has been divided into two areas with area given the prefix 'AU' as follows:

5.5.1 Control Measures

- 1. Plough the 10m wide fire breaks inside the highway boundary fence where possible prior to October each year
- 2. Slash & Brush cut were practicable, portions of AU1 and AU2.
- 3. Clean up any spilt coal along the edges of the rail loop tracks.
- 4. Continue cattle grazing to the property around the perimeter of the rail unloader



5.6 Barnard River Pumping Station

Includes land along the access road and all the land in and around perimeter of the main buildings and switchyard, which is an area of approximately 130 hectares.

At the Barnard River Pump Station, an SS1 key is required to gain access off the Scone-Nundle Road towards Orham Creek and Barnard River. Coordinates 31.655S, 151.505 E

This area has been divided into two areas with area given the prefix 'BR' as follows:

Area	Description	Risk
BR1	The general site containing pump station buildings, switchyard and water storage dams are contained within an area of approximately one square kilometre with a fire break separating the buildings from the surrounding vegetation which is predominantly uncleared natural bushland. 100 hectares	Risk can be HIGH due to the natural bushland surrounding the site.
BR2	The windy partly sealed access road into the site is approximately 15 km in length and is generally bordered either side by grassland and native bushland cover. 30 hectares	Risk can be HIGH due grass growth along the access road into the pumping station.

5.6.1 Control Measures

- 5. Selectively trim overhanging trees on and along the access road into the pumping station and remove unwanted vegetation around the perimeter of the switchyards and buildings.
- 6. Reduce ground fuel-loading procedures annually.
- 7. Control vegetation around the perimeter of all buildings and internal area of electrical switchyards by whipper snipping and spraying.



6 Requirements of Fuel Hazard Reduction

6.1 Bushfire Hazard Reduction Certificates

Bush Fire Hazard Reduction Certificate (BFHR Certificate) is required for most fuel hazard reduction activities. This is applicable to only newly identified activities.

These include:

- Hazard reduction burning
- Slashing, ploughing, pruning and any other mechanical reduction of fuel loads.

The NSW Rural Fire Service provides the required Certificate. This ensures that AGL Macquarie will address the requirements of the Environmental Planning and Assessment Act, 1979 and the Rural Fires Act, 1997.

To obtain a BFHR Certificate an application needs to be completed and submitted to the RFS Fire Control Centre at Bulga. A copy of the application form is shown in Appendix B. The application form is also available on the RFS website, www.rfs.nsw.gov.au. The application form will need to be signed by AGL Macquarie General Manager (equivalent to the owner).

The application needs to be accompanied by:

- A copy of this plan
- A map showing location of existing infrastructure and buildings,
- Dams, road tracks, conveyor systems and pipelines
- Vegetation types.

6.2 Rural Fire Service Contact

Contact information for the Bulga Fire Control Centre is:

- Address 2161 Putty Road Bulga 2330 PO Box 3111 Singleton 2330
- Phone 02 6575 1200
- Phone After Hours Duty Officer 02 6575 1222
- Fax 02 6575 1290
- Email Huntervalley.Team@rfs.nsw.gov.au

Local RFS brigades

Local volunteer brigades are located as follows:

- Muswellbrook Shire Edinginglassie (Muswellbrook), Mangoola (Denman), Hebden
- Singleton Shire Jerrys Plains, Glennies Creek

All initial contact for emergencies should be through 000. For routine matters, direct inquiries in the first place to the Bulga Fire Control Centre. RFS resources will be directed to AGL Macquarie property by the Fire Control Centre.



7 Total Fire Bans

7.1 Emergency Hot Works

Generally, it is an offence to light or maintain a fire in the open during declared total fire ban days (TOBAN). This includes any activity that can result in sparks or naked flames capable of starting a fire. Accordingly AGL Macquarie may not undertake routine activities such as hot works or welding on a TOBAN day.

However, the work at AGL Macquarie being Critical Infrastructure in nature, the Bayswater and Liddell Power Stations are covered under the Standing Government Gazette Exemption Schedules, specifically Schedule 6. These schedules were implemented in early 2018, and also some businesses like ours to meet the requirements of a Total Fire Ban Day (TOBAN), without the additional requirement seeking an exemption under Schedule 18.

AGL Macquarie individuals maintain responsibility to check specific TOBAN Orders to ascertain whether standard exemptions have been approved on each day of a TOBAN. Each time a TOBAN day is declared, the Gazette is re-published on the NSW Government Legislation website,

<u>https://legislation.nsw.gov.au/#/notifications</u> as well as a "TOBAN ORDER". That Order will have in it, a list of Schedules that are approved to go ahead during that TOBAN. It is envisaged it will remain the same the majority of time, but in the event we need to essentially "suspend" an exemption schedule due to extreme weather conditions, we will publish it here. A full copy of the standing exemptions and imposed conditions are detailed in the <u>NSW Government Gazette</u>.

Any exemption is likely to be subject to the following conditions:

- Adequate firefighting equipment is immediately available at the site of the works to prevent escape of any fire, spark or incandescent material from the site
- Prior to proceeding with any work, contact the Bulga Fire Control Centre to provide details.

It should be noted that, notwithstanding the exemption, the local controller may impose additional conditions which may include a direction that the proposed activity be suspended.



8 Action of Person Discovering a Fire

If a fire is reported on AGL Macquarie property, the Shift Manager at Bayswater or Liddell Power Stations must be notified, as they become the Emergency Controller in this situation. On being advised of a fire the Shift Manager will activate Emergency Responders trained in respond to wildfire to the scene and if required call in outside assistance. Refer to the AGLM Emergency Response Plan for detailed actions required in the event of a bushfire (ALGM-HSE-PLN-010.02).

All fires must be reported to the PCR - Emergency Number 5555 or

- 6542 0555 Bayswater
- 6542 1555 Liddell

Advise the following information:

- Site and exact location of fire and plant affected
- Type of fuel, if known
- A description of the size or extent of the fire
- Any person(s) injured or trapped

9 **Definitions**

Term	Definition
PSSI	Power Station Standing Instructions
TARP	Triggered Action Response Plan
Contractor	a Company engaged by a AGL Macquarie to undertake licensed asbestos removal work.
Employee Health and Safety Representative	An elected employee responsible for representing employees within a designated work group on matters relating to occupational health and safety.
Shall ensure that	Must ensure, so far as is reasonably practicable
Work Health and Safety Committee	An elected group of employees responsible for representing employees on matters relating to occupational health and safety within AGL Macquarie
TOBAN	Total Fire Ban
Critical Infrastructure	Power Stations, Transmission Lines, Electrical Switchyards etc.



10 Referenced Documents

Document Number	Document Title
Legislation	NSW Work Health and Safety Act 2011
	NSW Work Health and Safety Regulation 2017
AS/NZS 1715:2009	Selection, Use and Maintenance of Respiratory Protective Equipment
AS/NZS 1716:2012	Respiratory Protective Devices
AGLM-HSE-PRO-004.02	Permit to Work Procedure.



11 Appendix 1 – List of Maintenance Plans for Bushfire Risk Management Zones

New routines to be raised

Buffer Zones	Zones ID	Maintenance Items	
Bayswater Power	Yellow	Fuel loading assessment of the nominated area	
Station		Plough 10m wide fire breaks along the inside the Highway boundary fence	
		Inspect access roads condition and carryout repairs as necessary	
		Vegetation control by slashing/weed spraying along the edges and under coal conveyors	
		Electrical easements - inspect and arrange for removal of all shrub or tree growth within and under each transmission line	
		Electrical easements - inspect and maintain fire breaks at least 3m wide around switchrooms/switchyards	
		Inspect and arrange for vegetation control around contractor's area	
Liddell Power	Pink	Fuel loading assessment of the nominated area	
Station		Plough 10m wide fire breaks along the inside the Highway boundary fence	
		Inspect access roads condition and carryout repairs as necessary	
		Vegetation control by slashing/weed spraying along the edges and under coal conveyors	
		Electrical easements - inspect and arrange for removal of all shrub or tree growth within and under each transmission line	
		Electrical easements - inspect and maintain fire breaks at least 3m wide around switchrooms/switchyards	
		Inspect and arrange for vegetation control around contractor's area	
		Grazing leases to selected portions of land along the 'M' series conveyor and the areas North of the Station and around Gas Turbines and 33 kV Switchyard	



Buffer Zones	Zones ID	Maintenance Items
Ravensworth	Green	Fuel loading assessment of the nominated area
Void		Grazing of all rehabilitated sections of the site on a rotating basis to ensure that all the grass growth is controlled, and the fire hazard reduced
		Slash 10m wide grass along external boundary fences and in particular along the Highway boundaries
		Electrical easements - inspect and arrange for removal of all shrub or tree growth within and under each transmission line
Ravensworth Rail	Brown	Fuel loading assessment of the nominated area
Coal Unloader		Plough 10m wide fire breaks along the inside the Highway boundary fence
		Vegetation control by slashing/brush cutting
		Inspect and arrange for clean up any coal spilt along the edges of the rail loop tracks
Antiene Rail Coal	Red	Fuel loading assessment of the nominated area
Unloader		Plough 10m wide fire breaks along the inside the Highway boundary fence
		Vegetation control by slashing/brush cutting
		Inspect and arrange for clean up any coal spilt along the edges of the rail loop tracks
		Grazing leases around the perimeter of the rail unloader
Barnard River	No Colour	Fuel loading assessment of the nominated area
Pumping Station		Selectively trim overhanging trees on and along the access road into the pumping station and remove unwanted vegetation around the perimeter of the switchyards and buildings
		Control vegetation around the perimeter of all buildings and internal area of electrical switchyards by whipper snipping and weed spraying



List of current routines for vegetation inspection and maintenance

Maint Item	Maint Item text	
Bayswater Po	wer Station	
8029397	BW Z00 U0 6M ASH DAM VEGE MAINT	
8036951	BW Q01 6M U0 ASH DAM VEG MAINT	
8041184	BW Z00 12M PLASHETT VEGE INSP	
8041185	BW Z00 12M PIKES GULLY DAM VEGE INSP	
8041186	BW Z00 12M FRESHWATER DAM VEGE INSP	
8041187	BW Z00 12M LAKE LIDDELL VEGE INSP	
8041188	BW Z00 12M BC HOLDING POND VEGE INSP	
8041189	BW Z00 12M BC DECANT BASIN VEGE INSP	
8041223	BW Z00 3M BC HOLDING POND VEGE MNT	
8041224	BW Z00 3M PASAVEER VEGE MNT	
8041225	BW Z00 3M COAL PLANT VEGE MNT	
8041226	BW Z00 3M 1 / 2 END INTERNALS VEGE MNT	
8041227	BW Z00 3M 3 / 4 END INTERNALS VEGE MNT	
8041228	BW Z00 3M RIVER RD TO LSP VEGE MNT	
8041229	BW Z00 3M RIVR RD TO HP PMP VEGE MNT	
8041230	BW Z00 3M RIVR RD HP TO LP PMP VEGE MNT	
8041231	BW Z00 3M PLASHETT VEGE MNT	
8041232	BW Z00 3M PIKES GULLY ASH DAM VEGE MNT	
8041233	BW Z00 3M BAD TO GUARDHOUSE VEGE MNT	
8041234	BW Z00 3M GRD HSE TO INTCHNGE VEGE MNT	
8041235	BW Z00 3M MT ARTHUR CONVEYOR VEGE MNT	
8041236	BW Z00 3M SAVOY HILL VEGE MNT	
8041237	BW Z00 3M FRESHWATER DAM VEGE MNT	
8041238	BW Z00 3M LAKE LIDDELL VEGE MNT	
8041239	BW Z00 3M H2 CONV TO HOWICK VEGE MNT	
8041240	BW Z00 3M BC DECANT BASIN VEGE MNT	
8041241	BW Z00 3M SWITCHYARDS VEGE MNT	
8041270	BW Z00 24M PLASHETT VEGE SURVEY	
8041271	BW Z00 24M PIKES GULLY DAM VEGE SURVEY	
8041272	BW Z00 24M BC HOLDING POND VEGE SURVEY	
8041273	BW Z00 24M BC DECANT BASIN VEGE SURVEY	
8041274	BW Z00 24M FRESHWATER DAM VEGE SURVEY	
8041275	BW Z00 24M LAKE LIDDELL VEGE SURVEY	
8041276	BW Z00 3M PLASHETT VEGE MONITOR	



Maint Item	Maint Item text	
8041277	BW Z00 4M PIKES GULLY DAM VEGE MONITOR	
8041278	BW Z00 6M FRESHWATER DAM VEGE MONITOR	
8041279	BW Z00 3M LAKE LIDDELL VEGE MONITOR	
8041280	BW Z00 6M BC HOLDING POND VEGE MONITOR	
8041281	BW Z00 6M BC DECANT BASIN VEGE MONITOR	
8036919	BW Q01 6M U0 DAMS PLASHETT VEG MAINT	
8036941	BW Q01 6M U0 DAM CW MAKE UP VEG MAINT	
8036943	BW Q01 6M U0 DAM FRESHWTR VEG MAINT	
8036945	BW Q01 6M U0 DAM LAKE LDDL VEG MAINT	
8036947	BW Q01 6M U0 DAM BRINE DCANT VEG MAINT	
8036949	BW Q01 6M U0 DAM BRINE HOLDG VEG MAINT	
8037501	BW Q00 3M U1/2 DSL GEN DAY TNK VEGE MNT	
8037517	BW Q00 3M U3/4 DSL GEN DAY TNK VEGE MNT	
Barnard River Pumping Station		
8020727	BW B00 4Y U0 132KV OH LN ARIEL MAINT	
8042583	BW Q00 U0 1Y BARNARD RIVER SYS INSP	
8042584	BW Q00 U0 5Y BARNARD RIVER SYS INSP	
Liddell Power	Station	
8036954	LD Q01 6M U0 ASH DAM VEG MAINT	
8041203	LD Z00 3M STAT INNER PERIMETER VEGE MNT	
8041204	LD Z00 3M LAKE ROAD VEGE MNT	
8041205	LD Z00 3M INTERCHANGE VEGE MNT	
8041206	LD Z00 3M CANAL ROAD VEGE MNT	
8041207	LD Z00 6M SEWAGE PLANT VEGE MNT	
8041208	LD Z00 3M CW PUMPS VEGE MNT	
8041209	LD Z00 3M M SERIES CONVEYORS VEGE MNT	
8041210	LD Z00 3M GAS TURBINES VEGE MNT	
8041211	LD Z00 3M STOCKYARD CONVEYORS VEGE MNT	
8041212	LD Z00 3M SOLAR PLANT VEGE MNT	
8041213	LD Z00 3M STOR BAY RD/COAL PLNT VEGE MNT	
8041214	LD Z00 3M GRAVEYARD VEGE MNT	
8041215	LD Z00 3M TINKERS CREEK VEGE MNT	
8041216	LD Z00 3M SWYD ROAD/OPER CPARK VEGE MNT	
8041217	LD Z00 3M PIPE BEHIND TRANSGRID VEGE MNT	
8041218	LD Z00 3M EMBANKMENTS VEGE MNT	
8041219	LD Z00 3M LAKE LIDDELL VEGE MNT	
8041220	LD Z00 3M LAKE LIDDELL VEGE MONITOR	



Maint Item	Maint Item text	
8041221	LD Z00 12M LAKE LIDDELL VEGE INSP	
8041222	LD Z00 24M LAKE LIDDELL VEGE SURVEY	
8036954	LD Q01 6M U0 ASH DAM VEG MAINT	
8041203	LD Z00 3M STAT INNER PERIMETER VEGE MNT	



12 Appendix 2 – Trigger Action Response Plan (TARP)



The TARP gets revised every year. Attached is the TARP for 2020-21 Bushfire Season



13 Appendix 3 – Bushfire Management Plan Access Gates and Fire Management







14 Appendix 4 – Location of Ploughed Fire Breaks







15 Appendix 4 – Plan Improvement Areas

Areas for Improvement	Action Plan
Development of new maintenance plan as identified in Appendix 1	D2 120006623 Task 6
 Update BW 805700 or development of new map identifying, All access gates to the property All grazing areas Water fill points Secondary emergency egress paths 	D2 120006623 Task 7



16 Appendix 5 – Fuel Loading Assessment Report 2020

