Murra Warra Wind Farm

Electric Line Clearance Management Plan (ELCMP) (2025-2026)

Electricity Safety (Electric Line Clearance) Regulations 2020

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Document Revision History

Version	Release Date	Reviewer	Description
1.0	31.03.21	Kevin Garthwaite	Preparation for 2021/2022
2.0	31.03.22	Tanya Jackson	Preparation for 2022/2023
3.0	9.11.22	Tanya Jackson	Updated to include Murra Warra (Stage 2) at Risk Electric Lines
4.0	20.02.23	Draft	Updated as per ESV Evaluation Matrix V1 20230206
5.0	24.03.23		Updated as per ESV Evaluation Matrix V2 20230306
6.0	28.04.23		Section 9.4.a: Updated responsible person Section o.ii: Included sign off review of actions.
7.0	26.05.23		Updated as per ESV Evaluation Matrix V3 20230511
8.0	2024	James Cooper	Preparation for 2024/2025
9.0	28.03.2025	Christopher Gulvin	Preparation for 2025/2026

Document Approval

Name / Originator	Description	Date	Signature
Mirelle Gouws	Author	2025	
Christopher Gulvin	Reviewer	2025	

Applicable Sites/Maintenance Zones

Murra Warra Wind Farm (Stage 1)

The land on which Murra Warra Wind Farm (Stage 1) and its associated overhead line is established consists of agricultural land predominantly used for cropping. There are trees within the boundaries of the wind farm however there are none in close proximity of the turbines or substations and all overhead lines are kept clear according to Electricity Safety (Electric Line Clearance) Regulations 2020.

It is recognised that there are multiple electrical assets located at the Murra Warra Wind Farm where fire could originate from, including;

i. The wind turbine nacelle,
ii. The Integrated Grid Connection Transformer and Switchgear inside each wind turbine,
iii. The ≈3km of single and dual circuit 33kV overhead line mounted on 44 steel monopoles between the turbines and MWWF1 Switchyard (At-Risk Electric Lines), and
iv. The Murra Warra Wind Farm (MWWF1) Switchyard.

Murra Warra Wind Farm (Stage 2)

The land on which Murra Warra Wind Farm (Stage 2) and its associated overhead line is established consists of agricultural land predominantly used for cropping. There are trees within the boundaries of the wind farm however there are none in close proximity of the turbines or substations and all overhead lines are kept clear according to Electricity Safety (Electric Line Clearance) Regulations 2020.

It is recognised that there are multiple electrical assets located at the Murra Warra Wind Farm where fire could originate from, including:

i. The wind turbine nacelle,
ii. The Integrated Grid Connection Transformer and Switchgear inside each wind turbine,
iii. 4km and 3km of dual circuit 33kV overhead lines mounted on 42 steel monopoles between the turbines and MWWF2 Switchyard (At-Risk Electric Lines), and
iv. The Murra Warra Wind Farm 2 (MWWF2) Switchyard, including synchronous condenser.

At-Risk Electric Lines

Murra Warra (Stage 1) Electric Lines

The internal overhead electric lines described in Stage 1 point iii. above are owned by Murra Warra Project Co and are located to the east of the MWWF Switchyard and 220kV Murra Warra Terminal Station (MRTS) and who's performance and compliance is ensured through the implementation of this plan. They are steel pole, single and double circuit lines approximately 3 km in length and require vegetation management processes to maintain the clearance space around them. Siemens Gamesa Renewable Energy (SGRE) has been engaged as the main Operations and Maintenance provider for the Wind Farm Stage 1.

Most electric lines at the MWWF1 have been installed underground between the Wind Turbines.

The overhead line is located on a private easement leased by Murra Warra Project Co

Murra Warra (Stage 2) Electric Lines

The internal overhead electric lines described in Stage 2 point iii. above are owned by Murra Warra Project Co and are located to the north and east of the MWWF2 Switchyard and 220kV Murra Warra Terminal Station (MRTS) and who's performance and compliance is ensured through the implementation of this plan. They are a pair of steel pole, double circuit lines approximately 3 km and 4km in length, respectively, and require vegetation management processes to maintain the clearance space around them. GE Renewable Energy Australia has been engaged as the main Operations and Maintenance provider for the Wind Farm Stage 2.

Most electric lines at the MWWF2 have been installed underground between the Wind Turbines.

The overhead line is located on a private easements leased by Murra Warra Project Co.

Electricity Safety (Electric Line Clearance) Regulations 2020

Part 2 – Prescribed Code of Practice and related provisions

9 Preparation and Submission of a Management Plan

9(2) Preparation of management plan – Before 31 March in each year

This Electric Line Clearance Management Plan (ELCMP) will be prepared before the 31st of March each year to comply with the current Regulations (found here: https://www.esv.vic.gov.au/about-us/regulatory-framework/legislation-and-regulations) and with the Code of Practice.

Preparation of the ELCMP will be ensured through the use of Microsoft Teams Planner and Outlook reminders.

9(4) A responsible person must ensure that a management plan prepared under subregulation (2) specifies the following

(a) The name, address and telephone number of the responsible person:

The responsible person under section 84 of the Electricity Safety Act 1998 for the maintenance of a private electric line or for the keeping of the whole or any part of a tree clear of an electric line within the area under the control of Murra Warra Project Co Pty Ltd is:

Murra Warra Wind Farm (Stage 1)	*Murra Warra Wind Farm (Stage 2)*
Mr. Benjamin Deer	Mr. Benjamin Deer
Murra Warra Project Co Pty Ltd	Murra Warra Project Co Pty Ltd
171 – 173 Mounts Bay Road,	171 – 173 Mounts Bay Road,
Perth, WA, 6000	Perth, WA, 6000
Mobile +61 438 237 141	Mobile +61 438 237 141

(b) The person responsible for preparation of the plan is:

Murra Warra Wind Farm (Stage 1)	*Murra Warra Wind Farm (Stage 2)*
Ms. Mirelle Gouws	Ms. Mirelle Gouws
Environmental Compliance Officer	Environmental Compliance Officer
Squadron Energy Services Pty Ltd	Squadron Energy Services Pty Ltd
Level 12, 55 Market Street	Level 12, 55 Market Street
Sydney, NSW, 2000	Sydney, NSW, 2000
Mobile +61 455 867 213	Mobile +61 455 867 213

(c) The person responsible for carrying out the management plan is:

Murra Warra Wind Farm (Stage 1)	*Murra Warra Wind Farm (Stage 2)*
Mr. Christopher Gulvin	Mr. James Cooper
Operations Manager	Asset Manager
Murra Warra Project Co Pty Ltd	RES Australia Pty Ltd
Ailsa Wheat Road	Level 6, 165 Walker Street
Murra Warra, VIC, 3401	North Sydney, NSW, 2060
1800 940 487	(02) 8440 7400
Mobile +61 467 794 488	
	and
and	
	Mr. Sam Kelly
Mr. Ashley Marra	Lead Service Technician
Lead Service Technician	GE Renewable Energy Australia
Siemens Gamesa Renewable Energy	Ailsa Wheat Road
Alisa Wheat Road	Murra Warra, VIC, 3401
Murra Warra, VIC, 3401	(03) 8440 7400
Mobile +61 482 952 782	Mobile +61 407 924 933

(d) The person that can be contacted in case of an emergency requiring tree clearance:

Murra Warra Wind Farm (Stage 1)	*Murra Warra Wind Farm (Stage 2)*
Mr. Ashley Marra	Mr. Sam Kelly
Lead Service Technician	Lead Service Technician
Siemens Gamesa Renewable Energy	GE Renewable Energy Australia
Alisa Wheat Road	Alisa Wheat Road
Murra Warra, VIC, 3401	Murra Warra, VIC, 3401
+49 (0) 4331 837 3333 (SGRE 24/7 Turbine Control Centre)	+91 8040 885 235 (24/7 GE Remote Operation Centre)
Mobile +61 482 952 782 (Ashley Marra)	Mobile +61 407 924 933 (Sam Kelly)

(e) The objectives of the management plan:

The objectives of the plan are to ensure:

i. compliance with the Regulation and Code of Practice,
ii. electrical safety,
iii. public/community/worker and other stakeholder safety and satisfaction,
iv. vegetation is kept clear of the electric lines,
v. the risk of electric lines starting fires is minimised, as far as practicable,
vi. the risk to the safe and 'normal' operation of electric lines is minimised,

vii. works associated with this plan protect the environment and amenity of the surroundings, and
viii. protect areas of important vegetation

(f) The land that this plan applies to:

The drawing in Appendix A of this plan shows the land to which this management plan applies.

(g) Any hazardous bushfire risk areas and low bushfire risk areas:

The at-risk assets in this plan are in an area assigned as a 'hazardous bushfire risk area' (HBRA) by the CFA under section 80 of the Electricity Safety Act

The assignment can be confirmed via access to the Data Vic GIS database:

https://discover.data.vic.gov.au/dataset/low-bushfire-rating-areas1

Further information can be obtained via the CFA website:

http://www.cfa.vic.gov.au/plan-prepare/electric-line-vegetation-clearance/

or by contacting the following email address:

fire-hzd-ratings@cfa.vic.gov.au

(h) Each area that the responsible person knows contains a tree:

Each of the sites developmental and planning scheme investigations / assessments / studies / plans confirmed none of the following categorised trees were identified in the vicinity of the at-risk electric lines.

During construction of the at-risk assets all vegetation was managed in line with the approved planning schemes and private land lease agreements.

During the life span of the at-risk assets, it can be expected that some areas may require the cutting or removal of trees determined to be:

(i) indigenous to Victoria; or
(ii) listed in a planning scheme to be of ecological, historical or aesthetic significance; or
(iii) a tree of cultural or environmental significance.

The location of any growth and any subsequent recommended cutting/removal scope/timings can be obtained in the annual line vegetation inspection report/s (example in Appendix D).

(i) The means of identifying trees specified in (h) (i), (ii) or (iii):

Determinations in section (h) have been, or will be, made with reference / use / access of resources including (but not limited to):

i. the latest Threatened species records via the Victoria Biodiversity Atlas (VBA) https://vba.biodiversity.vic.gov.au/vba/#/,
ii. the Flora and Fauna Guarantee (FFG) Act Threatened List https://www.environment.vic.gov.au/conserving-threatened-species/threatened-list,
iii. the Heritage Registry, http://vhd.heritagecouncil.vic.gov.au/,

iv. the Victorian Aboriginal Heritage Registry, https://achris.vic.gov.au/#/dashboard,

v. the Yarriambiack Shire Council, or

vi. the knowledge/assessment of a 'suitably qualified arborist'

These references can be reviewed by the specialist service provider conducting the annual line clearance inspection.

The currency of these references will be reviewed annually by the person responsible for the preparation of the plan as part of this plan preparation.

The annual line vegetation inspections report/s will be reviewed annually against the references to identify the existence of trees of a kind specified in paragraph (h)(i), (ii) or (iii).

(j) The management procedures to ensure compliance with the Code:

Compliance with the Code is currently ensured by adopting the following processes and procedures. This includes, but is not limited to:

i. Annual line vegetation inspections of the overhead 33kV lines and optical fibre cables are performed.

ii. The Code Clearance Graphs, formulas and figures (Appendix C) identify the minimum clearance space (excluding additional distance for cable sag and sway).

iii. (A) the applicable Vertical and Horizontal Clearance Chart (Appendix C) for each 33kV Conductor-type in HBRA's in determining an additional distance that allows for vertical distance for sag and horizontal distance for sway. This is based on the characteristics of the conductor such as the voltage, stranding, spans, conductor material, design temperature and the maximum side swing of the conductor.

Cutting and removal methods will, as far as is practicable, be in line with the Code of Practice within the Regulations and AS 4373 Pruning of Amenity Trees.

Compliance to AS 4373 for any tree cutting is done through the use of suitably qualified arborist/s that is familiar with AS 4373 and use of appropriate plant and equipment. Selection of most appropriate plant and equipment can also be assisted through review of the line vegetation inspection report conducted prior to works.

'Urgent' or 'Hazard' cutting or removal work may be identified and reported internally via email, safety observation or externally via the enquires line (1800 940 487) or email address (info@murrawarrawindfarm.com) to MWWF outside of the annual line vegetation inspections by several potential stakeholders:

i. MWWF representatives (employees, contractors, sub-contractors),
ii. Network Operator,
iii. Lease Landowners, and/or
iv. Councils.

The appropriate period between tree cutting and/or removal is dependent on reviewing the results of the annual line vegetation inspection reports and their individual tree species/variety and current/future site conditions expected. The likelihood and associated priority of any vegetation with the potential to contact the line as well as any other recommendations will be included in the annual line vegetation report (example in Appendix D).

Prioritisation of any cutting/removal works is done in-line with the annual line vegetation inspection report (example in Appendix D and Table 1 & 2 below).

Table 1 Vegetation Inspection Code Guideline

Code	Code Descriptions
55	A span where vegetation is touching or likely to touch conductor
56	A span where vegetation is in the clearance space of conductor as defined by the Regulations and is NOT a Code 55
Year Codes: 23	Means the Vegetation will enter the clearance space in that year but is not yet a code 55 or 56
Year Codes: 24, 25, 26, 27, 28, 29, or 30	Means the next year the vegetation is anticipated to grow inside the clearance space in that year.
VS (Vegetated Span)	Tree will most likely enter clearance space from 2032 to 2034
NVS (Non-Vegetated Span)	Means there is no potential for any vegetation to ever enter into the clearance space due to tree growth (Visual Assessment Only)

Note that if any spans are coded as either 55 or 56 (non-compliant) then they will have additional coding as per the below Table 2 to ensure non-compliant works are carried out Pre Declared Fire Danger Period (DFDP)(http://www.cfa.vic.gov.au/warnings-restrictions/total-fire-bans-and-ratings/) days.

Table 2 Vegetation Inspection 'Priority' Code Guideline

New Priority	P1	P30	P180	P365	P720
55	55, 1 day				
56		56, 30 days			
CYR				CYR, 365 days	
CYR/RE				CYR/RE, 365 days	
NYR					NYR, 720 days
CV					CV, 720 days

The number system used to establish the maximum timeframe before the vegetation needs to be either next reviewed or clearance work is required to be completed.

P1 – scheduled to be actioned immediately or within 24hrs

- HBRA vegetation that is >2.0m within the clearance space outlined in Table C.2 (Appendix C).
- Line of Fall tree where failure of tree is imminent.

P30 – scheduled to be actioned within a 30 day period

- HBRA vegetation that is up to 2.0m within the minimum clearance space outlined in Table C.2 (Appendix C).
- Line of Fall tree is identified and failure is probable corrective action should be taken as soon as is practicable

P180 – scheduled to be actioned within a 180 day period

- Vegetation that may grow into the clearance space outlined in Table C.2 (Appendix C) within the next 6 months
- Line of fall tree identified and failure is possible, the tree or tree parts exhibit moderate structural damage and/or structural defects
- Vegetation could threaten the security of the line other than by intruding into the clearance space, e.g., Dense scrub, high fuel loadings, high smoke-producing species.

These procedures are also supported by ensuring the objectives and tasks associated with this plan are included in the commercial arrangements/engagement of the suitably qualified/competent specialised service provider are maintained.

(k) The procedures for AS 4373 compliance alternatives:

If it is not practicable, defined as;

> an action that is, or was, reasonably capable of being done with the available means taking into account and weighing up all relevant matters including:
>
> i. the likelihood of the hazard or the risk concerned occurring; and
> ii. the degree of harm that might result from the hazard of the risk; and
> iii. what the person concerned knows, or ought reasonably to know, about the hazard or risk, and about the ways of eliminating or minimising the risk; and
> iv. the availability and suitability of ways to eliminate or minimise the risk; and
> v. after assessing the extent of the risk and the available ways of eliminating or minimising the risk, the cost associated with available ways of eliminating or minimising the risk, including whether the cost is grossly disproportionate to the risk,

to comply with the requirements of the current version of AS 4373 then MWWF will consult with the specialised service provider and other impacted stakeholders to agree on an alternative methodology (e.g., plant or asset relocation, postponement, exemption application). Training of workers involved in vegetation management as per AS4373 is part of the requirements detailed in the Scope of Works during procurement face.

Personnel involved with this plan are familiar with the definition of ‘as far as practicable’ (or ‘where reasonably practicable’) via this plan.

(l) Alternative compliance mechanisms:

Not Applicable

(m) Approval for an alternative compliance mechanisms:

Not Applicable

(n) Measures to assess the performance of the responsible person:

The performance of this plan and the responsible person is directly related to the achievement of the plan objectives.

Other performance measures, that are reviewed annually at the time of preparation of this plan, include:

Table 3 Key Performance Indicators for the responsible person

Key Performance Indicator (KPI)	Target	Result (previous year)
Number of electrical events/faults that have occurred on the relevant overhead assets with the cause identified to be directly related to the Electric Line asset condition and/or compliance with the Regulations.	0	1*
Annual Number of Fire Starts.	0	0
Number of Stakeholder complaints/correspondence received in relation to the relevant overhead assets as measured through MWWF's Communication and Stakeholder Representative and the associated enquires line (1800 940 487) and email address (info@murrawarra-windfarm.com).	0	0
Number of Urgent or cutting/removal works required.	0	0
Lost Time Injuries (LTI's) or Medical Treatment Injuries (MTI's) with the cause identified to be directly related to the Electric Line assets.	0	0
Completion of Annual Vegetation Inspections (MW1 & 2)	2	4
Audit of Annual Vegetation Inspections (MW1 & 2)	2	2
Future ELCMP prepared by 31st March each year	Yes	Yes
Financial Penalties (Penalty Units) received.	None	None

**MW2 - Occurred 30 June 2024 (outside the FY2025 period but nevertheless documented in this report as it would not have been documented in the 2024/2025 report, which was due for submission 31 March 2024.*

MW1 - all termination replacement works mentioned in the 2024/2025 report were completed by 13 November 2024.

Poor or Inadequate performance against any of these measures will be reported to the person responsible for this plan under 9(4)(a) and also to the electric line specialised service provider for further contractor performance review and discussion if necessary.

This plans performance is also measured through the closure of maintenance work orders in the Computerised Maintenance Management System (CMMS) related to bushfire mitigation and line vegetation works.

This measure is called the Bushfire Index and is calculated as:

Number of Outstanding Tasks ÷ Number of Required Tasks

Tasks include all line inspection/clearance works, both scheduled and unscheduled.

MURRA WARRA WIND FARM (STAGE 1)

The **'outstanding tasks'** from the previous period include:

v. There were no outstanding/overdue works for this site

The **'tasks required'** for the upcoming period include:

vi. Annual Vegetation Inspection (next due: Oct 2025)

vii. Audit of line inspection/clearance

viii. Completion of annual pruning program

**Note that the next 36-month Electric Line Inspection is due April 2028*

Therefore:

Bushfire Index = 0 ÷ 3 = 0

MURRA WARRA WIND FARM (STAGE 2)

The **'outstanding tasks'** from the previous period include:

ix. There were no outstanding/overdue works for this site

The **'tasks required'** for the upcoming period include:

x. Annual Vegetation Inspection (next due: November 2025)

xi. Audit of line inspection/clearance

xii. Completion of annual pruning program

**Note that the next Electric Line Inspection is due November 2027*

Therefore:

Bushfire Index = 0 ÷ 3 = 0

The status of all maintenance tasks is monitored and reported on monthly.

Continual improvement of this plan is done through review and adjustment to the above measures annually as well as incorporation of any findings identified from annual audits conducted under the following section.

(o) Audit processes to determine compliance with the Code:

Auditing performance against the Code and of this plan is done through the following processes;

i. An annual audit post DFDP undertaken by the respective representative responsible for carrying out this plan to ensure;

   a. the qualifications and experience of personnel performing any scheduled inspection and/or clearance works adheres to this plans requirements (including currency);

   b. The Health, Safety and Environment documentation;

   c. the line vegetation inspection has been conducted and the report has been submitted to the persons responsible for carrying out the plan;

   d. all inspection reports and subsequent clearance work recommendations have been conducted in line with the scope and agreed timing/scheduling of the

recommendations and to the quality of this plan and the applicable Acts, Regulations, Codes and Standards (eg, AS 4373) hence ensuring clearance has been maintained for the overhead lines and that task/s have been closed out following completion of the works.

Auditing the inspections/clearance works is performed through conducting a ground based visual audit. The scope of the visual audit will cover, as a minimum, a randomly selected **10%** of the Electric Line asset spans previously inspected and take the form of a marked-up version of the inspection/clearance report (example in Appendix D) or another checklist template (e.g., I-Auditor report).

If any significant non-compliances including, but not limited to, unmentioned vegetation or insufficient clearance space are noted then the audit scope will be expanded to include 100% of the Electric Line assets. These non-compliances will then be reported back to the electric line specialised service provider for rectification (including specified timeframes) and further contractor performance review and discussion, and

This audit will be performed by either;

1. A representative who has;
   a. Knowledge of applicable Acts, Regulations and Codes associated with this plan,
   b. Knowledge of this plan and its auditing obligations,
   c. Knowledge of, and are familiar with, the Electric Line Assets subject to the audit, and
   d. A minimum of 3 years Electric Line management experience,

   Or,
2. An independent third party with the same knowledge/experience as above.

If one of the items in the above list of item (d) are believed to have not occurred then the representative responsible for carrying out this plan is to immediately contact the provider of the services/reports and request the required information, immediately perform the required work or contact their manager and request support to perform the work. Establishment of the cause/reason for any noncompliance and how reoccurrences will be avoided will be required of the specialised service provider.

e. the line clearance recommendations/works from the inspection report/s, if any, have been entered into the CMMS; and

the representative responsible for carrying out this plan may also choose to perform additional inspections/audits if other scheduled/unscheduled line works are planned and resourcing is available.

ii. The annual review and preparation of this plan is performed by the person responsible for preparing the plan in conjunction with the other representatives listed under sections (a-d). Identification of any deficiencies in the plan implementation or ongoing performance, including that of the associated contractors, or subcontractors is done via;

a. Representative responsible for carrying out this plan to provide feedback to their manager and the person responsible for preparation of the plan when a deficiency is found.

b. Safety or Hazard Observation, and/or

c. Review of site/asset risk registers.

Any subsequent change/s to the plan are performed during the annual review/preparation of this plan. If there are more critical changes required to important information, including but not limited to contact details or applicable procedures/policies these will be performed as soon as practicable.

The reviews intension is also to re-aligning the plan to any updated Legislation, Regulations or Codes, industry practices, asset configurations/locations and work towards continual improvement.

The records, notification and closure of any audit results is done in several ways depending on the format/forum that the non-compliance was initially raised and can include, but is not limited to:

i. correspondence confirmation (e.g., letter, email, verbal),
ii. closure of Corrective Actions Register (in the case of Health Safety and Environment actions),
iii. Sign off confirmation of closure of actions by the responsible person for implementation of this plan
iv. updating/closure of applicable task in CMMS, or
v. updating or Risk Register/s.

(p) The qualifications and experience required of persons carrying out inspection, cutting or removal of trees:

The qualifications and experience of the persons who are to carry out the inspection, in accordance with the Code and the Electricity Safety (General) Regulations 2019 r.616 will be a “qualified person” and have satisfactorily completed the nationally accredited ‘Assess Trees’ and ‘Identify Tree’ modules through an RTO and who must comply with the following:

i. Vegetation Management Rules;
ii. Blue Book when working on or near high voltage electrical apparatus;
iii. VESI Vegetation Management Guidelines;
iv. VESI Skills and Training Guideline; and
v. Vegetation Skills and Training Matrix

A suitably qualified arborist assessing for hazard trees must have the Certificate 3 in Arboriculture and have completed the “Perform a ground-based tree defect evaluation” module and have at least 3 years of field experience assessing trees.

Training for vegetation management workers includes Cert II ESI Powerline Vegetation Control, and annual refresher training to maintain currency of the Cert II ESI Powerline Vegetation Control. Training units relevant to work roles must also be specified depending on the specialised work roles of the associated personnel (e.g., Arborist, Assessor, Cutter working from EWP, Ground Crew, Specialised Plant Operator or Tree Climber) and shall include ESI Cert II training units such as:

- EWP Operator and EWP safety observer = EWP - WP Licence, plus;
- UETDRVC007 - Control vegetation using pruning techniques; and
- UETTDRVC004 – Control vegetation in the vicinity of live electrical apparatus from an elevated work platform.

Crew OHS training or experience (Pruning practices/standards/Chainsaw operation/Chipper operation/Traffic management/HSE/First aid)

The person/s responsible for carrying out the plan will obtain these training records from the specialised service provider prior to the commencement of associated works.

If any worker associated with the assets and tasks covered under this plan are found to be performing works without required training/qualifications/experience or outside of their capabilities or the prescribed documentation they are supposed to be working under, then work will be immediately stopped and the associated personnel removed from the site.

Those persons carrying out inspection, cutting or removal of trees at an Applicable Site/Maintenance Zone will be required to be inducted prior to the commencement of associated works. This involves the combination of a:

- General Induction; and
- Site Specific Induction

which includes, but is not limited to, a combination of corporate and site specific policies, procedures, practices, plans (including reference to applicable details from this Electric Line Clearance Management Plan), site maps, emergency evacuation contacts/locations, current safety alerts, expected weather conditions and operational status of applicable assets.

(q) Notification and consultation procedures:

Plans to inspect or subsequently cut or remove vegetation as required under clause 3, 8 or 9 of the Code must comply with the notification, publication, consultation and record keeping obligations under clause 16, 17, 18 and 19 of, Part 2, Division 3 of the Code.

16 Responsible person must provide notification before cutting or removing certain trees

In the case of clause 16 this is not currently applicable to this plan as no trees are:

(a) on private property that the responsible person neither owns not occupies; or
(b) on public land; or
(c) a tree of cultural or environmental significance; or
(d) listed in a planning scheme to be of ecological, historical or aesthetic significance.

17 Responsible person must publish notice before cutting or removing certain trees

Not Applicable, as none of the trees are on public land.

18 Responsible person must consult with occupier of owner of private property before cutting or removing certain trees

Not Applicable, as none of the trees are within the boundary of a private property which the responsible person neither occupies nor owns.

19 Notification and record keeping requirement for urgent cutting or removal

In the case that ‘Urgent’ cutting or removal of trees this can occur in several ways;

(a) as a result of encroachment or growth of trees that was not anticipated in the management plan; or
(b) as a result of a tree falling or becoming damaged so it is required to be cut or removed to maintain the minimum clearance space; or
(c) because a suitably qualified arborist has
    i) assessed the tree having regard to foreseeable local conditions; and
    ii) advised the responsible person that the tree, or any part of the tree, is likely to imminently fall onto or otherwise come into contact with an electric line; or
(d) during the fire danger period declared under the Country Fire Authority Act 1958.

If the tree meets the above criteria and requires urgent cutting work this work shall be restricted to ensure;

1) The responsible person must not cut a tree further than 1 metre from the minimum clearance space for a span of an electric line, and

If the tree meets the above criteria and requires urgent removal work this work shall be restricted to ensure the responsible person must not remove the tree unless

(a) The tree has fallen or become damaged and is to be removed to keep the minimum clearance space for a span of an electric line free of trees, or
(b) a suitably qualified arborist has
    i) assessed the tree having regard to foreseeable local conditions, and
    ii) advised the responsible person that the tree is likely to imminently fall onto or otherwise come into contact with an electric line.

The services of a suitably qualified arborist will be requested at the time of inspection/identification, or closely following, through the specialised service provider to establish the above.

Clauses 2, 3 and 4 regarding notification requirements are not applicable as per clause 18.

(r) Procedure for independent resolution of disputes relating to electric line clearance:

MWWF aims to establish and maintain respectful and collaborative relationships with the communities in which it operates or seeks to operate in.

Notwithstanding, there is a Complaints Investigation Response Plan which is publicly available on the Murra Warra Project website;

https://www.squadronenergy.com/our-projects/murra-warra-I-wind-farm

https://www.squadronenergy.com/our-projects/murra-warra-II-wind-farm

This explains the way in which the Murra Warra Wind Farm Projects deal with a complaints prior to becoming a disputed situation. If however, there was a dispute between parties relating to or arising from this plan or the associated Regulations that cannot be resolved using reasonable endeavours and acting in good faith to resolve through joint discussions then:

The person responsible for resolving disputes for Murra Warra (Stage 1) is:

Mr. Christopher Gulvin

Operations Manager

Murra Warra Project Co Pty Ltd

Ailsa Wheat Road

Murra Warra, VIC, 3401

1800 940 487

Mobile +61 467 794 488

The person responsible for resolving disputes for Murra Warra (Stage 2) is:

Mr. James Cooper (Authorised Representative of Murra Warra 2 Project Co)
Asset Manager
RES Australia Pty Ltd
Level 6, 165 Walker Street
North Sydney, NSW, 2060
(02) 8440 7400

Mr. Christopher Gulvin
Operations Manager
Murra Warra Project Co Pty Ltd
Ailsa Wheat Road
Murra Warra, VIC, 3401
1800 940 487
Mobile +61 467 794 488

(s) Energy Safe Victoria exemptions:

Not applicable

10 Obligations relating to management plan

(6) Plan published on Internet Site

The latest prepared Electric Line Clearance Management Plan is available for inspection on the responsible persons website located at:

https://www.squadronenergy.com/our-projects/murra-warra-I-wind-farm

https://www.squadronenergy.com/our-projects/murra-warra-II-wind-farm

Any superseded versions of the plan located at the above websites will be overwritten by the person responsible for preparing the plan.

Schedule 1 - Code of Practice for Electric Line Clearance,

Part 2 – Clearance Responsibilities, Division 1 – Roles and Responsibilities

8 Owner or operation of transmission line must manage trees around minimum clearance space

Not Applicable due to 33kV only.

9 Responsible person may cut or remove hazard tree

A hazard tree can only be classified if a 'suitably qualified arborist' has

i. assessed the tree having regard to foreseeable local conditions, which includes weather, environmental, significant vegetation, protected flora and fauna and habitat; and
ii. advised the responsible person that the tree, or any part of the tree, is likely to fall onto or otherwise come into contact with an electric line.

This classification remains valid irrespective of if the tree is not within, and is not likely to grow into, the minimum clearance space.

The services of a suitably qualified arborist will be requested through the specialised service provider to establish the above.

A suitably qualified arborist is considered someone who complies with the applicable arborist requirements stipulated under section (p) of this plan.

Part 2 – Clearance Responsibilities, Division 2 – Manner of cutting and removing trees

10 Cutting of tree to comply with Standard

As far as reasonably practicable, trees will be cut in accordance with AS 4373 as published or amended from time to time.

11 Cutting of removal of specified trees must be minimised

In the case that cutting of specified trees, as identified under section (h) is required it will as far as practicable, be restricted to the minimum extent necessary to ensure compliance with;

i. the Code, Division 1, or
ii. to make an unsafe situation safe

If the identified tree is specified it shall not be removed unless it necessary to achieve the above criteria or a suitably qualified arborist has;

i. inspected the tree, and
ii. advised the responsible person that cutting the tree in accordance with the above criteria would make the tree unhealthy or unviable.

The services of a suitably qualified arborist will be requested at the time of inspection/identification, or closely following, through the specialised service provider to establish the above.

12 Cutting of removing habitat for threatened fauna

In the case that cutting/removal of threatened fauna habitat is required this will be done outside of the breeding season for that species of fauna wherever practicable. If it is not practicable outside of the breeding season, translocation of the fauna must be undertaken wherever practicable to ensure compliance with the Code.

Refer to plan section 9(4)(i) for how the existence/location of these trees and identification of this fauna and its associated breeding season may be obtained.

Appendices

A. Murra Warra Wind Farm (Stage 1) Overhead Line – Site Layout (Lines) (HBRA Classified)

B. Murra Warra Wind Farm (Stage 2) Overhead Line – Site Layout (Lines) (HBRA Classified)

C. Clearance Charts Guideline and Code Graphs, formulas and figures

D. Example Line Vegetation Inspection Report

Appendix A. MWWF (Stage 1) Overhead Line – Site Layout (HBRA Classified)

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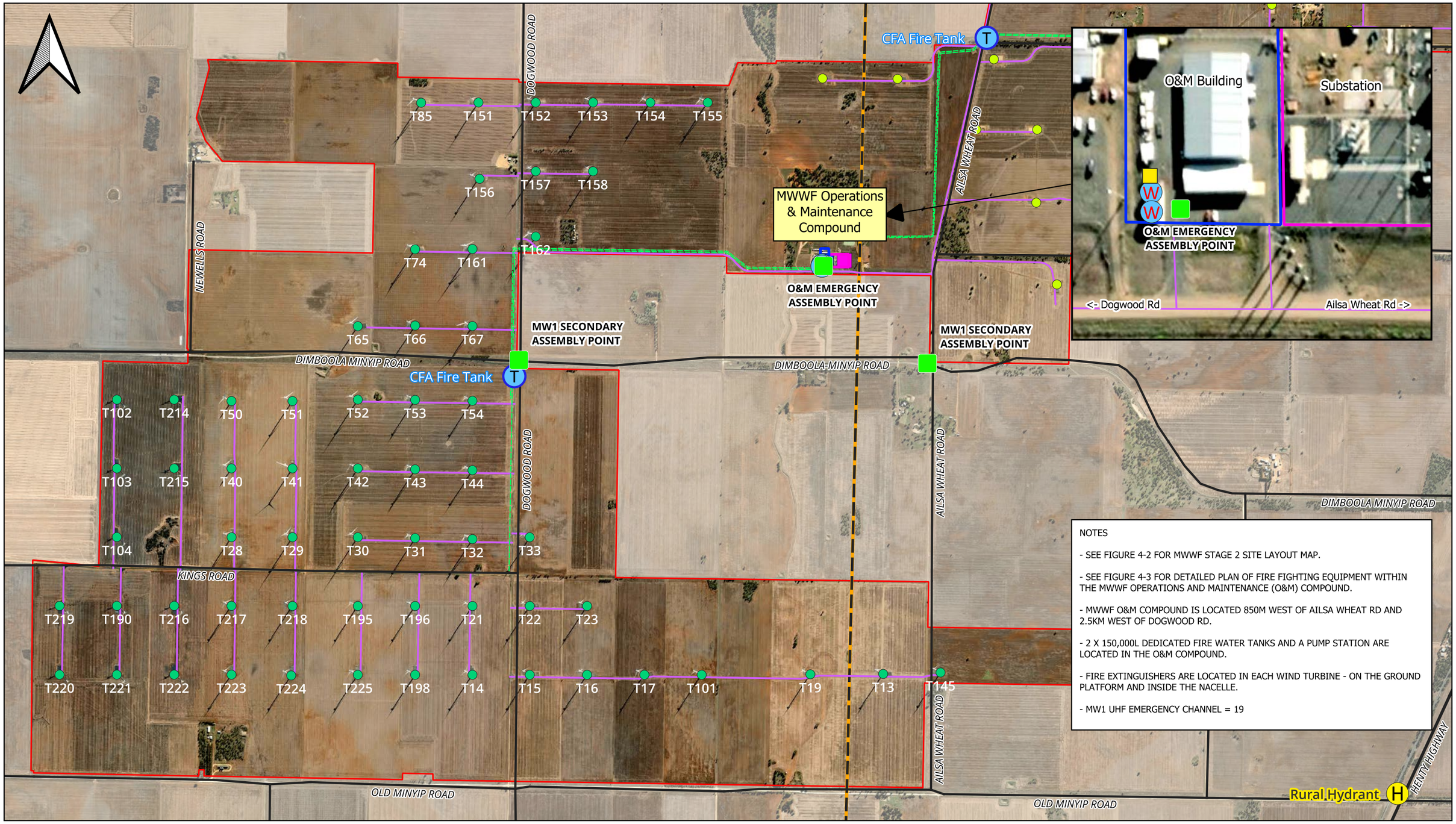

NOTES

- SEE FIGURE 4-2 FOR MWWF STAGE 2 SITE LAYOUT MAP.
- SEE FIGURE 4-3 FOR DETAILED PLAN OF FIRE FIGHTING EQUIPMENT WITHIN THE MWWF OPERATIONS AND MAINTENANCE (O&M) COMPOUND.
- MWWF O&M COMPOUND IS LOCATED 850M WEST OF AILSA WHEAT RD AND 2.5KM WEST OF DOGWOOD RD.
- 2 X 150,000L DEDICATED FIRE WATER TANKS AND A PUMP STATION ARE LOCATED IN THE O&M COMPOUND.
- FIRE EXTINGUISHERS ARE LOCATED IN EACH WIND TURBINE - ON THE GROUND PLATFORM AND INSIDE THE NACELLE.
- MW1 UHF EMERGENCY CHANNEL = 19

- MWWF Site Boundary
- Substation
- O&M Building
- MW1 Turbines
- MW2 Turbines
- Public Road
- Internal access roads
- MW1 Overhead Powerlines (33kV)
- AusNet Transmission Line
- CFA Fire Tank
- Rural Hydrants
- Emergency Assembly Point
- O&M Water Tank
- O&M Pump Station

0 1 2 km

Company: Squadron Energy				SQUADRON ENERGY
Title: Murra Warra Wind Farm - STAGE 1 Site Layout and Emergency Details				
Date: 23/01/2025	Projection: GDA94 Z54	Drawing No: FPERP Fig. 4-1	Rev: 1	Ver: A
Drawn By: A Gordijn	Checked By: C Gulvin	Sheet: 1	Proj Code: MWWF	Size: A3

Appendix B. MWWF (Stage 2) Overhead Line – Site Layout (HBRA Classified)

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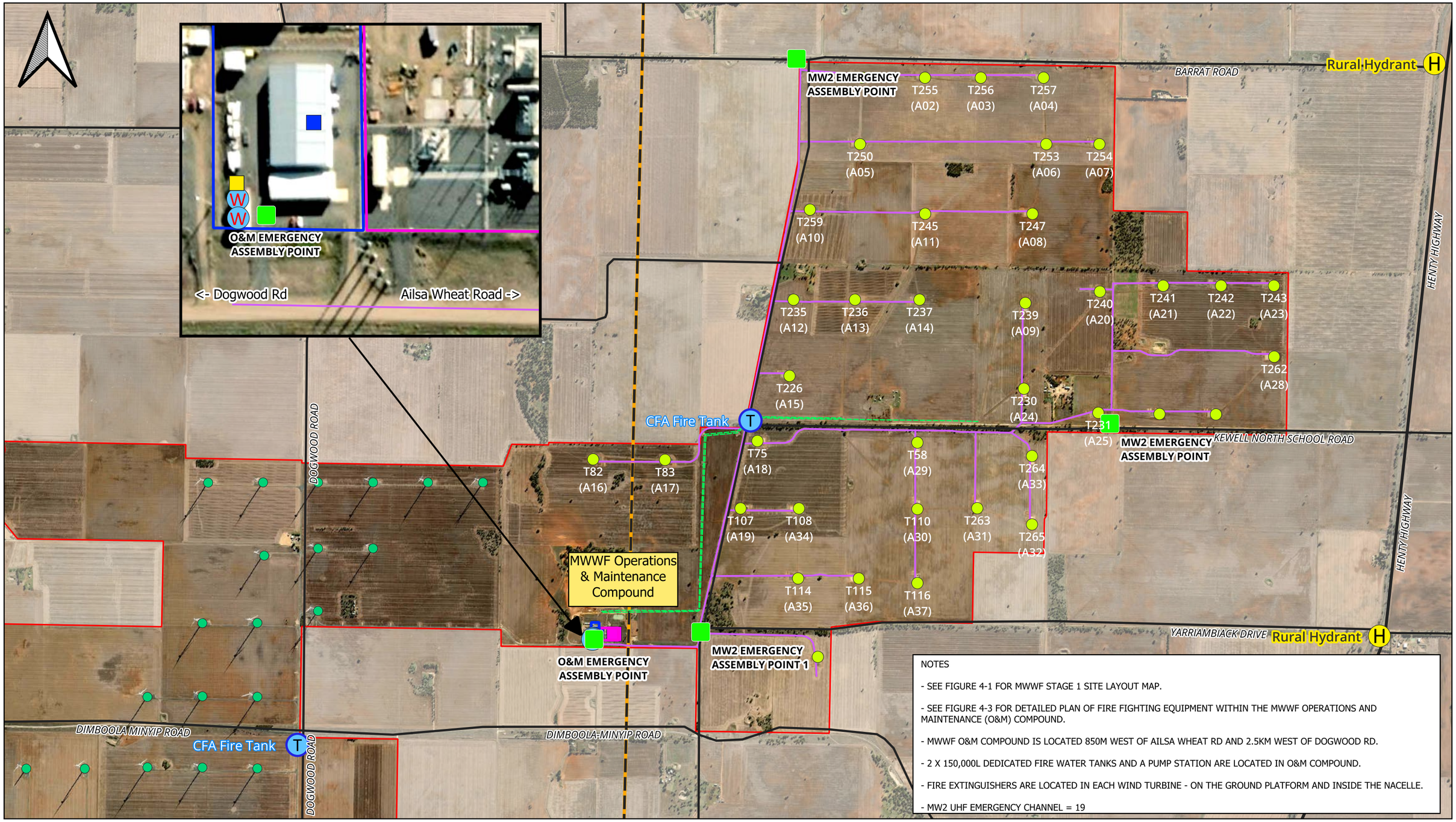


MWWF Site Boundary
Substation
O&M Building
MW2 Turbines
MW1 Turbines
Public Road
MW2 internal access roads
MW2 Overhead Powerlines (33kV)
AusNet Transmission Line
CFA Fire Tank
Rural Hydrants
Emergency Assembly Point
O&M Water Tank
O&M Pump Station

0 1 2 km

Company: Squadron Energy				SQUADRON ENERGY
Title: Murra Warra Wind Farm - STAGE 2 Site Layout and Emergency Details				
Date: 23/01/2025	Projection: GDA94 Z54	Drawing No: FPERP Fig. 4-2	Rev: 1	Ver: A
Drawn By: A Gordijn	Checked By: C Gulvin	Sheet: 1	Proj Code: MWWF	Size: A3

Appendix C. Clearance Charts guideline and Code graphs, formulas and figures

The following Clearance Chart guidelines identify:

1. Vertical/Horizontal Clearances (Applicable Distance only),and Vertical/Horizontal Clearance (Applicable Distance plus Sag/Sway),

In High Bushfire Risk Areas.

Table C.1 Vertical/Horizontal Clearances (Applicable Distance only)

	Sections of all spans near the pole	Spans up to and including 45 meters	Spans exceeding 45 meters
HV	1.5m	1.5m	2.25m

i. Sag and Sway is not included in the above table,
iii. 'Near Pole' is the first 1/6th distance from the pole at either end of the span

Table C.2 Vertical/Horizontal Clearance (Applicable Distance plus Sag / Sway)

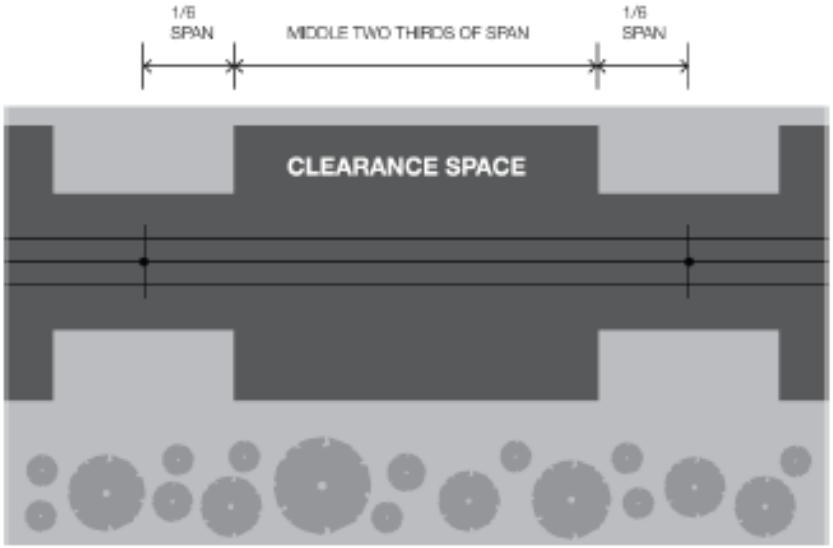
Span Length (m)	33kV (AAC/AAAC Conductor)
A – REQUIRED CLEARANCE FOR SPANS UP TO AND INCLUDING 45 METERS	
0-45	1.5
B – REQUIRED CLEARANCE FOR SPANS EXCEEDING 45 METERS	
45-70	2.25
70-120	4
120-160	5
160-200	7
200-250	11

i. The Sag and Sway Chart are not applicable to the 'Near Pole' area
ii. This Chart ensures compliance with Part 3, Division 1 of the Code.

Electricity Safety (Electric Line Clearance) Regulations 2020
S.R. No. 50/2020
Schedule 2—Applicable distance for middle 2 thirds of electric line span

FIGURE 1—PLAN VIEW OF ELECTRIC LINES IN ALL AREAS

Clauses 24, 25, 26, 27, 28 and 29,
Graphs 1, 2, 3, 4, 5 and 6



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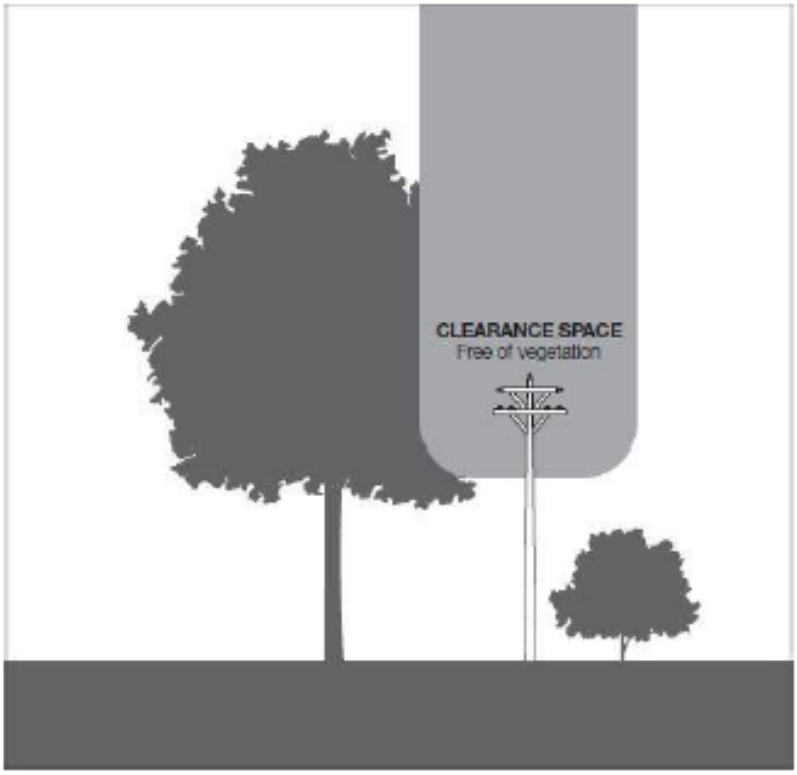
Electricity Safety (Electric Line Clearance) Regulations 2020
S.R. No. 50/2020
Schedule 2—Applicable distance for middle 2 thirds of electric line span

FIGURE 5—UNINSULATED 66 000 VOLT ELECTRIC LINE IN A LOW BUSHFIRE RISK AREA AND UNINSULATED ELECTRIC LINE IN A HAZARDOUS BUSHFIRE RISK AREA

Clauses 27, 28 and 29, Graphs 4, 5 and 6



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Appendix D. Example line vegetation inspection report

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Murra Warra Wind Farm (Stage 1 or 2) Powerline Vegetation Inspection YEAR

Prepared for:

Report prepared by:

DISCLAIMER

Scope

To complete an inspection of the Murra Warra Project Co. owned 33kV overhead line for the Murra Warra Wind Farm (Stage 1 or 2).

Inspection includes an assessment of each span with a projection of when the vegetation is likely to enter the clearance space. Identify any tree that may need clearing to ensure compliance with the Electricity Safety (Electric Line Clearance) Regulations 2020 is maintained.

Trees within the vicinity of the Powerlines will be assessed to identify any (Hazard) trees or parts of the trees that are likely to fail and enter the clearance space.

The details of any vegetation identified as likely to enter the clearance space will be reported with cutting details and recommendations to ensure the compliance is maintained.

The report contains the location details of each span and the year the vegetation is likely to grow within the clearance space. Details of trees that need to be cleared including Tree Species, Description of Work, a photograph, Clearance space required and the actual clearance.

Where works are required, the customers or affected persons will be notified and negotiated with as required.

The Current ELCMP should be reviewed via the following link:
http://murrawarrawindfarm.com/permits/

Findings

Summary

The 33kV lines were inspected on the Date. All spans were inspected and the codes have been updated to reflect their current status.

- Spans with current (YEAR) data for these lines are within Appendix 1,
- Span coding definitions can be found in Appendix 2.
- Clearance Charts can be found in Appendix 3

Pictures:

Appendix 1

YEAR Murra Warra (Stage 1 or 2)

Pole No.	Code	Pole No.	Code
1		21	
2		22	
3		23	
4		24	
5		25	
5A		26	
6		27	
6A		28	
7		29	
8		30	
9		31	
10		32	
11		33	
12		34	
13		35	
14		36	
15		37	
16		38	
17		39	
18		40	
19		41	
20		42	

Appendix 2

Vegetation, Priority Codes and Clearance

Code	Code Descriptions
55	A span where vegetation is touching or likely to touch conductor
56	A span where vegeation is in the clearance space of conductor as defined by the Regulations and is NOT a Code 55
Year Codes: 23	Means the Vegetation will enter the clearance space in that year but is not yet a code 55 or 56
Year Codes: 2024, 25, 26, 27, 28, 29, or 30	Means the next year the vegetation is anticipated to grow inside the clearance space in that year.
VS (Vegetated Span)	Tree will most likely enter clearance space from 2032 to 2034
NVS (Non-Vegetated Span)	Means there is no potential for any vegetation to ever enter into the clearance space due to tree growth (Visual Assessment Only)

Note that if any spans are coded as either 55 or 56 (non-compliant) then they will have additional coding as per the below Table 2 to ensure non-compliant works are carried out Pre Declared Fire Danger Period (DFDP)(http://www.cfa.vic.gov.au/warnings-restrictions/total-fire-bans-and-ratings/) days.

New Priority	P1	P7	P14	P30	P90	P180	P365	P900	P6Y
55	55, 1 day								
56				56, 30 days					
CYR							CYR, 365 days		
CYR/RE							CYR/RE, 365 days		
NYR								NYR, 912 days	
CV								CV, 912 days	

Table 1 Vegetation Inspection 'Priority' Code Guideline

P1 – scheduled to be actioned immediately or within 24hrs

- HBRA vegetation that is >2.0m within the clearance space outlined in Appendix C, Table 4
- Line of Fall tree where failure of tree is imminent.

P30- scheduled to be actioned within a 30 day period

- HBRA vegetation that is up to 2.0m within the minimum clearance space outlined in Appendix C, Table 4
- Line of Fall tree is identified and failure is probable corrective action should be taken as soon as is practicable

P180- scheduled to be actioned within a 180 day period

- Vegetation that may grow into the clearance space outlined in Table 4.1 within the next 6 months
- Line of fall tree identified and failure is possible, the tree or tree parts exhibit moderate structural damage and/or structural defects

Vegetation could threaten the security of the line other than by intruding into the clearance space, eg. Dense scrub, high fuel loadings, high smoke-producing species

Appendix 3

The following Clearance Chart guidelines identify:

Vertical/Horizontal Clearances (Applicable Distance only),and
Vertical/Horizontal Clearance (Applicable Distance plus Sag/Sway),

In High Bushfire Risk Areas.

	Sections of all spans near the pole	Spans up to and including 45 meters	Spans exceeding 45 meters
HV	1.5m	1.5m	2.25m

Table 2 Vertical/Horizontal Clearances (Applicable Distance only)

i. Sag and Sway is not included in the above table,
ii. 'Near Pole' is the first 1/6th distance from the pole at either end of the span

Span Length (m)	6.6kV, 11kV, 22kV & 33kV			
	LV/ABC	AAC	Copper, ACSR, CdCu	Steel
	A – REQUIRED CLEARANCE FOR SPANS UP TO AND INCLUDING 45 METERS			
0-45	0.3	1.5	1.5	1.5
	B – REQUIRED CLEARANCE FOR SPANS EXCEEDING 45 METERS			
45-70	0.6	2.25	2.25	2.25
70-120	0.9	4	3	3.5
120-160		5	3.5	5
160-200		7	5	6
200-250		11	7	6
250-300			10	6
300-350			13	6
350-400			16	7

Table 3 Vertical/Horizontal Clearance (Applicable Distance plus Sag/Sway)

iii. The Sag and Sway Chart are not applicale to the 'Near Pole' area
iv. This Chart ensures compliance with Part 3, Division 1 of the Code.

FIGURE 1—PLAN VIEW OF ELECTRIC LINES IN ALL AREAS

Clauses 24, 25, 26, 27, 28 and 29,
Graphs 1, 2, 3, 4, 5 and 6

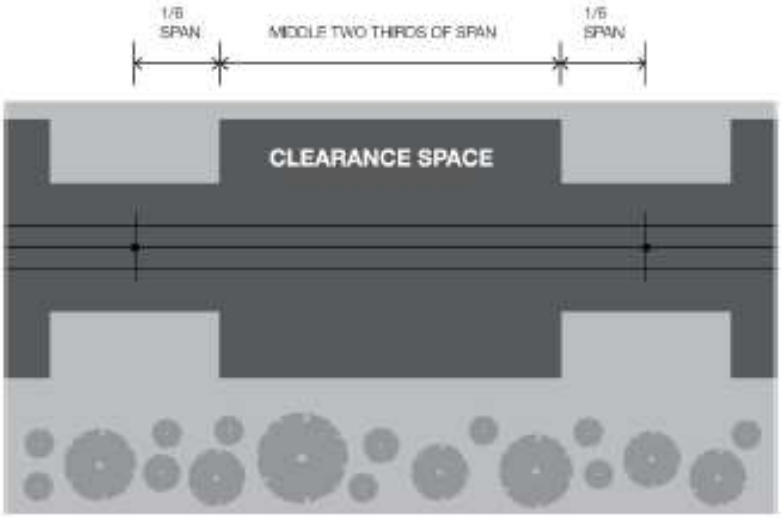

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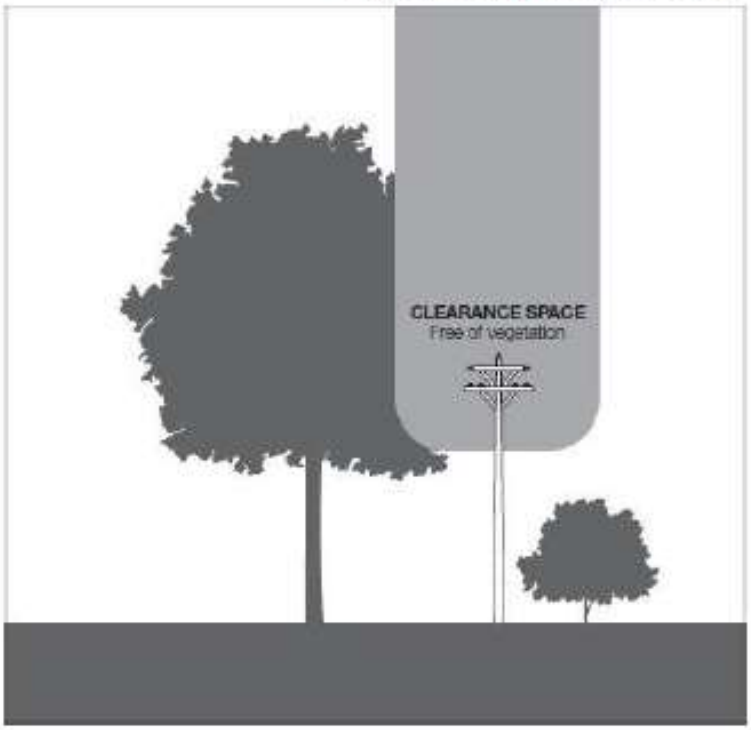
FIGURE 5—UNINSULATED 66 000 VOLT ELECTRIC LINE IN A LOW BUSHFIRE RISK AREA AND UNINSULATED ELECTRIC LINE IN A HAZARDOUS BUSHFIRE RISK AREA

Clauses 27, 28 and 29, Graphs 4, 5 and 6



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