

Hexham Wind Farm
Environment Effects Statement and Planning Permit
Inquiry and Advisory Committee Report

Environment Effects Act 1978

Planning and Environment Act 1987

16 July 2026

Planning Panels Victoria acknowledges the Wurundjeri Woi Wurrung People as the traditional custodians of the land on which our office is located. We pay our respects to their Elders past and present.

Environment Effects Act 1978 – Inquiry report under section 9(1)

Planning and Environment Act 1987 – Advisory Committee report under section 151(1)

**Hexham Wind Farm
Environment Effects Statement and Planning Permit**

16 July 2026



Con Tsotsoros, Chair



Elizabeth McIntosh, Deputy Chair



Natasha Reifschneider, Member



Kym Burgemeister, Member

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Glossary and abbreviations

ACHIA	Aboriginal Cultural Heritage and Impact Assessment
BAM Plan	Bat and Avifauna Management Plan
BESS	Battery Energy Storage System
CASA	Civil Aviation Safety Authority
CFA	Country Fire Authority
CHMP	Cultural Heritage Management Plan
CNMP	Construction Noise Management Plan
dBA	A-weighted decibel
dBL	Linear Decibel
DCCEEW	Department of Climate Change, Energy, the Environment and Water (Australian Government)
DEECA	Department of Energy, Environment and Climate Action
DELWP	Department of Environment, Land, Water and Planning (former)
DTP	Department of Transport and Planning
EE Act	<i>Environment Effects Act 1978</i>
EES	Environment Effects Statement

EMAC	Eastern Maar Aboriginal Corporation
EMF	Environmental Management Framework
EMM	Environmental Management Measure
EMP	Environmental Management Plan
EP Act	<i>Environment Protection Act 2017</i>
EPA	Environment Protection Authority (Victoria)
EUROBATS Guideline	<i>EUROBATS Guidelines for consideration of bats in wind farm projects in Europe, and NatureScot's Bats and onshore wind turbines - survey, assessment and mitigation in Scotland</i>
EVC	Ecological Vegetation Class
FFG Act	<i>Flora and Fauna Guarantee Act 1988</i>
Glen Hopkins CMA	Glenelg Hopkins Catchment Management Authority
HAEC	Hexham Community Environmental Action Group Inc
Head TfV	Head, Transport for Victoria
IAC	Inquiry and Advisory Committee
Interim Brolga Guidelines	Interim Guidelines for the Assessment, Avoidance, Mitigation and Offsetting of Potential Wind Farm Impacts on the Victorian Brolga Population (Department of Sustainability and Environment, 2011)
ISO 9613-2	<i>ISO 9613-2:2024 Acoustics – Attenuation of sound during propagation outdoors – Part 2: Engineering method for the prediction of sound pressure levels outdoors</i>
LSALT	Lowest Safe Altitude
LVIA	Landscape and Visual Impact Assessment
MNES	matters of national environmental significance
Moyne Council	Moyne Shire Council
MRSD Act	<i>Mineral Resources (Sustainable Development) Act 1990</i>
Native Vegetation Guidelines	<i>Guidelines for the removal, destruction or lopping of native vegetation, DEECA, 2025</i>
New Zealand Standard	New Zealand Standard 6808:2010
OEMP	Operational Environmental Management Plan
PANS-OPS	Procedures for Air Navigation Services – Aircraft Operations
PE Act	<i>Planning and Environment Act 1987</i>

Planning Scheme	Moyne Planning Scheme
PPV	Planning Panels Victoria
Project	Proposed Hexham wind energy facility
Project site	The area shown in Figure 2
Proponent	Hexham Wind Farm Pty Ltd
RAP	Registered Aboriginal Party
RGZ	Residential Growth Zone
SBWB	Southern Bent-winged bat
Scoping Requirements	<i>Scoping Requirements Hexham Wind Farm Environment Effects Statement</i> , September 2024
Transport Assessment	Transport Impact Assessment Report Hexham Wind Farm Project (Ratio, 3 October 2025)
VCAT	Victorian Civil and Administrative Tribunal

Overview

Project summary

The Project	Hexham Wind Energy Facility Project
Brief description	The Project is for a wind energy facility comprising up to 106 wind turbines, battery storage for up to 200 megawatts and associated infrastructure and works
Project location	In the Moyne Shire, about 3 kilometres southwest of Hexham and north-west of Ellerslie, and in Victoria's South-West Renewable Energy Zone
Project site	About 16,000 hectares of land shown in Figure 2
Proponent	Hexham Wind Farm Pty Ltd
Exhibition	The Environment Effects Statement was placed on public exhibition from 27 January to 11 March 2026 The planning permit application was placed on public notice from 23 January 2026 and remains open until the Responsible Authority makes a decision on the application
Number of submissions	Environmental Effects Statement: 66 and Permit application: 65 (See Appendix B)

Inquiry and Advisory Committee

IAC members	Con Tsotsoros (Chair), Elizabeth McIntosh (Deputy Chair), Natasha Reifschneider, Dr Kym Burgemeister
IAC role	To inquire into, and report on, the potentially significant environmental effects of the proposed Hexham wind energy facility assessed in the environment effects statement and planning merits of the planning permit application, in accordance with the terms of reference
Supported by	Lauren Sharpe, Planning Panels Victoria
Directions Hearing	Planning Panels Victoria and by video, 31 March 2026
IAC Hearing	Cliftons Conference Centre, Melbourne and by video on 27, 28, 29, 30 April and 4, 5, 7, 20, 21 and 22 May 2026 Lighthouse Theatre, Warrnambool and by video on 11, 12, 13, 14 and 15 May 2026
Site inspections	Unaccompanied, 15 April 2026
Parties to the Hearing	See Appendix C
Citation	Hexham Wind Energy Facility (EES) [2026] PPV
Date of this report	16 July 2026

Executive summary

(i) The Project

The Hexham Wind Energy Facility Project (Project) is for a wind energy facility comprising up to 106 wind turbines, battery storage for up to 200 megawatts/800 megawatt hours and associated infrastructure and works. It is expected to generate about 2,559 gigawatt-hours each year, equivalent to the average electricity usage of about 515,000 homes.

The Project is in the Moyne Shire, about 3 kilometres southwest of Hexham and north-west of Ellerslie, and in Victoria's South-West Renewable Energy Zone.

(ii) Context for assessment and approvals

On 19 April 2022, the Minister for Planning determined an Environment Effects Statement (EES) was required for the Project under the *Environment Effects Act 1978*. On 31 August 2022, a delegate of the Minister administering the *Environment Protection and Biodiversity Conservation Act 1999* (Commonwealth) (EPBC Act) decided the Project is a controlled action.

The EES forms the basis for assessing impacts on matters of national environmental significance under the EPBC Act, pursuant to the Bilateral Agreement between the Commonwealth and Victorian governments.

Scoping requirements for the EES were issued in September 2024 which detail the requirements of the EES, including designation of Key Matters and Other Matters, and evaluation objectives for each of those matters.

The EES comprises the executive summary report, summary report, 29 main report chapters and 25 technical appendices.

Key statutory approvals are required by the:

- *Environment Protection and Biodiversity Conservation Act 1999*
- *Planning and Environment Act 1987*
- *Aboriginal Heritage Act 2006*.

Secondary approvals are required by the:

- *Flora and Fauna Guarantee Act 1988*
- *Wildlife Act 1975*
- *Road Management Act 2004*
- *Water Act 1989*
- *Environment Protection Act 2017*.

(iii) The Inquiry and Advisory Committee

On 20 January 2026, the Minister for Planning appointed the Project Inquiry and Advisory Committee (IAC). The IAC's Terms of Reference sets out the purpose and process for the Inquiry.

The IAC is not tasked with recommending whether the Project should be approved. Its task is to consider and report on the Project's potential environmental effects, their significance and acceptability. This Report provides an integrated assessment of the Project's impacts, having regard to the evaluation objectives in the Scoping Requirements and relevant policy and legislation.

The EES was exhibited for 30 business days, from 27 January to 11 March 2026. The IAC received 66 submissions on the EES.

DTP, on behalf of the Minister for Planning, was responsible for receiving submissions and objections to the planning permit application. DTP referred 65 submissions on the planning permit application to the IAC.

Across both processes, the IAC identified 83 unique submitters, which included:

- one Australian government authority
- seven Victorian government departments, authorities and agencies
- two local councils – Moyne Council and Warrnambool City Council
- local community, environment and business groups, including the Hexham Community Environmental Action Group Inc., the Wimmera Mallee Environmental and Agricultural Protection Association Inc, and Save Our Surroundings Riverina
- members of the community.

The IAC has considered the exhibited material, written submissions received in response to the exhibited material, evidence, submissions and other material provided to the IAC during its Hearing process.

(iv) General IAC response

The Project proposal is supported by a comprehensive suite of technical and associated assessments and reports that have informed the application. The Project has been consciously designed to avoid, minimise and, where needed, mitigate potential effects and impacts. The IAC considers the Project will have acceptable environmental effects, having regard to relevant policy and legislation and relevant evaluation objectives in the scoping requirements.

This is reflected in the IAC's findings and limited extent of recommended changes to the final version of the Proponent's preferred permit conditions.

Having reviewed the referred matters, the IAC finds the Project will impact some private properties. However, when weighing amenity-related policy objectives against state policy objectives associated with climate change, renewable energy and the environment, the IAC considers the Project will result in a net community benefit.

(v) Environmental Effects Assessment matters including shared planning permit matters

Below are the IAC's findings regarding:

- Key matters specified in Terms of Reference Clause 8a for the EES and planning permit application
- Other matters specified in Terms of Reference Clause 8b.

Biodiversity and habitat

Brolga

The Project will result in an acceptable impact on the Brolgas. The Brolga Impact Assessment is sound and its methodology for assessing the proposed buffers is appropriate. Brolga surveys that supported the assessment are sufficient for assessing potential impact on Brolgas.

It is appropriate to apply the proposed disturbance and turbine-free buffers comprising:

- a 600-metre buffer around each wetland within a complex
- a 300-metre turbine free disturbance buffer applied to each home range
- a 95-metre turbine free buffer to account for rotor blade length.

The EES has appropriately identified and assessed wetlands suitable for Brolga habitat in its assessment.

Southern Bent-wing Bat and Bat and Avifauna Management Plan

The Project is not likely to result in significant residual effects on the Southern Bent-wing Bat. The Bat and Avifauna Management Plan:

- is sufficient for monitoring and managing potential impact on birds and bats during operation subject to the changes requested by the Department of Energy, Environment and Climate Action.
- should be approved before the Project starts operating.

The Department of Energy, Environment and Climate Action's requested changes to the Environment Management Framework and Permit conditions are acceptable.

Native vegetation and other flora and fauna

The Project's impact on native vegetation has been appropriately assessed. Its effects on native vegetation are acceptable, and suitable offsets can be provided for identified losses.

The impacts to other flora and fauna species have been appropriately assessed. The Project is not expected to result in significant impacts on other flora and fauna species that would warrant further modification of the Project.

An appropriate management framework is proposed to manage potential impacts on other flora and fauna species.

Matters of National Environmental Significance

The potential impacts on Matters of National Environmental Significance have been appropriately assessed. The Project has the potential to have a significant impact on two ecological communities and one species:

- Natural Temperate Grassland of the Victorian Volcanic Plain
- Grassy Eucalypt Woodland of the Victorian Volcanic Plain
- Striped Legless Lizard.

With the provision of offsets, effects on the above listed species are acceptable and do not preclude the Project being approved.

Landscape and visual amenity

The Landscape and Visual Assessment forms an appropriate base, and applies an appropriate methodology, for assessing landscape and visual impacts of the Project.

It is acceptable for the Landscape and Visual Assessment to show the image of a shorter turbine than what is proposed, for the purpose of representing turbine form.

Resident and community impact

The Environmental Effects Statement has appropriately assessed the landscape and visual impacts and addressed the scoping requirements. The Landscape and Visual Impact Assessment provides an appropriate basis for assessing landscape and visual impacts of the Project.

The Project will result in visual impacts to the landscape, but these impacts will generally be low, though moderate impacts will occur in some instances. The landscape, comprising the Project site and its surrounds, is not formally recognised as one with particular significance or value that should be protected.

Landscape impact

The EES has appropriately assessed the landscape and visual impacts and addressed the scoping requirements. The Landscape and Visual Impact Assessment provides an appropriate basis for assessing landscape and visual impacts of the Project.

The landscape, comprising the Project site and its surrounds, is not formally recognised as one with particular significance or value that should be protected.

The Project will result in visual impacts to the landscape, but these impacts will generally be low, though moderate impacts will occur in some instances.

Cumulative impact

The EES has adequately assessed the cumulative impacts.

Views towards the Project and other wind energy facilities may be possible from certain public and private viewpoints. Approved and operating wind energy facilities form part of the existing landscape context of the Project site.

There may be cumulative visual impacts in simultaneously and sequential views of the Project and other wind energy facilities (particularly Mount Fyans). Some public and private viewpoint locations are likely to have cumulative impacts that are the moderate to high. The impacts from private viewpoints can be mitigated through the implementation of proposed mitigation measures.

The cumulative visual impacts of the Project are likely to be low due to the location, type of viewpoint and extent of intervening screening elements.

Surface water

Surface water effects have been appropriately assessed and are acceptable. The Environmental Management Framework should be revised to add an Environmental Management Measure that requires the preparation of a standalone flood impact assessment and stormwater management plan for the Battery Energy Storage System

and the terminal station. This new measure would need to be reflected as a planning condition to give it statutory effect.

Aboriginal cultural heritage

The Environmental Effects Statement has satisfactorily assessed the potential impact to Aboriginal cultural heritage.

The Project design has appropriately sought to avoid and minimise impacts to tangible and intangible Aboriginal cultural heritage values. The Cultural Heritage Management Plan, permit conditions and proposed mitigation measures can appropriately manage the Project's residual impacts on Aboriginal cultural heritage. Ongoing involvement of Eastern Maar Aboriginal Corporation is important, particularly regarding impacts on intangible cultural heritage values.

Other EES matters and matters with minimal impact

The EES has appropriately assessed and responded to Agriculture, Community benefit, Cultural heritage, Cumulative impacts, Economic effect, EES methodology and assessment, Electromagnetic interference, Energy policy, Human health, Land use and planning, and Social effects.

The IAC agrees with submitters that it is challenging for busy members of the community to read, understand, and prepare a submission to the EES within a tight six-week public exhibition timeframe. The IAC process provided members of the community with an opportunity to express their issues in more detail.

(vi) Key planning permit matters

The permit application is supported by appropriate assessments for traffic and transport, aviation safety, fire safety, noise, blade glint and shadow flicker. They have appropriately considered and applied relevant legislation, policies and guidelines.

The IAC's findings regarding the key planning permit matters specified in Terms of Reference Clause 9 are summarised below.

Traffic and transport

Access to a Transport Zone 2 road

The Project's proposal to alter access to the Hamilton Highway and Warrnambool-Caramut Road will result in an acceptable impact to their operation. The permit conditions (final version) appropriately require the Traffic Management Plan to designate safe vehicle access points.

Road network impact and traffic management

Traffic generated by the Project during construction and operation can result in acceptable impacts on the surrounding road network subject to applying traffic management requirements through the planning permit.

The planning permit conditions (final version) appropriately respond to potential impacts associated with a quarry used to service the Project. The existing conditions survey should:

- apply to the sections of all roads expected to be used by the Project traffic irrespective of who manages those roads
- be visual only without the need for intrusive below ground testing because this, combined with knowledge of the road's construction standards, will sufficiently identify any notable issues.

Other transport management requirements

The Traffic Management Plan requirements specified in the planning permit conditions shown in Appendix F:

- are appropriate to respond to identified traffic issues
- do not preclude Head, Transport for Victoria from requesting the inclusion of more detailed information when considering whether to approve the Traffic Management Plan, therefore that degree of information does not have to be specified as a permit condition
- should require the Traffic Management Plan to be approved by the relevant road management authority
- should require the Traffic Management Plan to demonstrate in the engineering plans whether trucks can be accommodated without encroaching onto the incorrect side of the road
- should include the Road Quality Auditor conditions sought by Moyne Council
- should not require traffic counts at the eastern end of Connewarren Lane and the western end of Woolsthorpe-Hexham Road during construction.

Other key planning permit matters

Aviation safety

The Project will, from a safety perspective, have an acceptable impact on Warrnambool Airport's operations. It will not:

- create any negative safety impacts for aircraft from local airstrips
- materially restrict aerial firefighting capability or low-level flying operations from agricultural aerial spraying.

Fire safety

The range of fire safety impacts have been appropriately assessed. The fire risks have been appropriately identified, including in relation to the Battery Energy Storage System. The Project, subject to the permit conditions in Appendix F, will appropriately manage fire risk. The conditions requested by the Country Fire Authority and WorkSafe to be included on the planning permit, provide an appropriate planning framework for assessing and managing fire safety associated with the Project's use and development.

The Project will not negatively impact aerial firefighting capability.

Noise, blade glint and shadow flicker

The Project will not cause:

- noise and vibration that negatively impacts amenity at sensitive receptors during construction, operation and decommissioning

- blade glint and shadow flicker from turbine operation that negatively impacts surrounding amenity.

The Project will not cause noise and vibration that negatively impacts amenity at sensitive receptors during construction, operation and decommissioning. The proposed permit conditions provide a suitable framework to ensure noise and vibration impacts are appropriately managed.

Planning permit condition drafting

It is important the planning permit conditions be drafted clearly to implement key and other matters that were referred to the IAC. The permit conditions would benefit from ensuring:

- their structure and form is consistent with changes sought by the Department of Transport and Planning (Energy Assessment) through Document 121a
- they reflect drafting guidance in *Writing Planning Permits* (Department of Transport and Planning, 2023).

(vii) Recommendations

Based only on the referred matters, the Inquiry and Advisory Committee recommends:

- 1. Include the permit conditions relevant to the referred matters, as shown in Appendix F, to any future planning permit for the Project.**
- 2. Amend the Environmental Management Framework at Environmental Management Measure SW01(2) to add:**

A standalone flood impact assessment (FIA) and stormwater management plan (SWMP) be established for the BESS and terminal station. The [Flood Impact Assessment] and [Storm Water Management Plan] will incorporate the requirement to minimise the potential impact of earthworks on flood levels and extents on adjacent properties, treat stormwater runoff and retain firefighting runoff.



PART A: INTRODUCTION AND BACKGROUND

1 The Project

This Chapter provides a high-level overview of the proposed Hexham wind energy facility (Project). Hexham Wind Farm Environment Effects Statement (EES) Chapter 6 (Project description) provides more specific and detailed information.

1.1 Project location

The Project is in the Moyne Shire in south-western Victoria, and about:

- 15 kilometres west of Mortlake and northeast of Woolsthorpe
- 4 kilometres south-east of Caramut
- 3 kilometres southwest of Hexham and north-west of Ellerslie.

The Project is in the South West Renewable Energy Zone – one of the five declared zones in Victoria. The EES explains that this zone was identified because of the *“strength of the wind resource, access to a transmission network with capacity and the availability of suitable land on which to develop renewable energy projects”*.

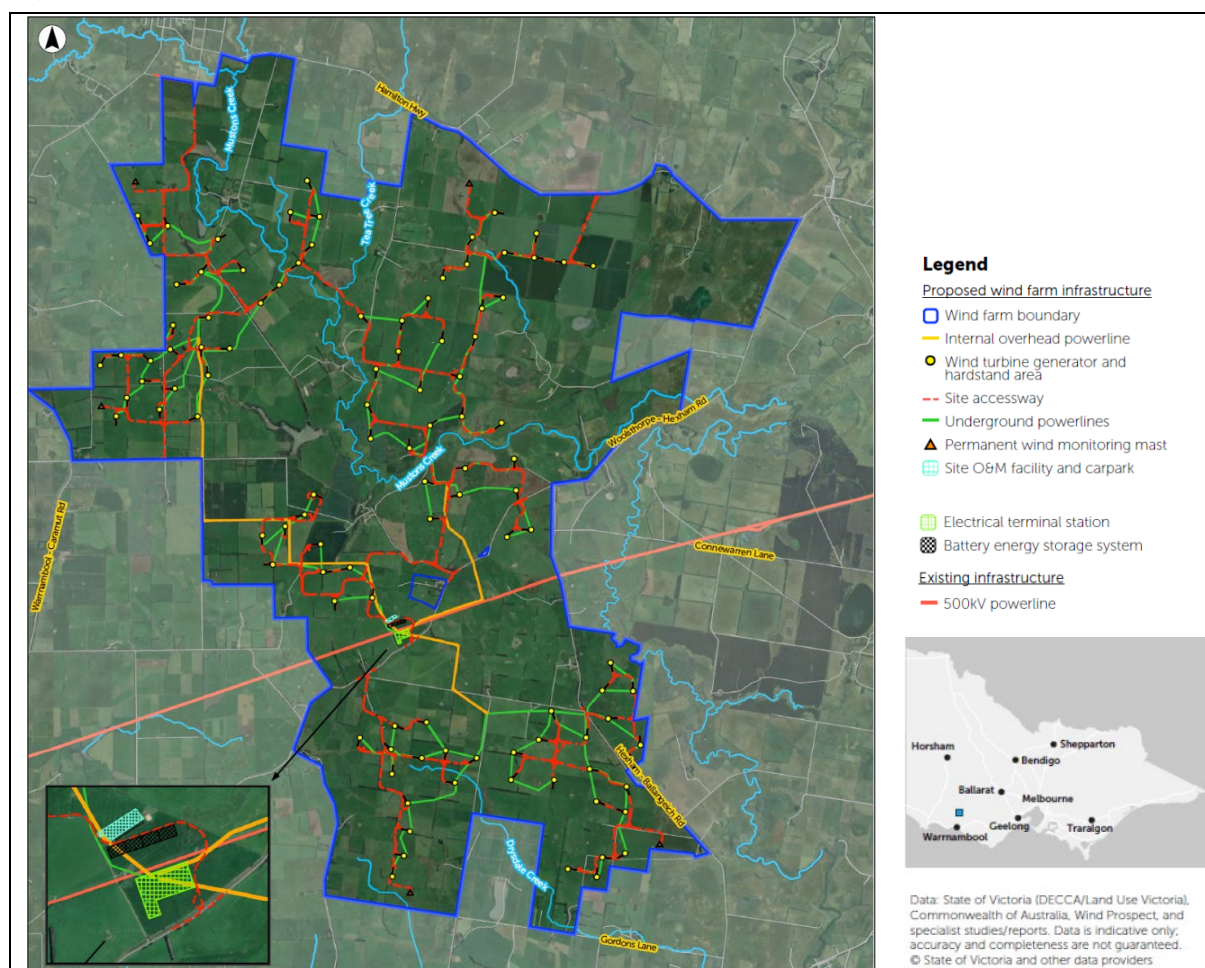
Figure 1 South West Renewable Energy Zone



Source: www.vicgrid.com.au

1.2 Project site

The Project site covers around 16,000 hectares, as shown in Figure 2.

Figure 2 Project site

Source: EES Summary Report (PPV reformatted)

1.3 Proponent

Hexham Wind Farm Pty Ltd, owned by Wind Prospect Pty Ltd, is the Proponent for the Project. The Proponent is a renewable energy developer that gains planning approval but does not build, own or generate wind energy facilities.

1.4 Project overview

The Project is a wind energy facility that is expected to generate about 2,559 gigawatt-hours each year, equivalent to the average electricity usage of about 515,000 homes.

Key Project elements

- | | |
|--|-----------------|
| • Wind turbines: | 106 |
| • New tracks for turbine access and connectivity: | 147 kilometres |
| • Upgrades to existing tracks for access and connectivity: | 16.5 kilometres |
| • Underground cables laid in about 86 kilometres of trenches about one metre below ground: | ~139 kilometres |
| • Overhead powerlines along an 18-kilometre route to connect turbines to the on-site terminal station: | ~42 kilometres |
| • Battery energy storage system upper capacity: | 200 megawatts |

- Five meteorological masts for wind and weather monitoring during operation: up to 5.

Other Project elements

- on-site terminal station to connect to the Moorabool-Heywood 500 kilowatts transmission line
- operations and maintenance facility next to the terminal station.

1.5 Project phases

The ESS explains the Project’s pre-construction, construction, operation and decommission phases, as replicated in Table 1.

Table 1 Project phases

Phase	Duration	Key activities
Pre-construction	12-18 months	- Focuses on planning and approvals - Activities include securing grid connection, completing geotechnical assessments, tendering for turbine supply and civil works, and preparing environmental management plans - Financing and other commercial arrangements are also finalised
Construction	about 2 years	- Involves enabling works such as road upgrades and site establishment, building turbine foundations, installing underground and overhead cabling, and constructing access tracks - Wind turbines are delivered, installed, and tested - Following construction, temporary facilities like batching plants and compounds are removed, and the site is rehabilitated
Operation	25-30 years	- The wind energy facility begins exporting electricity to the National Electricity Market - Includes ongoing operation, maintenance of turbines and infrastructure, and monitoring to ensure reliable performance
Decommissioning	6-12 months	- At the end of the Project’s life, turbines and above-ground infrastructure are removed - The site is restored in line with the Decommissioning Plan and in consultation with landowners and relevant authorities

1.6 Project rationale and benefits

EES Chapter 2 (Project rationale and benefits) describes the Project rationale and anticipated benefits including:

Site characteristics

- strong, reliable winds
- proximity to an existing high voltage transmission line and connection infrastructure
- relatively low population density
- good vehicle access to, and around, the Project site
- suitable terrain for wind energy facility construction
- land is largely cleared, with few environmental constraints
- appropriate zoning.

Benefits

- contribute about 700 megawatts of electricity
- help reduce emissions intensity of electricity in the National Electricity Market by an equivalent to 2.2 million tonnes of carbon dioxide each year
- increase wind generation capacity by more than 5 per cent if its output was added to the National Electricity Market at the time
- contribute about 2,559 gigawatt hours of electricity each year to the National Electricity Market (enough to power more than 630,000 homes¹)
- employment opportunities
- local investment including about:
 - \$2.44 billion in capital expenditure during construction
 - \$31 million of operational capital expenditure each year for the Project's life
- neighbour benefit sharing program offered to surrounding property owners.

1.7 Events chronology

Table 2 Events chronology

Date	Details
Before 2025	
Jun-Dec 2011	Targeted flora surveys and Net Gain Assessment
Feb 2012	The (then) Department of Sustainability and Environment released the Interim Guidelines for the Assessment, Avoidance, Mitigation and Offsetting of Potential Wind Farm Impacts on the Victorian Brolga Population 2011
Nov 2018	Targeted surveys for spring and summer-flowering threatened ecological communities and listed flora species in suitable habitat areas that may need removal Native vegetation assessments of the investigation area
2019	Community and stakeholder engagement processes started
Jan 2019	Targeted surveys for spring and summer-flowering threatened ecological communities and listed flora species in suitable habitat areas that may need removal

¹ EES Chapter 1 refers to 515,000 homes

Date	Details
Nov 2021	Targeted surveys for spring and summer-flowering threatened ecological communities and listed flora species in suitable habitat areas that may need removal Native vegetation assessments of the investigation area
Apr 2022	The Minister for Planning required Hexham Wind Farm Pty Ltd (the Proponent) to prepare an EES under the <i>Environment Effects Act 1978</i> to assess the potential environmental effects of the Project
Jun 2023	Updated native vegetation assessments of the investigation area
Jul 2023	Draft Scoping Requirements for the EES were publicly exhibited from 10 July to 28 July 2023
Sep 2024	The Minister for Planning approved the Scoping Requirements for the Project
2025	
May	Shadow flicker assessment completed Victorian Government released the <i>Handbook for the development of renewable energy in Victoria</i>
Jun	Native vegetation assessments at: - three locations along the Portland and Geelong Transport Routes options - four locations along roadsides proposed to be upgraded as part of the Project
Jul	Targeted surveys for the Spiny Rice-flower in areas of suitable habitat that may require removal Project soil and landform assessment completed
Aug	Project assessments completed for surface water, groundwater impact, potential electromagnetic interference, and battery energy storage system Project peer review of environmental noise and vibration assessment
Sep	Project assessments completed for air quality, and blast impact for temporary quarry
Oct	Project assessments completed for aeronautical impact, noise, traffic, greenhouse gas, and social and economic impact Targeted surveys for listed spring-flowering orchids in areas of suitable habitat
Nov	Project assessments completed for Brolga and bat impact, land use and planning, and historical heritage
Dec	Targeted surveys for listed early summer-flowering species in areas of suitable habitat Project landscape and visual impact assessment completed
10 Dec	The Proponent lodged Planning permit application PA2504115 with the Minister for Planning

Date	Details
2026	
Jan	Project assessments completed for Aboriginal Cultural Heritage impact, flora and fauna, and environmental noise and vibration
27 Jan to 11 Mar	EES was publicly exhibited

2 Impact assessment and approvals

2.1 EES

(i) Scoping requirements

On 16 March 2022, the Minister for Planning (Minister) determined that an EES was required for the Project under the *Environment Effects Act 1978* (EE Act).

The Minister for Planning issued *Hexham Wind Farm Environment Effects Statement Scoping Requirements*, September 2024 (Scoping Requirements) which set out the specific matters to be investigated and documented in the EES including:

- potential effects on biodiversity and ecological values within and near the site including native vegetation, listed flora, fauna and communities through loss, degradation or fragmentation of habitat, collision with turbines, or other ecological effects;
- potential effects on water environments including wetlands, as a result of direct disturbance, changes to stream flows or discharge of sediment or waste during construction, operation or decommissioning of infrastructure;
- effects on Aboriginal cultural heritage values;
- effects on historic heritage values;
- effects on landscape and visual amenity values;
- effects on amenity related to construction and decommissioning;
- effects on the socioeconomic environment, at local and regional scales, including on traffic, agriculture and other direct and indirect effects; and
- cumulative effects of the project, particularly on biodiversity, ecology, social and landscape values, given the proximity to other proposed, approved and operating windfarms.

These scoping requirements provide further detail on the matters to be investigated in the EES as required by the Minister's decision and the Ministerial guidelines for assessment of environmental effects under the *Environment Effects Act 1978* (Ministerial Guidelines).

The Project was determined to be a controlled action under the *Environment Protection and Biodiversity Conservation Act 1999* (Commonwealth) (EPBC Act) due to potential significant impacts on the following matters of national environmental significance (MNES):

- listed threatened species and communities
- listed migratory species.

The EES process is accredited to assess impacts on MNES under the EPBC Act through the Bilateral (Assessment) Agreement between the Commonwealth and the State of Victoria.

(ii) Key Matters and Other matters

Table 3 shows the extant EES Key Matters and Other Matters as described in the Scoping Requirements list.

Table 3 Key Matters and Other Matters

Theme	Minister's reasons and decision	Relevant statutory decisions (and associated legislation)
Key matters with potentially significant effects		
Biodiversity and habitat	Potential effects on biodiversity and ecological values including native vegetation, listed flora, fauna and communities.	- Planning approval under the PE Act - Approval under EPBC Act - Permits under the FFG Act and <i>Wildlife Act 1975</i>
Catchment values and hydrology	Potential effects on water environments including wetlands and creeks, as a result of direct disturbance, changes to stream flows or discharge of sediment or waste.	- Permit or consents under the <i>Water Act 1987</i>
Aboriginal cultural heritage	Potential effects on Aboriginal and historic cultural heritage values.	- Approval of CHMPs under the <i>Aboriginal Heritage Act 2006</i> - Permit and/or consent under <i>Heritage Act 2017</i> to interfere with a heritage place or object listed on the Victorian Heritage Register, Victorian Heritage Inventory or an archaeological site not listed on the Victorian Heritage Inventory
Landscape and visual	Potential effects on visual and landscape values	- Planning approval under the PE Act
Other matters		
Amenity (related to construction, operation and decommissioning), including shadow flicker, EMI.		- Planning approval under the PE Act
Safety, transport/traffic, roads		- Consents or agreements under <i>Road Management Act 2004</i> to undertake works in, on or under a road - Planning approval under the PE Act - Lease or licence under <i>Crown Land Reserves Act 1978</i> and/or <i>Land Act 1958</i>

Source: Hexham Wind Farm Environment Effects Statement Scoping Requirements (September 2024)

(iii) Evaluation objectives

The Scoping Requirements include evaluation objectives for each topic to be addressed in the EES. The evaluation objectives (see Table 4) identify the desired outcomes in the context of the key legislative and statutory policies, the principles of Ecologically Sustainable Development, environment protection and net community benefit. They provide a framework to guide an integrated assessment of environmental effects and for evaluation of the overall implications of the Project.

Table 4 Evaluation objectives

Impact/effect	Evaluation objective
Biodiversity and habitat	To avoid, and where avoidance is not possible, minimise potential adverse effects on biodiversity values within and near the site including native vegetation, listed threatened species and ecological communities, and habitat for these species. Where relevant, offset requirements are to be addressed consistent with state and Commonwealth policies.
Catchment values and hydrology	To maintain the functions and values of aquatic environments, surface water and groundwater quality and stream flows and avoid adverse effects on protected environmental values.
Landscape and visual	Avoid and, where avoidance is not possible, minimise and manage potential adverse effects on landscape and visual amenity.
Amenity	To minimise and manage adverse air quality and noise and vibration effects on residents and local communities as far as practicable during construction, operation and decommissioning having regard to applicable limits, targets or standards.
Cultural heritage	Protect, avoid, or minimise where avoidance is not possible, adverse effects on historic heritage values, and tangible and intangible Aboriginal cultural heritage values, in partnership with Traditional Owners.
Land use and socioeconomic	To avoid and minimise adverse effects on land use (including agricultural and residential), social fabric of the community (with regard to wellbeing and community cohesion), local infrastructure, electromagnetic interference, aviation safety and to neighbouring landowners during construction, operation and decommissioning of the Project.
Traffic and roads	To avoid and minimise adverse effects on roads and road users during construction, operation and decommissioning of the Project.

(iv) Report chapters and appendices

The EES includes:

- Summary report
- 29 main report chapters (see Table 5)
- 22 technical appendices (see Table 6)
- 5 attachments (see Table 7).

Table 5 EES main report chapters

Main report chapters			
1	Introduction	16	Air quality and greenhouse gas
2	Project rationale and benefits	17	Noise and vibration
3	Legislation and policy framework	18	Aboriginal cultural heritage
4	Assessment framework	19	Historical cultural heritage
5	Assessment of alternatives and design development	20	Land use and planning
6	Project description	21	Socio-economic
7	Stakeholder consultation	22	Aviation
8	Biodiversity and habitat	23	Fire risk
9	Bats	24	Electromagnetic interference
10	Brolga	25	Traffic and transport
11	Groundwater	26	Cumulative effects
12	Surface water	27	Matters of National Environmental Significance
13	Landform and soils	28	Environmental management framework
14	Landscape and visual	29	Conclusion
15	Shadow flicker and blade glint		

Table 6 EES technical appendices

Technical assessment title	Author
Soil and Landform Assessment	WSP
Brolga Impact Assessment	Nature Advisory
Flora and Fauna Assessment	Nature Advisory
Auditor Verification of Pre-Construction Noise Assessment	Tonkin + Taylor
Blast Impact Assessment	Terrock Consulting Engineers
Transport Impact Assessment	Ratio
Social and Economic Impact Assessment	Umwelt

Technical assessment title	Author
Historical Heritage Impact Assessment	Tardis Archaeology Heritage Advisors
Greenhouse Gas Impact Assessment	Jacobs
Electromagnetic Interference Assessment	DNV
Fire Risk Management Plan (including Fire Safety Study)	Fire Risk Consultants
Surface Water and Groundwater Impact Assessment	Water Technology
Bat Impact Assessment	Nature Advisory
Environmental Noise and Vibration Assessment	Marshall Day Acoustics
Peer Review of Environmental Noise and Vibration Assessment	Resonate
Landscape and Visual Impact Assessment	Moir Studio
Land Use and Planning Impact Assessment	Bunjil Planning
Aboriginal Cultural Heritage Impact Assessment	Tardis Archaeology Heritage Advisors
Air Quality Impact Assessment	Jacobs
Shadow Flicker Assessment	Entura
Aeronautical Impact Assessment	Chiron Consultants
Peer Review of Landscape and Visual Impact Assessment	Hansen

Table 7 EES attachments

Attachment title	Author
Stakeholder Consultation Plan	Wind Prospect
Neighbour Benefit Sharing Program Flyer	Wind Prospect
Project Maps	Wind Prospect
Preliminary Draft Quarry Work Plan	BCA Consulting Earth Resources
Bat and Avifauna Management Plan	Nature Advisory

(v) Environmental Management Framework

EES Chapter 28 (Environmental Management Framework) includes the proposed Environmental Management Framework (EMF) and mitigation measures. The EMF provides mitigation measures to mitigate, manage and monitor the potential environmental impacts of the Project. The mitigation measures build on the recommendations in the EES technical appendices. The EMF also provides a governance framework for implementing the mitigation measures, including roles and responsibilities for implementation, monitoring and reporting.

(vi) EES statutory approvals

EES Chapter 3 (Legislation and policy framework) sets out the relevant legislation and key statutory approvals.

Table 8 EES statutory approvals

Approvals	Relevant legislation
Primary approvals	
The Project will require:	
Proposed action approval	EPBC Act
Planning consent	<i>Planning and Environment Act 1987</i> (PE Act) and Moyne Planning Scheme
Approved Cultural Heritage Management Plan (CHMP)	<i>Aboriginal Heritage Act 2006</i>
an approved Work Plan	<i>Mineral Resources (Sustainable Development) Act 1990</i>
Secondary approvals	
The Project may require:	
Consents for works in, on, or under roads	<i>Road Management Act 2004</i>
Consents for works on unreserved Crown land	<i>Land Act 1958</i>
Permit or licence to take or remove listed flora and fauna from public land (such as road reserves) under section 48	<i>Flora and Fauna Guarantee Act 1988</i> (FFG Act)
Licence or authority to remove, salvage, capture or relocate wildlife	<i>Wildlife Act 1975</i>
Licence to take and use groundwater and construct works across a designated waterway	<i>Water Act 1989</i>
Consents for any Crown land used by the Project, including for any blade overhang	<i>Crown Land (Reserves) Act 1978</i>
A permit if infiltration from any proposed retention basin results in discharge to an aquifer	<i>Environment Protection Regulations 2021</i>

2.2 Planning permit application

Table 9 sets out the elements of the Project which require a planning permit under the provisions of the Moyne Planning Scheme:

Table 9 Zone, Overlay and Particular Provision permit triggers

Planning Scheme provision	Permit trigger	Related provisions
Zone		
Clause 35.07-1 (Farming Zone)	To use the land for a wind energy facility and utility installation	A wind energy facility must meet the requirements of Clause 52.32
Clause 35.07-4 (Farming Zone)	To construct or carry out works for a wind energy facility and utility installation	
	To carry out earthworks specified in a schedule to this zone	Farming Zone Schedule 1 specifies that a permit is required for earthworks which: - change the rate of flow or the discharge point of water across a property boundary - increase the discharge of saline groundwater
	To construct a building which is within the following setbacks: - the setback from any other road or boundary specified in a schedule to this zone - 100 metres from a waterway, wetlands or designated flood plain	Farming Zone Schedule 1 specifies that the minimum setback from 'any other road' is 20 metres (i.e. excluding roads in the Transport Zone 2, or land in a Public Acquisition Overlay)
Particular Provisions		
Clause 52.05-14 (Signs)	To erect business identification signage	
Clause 52.17-1 (Native Vegetation)	To remove, destruct or lop native vegetation, including dead vegetation	
Clause 52.29-2 (Land Adjacent to the Principal Road Network)	To alter access to a road in the Transport Zone 2	
Clause 52.32-2 (Wind Energy Facility)	To use and develop land for a wind energy facility	

3 The Inquiry and Advisory Committee

3.1 Terms of Reference and key matters

On 20 January 2026, the Minister for Planning appointed the Hexham Wind Farm Inquiry and Advisory Committee (IAC). The IAC's Terms of Reference sets out the purpose and process for the IAC (see Appendix A).

(i) IAC purpose

The purpose of the IAC is set out in clauses 4 and 5 as follows:

4. The IAC is appointed by the Minister for Planning (the Minister) under section 9(1) of the EE Act to hold an inquiry into and report on the environmental effects of the project. The IAC is to:
 - a. review and consider the EES and submissions received in relation to the EES with a focus on the key EES matters;
 - b. consider and report on the significance and acceptability of the environmental effects of the project, having regard to relevant policy and legislation and relevant evaluation objectives in the scoping requirements;
 - c. consider and report on potential significant impacts on relevant matters of national environmental significance protected under the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act), including the significance and acceptability of residual impacts;
 - d. identify if any additional mitigation measures and/or project modifications are required beyond those identified in the EES to avoid, mitigate or manage the significant environmental effects of the project consistent with relevant policy and legislation; and
 - e. advise on how these modifications and measures should be implemented through the necessary approvals and consents for the project.
5. The IAC is also appointed as an advisory committee under Part 7, section 151(1) of the PE Act to:
 - a. review the planning permit application and any referred submissions and make recommendations for the Minister for Planning to consider in determining the planning permit application;
 - b. provide specific advice on the key planning matters that the IAC recommends should be addressed in the planning permit, if the Minister decides to grant a permit for the project.

(ii) Matters referred to the IAC

The key matters and other matters are identified in clause 8 and 9 as follows:

8. The Hexham Wind Farm Environment Effects Statement Scoping Requirements, September 2024 (Scoping Requirements) list, in Table 1, key matters with potentially significant environmental effects.
 - a. Key matters have been refined through the development of the EES. The extant 'key EES matters' are:
 - i. biodiversity values, including threatened species and communities listed under the Flora and Fauna Guarantee Act 1988 and Environment Protection and Biodiversity Conservation Act 1999;
 - ii. native vegetation and ecology of the area's terrestrial environment and freshwater environments, including wetlands and creeks;
 - iii. Aboriginal cultural heritage, and
 - iv. landscape and visual amenity.

- b. Other matters which are considered less likely to have significant environmental effects ('other EES matters').
- 9. Key matters which relate to the planning permit application include those listed in clause 8a (insofar as they are relevant to the planning application), in addition to traffic, noise, fire safety, shadow flicker and aviation safety ('key planning permit matters').

3.2 Exhibition and submissions

The EES was exhibited for 30 business days, from 27 January to 11 March 2026. During this period, the IAC received 66 submissions on the EES.

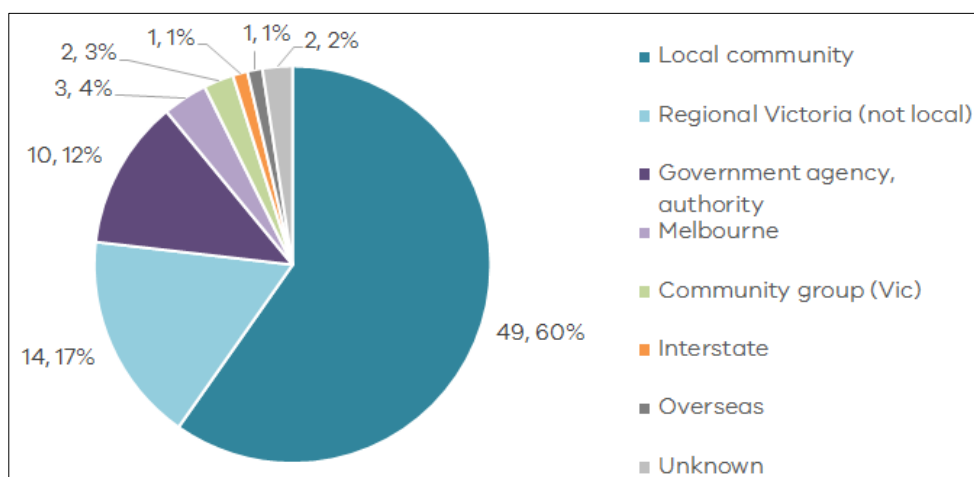
DTP, on behalf of the Minister for Planning, was responsible for receiving submissions and objections to the planning permit application. DTP referred 65 submissions on the planning permit application to the IAC.

Across both processes, the IAC identified 82 unique submitters.

Figure 3 shows that, of the 82 unique submitters, there were:

- 49 (60 percent) from the local community
- 14 (17 percent) from regional Victoria outside the immediate local area including Phillip Island and Wangaratta
- 10 (12 percent) from a government organisation or authority
- 3 (4 percent) from Melbourne
- 2 (3 percent) from Victorian local community groups
- 1 (1 percent) from interstate
- 1 (1 percent) from overseas.

Figure 3 Submitter type and location



Specifically, submissions were received from:

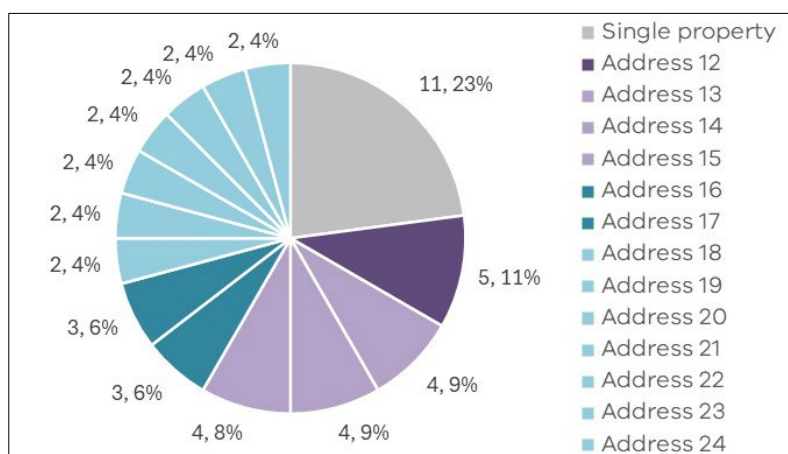
- Civil Aviation Safety Authority (CASA)
- seven Victorian government departments, authorities and agencies:
 - Country Fire Authority (CFA)
 - Department of Energy, Environment and Climate Action (DEECA)
 - Department of Transport and Planning (DTP) under delegation from the Head, Transport for Victoria (Head TfV)
 - Environment Protection Authority (EPA)
 - Glenelg Hopkins Catchment Management Authority (Glen Hopkins CMA)

- Wannon Water
- Heritage Victoria
- two local councils – Moyne Shire Council (Moyne Council) and Warrnambool City Council (Warrnambool Council)
- community groups:
 - Hexham Community Environmental Action Group Inc
 - Wimmera Mallee Environmental and Agricultural Protection Association Inc
- Save Our Surroundings Riverina based in New South Wales about 525 kilometres from the Project site.

The 49 local community submissions:

- were from individuals and families related to 24 affected local properties, as shown in Figure 4
- included 27 submissions based substantively on the same content.

Figure 4 Number of submissions relating to specific local properties



Appendix B lists all submitters and profiles the types of submissions.

3.3 The IAC's approach and procedural issues

(i) General approach

The IAC is not tasked with recommending whether the Project should be approved. Its task is to consider and report on the Project's potential environmental effects, their significance and acceptability. To that end, this Report provides an analysis of the EES and an integrated assessment of the environmental, social and economic impacts of the Project, having regard to the evaluation objectives in the Scoping Requirements and relevant policy and legislation.

The IAC has considered the exhibited material, all written submissions received in response to the exhibited material, and evidence, submissions and other material provided to the IAC during the Hearing. All material put before the IAC has been considered, although not all that material is specifically referenced in this Report.

(ii) Version 1 and final versions of draft permit conditions

The IAC directed the Proponent to circulate draft permit conditions before the Hearing started, and a final version with its closing submission. The Proponent circulated the following draft permit condition versions:

- version 1 – Document 57
- version 2 – Document 82
- version 3a – Documents 124 and 125
- version 3b – Document 127
- final version – Document 147b.

Parties were given the opportunity to provide written comments on the Proponent's permit conditions (version 3a) after the Hearing ended. Drafting comments on final version project documentation were received from:

- EPA – Document 140
- DEECA – Document 141
- Michelle Lehmann – Document 142
- Hamish Cumming – Document 143
- Moyne Council – Document 144
- Head, Transport for Victoria – Document 145
- DTP Energy Assessment – Documents 146 and 146a.

The IAC has had regard to all party comments on permit conditions (final version) in developing its recommendations.

The IAC's recommended version of the permit conditions at Appendix F is based on the Proponent's post-Hearing draft permit conditions (final version).

(iii) Procedural matters

The following parties requested to be heard at the Hearing but withdrew before presenting:

- Scott Bell
- Alexander Bell
- Carol Addinsall
- Rebecca Manifold
- Richard Manifold
- William Manifold
- Georgina Manifold.

The following parties requested to be heard at the Hearing but did not attend their allotted submission date and time:

- Michele S [surname withheld]
- Maurice Schinkel

Other matters

Appendix D includes further procedural matters related to the IAC process.

3.4 This report

The IAC's Terms of Reference sets out requirements for the IAC's report. Clauses 47 – 48 of the Terms of Reference state:

47. The report should include information and analysis of the significant environmental effects, in support of the IAC's findings and recommendations. The report should:
 - a. focus on the key EES matters and key planning permit matters only; and cover 'other matters' that may relate to the EES at a high level only; and
 - b. include information and depth of analysis proportionate to the significance of the environmental effects.
48. Matters that the IAC determines have minimal or negligible impact and can be readily addressed through standard and proven environmental management techniques do not need to be examined by the IAC. Simple recording of these matters in the report will suffice.

This Report is structured in the following parts and chapters:

- **Part A – Introduction and background**
 - 1 The Project
 - 2 Impact assessment and approvals
 - 3 The Inquiry and Advisory Committee
 - 4 IAC response, findings and recommendations
- **Part B – Environment effects assessment matters including shared Planning Permit matters**
 - 5 Biodiversity and habitat
 - 6 Landscape and visual amenity
 - 7 Other key EES matters
 - 8 Other EES matters and matters with minimal impact
- **Part C – Key planning permit matters**
 - 9 Traffic and transport
 - 10 Other key planning permit matters
 - 10.1 Aviation safety
 - 10.2 Fire safety
 - 10.3 Noise
 - 10.4 Blade glint and shadow flicker
 - 11 Permit condition drafting
- **Part D – Appendices, including recommended permit conditions.**

3.5 Limitations

Clause 47 of the Terms of Reference states:

47. The report should include information and analysis of the significant environmental effects, in support of the IAC's findings and recommendations. The report should:
 - a. focus on the key EES matters and key planning permit matters only; and cover 'other matters' that may relate to the EES at a high level only; and
 - b. include information and depth of analysis proportionate to the significance of the environmental effects

Accordingly, the IAC has not considered any matter beyond the scope of Clause 47.

(i) Weighting of submissions

The IAC has weighted submissions according to their context. The IAC was referred submissions:

- from owners or tenants of land within the Project site's immediate surrounds through to those located between about 50 to 550 kilometres away
- with unsubstantiated claims regarding the potential impact of the Project on surrounding people and land.

At the Hearing, the IAC gave parties an opportunity to explain their claims and to provide evidentiary information. In most cases, parties did not have such information.

Examples of claims include:

- any future planning permit application for their land would need consent from the wind energy facility operator
- wind turbines can cause headache, migraines, tinnitus, painful ear pressure, balance problems, dizziness, vertigo, nausea, visual blurring, irritability, concentration and memory problems, panic episodes, fast heart rate, heart palpitations, and high blood pressure
- wind turbines will risk community safety by fanning turbulent wind during fires
- the Project will contribute to Australia's electricity grid being destabilised and controlled by a foreign nation.

(ii) IAC scope of consideration

Since the Directions Hearing, the IAC informed parties it was restricted to its Terms of Reference. The Terms of Reference require the IAC to focus on key matters and considering other matters at a higher level. Throughout the process, the IAC reminded parties that it is also bound by Victoria's regulatory framework, and its process was not the forum to review this framework.

Victoria's regulatory framework

Several parties continued to disagree with Victoria's approach to Brolga and noise related measures, guidelines and processes. Specifically, they disagreed with the approach to:

- designating high amenity areas
- measuring the appropriate decibel levels for sleep disturbance
- defining Brolga breeding wetlands
- applying the default buffer distance around a Brolga breeding wetland
- threatened bird and bat species set out in the *Handbook for the development of renewable energy in Victoria*.

The IAC has considered noise and Brolgas within existing relevant legislative, environmental and planning frameworks specific to the proposal. It acknowledges that guidelines are not statutory requirements and may be varied in justified circumstances.

Permit condition compliance

Several submissions asserted that other wind energy facilities had breached planning permit conditions or not met relevant regulations, resulting in negative amenity impacts.

The IAC was not presented with supporting evidence to support all these claims. The IAC has assessed the Project on the assumption that it will comply with any future planning permit conditions and relevant regulations.

3.6 Experts referred to in this report

This report refers to the following experts:

Acoustics and noise

- Christophe Delaire of MDA called by the Proponent
- Thomas Evans of Resonate Consultants called by the Proponent
- Les Huson of L Huson & Associates Pty Ltd called by Hexham Community Environmental Action Group Inc

Agriculture and environmental chemistry

- Prof Ivan Kennedy called by Save Our Surroundings Riverina (SoSR)

Aviation

- Ian Jennings of Chiron Aviation Consultants called by the Proponent

Ecology

- Inga Kulik of Nature Advisory called by the Proponent

Electrical engineering and energy

- Ben Beattie called by SoSR

Energy policy and analysis

- Richard Bolt of Richard Bolt Consulting Pty Ltd called by the Proponent
- Aidan Morrison called by SoSR

Landscape and visual

- David Moir of Moir Studio called by the Proponent

Surface water

- Benjamin Hughes of Water Technology Pty Ltd called by the Proponent

Traffic

- Brett Young of Ratio called by the Proponent.

4 IAC response, findings and recommendations

4.1 Terms of Reference response

Clause 46 of the IAC's Terms of Reference specifies the analysis and findings the IAC's report must contain. Consistent with this clause, the report and its chapters has been structured to:

- discuss the IAC's analysis with respect to the environmental effects of the Project and their significance and acceptability in 'IAC response' and associated conclusions in 'Findings' (Chapters 5 to 8)
- include findings on whether acceptable environmental outcomes can be achieved, having regard to legislation, policy, best practice, and the principles and objectives of ecologically sustainable development (Executive summary and Chapters 5 to 8)
- include any recommendation or specific measure related to Clauses 46c to 46f (none recommended)
- consider predicted impacts on matters of national environmental significance and the acceptability, including appropriate controls and environmental management (Chapter 5.7)
- list all recommendations, including cross-references to relevant discussions in the report (Chapter 4.2)
- describe the public hearing conducted by the IAC, and list persons consulted with or heard (Overview, Chapter 3, Appendix C)
- list all submitters in response to the exhibited EES and those objections and submissions referred to the IAC on the planning permit application (Appendix B)
- list the documents tabled during the proceedings (Appendix E).

4.2 Findings and recommendations

(i) Overarching recommendations

Based solely on the referred matters, the IAC recommends:

Include the permit conditions related to the referred matters, as shown in Appendix F, to the planning permit for the Project.

Amend the Environmental Management Framework at Environmental Management Measure SW01(2) to add:

A standalone flood impact assessment (FIA) and stormwater management plan (SWMP) be established for the BESS and terminal station. The [Flood Impact Assessment] and [Storm Water Management Plan] will incorporate the requirement to minimise the potential impact of earthworks on flood levels and extents on adjacent properties, treat stormwater runoff and retain firefighting runoff.

(ii) Findings and recommendations

Table 10 cross-references the IAC findings and recommendations with the relevant chapters in this Report.

Table 10 Findings and recommendations

Findings and recommendations		Report ref
Biodiversity and habitat		Chapter 5
Brolga	Findings: - The methodology to assess the proposed buffers is appropriate and the assessment is sound. - It is appropriate to apply the proposed disturbance and turbine-free buffers comprising: - a 600-metre buffer around each wetland within a complex - a 300-metre turbine free disturbance buffer applied to each home range - a 95-metre turbine free buffer to account for rotor blade length. - The EES has appropriately identified and assessed wetlands suitable for Brolga habitat in its assessment. - The Brolga survey is adequate. - The Project will result in an acceptable impact on the Brolgas.	Chapter 5.2
Southern Bent-wing bats	Finding: The Project is not likely to result in significant residual effects on the Southern Bent-wing Bat.	Chapter 5.3
Bat and Avifauna Plan	Findings: - The Bat and Avifauna Management Plan is sufficient for monitoring and managing potential impact on birds and bats during operation subject to the changes requested by the Department of Energy, Environment and Climate Action. - The Bat and Avifauna Management Plan should be approved before the Project starts operating. - The Department of Energy, Environment and Climate Action's requested changes to the Environment Management Framework and Permit conditions are acceptable.	Chapter 5.4
Native vegetation	Findings: - The impact on native vegetation has been appropriately assessed. - The effects on native vegetation are acceptable. - Suitable offsets can be provided.	Chapter 5.5

Findings and recommendations	Report ref
Other flora and fauna Findings: - The impacts to other flora and fauna species have been appropriately assessed. - The Project is not expected to result in significant impacts on other flora and fauna species that would warrant further modification of the Project. - An appropriate management framework is proposed to manage potential impacts on other flora and fauna species.	Chapter 5.6
Matters of national environmental significance Findings: - The potential impacts on Matters of National Environmental Significance have been appropriately assessed. - The Project has the potential to have a significant impact on two ecological communities and one species: - Natural Temperate Grassland of the Victorian Volcanic Plain - Grassy Eucalypt Woodland of the Victorian Volcanic Plain - Striped Legless Lizard. - With the provision of offsets, effects on the above listed species are acceptable and do not preclude the Project being approved.	Chapter 5.7
Landscape and visual amenity	
Methodology Findings: - The Landscape and Visual Assessment has applied an appropriate methodology for assessing landscape and visual impacts. - It is acceptable for the Landscape and Visual Assessment to show the image of a shorter turbine than what is proposed, for the purpose of representing turbine form.	Chapter 6.2
Resident and community impact Findings: - The EES has appropriately assessed the landscape and visual impacts and addressed the scoping requirements. - The Landscape and Visual Impact Assessment provides an appropriate basis for assessing landscape and visual impacts of the Project. - The landscape, comprising the Project site and its surrounds, is not formally recognised as one with particular significance or value that should be protected. - The Project will result in visual impacts to the landscape, but these impacts will generally be low, though moderate impacts will occur in some instances.	Chapter 6.3

Findings and recommendations	Report ref
Recommendation: - Revise the permit conditions (final version), as shown in Appendix F, to require consultation regarding landscaping on private properties with affected landowners in the condition related to off-site landscaping.	
Landscape impact Findings: - The EES has appropriately assessed the landscape and visual impacts and addressed the scoping requirements. - The Landscape and Visual Impact Assessment provides an appropriate basis for assessing landscape and visual impacts of the Project. - The landscape, comprising the Project site and its surrounds, is not formally recognised as one with particular significance or value that should be protected. - The Project will result in visual impacts to the landscape, but these impacts will generally be low, though moderate impacts will occur in some instances.	Chapter 6.4
Cumulative impact Findings: - The EES has adequately assessed the cumulative impacts. - Views towards the Project and other wind energy facilities may be possible from certain public and private viewpoints. - Approved and operating wind energy facilities form part of the existing landscape context of the Project site. - There may be cumulative visual impacts in simultaneously and sequential views of the Project and other wind energy facilities (particularly Mount Fyans). - Some public and private viewpoint locations are likely to have cumulative impacts that are the moderate to high. - The cumulative visual impacts of the Project are likely to be low due to the location, type of viewpoint and extent of intervening screening elements. - The impacts from private viewpoints can be mitigated through the implementation of proposed mitigation measures.	Chapter 6.5
Other key EES matters	Chapter 7
Surface water Findings: - The effects on surface water effects have been appropriately assessed and are acceptable. - The Environmental Management Framework should be revised to add an Environmental Management Measure that requires the preparation of a standalone flood impact assessment and stormwater management plan for the Battery Energy Storage System and the terminal station.	Chapter 7.1

Findings and recommendations	Report ref
- The new Environmental Management Measure SW01(2) would need to be reflected as a planning condition to give it statutory effect. Recommendation: - Amend the Environmental Management Framework at Environmental Management Measure SW01(2) to add: <i>A standalone flood impact assessment (FIA) and stormwater management plan (SWMP) be established for the BESS and terminal station. The [Flood Impact Assessment] and [Storm Water Management Plan] will incorporate the requirement to minimise the potential impact of earthworks on flood levels and extents on adjacent properties, treat stormwater runoff and retain firefighting runoff.</i>	
Aboriginal Cultural heritage Findings: - The EES has satisfactorily assessed the potential impact to Aboriginal cultural heritage. - The Project design has appropriately sought to avoid and minimise impacts to tangible and intangible Aboriginal cultural heritage values. - The Cultural Heritage Management Plan, permit conditions and proposed mitigation measures can appropriately manage the Project's residual impacts on Aboriginal cultural heritage. - Ongoing involvement of Eastern Maar Aboriginal Corporation is important, particularly regarding impacts on intangible values.	Chapter 7.2
Other EES matters and matters with minimal impact	
Other EES matters Finding: The EES has appropriately assessed and responded to Agriculture, Community benefit, Cultural heritage, Cumulative impacts, Economic effect, EES methodology and assessment, Electromagnetic interference, Energy policy, Human health, Land use and planning and Social effect.	Chapter 8.1
Matters with minimal impact No matter with minimal impact was identified.	Chapter 8.2
Traffic and transport	
Access to a Transport 2 road Findings: - The Project's proposal to alter access to the Hamilton Highway and Warrnambool-Caramut Road will result in an acceptable impact to their operation. - The permit conditions (final version) appropriately require the Traffic Management Plan to designate safe vehicle access points.	Chapter 9.2

Findings and recommendations		Report ref
Road network impact	Findings: - The permit application is supported by an appropriate traffic impact assessment that has appropriately considered and applied relevant legislation, policies and guidelines. - Project traffic generated during construction and operation can result in acceptable impacts on the surrounding road network subject to applying traffic management requirements through the planning permit conditions.	Chapter 9.3
Project traffic management	Findings: - The planning permit conditions (final version) appropriately respond to potential impacts associated with a quarry used to service the Project. - The existing conditions survey should: - apply to the sections of all roads expected to be used by the Project traffic irrespective of who manages those roads - be visual only without the need for intrusive below ground testing because this, combined with knowledge of the road's construction standards, will sufficiently identify any notable issues. - The Proponent should be responsible for rehabilitating public roads within agreed timeframes and condition if the damage that can be evidently attributed to Project traffic. - The permit should require a program that facilitates road rehabilitation.	Chapter 9.4
Other transport management requirements	Findings: - Traffic Management Plan requirements specified in the permit conditions shown in Appendix F: - are appropriate to respond to identified traffic issues - do not preclude Head, Transport for Victoria from requesting the inclusion of more detailed information when considering whether to approve the Traffic Management Plan, therefore that degree of information does not have to be specified as a permit condition - should require the Traffic Management Plan to be approved by the relevant road management authority - should require the Traffic Management Plan to demonstrate in the engineering plans whether trucks can be accommodated without encroaching onto the incorrect side of the road - should include the Road Quality Auditor conditions sought by Moyne Council	Chapter 9.5

Findings and recommendations	Report ref
- should not require traffic counts at the eastern end of Connewarren Lane and the western end of Woolsthorpe-Hexham Road during construction.	
Other key planning permit matters	Chapter 10
Aviation safety	Chapter 10.1
Findings: - The permit application is supported by an appropriate aeronautical impact assessment that has appropriately considered and applied relevant legislation, policies and guidelines. - The Project will: - from a safety perspective, have an acceptable safety impact on Warrnambool Airport's operations - not create any negative safety impacts for aircraft from local airstrips - not materially restrict aerial firefighting capability or low-level flying operations from agricultural aerial spraying.	
Fire safety	Chapter 10.2
Findings: - The permit application is supported by an appropriate fire safety study and risk management plan that have appropriately considered and applied relevant legislation, policies and guidelines. - The fire risks have been appropriately identified, including in relation to the Battery Energy Storage System. - The Project, subject to permit conditions, will appropriately manage fire risk. - The conditions requested by the Country Fire Authority and WorkSafe to be included on the planning permit provide an appropriate planning framework for assessing and managing fire safety associated with the Project's use and development. - The Project will not negatively impact aerial firefighting capability.	
Noise	Chapter 10.3
Findings: - The permit application is supported by noise and vibration assessments that have appropriately considered and applied relevant legislation, policies and guidelines. - The Project will not cause noise and vibration that negatively impacts amenity at sensitive receptors during construction, operation and decommissioning.	
Blade glint and shadow flicker	Chapter 10.4
Findings: - The permit application is supported by an appropriate shadow flicker assessment that has appropriately	

Findings and recommendations	Report ref
considered and applied relevant legislation, policies and guidelines. - The Project will not cause blade glint and shadow flicker from turbine operation that negatively impacts surrounding amenity.	

PART B: ENVIRONMENTAL EFFECTS ASSESSMENT MATTERS INCLUDING SHARED PLANNING PERMIT MATTERS

Part B includes:

- Key matters specified in Terms of Reference Clause 8a for the EES and planning permit application
- Other matters specified in Terms of Reference Clause 8b.

5 Biodiversity and habitat

This chapter relates to the following key matters specified in the Terms of Reference:

- biodiversity values, including threatened species and communities listed under the *Flora and Fauna Guarantee Act 1988* and *Environment Protection and Biodiversity Conservation Act 1999*
- native vegetation and ecology of the area's terrestrial environment and freshwater environments, including wetlands and creeks.

5.1 Background

(i) EES

Evaluation objective

To avoid, and where avoidance is not possible, minimise potential adverse effects on biodiversity values within and near the site including native vegetation, listed threatened species and ecological communities, and habitat for these species. Where relevant, offset requirements are to be addressed consistent with state and Commonwealth policies.

The EES identifies key issues as:

- direct loss or degradation of native vegetation and associated listed ecological communities, including those listed as threatened under the EPBC Act and/or the FFG Act
- direct loss or degradation of habitat for migratory or threatened flora and fauna listed under the EPBC Act and/or the FFG Act
- disturbance and/or degradation of adjacent or nearby habitat that may support listed threatened or migratory species or other protected flora, fauna or ecological communities
- disturbance and increased mortality risk to flora and fauna species listed under the EPBC Act and/or FFG Act
- indirect habitat loss or degradation resulting from other effects, such as edge effects, surface hydrological changes, groundwater drawdown, noise, vibration, light or the introduction of weeds/pathogens
- disruption to the movement of fauna between areas of habitat across the broader landscape, including between roosting, breeding and potential foraging sites for the Southern Bent-wing Bat and Grey-headed Flying-fox
- the availability of suitable offsets for the loss of native vegetation and habitat for listed threatened species under the EPBC Act and/or FFG Act
- potential collision risk for protected bird and bat species with Project infrastructure, including with wind turbine blades
- potential impacts on groundwater dependent ecosystems
- potential cumulative effects on relevant listed threatened and migratory species and communities of flora and/or fauna, in particular, but not limited to, Brolga, Southern Bent-wing Bat, Grey-headed Flying-fox, White-throated Needletail and Black Falcon from the Project in combination with the construction and operations of other energy facilities
- potential for the Project to have significant impact on wetland systems, including Seasonal Herbaceous Wetlands (EPBC Act listed community), and the ability for

wetland systems to support habitat for flora species listed under the FFG Act and EPBC Act.

EES Chapter 8 (Biodiversity and habitat) assesses biodiversity and habitat and Chapter 9 (Bats) and Chapter 10 (Brolga) assess bats and Brolgas respectively. A Flora and Fauna Assessment, Brolga Impact Assessment and Bat Impact Assessment are included at the EES Appendix D, C1 and C2 respectively.

5.2 Brolga

5.2.1 Background

(i) EES

Relevant EES sections:

- Chapter 8 (Biodiversity and habitat)
- Chapter 10 (Brolga)
- Appendix D (Flora and Fauna Assessment)
- Appendix C1 (Brolga Impact Assessment).

(ii) Interim Brolga Guidelines

The Interim Guidelines for the Assessment, Avoidance, Mitigation and Offsetting of Potential Wind Farm Impacts on the Victorian Brolga Population (Department of Sustainability and Environment, 2011) (Interim Brolga Guidelines):

- establish a framework for assessing and managing the potential impacts of wind energy facilities on Brolgas
- recognise that wind energy facilities may affect Brolgas through direct impacts, including collision mortality, and indirect impacts, including habitat avoidance and barrier effects
- recommend a three-stage assessment process comprising:
 - an Initial Risk Assessment (desktop assessment)
 - an Impact Assessment (breeding and non-breeding season surveys); and
 - Mitigation and Offsetting (including impact avoidance measures, collision risk modelling, Population Viability Analysis and compensation strategies).

As a general guide, the Interim Brolga Guidelines recommend turbine-free buffers of 3.2 kilometres around breeding sites and 5 kilometres around flock roost sites. However, the guidelines acknowledge that the spatial requirements of Brolgas are not fully understood and provide flexibility for proponents to propose alternative buffer distances, provided they can demonstrate that the objectives for protecting breeding and non-breeding habitat will still be achieved. Any proposed variation to the recommended buffer distances must be to the satisfaction of DEECA.

In 2025, the Victorian Government released the *Handbook for the Development of Renewable Energy in Victoria* (the Handbook) to support the new renewable energy planning framework. The Handbook includes updated guidance for assessing and managing impacts on Brolgas and introduces the Victorian Government's new Brolga Breeding Habitat Suitability Model. The model is a spatial assessment tool that identifies

and ranks the likelihood that wetlands and surrounding areas provide suitable breeding habitat for Brolgas in Victoria.

The Interim Guidelines were primarily informed by the South West Brolga Research Project and associated research undertaken by Inka Veltheim on Brolga movements, habitat use and collision risk, together with long term Victorian Brolga monitoring data and expert ecological advice. The more recent Brolga Breeding Habitat Suitability Model was developed after the Interim Guidelines and represents an evolution of the Victorian Government's approach to identifying potential breeding habitat and assessing wind energy facility impacts.

5.2.2 Buffers

(i) The issue

The issue is whether the proposed foraging and disturbance turbine-free buffers are appropriate.

(ii) Background

EES Appendix C1 Figure 11 explains and illustrates the proposed turbine-free buffer distances. The buffers were determined by:

- grouping confirmed breeding wetlands and other assumed wetland habitat within 2 kilometres of the confirmed breeding wetland to form a wetland complex
- setting a 600-metre buffer around each wetland within a complex
- connecting closely located 600 metre buffers to define a 'home range' for each wetland or wetland complex
- adding a 300-metre turbine free disturbance buffer applied to each home range
- adding a 95-metre turbine free buffer to account for rotor blade length.

The proposed 995-metre buffer is determined by combining the 600-metre buffer with the 300-metre turbine free disturbance buffer and 95-metre rotor blade length.

(iii) Evidence and submissions

Evidence and submissions focused on:

- adequacy of breeding buffers
- displacement, and the adequacy of the turbine free buffer.

Adequacy of breeding buffers

The Proponent relied on the evidence of Dr Kulik regarding biodiversity matters. Dr Kulik was an author and reviewer of the Brolga Impact Assessment.

Dr Kulik stated:

- buffer distances for the Project were determined in accordance with the Interim Brolga Guidelines and in consultation with DEECA based on:
 - *Breeding Home Range Movements of Pre-Fledged Brolga Chicks, Antigone rubicunda (Gruidae) in Victoria, Australia – Implications for Wind Farm*

Planning and Conservation (Inka Veltheim, Simon Cook, Grant Palmer, Richard Hill, and Michael McCarthy, 2019) (Veltheim (2019))

- *Partial migration of Brolgas (Antigone rubicunda) within a restricted range is revealed by GPS tracking* (Inka Veltheim, Simon Cook, Michael A. McCarthy, Grant C. Palmer & F. A. Richard Hill, 2022) (Veltheim 2022)
- non-wetland habitat around confirmed Brolga breeding wetlands was defined as extending 600 metres from the wetland, or between wetlands within 2 kilometres of each other, to capture foraging habitat and movement corridors
- the 600-metre buffer is considered a conservative approach, incorporating Brolga foraging and movement considerations plus an additional 300 metre disturbance buffer was added as well as a 95-metre blade length buffer.

Several submitters referred to the Interim Brolga Guidelines and adequacy of breeding buffers and submitted:

- the default buffers in the guidelines should be adhered to for the Project, which generally recommend a turbine-free buffer of 3.2 kilometres from breeding sites
- the buffers proposed by the Project do not meet the Handbook
- although the guidelines allow for reduced buffer distances, the basis for a reduced buffer had not been established
- based on Veltheim (2019), the distance travelled by Brolga is greater than the proposed 995-metre buffers
- the buffer methodology was flawed based on comparison with other wind energy facilities such as Dundonnell, Golden Plains and Stockyard Hill
- it is not appropriate to rely on Veltheim (2019) because:
 - it is based on walking chicks and not flighted Brolga
 - this research used 400 global positioning system tracking data points out of nearly 80,000 records
 - it relied on a 2011 study by Venosta et al for the Penshurst Wind Energy Facility which used a flawed methodology
- the approach in Veltheim (2019) did not protect the full life cycle of the Brolga including:
 - the adult that is out foraging
 - the family of Brolgas that remain in residence at the home range until they leave to flock at their flocking home range
 - the walking chicks if their parents were displaced from the nesting site
- the breeding buffers should be based on the full range of data used in Veltheim (2022).

The IAC asked DEECA questions of clarification regarding the Interim Brolga Guidelines, the Handbook application and transitional arrangements.

In response, DEECA advised the Handbook applies a risk-based approach to identifying, assessing and managing risks and impacts to threatened birds including Brolga, using the mitigation hierarchy. The Handbook provides guidance for managing impacts that is proportionate to the risks.

DEECA submitted the Handbook was developed considering the most recent and best available science, data and information. However, DEECA acknowledges that knowledge gaps and uncertainties remain. Where uncertainties in information or data are

identified, the Handbook recommends that the proponent identifies and addresses them, including explaining how those uncertainties may impact outcomes of impact assessments. This allows proponents and decision-makers to factor those uncertainties into the assessment and approval process. The Handbook does not change application of the precautionary principle, where it may be relevant.

The transitional arrangements in the Handbook were developed with the knowledge that preparation for environmental impact assessments and planning approvals for wind energy facilities often takes many years. The intent of the transition period is to allow proponents time to adjust their approach to comply with the new guidance without disrupting projects that were already progressing, and may have been substantially completed, in compliance with existing requirements and guidance. The option for proponents to 'opt in' to use the Handbook was included to provide flexibility for proponents who may wish to adopt the new guidance.

DEECA added:

- it would be unreasonable and unnecessary to recommend a proponent change the guidance being applied in the middle of an assessment process
- it was satisfied the work undertaken to determine breeding buffers had been undertaken in accordance with the Interim Brolga Guidelines
- the Interim Brolga Guidelines are non-statutory and provide a framework for assessing and managing risks and impacts to Brolga, rather than requiring use of fixed turbine-free buffers in all circumstances.

The Proponent submitted:

- contrary to the views expressed in some submissions, the use of a site-specific approach to identifying Brolga home ranges and associated buffers is consistent with the Interim Brolga Guidelines
- concerns regarding the reliability of the scientific basis underpinning the Interim Brolga Guidelines are unfounded
- the relevant regulator has determined that both the Interim Brolga Guidelines and the research informing them are appropriate for achieving the objective of no net impact to Brolga populations.

The Proponent considered the Brolga impact assessment to be comprehensive and well-documented, applying a range of methodologies identified in the Interim Brolga Guidelines and clearly explaining the rationale for the methodologies selected and any refinements made.

The Proponent added that the assessment:

- provides a robust basis for establishing conservative turbine-free buffers around Brolga habitats
- informs the development of adaptive mitigation measures and a Brolga Compensation Plan designed to achieve the no net impact objective of the Interim Brolga Guidelines
- is supported by DEECA, including its methodology and conclusions.

Displacement and the adequacy of the disturbance buffer

Moyne Council submitted that a 900-metre disturbance buffer should be applied to designated Wetlands 28238 and 28243, together with a blade-length buffer of 95 metres, consistent with the requirements of the Willatook Wind Energy Facility's Minister's Assessment. Moyne Council contended that, given the larger scale of the Project compared to the Willatook Wind Energy Facility, a 900-metre setback should be regarded as the minimum appropriate buffer.

Regarding displacement and adequacy of buffers, there were submissions which stated:

- Brolgas are known to roam and forage beyond the proposed buffer distances, and the buffers should be extended by at least 800 metres to adequately protect these activities
- wind energy facilities built inside home ranges displace Brolga
- Brolgas have been killed by colliding with turbines and transmission lines
- the proposed buffer distances do not comply with Handbook
- post-completion reports of other wind energy facilities show:
 - breeding pairs have been displaced
 - flocking no longer occurs within 5 kilometres of turbines at any wind energy facility
 - breeding success rate within 5 kilometres has been impacted.

Some submissions claimed that wind energy facilities have displaced all Brolgas within 5 kilometres from any turbine. Post-completion reports and Victorian Biodiversity Atlas data from other wind energy facilities were submitted to support this claim.

Regarding the displacement and adequacy of the disturbance buffer, Dr Kulik stated:

- all buffering distances follow the most up-to-date guidance, which are informed by multiple comprehensive, evidence based regional studies on tracked Brolga conducted by Veltheim (2019) and Veltheim (2022) and in consultation with DEECA
- current guidance and legislation require projects to avoid impacts on breeding and flocking Brolga habitat and minimise disturbance, which the Project achieves
- documented behaviour suggests that Brolga are not necessarily displaced by wind energy facilities, with individuals frequently observed foraging beneath turbines and even breeding within a few metres of them
- there is currently no conclusive evidence from post construction monitoring demonstrating that Brolgas are displaced by wind energy facilities
- establishing such a relationship would require scientifically robust monitoring studies that show Brolgas actively avoid wind energy developments
- available evidence indicates that Brolgas naturally shift breeding and flocking locations in response to changes in habitat suitability and hydrological conditions across their range
- post-completion reports are often not available for other wind energy facilities and most of them do not include a monitoring program for breeding or flocking Brolga on which to draw information
- the lack of records of Brolga within 5 kilometres of a wind energy facility does not mean Brolga breeding pairs have been displaced.

DEECA submitted:

- the Project has demonstrated the avoidance, minimisation and mitigation measures to prevent indirect impacts by siting the Project in an area where no known flocking sites occur within the Interim Guidelines Level one Assessment radius of investigation, followed by layout refinement and the implementation of avoidance measures, including disturbance and turbine-free buffers around breeding wetlands
- the Handbook provides guidance and advice, and is subject to transitional arrangements
- the Proponent has decided to not rely on the Handbook, which DEECA accepts as appropriate, and has undertaken substantial work to avoid and minimise impacts to Brolga
- the assessment of risks and impacts for the Project has been undertaken in accordance with the Interim Brolga Guidelines
- it is broadly satisfied with the Brolga impact assessment undertaken for the EES, including the development of site-specific breeding buffers
- recent research published since the Interim Brolga Guidelines were prepared, including a Veltheim 2018 paper and Veltheim (2019), provides new information on Brolga ecology and movements, and DEECA supports the use of those studies to inform the assessment
- the use of site-specific breeding buffers informed by recent research and local survey data:
 - is consistent with approaches adopted for other recently assessed wind energy facilities
 - represents a contemporary method for avoiding and minimising impacts while applying the Interim Brolga Guidelines.

In response to a query from the IAC regarding displacement, DEECA's response was:

- the Interim Brolga Guidelines recognise displacement of Brolgas from flocking areas and breeding wetlands as a risk arising from indirect impacts (as per Glossary of Terms), and they seek to reduce disturbance, loss of functional habitat and minimise impacts to breeding success
- the Guidelines seek to achieve reduced disturbance, loss of functional habitat and minimise impacts to breeding through application of avoidance and minimisation measures such as buffers, and a minimum indirect disturbance setback from breeding and non-breeding home ranges.

(iv) IAC Response

Adequacy of breeding buffers

The IAC considers the Brolga Impact Assessment is sufficiently comprehensive.

Submissions did not:

- identify any new breeding wetlands, breeding habitat or Brolga value to those identified in the Brolga Impact Assessment
- demonstrate the proposed breeding buffers are inadequate to protect breeding Brolga or pre-fledging chicks.

The IAC is satisfied that Brolga breeding wetlands have been appropriately identified (as discussed in Chapter 5.2.3) and that appropriate turbine-free buffers have been applied. No Brolga flock roost sites were identified within 5 kilometres of the Project area. Accordingly, the Project is unlikely to result in direct impacts on Brolga breeding or flocking habitat.

The IAC accepts DEECA's submission that the 3.2-kilometre distance identified in the Interim Brolga Guidelines is a default home-range assumption intended to be applied where site-specific information is unavailable. In this case, extensive surveys have been undertaken over numerous years and a site-specific assessment has been completed. The assessment identified all wetlands within 2 kilometres of breeding habitat and applied a 995-metre turbine-free buffer around the resulting home ranges. This methodology was developed in consultation with, and was accepted by, DEECA.

The IAC accepts DEECA's submission that the default distances contained in the Interim Brolga Guidelines were developed when comparatively limited information was available regarding the movements of Brolga family groups, and the Project has instead relied on more recent scientific research, including Veltheim (2019), to inform the delineation of home ranges and the development of site-specific breeding buffers. In line with DEECA's advice, the IAC agrees that guidance in the 2025 Handbook does not need to apply to the Project or its buffers.

Some submissions sought to apply the default 3.2-kilometre buffer because, in their view, site-specific investigations had not been undertaken. This is not the case. The proposed 995-metre buffer distance is:

- based on substantial site-specific investigations and a methodology endorsed by DEECA
- consistent with the objective of the Interim Brolga Guidelines to ensure that turbine-free areas around breeding wetlands are sufficient to avoid significant impacts on breeding success.

The IAC acknowledges concern regarding the reliance on Veltheim (2019). Consistent with views of the Kentbruck Wind Farm Inquiry and Advisory Committee, the IAC considers that Veltheim (2019):

- is directly relevant because it specifically examines the movements of pre-fledging chicks, which is critical when determining breeding habitat buffers
- draws on the earlier work of Venosta et al 2011 regarding fledging age
- provides a more relevant basis for determining breeding buffers than research in Veltheim (2022), which focused on broader seasonal movement patterns rather than pre-fledging chick movements.

Having regard to the evidence of Dr Kulik, DEECA's submissions, the site-specific assessment undertaken for the Project and the findings in Veltheim (2019), the IAC is satisfied that the proposed breeding buffer methodology achieves the key objective of protecting pre-fledging chicks and maintaining breeding success. The proposed breeding buffers are appropriate for the Project.

The IAC queried whether the turbine-free Brolga buffers should be identified in the permit conditions. The Proponent agreed the buffers should be shown on the endorsed plans required under Condition 1 and included them in permit conditions (version 3). The IAC

supports this change as it provides greater certainty regarding the location and extent of the protected buffer areas.

Displacement and the adequacy of the disturbance buffer

Some submissions relied upon post-construction monitoring reports from existing Victorian wind energy facilities as evidence of the Project potentially displacing Brolgas from breeding and foraging habitat.

However, the IAC accepts Dr Kulik's evidence that the post-construction monitoring has not provided a sufficiently robust scientific basis to conclude the Project will result in displacement of Brolga or to determine the extent of any such displacement. The evidence indicates that only a small proportion of suitable wetlands are used for breeding in any given year and that breeding success is influenced by a range of factors including seasonal conditions, wetland characteristics and territorial behaviour. Consequently, the absence of breeding activity or unsuccessful breeding at a particular wetland cannot be attributed to the presence of a wind energy facility. The IAC was not provided with sufficient evidence to conclude the proposed wind energy facility will displace Brolgas or result in impacts beyond those already considered in the Brolga Impact Assessment.

The IAC is satisfied that the proposed disturbance buffers are appropriate.

(v) Findings

The Inquiry and Advisory Committee finds:

- The methodology to assess the proposed buffers is appropriate and the assessment is sound.
- It is appropriate to apply the proposed disturbance and turbine-free buffers comprising:
 - a 600-metre buffer around each wetland within a complex
 - a 300-metre turbine free disturbance buffer applied to each home range
 - a 95-metre turbine free buffer to account for rotor blade length.

5.2.3 Wetlands

(i) The issue

The issue is whether the EES has appropriately identified and assessed wetlands suitable for Brolga habitat.

(ii) EES

Relevant EES sections:

- Chapter 10 (Brolga)
- Chapter 12 (Surface water)
- Appendix C1 (Brolga) including the flood modelling at Appendix 4
- Appendix B (Surface water and ground water).

(iii) Background

The Interim Brolga Guidelines defines a Brolga breeding site as the nest of a Brolga breeding pair and the perimeter of the surrounding wetland. It includes wetlands with previous records of Brolga nests from any relevant information source. It states a wetland remains a breeding site providing it has not been permanently drained and/or planted with trees. Wetlands that have been ploughed can still be breeding sites providing the wetland retains some level of filling.

(iv) Evidence and submissions

Breeding wetlands

Many submitters disputed the flood modelling (contained in the Surface and Ground Water Impact Assessment) that informed the identification of wetlands.

Submissions considered:

- Wetland 29411 should have been included as Brolga breeding habitat, contrary to the findings of the assessment
- Wetlands 28235, 28236 and 28237 should have been assessed and identified as breeding wetlands
- the assessment had incorrectly classified a cultivated ridge within Wetland 28238 as a drain, potentially affecting the findings that it is unable to retain water for 120 days.

The Proponent submitted:

- The flood modelling provides a hydrological model for the wetlands in the study area, to identify relevant habitat and wetland boundaries.
- The model applied a methodology consistent with that expected by DEECA.
- 22 wetlands that met the inundation criterion were adopted as assumed habitat together with any confirmed breeding wetlands.

Dr Kulik explained the inundation criterion was informed by:

- discussions between the Proponent and DEECA
- hydrologically or visually observed as holding water for at least 120 days at least once every 10 years.

She added the criterion was not used to rule out breeding wetlands with historical breeding records.

Mr Hughes supported the flood modelling and stated:

- Wetland 28238 was not identified as a wetland as it is permanently drained by a drain (constructed since 1981) that allows water to drain from the wetland into Limestone Creek
- drains were observed during a site inspection
- during significant rainfall events such as was the case in October 2022, he would expect consequent temporarily pooling of water in the wetland, but for a period of less than 120 days.

In response to submissions regarding the identification of wetlands, Mr Hughes stated:

- Wetland 28235 is a confluence point within the Limestone Creek system that may occasionally flood but does not meet the inundation criteria.
- Wetlands 28236 and 28243 are located within 2 kilometres of Wetland 29420 and form part of the habitat complex associated with that wetland, which has a confirmed Brolga breeding record, meaning its ability to meet inundation criterion is irrelevant.
- Hydraulic modelling that informed the Surface and Ground Water Impact Assessment indicates that Wetland 28237, Wetland 25281 and Victorian Biodiversity Atlas record 844383 does not satisfy the inundation criterion.

DEECA submitted:

- permanent drainage of a wetland and/or planting with trees are the only measures used to exclude a wetland as a breeding site in accordance with the Interim Brolga Guidelines
- the Interim Brolga Guidelines do not provide a definition of what constitutes a permanently drained breeding wetland and it encouraged the Project to develop a definition and process to apply consistently across wetlands
- a historical breeding wetland can be considered permanently drained if an excavated earthen channel has been constructed from the wetland invert to a connecting drain, downstream waterway or downstream wetland.

DEECA did not raise concern with the Proponent's submission that Wetland 28238 was permanently drained given more than one of the specified lines of evidence were satisfied including:

- topographical imagery which demonstrates the drainage channel and connecting downstream wetland or waterway
- historical satellite imagery of the wetland in the central months of the Brolga breeding season (being August to October) over multiple years within a 10-year period evidencing the wetland area as drained and not capable of functioning as a wetland suitable for Brolga breeding
- using a high-resolution Digital Elevation Model in combination with water balance or hydrological modelling as the most precise and scientifically defensible method to assess whether a waterbody can (or cannot) function as a wetland suitable for Brolga breeding.

DEECA supported the findings of the flood modelling and Brolga Impact Assessment. It concluded the assessment was consistent with best practice for projects that have previously applied the Interim Brolga Guidelines, and it used various methods of evidence to provide a comparatively more robust assessment of wetland inundation conditions.

Flocking wetlands

Moyne Council supported submissions that Wetlands 28238 and 28243, which are not proposed to be protected by 995-metre turbine-free buffers, are confirmed Brolga flock-use wetlands. It disputed the findings of the Brolga Impact Assessment about the flock use of these wetlands. Moyne Council proposed a minimum 900-metre exclusion buffer from the boundaries of Wetlands 28238 and 28243, together with a 300-metre blade-tip exclusion zone within line of sight of designated Brolga flock-use wetlands.

One submitter similarly contended that Wetland 28243 (also referred to as wetland 16) should be recognised as a flocking site based on personal observations of Brolga flocking behaviour at that location.

In closing submissions, the Proponent submitted that there was insufficient evidence to classify Wetland 28243 as a flock-use site under the Interim Brolga Guidelines. The Proponent noted that the site did not satisfy the relevant criteria, namely:

- records from more than one year
- one or more records of 10 or more birds
- records occurring in more than one month.

The Proponent further submitted that eight years of surveys had been undertaken during the July to December breeding period, including numerous surveys undertaken between June and August when flocking behaviour would be expected to occur. It noted that no flocking behaviour was recorded at Wetland 28243 or any of the other wetlands that were surveyed.

(v) IAC Response

The IAC accepts the evidence of Mr Hughes and is satisfied that all wetlands raised in submissions have been appropriately considered in the flood modelling and Brolga Impact Assessment and either identified or excluded as confirmed breeding habitat based on clear and documented criterion.

Breeding wetlands

The methodology used to identify potential breeding wetlands was developed in consultation with DEECA and is consistent with the criteria set out in the Brolga Assessment Handbook. The IAC places weight on the fact that DEECA did not dispute the identification of wetlands assessed as potential breeding habitat using this approach.

The IAC accepts the evidence of Mr Hughes that, while Wetland 28238 can retain water, there is insufficient evidence to demonstrate that it can retain water for 120 days, as required to meet the inundation criterion.

The IAC further notes that all wetlands referred to by submitters were considered as part of the Brolga Impact Assessment. Where a wetland was not identified as breeding habitat, a clear explanation was provided as to why it did not satisfy the relevant criteria.

Flocking wetlands

The IAC accepts the approach adopted by the Proponent, whereby wetlands were only excluded where evidence demonstrated that they were incapable of retaining water for the relevant 120-day period, consistent with the approach agreed with DEECA. The IAC notes that wetlands with historical breeding records were retained within the assessment and associated buffers.

The IAC is not persuaded by Moyne Council's submission that Wetlands 28238 and 28243 should be treated as confirmed flock-use wetlands given no substantive evidence was provided to support this claim.

In relation to Wetland 28243, the IAC accepts the Proponent's submission that there is insufficient evidence to classify the wetland as a flock roost site under the Interim Brolga Guidelines. The wetland does not satisfy the inundation criterion, and the extensive survey effort undertaken over eight years, including targeted surveys during known flocking periods in 2018, 2019 and 2020, did not record any flocking behaviour in that location.

The IAC is satisfied that the identification and classification of breeding and flocking wetlands is appropriate and supported by the available evidence.

(vi) Finding

The Inquiry and Advisory Committee finds the Environmental Effects Statement has appropriately identified and assessed wetlands suitable for Brolga habitat in its assessment.

5.2.4 Potential Brolga impact

(i) The issue

The issue is whether:

- the Brolga survey effort is adequate
- the Project will result in an acceptable impact on the Brolgas.

(ii) Evidence and submissions

Brolga Records and Survey

Many submissions said the Brolga Impact Assessment could not be relied upon because:

- survey effort was undertaken when Brolgas were not present (when Wetland 29411 was dry)
- there were errors in the description of Brolga survey records
- surveys were at inappropriate times – this includes 16 August 2023 on a ram sale day and weaning of ewes and lambs which may have discouraged Brolgas from the survey area
- significant historical Brolga nesting and flocking sites had not been considered
- lack of consultation with landowners who have observed Brolga activities
- certain sightings of Brolgas on properties were not documented in the Brolga Impact Assessment
- maternity flocking sites were not considered
- wetlands where aerial surveys found empty nests should be considered as Brolga breeding wetlands
- landholders have records of breeding
- data has not been sourced from all available sources
- key data collected by Nature Advisory and community records are not considered
- of the lack of site-specific survey
- Brolga regularly breed at Wetland 29411, located in 'Connewarran'.

In her evidence, Dr Kulik stated:

- the Brolga Impact Assessment followed the survey methodology of the Interim Brolga Guidelines and was informed by consultation with DEECA on survey methods
- the Interim Brolga Guidelines require breeding habitat surveys to be undertaken between July and December and this occurred monthly during that period
- wetlands with previous breeding activity continued to be surveyed in dry conditions as Brolga might still be present after a failed breeding attempts and hidden waterholes could provide a suitable source of water
- analysis of Brolga records was undertaken, complemented by community consultation, in accordance with standard assessment procedures and the Interim Brolga Guidelines
- it is unlikely the surveys would have completely missed Brolga events as the wetlands were regularly reinvestigated over multiple years
- Brolga surveys of the Project site exceed the level of pre-construction surveys undertaken for most wind energy facilities
- survey effort includes flocking and breeding season roaming surveys conducted in 2009 to 2011, 2013, and 2018 to 2024, complemented by two aerial surveys and extensive ground searches during the Brolga breeding season from 2018 to 2024, supported by ongoing reviews of database records and consultation with landowners
- no evidence of Brolga breeding at Wetland 28358 or farm dams to the west was supplied to require buffering
- all Brolga records documented by her company (for any project) are on the Victorian Biodiversity Atlas database up to November 2024/2025
- site-specific data is difficult to obtain for single projects, and therefore scientific research was used to suggest a buffer methodology in consultation with DEECA.
- multiple historical breeding records have been considered in Connewarran leading to most of the area being excluded from the Project site.

Moyne Council's primary submission was that the IAC should recommend that the Minister for Planning refuse the planning permit application for the Project until the key Brolga and SBWB uncertainties are satisfactorily resolved.

The Proponent submitted that there is no evidence that maternity flocking is a relevant concept for the Brolga. The Proponent said the term is not referred to in the Interim Brolga Guidelines, the Handbook, the Action Statement for the Brolga, or any other published research it was able to find.

Brolga Breeding survey window

Moyne Council submitted:

- the omission of the July to November Brolga breeding window from successive years excluded 'the months that mattered'
- there was no thorough breeding-season survey covering the July to November period during successive years where Wetlands 28238 and 28243 are located, which it considered were confirmed flock-use wetlands

- a Brolga seasonal turbine shutdown should be implemented from 1 July to 30 November to avoid the Brolga breeding window in line with the Minister's Assessment of the Willatook Wind Energy Facility EES.

The Proponent submitted:

- the relevant breeding season for the Brolga is July to December, not July to November, and surveys were not undertaken in 2021 as three consecutive years of breeding survey data had been collected to allow for the development of the buffers and reporting to support the EES referral
- surveys continued in 2022 to 2024 for purposes of the EES
- there is no reference in the Minister's Assessment of the Willatook Wind Energy Facility EES of a shutdown period from July to November, but there is a reference to managing construction activity during the breeding season to minimise impact from construction rather than from operation.

Brolga Compensation Plan

Moyne Council submitted the Brolga Impact Assessment:

- is inadequate because a Brolga Compensation Plan had not yet been prepared and no compensation habitat had been secured to inform the proposed compensation framework
- does not adequately address the uplisting of Brolga from vulnerable to endangered
- is incomplete because it does not specifically address the implications of the Brolga's endangered status and the Brolga Compensation Plan should be subject to an external independent review.

Moyne Council also submitted it was inappropriate for the IAC to assess the Project without a completed Brolga Compensation Plan.

Moyne Council added:

- these matters supported the need for a new or supplementary EES process
- if the IAC supported the Project, any approval should require a completed and approved Brolga Compensation Plan, including mapped and legally secured compensation habitat, to be in place before construction starts, consistent with requirements applied to other wind energy facility projects.

DEECA submitted:

- the landscape context of the Project site, which has extensive modified agricultural wetlands used opportunistically by Brolga, means that full elimination of collision risk through avoidance is unrealistic
- it was satisfied with the approach to manage the remaining collision risk identified through the implementation of a Brolga Compensation Plan which proposes wetland restoration actions to attract regular, successful breeding by Brolgas, to produce additional young birds to replace those that may be lost through the impacts of wind energy facilities
- the detailed development of the Brolga Compensation Plan will be resolved following the Minister's assessment of the Project, as a secondary consent, if a planning permit is issued.

Other submissions considered:

- the creation of habitat seeking to support Brolga breeding have not successfully mitigated losses
- the Project will likely contribute to the extinction of the Brolga.

Dr Kulik stated:

- compensatory measures are the last step in the mitigation hierarchy and are applied after avoidance and mitigation measures have been implemented
- the Brolga Compensation Plan will identify appropriate compensation strategies and measures to be followed to ensure a zero net impact
- the Project has incorporated all relevant guidance and regulatory requirements to avoid and mitigate potential impacts, including operational carcass monitoring and adaptive management to address any unforeseen residual impacts
- the Population Viability Analysis undertaken by the University of Melbourne for the Project concludes the Project would contribute to an additional loss of 1.3 to 2.5 Brolga over the life of the Project (30 years), depending on the assumed avoidance rate.

The Proponent submitted:

- Dr Kulik's evidence was that the status of the Brolga (whether vulnerable or endangered) did not change the assessment required.
- The Brolga has been listed as a threatened species throughout the Project assessment (now an endangered rather than vulnerable species) and is captured by the Scoping Requirement that the EES consider 'listed threatened species'.

Collision Risk Model

Moyne Council submitted:

- the Collision Risk Model is not appropriate as it was not based on project-specific information and is based on a 90 per cent avoidance rate default figure
- the Proponent has not tested the inputs to which the model is most sensitive
- the Collision Risk Model and mitigation toolkit have not been recalibrated against the Handbook which sets the contemporary standard.

Other submissions considered the Collision Risk Model:

- uses generic avoidance rates not validated for Victorian Brolga populations
- does not include sensitivity testing to show how changes in flight height, avoidance rate or turbine layout affect mortality
- does not incorporate seasonal variation in flight behaviour, particularly during breeding dispersal and flocking movements
- does not address the compounding effect of multiple turbines aligned across known movement pathways
- does not consider cumulative collision risk across multiple wind energy facilities.

Dr Kulik stated:

- the Interim Brolga Guidelines require the Collision Risk Model for Brolga
- there is no validated avoidance rate for the Victorian Brolga population

- Brolga rarely collide with turbines so an avoidance rate between 90 and 95 percent seems reasonable and in line with other wind energy facilities such as Dundonnell and Golden Plains where the same avoidance rates have been applied
- sensitivity analysis was not undertaken because the model used was one that had been used for Victorian Brolga historically for nearly a decade, so detailed mathematical validation was not presented beyond what was required to present and contextualise the results
- the recorded flight path from each recorded breeding pair member was included as input into the Collision Risk Model
- no flocking behaviour was observed or has been historically recorded near the Project site and therefore was not considered
- cumulative impacts regarding Brolga are unknown due to a lack of data from scientific studies
- to date, one Brolga death has been assumed due to turbine collision in Victoria.

(iii) IAC Response

Brolga records

The IAC agrees with submissions that the Brolga Impact Assessment would have benefitted from more extensive Brolga records than what is presented. However, the information provided is sufficient to form an adequate basis for assessing potential impacts. Consultation with landholders represents only one component of the process for identifying Brolga records and the assessment was informed by more than 10 years of field investigations and monitoring. The assessment methodology was consistent with the process outlined in the Interim Brolga Guidelines, was accepted by DEECA and is accepted by the IAC.

Brolga Survey Adequacy

The IAC accepts the Project's surveys did not include a full sequence of breeding-season survey across successive years within the 26 breeding surveys. The IAC accepts DEECA's view that this is not an omission or issue with the survey. Accordingly, the level of survey is sufficient for assessing potential impact on Brolgas.

Brolga Compensation Plan

It is evident the Project has been designed, through layout refinements, to avoid and minimise potential impact on the Brolga. This includes avoiding key breeding wetlands, reducing turbine placement near wetlands and movement corridors, and minimising exposure to known and potential Brolga habitat.

Given the extensive network of modified agricultural wetlands in the Project site that are used opportunistically by Brolga, it is not feasible to eliminate all residual collision risk through avoidance measures alone. The Interim Brolga Guidelines recognise this and provide a framework for assessing residual risk and identifying appropriate compensation measures to achieve the objective of no net impact on the Victorian Brolga population. The EES objectives themselves seek to offset where avoidance or minimisation cannot be achieved.

The Interim Brolga Guidelines endorse the use of habitat protection and enhancement measures where residual risks remain following the application of avoidance and minimisation measures. In this context, the proposed Brolga Compensation Plan adopts a recognised and established mechanism under the Interim Brolga Guidelines for addressing residual collision risk.

The Brolga Compensation Plan proposes wetland restoration and enhancement actions intended to improve breeding habitat and increase breeding success. This would help recruit additional birds to offset any losses that may occur from the Project's operation. As noted by DEECA, this approach is consistent with the Interim Brolga Guidelines and is an appropriate compensation mechanism where it is properly justified, targeted and enforced.

The IAC is satisfied that a Brolga Compensation Plan can be prepared, approved and implemented through permit conditions before the wind energy facility starts operating. It is not necessary or practical for compensation habitat to be secured or a final compensation plan to be completed before a planning permit is granted. Rather, it is appropriate that these matters be resolved if the project is approved and before operation commences. This will enable compensation measures to be:

- informed by the final approved project design
- subject to review and approval by the relevant authorities.

Collision Risk Model

The IAC has carefully considered the concerns raised by Moyne Council and submitters regarding the Collision Risk Model. While there is inherent uncertainty associated with modelling wildlife behaviour, the Collision Risk Model provides an appropriate and accepted tool for assessing potential collision risk to Brolga under the Interim Brolga Guidelines.

The use of a Collision Risk Model is specifically required by the Interim Brolga Guidelines and forms a key component of the established assessment framework for a wind energy facility in Victoria. The IAC considers it significant that the methodology applied in this assessment:

- is consistent with that used for other recently approved wind energy facilities
- reflects the approach accepted by DEECA in assessing potential impacts on Brolga.

The IAC accepts the evidence of Dr Kulik that there are currently no validated avoidance rates available for the Victorian Brolga population and that the avoidance rates adopted in the Collision Risk Model are consistent with those applied in other Victorian wind energy facility assessments. Without species-specific empirical data, the IAC considers it reasonable to rely on the accepted assumptions in the established assessment framework rather than require the development of a new modelling approach for this Project.

The Collision Risk Model has been informed by project-specific survey data including the location of breeding wetlands, movement pathways and recorded flight activity. While submissions criticised the absence of sensitivity testing, this does not materially undermine the assessment. The Collision Risk Model is one component of a broader

assessment framework that includes site specific breeding buffers, turbine free areas, adaptive mitigation measures and a compensation framework intended to achieve the objective of no net impact.

The IAC is satisfied that, as no flocking behaviour was observed during surveys or identified from historical records, it is reasonable for the Brolga Impact Assessment to focus on the movements associated with breeding pairs. Similarly, while cumulative impacts remain an area of uncertainty, there is currently insufficient scientific data available to robustly quantify cumulative collision risk for Brolga across multiple wind energy facilities.

The Brolga Impact Assessment does not need to align with the 2025 Handbook because it provides advice and guidance rather than mandatory requirements. The IAC places significant weight on:

- DEECA confirming the Brolga Impact Assessment was appropriately undertaken in accordance with the Interim Brolga Guidelines
- DEECA being broadly satisfied with the Brolga Impact Assessment, including the methodologies adopted and the approach to assessing residual collision risk.

The IAC is satisfied the Collision Risk Model provides a reasonable and proportionate assessment of potential collision risk and an appropriate base for informing the avoidance, mitigation and compensation measures proposed for the Project.

Brolga Impact

The IAC acknowledges the high conservation significance of the Brolga, which is listed as endangered under the FFG Act, and the considerable concern raised by submitters regarding the potential impacts of the Project on the species. However, having considered the evidence, submissions and advice of the relevant authorities, the IAC is satisfied the Project's impact on Brolga has been avoided where reasonable through design, and can be appropriately managed and is acceptable.

The IAC agrees with Dr Kulik that the recent change in the conservation status of the Brolga from vulnerable to endangered does not alter the assessment methodology required under the Interim Brolga Guidelines. The Brolga Impact Assessment has been undertaken in accordance with the applicable policy framework and has appropriately considered the risks posed by the Project.

The IAC places significant weight on the extensive avoidance and minimisation measures incorporated into the Project design. These include:

- identification of Brolga habitat through hydrological modelling and field surveys
- delineation of wetland complexes and home ranges
- application of site-specific turbine-free buffers developed in accordance with the Interim Brolga Guidelines.

This approach has resulted in the avoidance of breeding wetlands.

The IAC accepts that a site-specific approach to the identification of Brolga home ranges and associated buffers is consistent with the Interim Brolga Guidelines and reflects contemporary scientific understanding of Brolga ecology. Of note, DEECA supports the adopted methodology, including the use of recent research and local survey data to inform the assessment.

While residual collision risk remains, the IAC accepts the evidence that such risk cannot be eliminated in a landscape characterised by numerous wetlands that are used opportunistically by Brolga. The Interim Brolga Guidelines recognise this circumstance and provide for the use of mitigation, adaptive management and compensation measures to achieve the objective of no net impact on the Victorian Brolga population.

The proposed monitoring, adaptive management measures and Brolga Compensation Plan provide an appropriate framework for managing residual risk. The compensation framework is consistent with the Interim Brolga Guidelines and can be secured through permit conditions requiring the preparation, approval and implementation of a Brolga Compensation Plan before the Project starts operating.

The Project can achieve the no net impact objective of the Interim Brolga Guidelines and acceptable residual impacts on Brolga when having regard to:

- the extensive avoidance and minimisation measures incorporated into the Project
- application of site-specific turbine-free buffers
- proposed monitoring and adaptive management framework, requirement for compensation to address residual risk.

(iv) Findings

The Inquiry and Advisory Committee finds:

- the Brolga survey is adequate
- the Project will result in an acceptable impact on the Brolgas.

5.3 Southern Bent-wing bats

(i) The issues

The issues are:

- whether the Project is likely to result in significant effects on the Southern Bent-wing Bat (SBWB)
- if so, whether such effects are acceptable and will not compromise the recovery of the species.

(ii) Background

EES

Relevant EES sections:

- Chapter 9 (Bats)
- Appendix C2 (Bats).

(iii) Evidence

Dr Kulik stated:

- as of April 2026, she is aware of a total of 36 SBWB mortalities at operational wind energy facilities in Victoria that have been reported to DEECA
- the Bat Impact Assessment shows that SBWBs were recorded at multiple sites across the study area specifically, along Mustons Creek and its treed habitats,

and consequently, there is a possibility that SBWB could occasionally collide with operational turbines at the Project site

- no definite SBWB calls or SBWB species complex calls were recorded in the rotor swept area
- other records indicate the SBWB does fly within the rotor swept area and mortalities of the SBWB have been reported for other wind energy facilities
- it has been assumed the SBWB will use the Project site, with a possibility of collision and mortality
- this species has a low impact rating (before implementing avoidance and mitigation measures) due to the low number of SBWB calls recorded during survey.

Dr Kulik explained that avoidance, minimisation and mitigation measures have been developed in consultation with DEECA and DCCEEW comprising a multi-faceted approach accounting for the known ecology and behaviour of SBWB, site features relating to available habitat and foraging opportunities, and the influence of weather and season on bat activity. She explained this approach includes:

- a minimum rotor swept height of 40 metres above ground
- avoidance of high quality SBWB habitat and areas with high SBWB calls
- ranking of turbines into higher, moderate and lower risk to SBWB
- micro-siting turbines to allow for a 269-metre buffer.

Dr Kulik explained:

- the 269-metre buffer distance was derived from a 200-metre buffer from nearest habitat to the blade tip as used for wind energy facilities in Europe that have potential to impact bats (Rodrigues et al 2015)
- micro-siting of the proposed turbines was based on overlap of a 269-metre buffer around turbines, habitat and SBWB activity, and consultation with DEECA and DCCEEW.

Dr Kulik added that the following avoidance categories were created:

- High priority avoidance – Creeks, wetlands, remnant native woodland, forestry plantations, and higher number of SBWB-definite or complex calls per night relative to other sites.
- Medium priority avoidance – Planted windrows and eucalypts, farm dams and medium number of SBWB-definite or complex calls per night relative to another site.
- Low priority avoidance – Scattered trees, isolated wind rows (100 metres away from other trees), and low to very low number of SBWB-definite or complex calls per night.

She explained micro-siting efforts commenced with a concept design to avoid most of the habitat which included a 100-metre buffer around DEECA mapped wetlands and watercourses, including Mustons Creek, Drysdale Creek and smaller drainages and Brolga breeding site buffers as detailed in the separate Brolga Assessment Report.

Dr Kulik stated:

- this methodology established a baseline layout that was then used to microsite turbines in relation to higher and medium priority habitat areas and known SBWB activity
- the objective was to minimise the extent of SBWB habitat within 269 metres of turbines
- each turbine was assigned a high, moderate or low impact rating both before and after micro siting to assess the effectiveness of the design refinements
- these categories were identified using the following strategy:
 - Higher risk – where the 269-metre turbine buffers which overlap with any high priority avoidance habitat and/or have medium, high or very high numbers of SBWB or SBWB complex calls per night (greater than 0.1 definite or 1 complex call per night)
 - Moderate risk – more than 2.5 per cent of the 269-metre turbine buffer covers medium priority habitat
 - Lower risk – less than 2.5 per cent of the 269-metre turbine buffer overlaps with medium or low priority avoidance habitat. Buffers overlap with areas of very low or no SBWB activity.

Dr Kulik concluded:

- the Project design had selectively placed wind turbines where they would minimise potential impacts with bats
- this placement of turbines to avoid habitats most used by bats will minimise the likelihood of collisions with turbines
- no significant residual impacts are anticipated after implementation of avoidance and mitigation measures
- a Bat and Avifauna Management Plan (BAM Plan) with specific triggers will be implemented to respond to impacts on these species if impacts are higher than anticipated.

BAM Plan

For moderate and higher-risk turbines, Dr Kulik's evidence was that the Proponent is committed to increase the nighttime low windspeed cut-in to 4.5 metre per second at hub height when SBWB are most actively moving across the landscape between September to April. This measure is detailed in the BAM Plan.

She explained:

- a study at a southern Australian wind energy facility has shown that increasing turbine cut-in speed from 3.0 to 4.5 metres per second from dusk to dawn significantly reduced bat fatalities
- further mitigations, such as blade feathering and increasing nighttime low-windspeed cut-in will be adaptively managed and implemented with the BAM Plan.

(iv) Submissions

Moyne Council

Moyne Council's primary submission was that the IAC should recommend that the Minister for Planning refuse the planning permit application for the Project until the key SBWB uncertainties are satisfactorily resolved.

Moyne Council submitted:

- Action 2.11 of the National Recovery Plan for the SBWB (DELWP, 2020) records that *"extensive data collection will be required... before there is sufficient information to undertake a Population Viability Analysis"* of cumulative wind energy facilities impact on the species
- the IAC should not recommend the Project be approved before the aggregated mortality study is available
- Naroghid and Mount Fyans are examples of wind energy facilities where insufficient application information was supplied concerning potential impacts on the SBWB to provide the necessary level of confidence that significant impacts will not occur.

Moyne Council added:

- the cumulative impact on SBWB is more severe for the Project due to more operating turbines, more confirmed mortalities and a regulator acknowledged extrapolation issue affecting the public dataset
- some design measure for SBWB had been incorporated, but are insufficient
- the 269-metre SBWB blade-tip buffer was derived from a combined workshop with DEECA and DCCEEW rather than from a collision risk model
- the turbine cut-in speed for the SBWB should be 4.5 metres per second escalating to 6 metres per second.

DEECA

DEECA acknowledged the significant amount of work undertaken in the Bat Impact Assessment to apply the mitigation hierarchy to avoid, minimise and mitigate potential impacts on SBWB. DEECA submitted:

Post construction surveys

- it supported post-commissioning acoustic bat surveys in the EMF
- SBWB calls can be difficult to interpret so it recommends a precautionary approach to complex calls be applied with surveys aimed at indicating presence rather than quantifying activity levels.

Proactive mitigation to reduce residual risks and impacts

- it supports the proposed proactive nighttime low windspeed curtailment strategy for moderate and higher-risk turbines
- it supports the EMF measure on curtailment subject to clarifying that the curtailment setting is the minimum mitigation requirement and any refinements made in response to the proposed post-construction SBWB monitoring in the EMF will increase these parameters if it is deemed necessary

- adjusting curtailment conditions for individual turbines in response to SBWB monitoring, beyond increasing cut-in speeds, would create additional administrative complexity
- the BAM Plan does not explain how such changes would be monitored and reported
- it supports curtailment strategies that apply to groups of turbines based on the existing turbine risk categories.

Adaptive mitigation and management measures in response to impact

- it supports an adaptive mitigation and management strategy in response to SBWB impacts to reduce the potential impact of turbine collision to the species
- there is uncertainty regarding the adaptive management and mitigation measures proposed in the BAM Plan for SBWB
- it is uncertain whether the proposed single-turbine curtailment approach would be effective in reducing residual risks and impacts to the species because collision risk can be influenced by movement patterns of the species, landscape scale features and seasonal conditions, risks that may not be linked to individual turbines or are not well understood
- there is currently no evidence that single turbine curtailment is an effective mitigation strategy for highly mobile species such as SBWB
- recent SBWB impacts at other Victorian wind energy facilities have occurred at multiple turbines per site, not only at isolated single turbines, where there is no clear link to SBWB habitat use across the Project site
- curtailment implemented across defined turbine clusters or more broadly across the Project site during high-risk conditions provides a more robust and adaptive mitigation approach in the instance that SBWB impacts occur, unless it is justified that cut in speeds applied to a single turbine can adequately address collision risk to SBWB
- curtailment is a matter of detail that could reasonably be resolved at the secondary consent stage (should the Project be approved) during finalisation of the BAM Plan
- it supports commitments in the BAM Plan to change the parameters of the low wind speed curtailment in response to SBWB mortalities
- the BAM Plan should provide a clear outline of what the adaptive management approach will be if the maximum cut in speed (6 metres per second) is applied but impacts are continuing to occur and then compensate for impacts.

DEECA was satisfied with the parameters of the SBWB mitigation strategy in the BAM Plan and stated that technical details can be refined in consultation with DEECA at a later time. It submitted:

- it supports the proposed EMF measure for trialling the feasibility of acoustic deterrent technology in the BAM Plan
- it can provide advice on any final turbine layout once it is developed
- technological trials should be used to complement other mitigation measures, rather than replace them, until the results of the trial have demonstrated its effectiveness in mitigating impacts

- trials should also be supported by robust monitoring, reporting and evaluation requirements, including provision of data and outcomes of the trial to DEECA.

Other submissions

There were submissions that considered:

Potential Impacts on the Southern Bent-wing Bat

- the Project will have significant implications for the SBWB environment
- the construction and operation of the Project will directly impact the survival of the critically endangered SBWB
- there have been recordings of SBWB on a farm adjacent to the Project site
- the Project is located within a direct flight path between the Warrnambool and Portland breeding grounds
- no population viability analysis has been undertaken, despite the potential for even small numbers of fatalities to have population-level consequences.

Adequacy of Survey Effort and Baseline Data

- survey effort for the species is inadequate due to:
 - inadequate spatial coverage, with detectors located too far from turbine envelopes
 - no vertical acoustic monitoring
 - insufficient temporal coverage
 - lack of targeted surveys near known karst systems, caves and roosting habitat that support the population
- assumptions of low risk are unsubstantiated and rely on generalised statements rather than empirical data.

Collision Risk Assessment

- no quantitative collision risk model has been prepared for SBWB despite its vulnerability and the availability of established modelling approaches
- the Collision Risk Model does not adequately consider turbine height, blade length and rotor-swept area, all of which may increase collision risk for fast-flying, high-altitude species such as SBWB
- recorded SBWB mortalities at existing wind energy facilities are likely to underestimate actual fatalities due to limitations in post-construction monitoring, creating uncertainty regarding the true scale of impacts.

Mitigation and Adaptive Management

- mitigation measures are generic and reactive, rather than being tailored specifically to SBWB
- no curtailment triggers have been proposed, despite evidence that curtailment is one of the most effective measures for reducing bat mortality
- the assessment relies heavily on post-construction monitoring rather than avoidance and minimisation through project design
- no adaptive management framework has been proposed that links monitoring outcomes to measurable thresholds or population-level consequences.

Legislative and Policy Compliance

- the assessment does not adequately apply the precautionary principle, given the critically endangered status of the species and the irreversible nature of collision mortality
- the Project has not demonstrated compliance with EPBC Act requirements relating to the avoidance of significant impacts on listed threatened species.

Cumulative Impact Assessment and Monitoring

- the absence of a centralised registry for operational monitoring data limits the ability to assess cumulative impacts on the species across multiple wind energy facilities
- under reporting of fatalities through existing monitoring programs creates uncertainty regarding cumulative mortality levels and broader population impacts.

The Proponent

The Proponent submitted:

- a range of avoidance and mitigation measures had been incorporated into the Project design to minimise impacts on the SBWB
- the Bat Impact Assessment, supported by Dr Kulik, demonstrates that the selective siting of turbines and the proposed mitigation measures would avoid significant residual impacts on the SBWB.

(v) IAC Response

The IAC agrees with Dr Kulik that, while there is potential for SBWB mortality through turbine collision, the Project has applied a comprehensive avoidance, minimisation and mitigation framework that has been specifically developed having regard to the ecology and behaviour of the species. The Project design has been refined through a process of habitat mapping, activity surveys, turbine risk categorisation and micro-siting to minimise the extent of higher value habitat and known SBWB activity areas near turbines.

In line with DEECA's submission, the IAC considers a substantial amount of work has been undertaken to apply the mitigation hierarchy to avoid, minimise and mitigate impacts on SBWB. Of note, DEECA supports:

- the low wind-speed curtailment strategy for moderate and higher-risk turbines
- the proposed post-construction monitoring program
- the adaptive management framework
- the overall parameters of the mitigation strategy in the BAM Plan.

DEECA is generally satisfied with the SBWB mitigation framework and that the remaining technical details could be resolved through the secondary consent process when finalising the BAM Plan.

The IAC acknowledges the concern raised in submissions, including from Moyne Council regarding survey effort, collision risk modelling, cumulative impacts, population viability and uncertainty regarding actual mortality rates. However, these matters do not demonstrate the Bat Impact Assessment is fundamentally deficient or that the Project

will result in significant residual impacts on the species. The purpose of adaptive management is to respond to that uncertainty where it cannot be fully resolved at the assessment stage.

The IAC agrees with Dr Kulik that the relatively low levels of recorded SBWB activity across the Project site, together with the selective placement of turbines, habitat avoidance measures, 269-metre micro-siting approach, turbine risk categorisation and operational curtailment measures, provide a reasonable basis to conclude that residual impacts are likely to be low. The BAM Plan includes appropriate mechanisms to strengthen mitigation measures should monitoring identify impacts that are greater than those anticipated.

While DEECA identified opportunities to refine aspects of the adaptive management response, particularly regarding the application of curtailment to turbine clusters rather than individual turbines, DEECA regarded these matters as implementation details capable of being resolved through finalisation of the BAM Plan. The IAC agrees with this position and does not consider these matters warrant refusal of the Project or indicate that the overall mitigation strategy is inadequate.

Accordingly, the IAC accepts the impact assessment and concludes that, subject to implementing the BAM Plan and associated monitoring, adaptive management and curtailment measures, the Project is unlikely to result in significant residual impacts on the SBWB.

(vi) Finding

The Inquiry and Advisory Committee finds the Project is not likely to result in significant residual effects on the Southern Bent-wing Bat.

5.4 Bat and Avifauna Management Plan

(i) The issues

The issues are whether:

- the BAM Plan is sufficient for managing potential impact on bat and avifauna species
- the proposed time for approving the Bat and Avifauna Management Plan is appropriate.

(ii) Background

EES

Relevant EES sections:

- Chapter 9 (Bats)
- Appendix C2 (Bats).

(iii) Evidence and submissions

BAM Plan purpose

Moyne Council submitted the BAM Plan in draft form constrained the ability to make evaluative findings about the nature, extent and significance of environmental effects on the Brolga and SBWB.

Other submissions considered:

- if a permit is granted, the BAM Plan should include practical, measurable and enforceable mitigation measures to protect threatened species
- the permit conditions should require BAM Plan monitoring reports to be published on the Project website in a timely manner to promote transparency and accountability.

The Proponent submitted that the BAM Plan:

- is not the primary mechanism to prevent impacts to bird and bat species
- does not seek to prevent the first death of a bat or bird species
- seeks to establish the process for adapting to mortalities if they occur.

The Proponent explained that avoidance of impact on birds and bats has been achieved through the design of the Project, including by using turbine-free buffers around wetlands, and through the approach to classifying and avoiding or minimising interaction with vegetation.

BAM Plan sufficiency

The Proponent submitted that the BAM Plan:

- has been prepared with discussion and input from DEECA and DCCEEW
- builds upon the extensive survey work that has informed the EES with additional monitoring, including carcass monitoring during the operational phase to inform the need for any targeted monitoring and adaptive mitigation measures which will be agreed with the relevant regulators.

DEECA supported, in principle, the BAM Plan measures proposed in the EMF. It maintained its earlier submissions that the proposed monitoring and mitigation measures may be difficult to implement effectively due to the complexity of the significant impact triggers. It explained the triggers are activated when a listed bird or bat species is found dead or injured and require immediate investigation, together with the practical challenges of applying the associated mortality thresholds. DEECA advised that its concern is informed by its experience with implementing similar BAM Plans at operational wind energy facilities.

DEECA requested it be consulted during the BAM Plan's preparation and submitted:

Significant impact thresholds

- it is unclear how including 'significant impact' thresholds supports the application of adaptive management measures
- the BAM Plan should focus on managing residual risks and impacts during the operation of the wind energy facility
- the proposed BAM Plan applies two different approaches:
 - mortality based triggers, which respond directly to observed residual impacts

- significant impact thresholds, which sit alongside but do not align with the adaptive management framework
- it is unclear how these two approaches interact or whether they form part of a coordinated risk management framework
- further consideration of the significant impact thresholds is required in consultation with DEECA to provide clarity on their purpose and what data and information can be used to inform definition of thresholds that will work in practice
- mortality-based adaptive management measures are used to directly address impacts that arise during the operation of the Project.

Bird and Bat Utilisation Surveys

- the purpose of these surveys, how the data will be used and reported on, and how the results will inform mitigation and adaptive management, are not clearly articulated, given the limited 2-year monitoring period proposed
- it recommends these matters are clarified in the BAM Plan.

DEECA requested changes to the exhibited BAM Plan including:

- monitoring during the operational life of the wind energy facility, with an initial continuous monitoring period (for example, for 5 years) and then periodic monitoring
- where post-construction mortality searches are proposed for 30 percent or fewer of the turbines, DEECA considers there to be a high degree of uncertainty in the results, and therefore recommends increasing the proportion of turbines subject to post-construction mortality monitoring beyond 30 percent, or alternatively providing a clear explanation of how the Project will manage and address this uncertainty
- increasing post-construction mortality searches over more than 30 percent of turbines, or clarification be provided on how the Project will address that uncertainty
- species-specific mitigation measures, once applied, should remain in place unless evidence indicates they are no longer warranted, and this be agreed to by the responsible authority (in consultation with DEECA)
- inclusion of targeted mitigation measures for Wedge-tailed Eagle supported by Traditional Owner knowledge
- clarifying the purpose, intended outcomes and implementation approach for proposed compensation measures to ensure they are robust and effective, including for the SBWB compensation measures and the general biodiversity measures.

Further, DEECA submitted:

- in principle, it does not oppose the commitment in the BAM Plan to a one-off financial compensatory contribution to a general biodiversity and/or species preservation program(s) for impacted species
- it recommends that a requirement to prepare a general biodiversity compensation plan be included in the EMF, to manage the development of this commitment.

DEECA made drafting comments on the permit conditions (version 3) regarding the BAM Plan that:

- defined 'listed species' in accordance with FFG and EPBC Act and defined 'the first turbine commences operating' (condition 95)
- required the statement of objectives and strategy for minimising bird and bat strike to include a definition of impact 'triggers' for action, and processes (including roles, responsibilities, timing) for implementing mitigation measures and/or compensation action once an impact threshold to listed bird and bat species has been triggered (condition 96(a))
- included procedures for reporting bird and bat strikes of listed species to DEECA Regions/DCCEEW within seven days of becoming aware of any strike as part of the mortality monitoring program at condition 96(ci)
- included procedures for annual reporting to DEECA Regions and the responsible authority, within agreed timeframes, of the findings of the mortality and operational monitoring program at condition 96(cv)
- referenced the Draft BAM Plan (Nature Advisory April 2026) when referring to cut in speed (condition 96(di))
- required consultation with DEECA when updating curtailment in response to raptor monitoring (condition 96(dii))
- specified implementation of blade feathering to all turbines at condition 96(e)
- required bat detector surveys to be undertaken for at least two years after all turbines start operating (condition 96(g))
- required a Grey-headed Flying-fox monitoring program to be undertaken for the first two years after all turbines start operating (condition 96(h))
- refined condition 96(i) in relation to how farming activities will be managed to minimise risk of Black Falcon turbine collision and include these procedures in the BAM Plan
- included *a monitoring program of Brolga breeding wetlands within 5km of the wind farm site* (condition 96(j)).

BAM Plan timing

Moyne Council submitted:

- the BAM Plan should be finalised and approved as part of the EES
- the lack of the final plan constrained the IAC's ability to make evaluative findings about the nature, extent and significance of environmental effects on the Brolga and SBWB.

Moyne Council referred to the Golden Plains Wind Energy Facility as an example of why the BAM Plan must be settled before the permit is granted. It submitted:

- BAM Plans settled post-permit issue are prepared too late with limited public scrutiny, and occur well after construction is advanced
- the Minister's Assessment for the Willatook Wind Energy Facility EES and the Mount Fyans permit required BAM Plan approval as a condition before starting works and the same approach should apply to the Project.

Moyne Council considered the BAM Plan performance should be independently reviewed by a Moyne Council nominated ecologist.

The Proponent submitted the BAM Plan:

- cannot be settled until after the IAC and Minister provide advice and assessment on the EES and planning permit application
- is a well-considered document, has been through the TRG and exhibition process, and reviewed by DEECA
- has been tested through Dr Kulik's evidence.

(iv) IAC Response

BAM Plan purpose

The IAC agrees that the purpose of the BAM Plan is not to prevent impacts on bird and bat species, its purpose is to establish the process for adapting to mortalities should they occur. The task of preventing impact is in the design of the Project through siting and buffering turbines for the Project.

BAM Plan sufficiency

The IAC accepts DEECA's submission that supports the Bat Impact Assessment, subject to clarifying changes it recommended for the BAM Plan, but all of which it considers are appropriately addressed as part of the secondary consent approval process. The BAM Plan is required to be prepared in consultation with DEECA and DCCEEW and must be generally in accordance with the draft BAM Plan, therefore the clarifications that DEECA is seeking can form part of the consultation process.

The IAC agrees that the purpose of the Brolga Compensation Plan is to manage and monitor compensation measures, including the rehabilitation and ongoing management of offset sites. In contrast, monitoring of Brolga activity on and within 5 kilometres of the Project is directed towards understanding and managing the operational impacts and informing adaptive management responses.

The IAC also accepts DEECA's recommendation that monitoring be undertaken for a period of five years, consistent with section 5.2.1 of the draft BAM Plan. The IAC considers that a five-year monitoring period will provide sufficient data across a range of seasonal and climatic conditions to assess Brolga use of the Project site, evaluate the effectiveness of mitigation measures, and inform any adaptive management actions that may be required.

The IAC accepts DEECA's requested changes to the BAMP condition, including:

- requiring clear definitions of impact triggers and associated response processes
- procedures for reporting listed bird and bat strikes and annual monitoring results to DEECA and DCCEEW
- requiring a monitoring program for Brolga breeding wetlands within 5 kilometres of the Project site.

BAM Plan timing

The IAC agrees there is an inconsistent approach to the timing of BAM Plan approvals across wind energy facilities. Some permits require approval before development starts while others before the use commences.

The IAC recognises the draft BAM Plan was exhibited with the EES and went through multiple iterations before exhibition, including being the subject of comment through the TRG process (to which Moyne Council was a party). The exhibited draft was subject to further comment by DEECA in its submission on the EES, as well as further review by the Proponent, its lawyers and Dr Kulik as part of the preparation of her evidence statement. The IAC does not accept Moyne Council's view that the BAM Plan is absent or limited. The draft BAM Plan is detailed, sets out the process for identification and response to residual impacts on bird and bat species. The IAC also notes that DEECA accepts this plan and is therefore unlikely to transform from its current status to finalisation.

The IAC considers that the appropriate time for approval of the BAM Plan is before operation of the first turbine commences, as the primary purpose of the plan is to manage residual impacts arising from operational rather than construction activities.

The IAC notes that it is common for major projects to require secondary approvals, consents and management plans following the grant of a primary approval. These subsequent approvals typically rely on the preparation of more detailed information (such as confirmed location of turbines and overall site layout) and further assessment by the relevant regulators. The IAC considers this to be a standard and appropriate regulatory approach for a project of this nature and sees no reason why the BAM Plan must be finalised or approved before the planning permit is issued.

(v) Findings

The Inquiry and Advisory Committee finds:

- The Bat and Avifauna Management Plan will be sufficient for monitoring and managing potential impact on birds and bats during operation subject to the changes requested by the Department of Energy, Environment and Climate Action.
- The Bat and Avifauna Management Plan should be approved before the Project starts operating.
- The Department of Energy, Environment and Climate Action's requested changes to the Environment Management Framework and Permit conditions are acceptable.

5.5 Native vegetation

(i) The issues

The issues are whether:

- the assessment of native vegetation impact is appropriate
- the effects on native vegetation are acceptable
- suitable offsets can be provided.

(ii) Background

EES

Relevant EES sections:

- Chapter 8 (Biodiversity and habitat)

- Appendix D (Biodiversity and habitat).

Legislation, policy or guidelines

Relevant legislation, policy and guidelines include:

- the Guidelines for the Removal, Destruction or Lopping of Native Vegetation (the Native Vegetation Guidelines)
- the Significant Impact Guidelines – Matters of National Environmental Significance (Significant Impact Guidelines).

(iii) Evidence and submissions

The Proponent relied on the evidence of Dr Kulik regarding impacts on native vegetation.

Dr Kulik considered the Project, including road widening and swept paths combined, will have the following impacts on native vegetation dependant on the final transport route selected:

- Geelong route – loss of 7.895 hectares of native vegetation from patches and four large trees in patches
- Portland route – 8.080 hectares of native vegetation from patches and nine large trees in patches
- combined routes – 8.190 hectares of native vegetation from patches and nine large trees in patches
- the loss of four large and two small, scattered trees (all routes).

Dr Kulik explained the Project would result in a loss of listed communities comprising:

- 0.586 hectares (Geelong), 0.595 hectares (Portland) or 0.605 hectares (combined) of *Natural Temperate Grassland of the Victorian Volcanic Plain* (EPBC Act: Critically Endangered)
- 0.247 hectares of *Grassy Eucalypt Woodland of the Victorian Volcanic Plain* (EPBC Act: Critically Endangered)
- 0.743 hectares (Geelong), 0.806 hectares (Portland) or 0.818 hectares (Combined) of *Western (Basalt) Plains Grasslands Community* (FFG Act: threatened)
- 0.007 hectares (Portland or combined) of *Western Basalt Plains (River Red Gum) Grassy Woodland* (FFG Act: threatened).

Dr Kulik concluded that no EPBC Act listed flora species will be impacted and one FFG Act listed flora species will be impacted, being the Purple Blown-grass (FFG Act: Endangered).

She noted the following FFG Act-protected flora are susceptible to impacts from the Project on public land at the entrance point and from public road reserves:

- common Onion-orchid (protected under the FFG Act)
- Sun Orchid (member of a genus protected under the FFG Act).

Dr Kulik was satisfied the Project had been designed and assessed in accordance with the Native Vegetation Guidelines, including appropriate application of the avoid, minimise and offset hierarchy. She considered the impacts on native vegetation to be low and was satisfied that reasonable and appropriate efforts had been made through the Project design process to avoid and minimise native vegetation removal and associated habitat disturbance.

Submissions regarding native vegetation impacts considered:

- the Project's reliance on offsets had not been adequately justified
- it had not been demonstrated that impacts on native vegetation were unavoidable after all reasonable avoidance and minimisation measures had been exhausted
- the Project had not sufficiently demonstrated that residual impacts on native vegetation and biodiversity values could be effectively managed over the life of the Project
- the location of certain turbines and associated access tracks could be modified to further reduce or avoid impacts on native vegetation
- construction activities associated with the Project could introduce, spread or exacerbate the presence of weed species within the Project site and surrounding landscape.

DEECA did not object to a planning permit being granted to remove native vegetation, subject to standard conditions relating to offset obligations and vegetation management. DEECA concluded:

- the Project has appropriately applied the Native Vegetation Guidelines, adequately considered potential impacts on listed threatened flora species, and demonstrated that suitable mitigation measures can be implemented throughout all phases of the Project
- adequate steps had been taken to avoid and minimise native vegetation removal and associated impacts on biodiversity values
- further reductions in native vegetation impacts may be achieved once the final transport route is confirmed
- the exhibited mitigation measures for native vegetation were appropriate, including the preparation and implementation of a Construction Environmental Management Plan (CEMP) to manage vegetation and biodiversity impacts during construction
- suitable third-party offset sites have been identified by the Proponent and are currently available to meet the Project's offset requirements.

DEECA did not recommend any changes to the permit conditions or EMF regarding native vegetation.

(iv) IAC Response

The IAC agrees with Dr Kulik that native vegetation impacts are acceptable and consistent with the relevant guidelines.

The IAC is satisfied that native vegetation has been avoided and minimised through the Project's location on generally cleared farmland. Further changes are not warranted given the comparatively small amount of native vegetation to be removed and the availability of offsets.

The IAC is satisfied that:

- the native vegetation assessment has appropriately considered relevant legislation, policy and guidelines

- the design of the Project has been informed by the three-step approach in the Native Vegetation Guidelines
- adequate efforts have been made to avoid and minimise loss of native vegetation for the Project
- offsets for the removal of these ecological communities and native vegetation are available and are in the process of being secured.

(v) Findings

The Inquiry and Advisory Committee finds:

- The impact on native vegetation has been appropriately assessed.
- The effects on native vegetation are acceptable.
- Suitable offsets can be provided.

5.6 Other flora and fauna

(i) The issue

The issue is whether other flora and fauna species, in addition to the Brolga and Southern-Bent wing Bat, have been appropriately assessed.

(ii) Evidence

Dr Kulik explained:

- assessment of flora and fauna species other than the Brolga and SBWB, included desktop studies and field surveys over a period spanning seven years
- specific surveys were undertaken for flora, birds, bats, Growling grass frog, Freshwater Fish and the Golden Sun Moth.

Fauna

Dr Kulik stated that 17 listed or significant fauna species were recorded within the Project site during the site assessments or are known to occur in the study area. Of these species, the following listed threatened fauna species or avifauna species were considered susceptible to residual impacts at the Project site:

Birds

- Australasian Shoveler (FFG Act: Vulnerable)
- Australian Gull-billed Tern (FFG Act: Endangered)
- Black Falcon (FFG Act: Critically Endangered)
- Blue-billed Duck (FFG Act: Vulnerable)
- Blue-winged Parrot (EPBC Act: Vulnerable)
- Eastern Great Egret (FFG Act: Vulnerable)
- Freckled Duck (FFG Act: Endangered)
- Little Eagle (FFG Act: Vulnerable)
- Musk Duck (FFG Act: Vulnerable)
- Spotted Harrier (Species of interest in Lumsden et al (2019)).

Migratory birds

- White-throated Needletail (EPBC Act: Vulnerable, Migratory)

- Fork-tailed Swift (EPBC Act: Migratory).

Migratory shorebirds

- Common Greenshank (EPBC Act: Migratory)
- Common Sandpiper (EPBC Act: Migratory)
- Curlew Sandpiper (EPBC Act: Critically Endangered, Migratory)
- Double-banded Plover (EPBC Act: Migratory)
- Latham's Snipe (EPBC Act: Migratory)
- Marsh Sandpiper (EPBC Act: Migratory)
- Red-necked Stint (EPBC Act: Migratory)
- Sharp-tailed Sandpiper (EPBC Act: Migratory).

Dr Kulik noted a non-listed but susceptible fauna species, the Wedge-tailed Eagle was recorded consistently during bird utilisation surveys and at least two pairs observed in the Project site.

Dr Kulik considered:

- the Project is unlikely to result in a significant impact to the habitat of any of these bird species as only small areas of wetlands and woodlands are proposed to be impacted
- adaptive management plans, such as the BAM Plan and the EMF will effectively monitor these bird species and potential impacts to them during operations.

Mammals

Dr Kulik stated the Fat-tailed Dunnart (FFG Act: Vulnerable) has potential to occur, however, any impact to this species would be mainly due to direct loss of habitat and would be low to moderate, depending on extent of occurrence.

Reptiles

Dr Kulik stated:

- Striped Legless Lizard (EPBC Act: Vulnerable, FFG Act: Endangered) and Tussock Skink (FFG Act: Endangered) have potential to occur in grassland habitats
- grassland habitats along road reserves would be impacted by road upgrades in some sections, which would predominantly comprise removal of narrow sections along the inner roadside
- most of the highest quality grassland habitat remaining on the Project site for native fauna has been avoided and will be retained
- the impact on the local population on any grassland-dependent fauna is therefore likely to be limited.

Dr Kulik recommended habitat suitability surveys are carried out in potentially suitable fauna habitat (including non-native vegetation) before clearance by an ecologist or qualified fauna spotter-catcher which will inform the need for further targeted species surveys and any salvage/translocation to nearest retained habitat.

Listed Amphibians

Dr Kulik explained that surveys to map suitable Growling Grass Frog habitat were undertaken in November 2011 and November 2018 across the Project site, and this

mapping informed the layout of the Project to ensure suitable habitats were avoided wherever possible.

She concluded that no significant impact is anticipated to the Growling Grass Frog given their known sites are avoided and construction at creek crossing points is undertaken between April and August when activity is low.

Listed Invertebrates

Golden Sun Moth

Dr Kulik explained the Targeted Golden Sun Moth surveys did not record the species and determined a low likelihood of occurrence. She added:

- given the time elapsed since the surveys a precautionary approach has been adopted
- on this basis, the species has potential to occur and is considered susceptible to a low level of impact during the construction stage
- potential Golden Sun Moth habitat will be surveyed before construction to determine presence, and whether further avoid and minimise measures are needed.

Hairy Burrowing Crayfish

Dr Kulik stated the Hairy Burrowing Crayfish is known to occur in some areas within the Project site, but suitable habitats are largely avoided. However, some ephemeral floodplains have been impacted by the development footprint. Impacts are considered low. She recommended that works within areas with potential to harbor Hairy Burrowing Crayfish are carried out during drier months to avoid impact.

Yarra Pygmy Perch and Little Galaxias

Dr Kulik explained targeted surveys for the Yarra Pygmy Perch and Little Galaxias were undertaken and none of these species were recorded. In addition, no impacts to waterways or these species are anticipated.

Bats other than the SBWB

Dr Kulik noted that eight bat species (other than SBWB) and four multi-species complexes, were recorded during bat detector surveys. The Yellow-bellied Sheath-tailed Bat (FFG Act Vulnerable) was detected. She concluded:

- the level of activity of the Yellow-bellied Sheath-tailed Bat species was low, despite considerable survey effort
- it is unlikely the Project will result in the level of mortality that would significantly impact the species.

Grey Headed Flying Fox

Dr Kulik stated:

- the Grey-headed Flying-fox is unlikely to regularly use the Project site for feeding, given the limited availability of suitable foraging habitat within the Project site
- individuals may occasionally traverse the Project site while commuting

- the Grey-headed Flying-fox is unlikely to regularly use the Project site for feeding based on observations of them departing the nearby camp in a predominantly westerly direction
- it is unlikely the Project would result in mortality levels that would constitute a significant impact on the species under the Significant Impact Guidelines.

Management and Mitigation Measures

Dr Kulik explained that a range of mitigation measures are proposed to address potential impacts on flora and fauna species, including specific measures directed to:

- Wedge-tailed Eagle
- Blue-winged Parrot
- Gang gang Cockatoo
- Growling Grass Frog
- Hairy Burrowing Crayfish
- Striped Legless Lizard
- Tussock Skink
- Black Falcon.

(iii) Submissions

Several submissions raised concerns regarding the assessment of other flora and fauna impacts including:

- adequacy and seasonal coverage of biodiversity surveys undertaken for the Project
- adequacy of the Bird Utilisation Surveys and the resulting assessment of avifauna impacts
- potential impacts on birds and bats arising from collision risk with wind turbines
- whether sufficient consideration had been given to impacts on Wedge-tailed Eagles
- potential underestimation of impacts on threatened fauna species, particularly birds and bats
- observations of Grey-headed Flying-foxes flying towards and potentially using the Project site
- adequacy of survey effort and impact assessment for Wedge-tailed Eagle, Black Falcon, Blue-winged Parrot and Latham's Snipe
- that the Australian Bittern had not been adequately considered in the assessment and that additional targeted surveys should be undertaken
- potential habitat disturbance and collision risks for Latham's Snipe and Australian Painted snipe.

DEECA submitted it reviewed the potential impacts of the Project on threatened fauna and was generally satisfied that impacts have been avoided, minimised and mitigated to the extent practicable and made the following comments on the Black Falcon, Blue-winged Parrot and Grey Headed Flying Fox. DEECA's submission is summarised in Table 11.

Table 11 DEECA submission on other flora and fauna species

Species	DEECA Submission
Black Falcon	It is aware of 12 Black Falcon mortalities in the Victorian local government areas of Golden Plains, Corangamite and Moyne, including eight mortalities in 2025/26, which indicates that wind energy facilities can impact the species. Dr Kulik's evidence responds to DEECA's recommendation to consult with relevant landholders regarding farming practices that may attract Black Falcon before finalising the BAM Plan, and that outcomes will be incorporated into the BAM Plan. DEECA's recommendation to include pre-construction surveys, rather than post-construction surveys has also been responded to and accepted in the Ecology evidence. The EMF should be updated to reflect this commitment. It supported measures in the EMF, including buffering from any identified breeding sites during construction and curtailing turbines in proximity to active breeding nests during operation, based on the findings of the pre/post-construction surveys. The BAM Plan monitoring timeframes should align with the length of the BAM Plan, for example, five years rather than two years, and a clearer methodology outlined, where the monitoring would occur, and how long will roaming surveys to look for breeding activity be carried out. No mitigation measures have been specifically committed to for collision impacts in the BAM Plan, other than if an active nest is recorded. It is accepted that a combination of mitigation measures is likely to reduce the residual risks and impacts to the species. The BAM Plan should describe how the combination of potential mitigation measures will help to mitigate impacts to Black Falcon, including how the proposed smart curtailment and blade painting would be proposed to be implemented, and demonstration that the approach will effectively reduce the residual risk to Black Falcons. This detail can be resolved at a later stage.
Blue-winged Parrot	While uncertainty remains around the potential collision risk to this species, potential impacts are proposed to be managed through species-specific management measures proposed in the BAM Plan which is supported by DEECA. It supports the measures in the EMF which propose a pre-clearance survey of potential mature treed habitat to be removed during the breeding season (spring and summer) to identify active breeding locations. However, recommends this be expanded to determine if the species is breeding within and surrounding the Project site. This is to ensure potential mitigations can capture breeding locations in areas not proposed to be removed, as required. The Proponent should provide further information that the nest boxes to replace any tree hollows that Blue-winged Parrots may use for nesting: - are a sufficient replacement option - will be sited in appropriate locations to not increase collision risk to the species.

Species	DEECA Submission
Grey Headed Flying fox	It supports the Grey-Headed Flying Fox monitoring measure in the EMF describing the proposed two-year postconstruction monitoring proposed for Grey-Headed Flying Fox. The EMF should include a measure to survey potential food sources as part of the post-construction monitoring west of the Grey-Headed Flying Fox camp.

DEECA submitted it reviewed and made drafting changes the Proponent's permit conditions (version 2) and acknowledged that many of the recommendations made in its exhibition submission have been addressed through the drafting of the permit conditions.

DEECA reiterated the following amendments to the EMF from its exhibition submission that have not yet been addressed:

- a requirement to undertake a pre-construction targeted survey for the Black Falcon, for example, added to BA01-7, and the results be included in and inform development of the BAM Plan
- BH06(1a) is amended to replace pre-clearance surveys with a targeted survey during the breeding season (spring and summer) to identify active breeding locations, and the methodology to be prepared in consultation with DEECA
- BH06(1c), (1d) and (2) includes a requirement to investigate the adequacy of nest replacement boxes, and that any proposed siting location will be undertaken in consultation with DEECA.

The Proponent confirmed the draft BAM Plan considers the following management measures to manage residual impacts on raptor and bird species:

- post-construction surveys for the Wedge-tailed Eagle and Black Falcon, to identify nest locations
- identifies buffer distances around Wedge-tailed Eagle and Black Falcon nest during which daytime curtailment will occur for turbines during breeding attempts and until fledging or nest failure
- identifies weekly carrion removal across the Project site, as a mitigation measure to reduce attraction of raptor species
- includes a hierarchy of species-specific management strategies for the Wedge-tailed Eagle and Black Falcon, to be adopted if carcasses of those species are identified in proximity to turbines
- includes more general triggers and mitigations for non-threatened bird species
- mitigation measures directed to residual impacts on the following species: White-throated Needletail, Fork-tailed Swift, and Blue winged parrot
- the presence of the Australasian Bittern will be considered as part of the bird utilisation surveys required by the BAM Plan
- specific monitoring requirement for migratory shorebirds including the Latham's Snipe at 'moderate to high value' wetlands, with an adaptive management response required where large numbers of shorebirds are identified
- impact triggers and mitigation measures directed to Grey-headed Flying-fox; and Yellow-bellied Sheath-tailed Bat.

DEECA made minor changes to the permit conditions (version 2) specifically regarding conditions of other threatened species. DEECA's changes included:

- specifying that before development starts, Threatened Species Management Plan must be prepared in consultation with DEECA 'Regions' and completed to the satisfaction of the 'responsible authority'
- the Threatened Species Management Plan must include specific measures to avoid minimise and mitigate impacts unless 'agreed' by DEECA.

(iv) IAC Response

The IAC considers that a comprehensive assessment of potential impacts on flora and fauna has been undertaken, informed by both desktop investigations and field surveys conducted over a period of approximately seven years. It accepts the findings of the Flora and Fauna Assessment and evidence of Dr Kulik.

The draft BAM Plan specifically addresses potential impacts on raptor species through a framework of targeted surveys, setback requirements and mitigation measures. The IAC gives weight to the fact that the BAM Plan has been reviewed and accepted by DEECA.

The IAC accepts DEECA's minor amendments to the Proponent's Version 2 draft permit conditions relating to other threatened species. In particular, the IAC supports the amendments requiring that, before development commences, a Threatened Species Management Plan be prepared in consultation with DEECA Regions and completed to the satisfaction of the responsible authority, and that the Plan must be agreed by DEECA.

In relation to non-raptor bird species, the IAC is satisfied that the assessment has adequately considered potential impacts and that appropriate avoidance, mitigation and management measures have been incorporated into the draft BAM Plan. Submissions did not identify any threatened bird species that had not already been considered through the ecological impact assessment and addressed within the proposed management framework.

(v) Findings

The Inquiry and Advisory Committee finds:

- The impacts to other flora and fauna species have been appropriately assessed.
- The Project is not expected to result in significant impacts on other flora and fauna species that would warrant further modification of the Project.
- An appropriate management framework is proposed to manage potential impacts on other flora and fauna species.

5.7 Matters of National Environmental Significance

(i) The issues

The issues are whether:

- the Project is likely to result in significant effects on Environment Biodiversity and Protection Act-listed threatened species and ecological communities
- such effects are acceptable and will not compromise the recovery of any threatened species or ecological communities.

(ii) Evidence and submissions

Refer to Chapter 6.5 and 6.6 of this report.

(iii) IAC Response

The IAC accepts the evidence of Dr Kulik that identified 17 fauna species, two flora species and three ecological communities of national environmental significance as either present or potentially present in the Project site.

The IAC accepts the conclusion reached in respect of MNES that the Project has the potential for 'significant' impact on two ecological communities and one fauna species:

- Natural Temperate Grassland of the Victorian Volcanic Plain
- Grassy Eucalypt Woodland of the Victorian Volcanic Plain
- The Striped Legless Lizard.

The IAC accepts Dr Kulik's evidence that the principal impacts on these species arise from vegetation removal associated with road widening works along transport routes. The IAC is satisfied that the Project has applied the mitigation hierarchy by seeking to avoid impacts where possible, minimise impacts where avoidance is not feasible, and offset any residual impacts.

The IAC agrees that residual impacts on these species cannot be completely avoided and offsets will be required. Suitable offsets have been identified, are available, and are currently being secured to address these unavoidable impacts.

(iv) Findings

The Inquiry and Advisory Committee finds:

- The potential impacts on Matters of National Environmental Significance have been appropriately assessed.
- The Project has the potential to have a significant impact on two ecological communities and one species:
 - Natural Temperate Grassland of the Victorian Volcanic Plain
 - Grassy Eucalypt Woodland of the Victorian Volcanic Plain
 - Striped Legless Lizard.
- With the provision of offsets, effects on the above listed species are acceptable and do not preclude the Project being approved.

6 Landscape and visual amenity

6.1 Background

(i) EES

Evaluation objective

Avoid and, where avoidance is not possible, minimise and manage potential adverse effects on landscape and visual amenity.

The EES identifies key issues as:

- potential for nearby residents and communities to be exposed to significant effects to the visual amenity
- potential effects on landscape, including significant volcanic and other landforms, through removal or covering of features or reshaping of surfaces
- potential cumulative impacts of other operating and approved wind energy facilities on landscape values of the region.

EES Chapter 14 (Landscape and visual) assesses landscape and visual amenity.

A Landscape and Visual Impact Assessment (LVIA) is included at EES Appendix F1.

The LVIA concluded the visual impacts of infrastructure associated with the Project can generally be reduced to acceptable levels through careful siting, design, screening and landscape treatment, and most infrastructure would be viewed as compatible with the existing agricultural landscape character.

The key findings of the LVIA are:

- Existing vegetation and landscape features and structures already limit visibility in many locations.
- The Project will alter the existing rural landscape, but that landscape is not significant and has been highly modified.
- Further change to the existing landscape is not inherently unacceptable.
- Most of the representative public viewpoints experience low or negligible visual impacts, seven viewpoints had a visual impact rating of moderate and three had a visual impact rating of moderate-low.
- There are no significant tourist or designated viewpoints impacted by the Project.
- Impacts to private viewpoints are concentrated locally, particularly at a small number of dwellings nearby to the proposed turbines.
- Of the 27 representative assessed private viewpoints, two were high impact, seven were assessed as moderate impact and the remaining were either low or no impact.
- Mitigation (especially screening and planting) can substantially reduce impacts at affected dwellings, as can management of nighttime lighting.
- With mitigation screening, residential impacts were assessed as moderate for two dwellings, moderate-low for one dwelling and either low or no change for the remaining dwellings.
- Impacts across all private viewpoints can be reduced to an acceptable level with mitigation (predominantly screening).

Regarding potential cumulative impacts, the LVIA stated:

- they predominantly relate to views where the Project would be seen simultaneous to other nearby operating, constructed, approved and proposed wind energy facilities
- the Project will likely be viewed as an extension to the Mount Fyans wind energy facility
- the broader regional character is likely to be perceived as a landscape characterised by wind energy facilities
- cumulative views are largely confined to distant, high-speed views along tourist routes and will have low moderate impact.

The LVIA recommended that landscape screening be offered to owners with dwellings within 6 kilometres of a turbine.

A peer review of the LVIA is included at Appendix F2. It concludes the LVIA adopts a sound methodology, consistent with industry best practice and is acceptable for decision making.

Planning Scheme

The Farming Zone includes decision guidelines which the responsible authority must consider as appropriate:

- The impact of the siting, design, height, bulk, colours and materials to be used, on the natural environment, major roads, vistas and water features and the measures to be undertaken to minimise any adverse impacts.
- The impact on the character and appearance of the area or features of architectural, historic or scientific significance or of natural scenic beauty or importance.

Clause 52.32 (Wind energy facilities) includes a purpose, application requirement and decision guidelines regarding landscape and visual impact.

Relevant provisions from the Planning Policy Framework are:

- Clause 02.03-2 (Environment and landscape values)
- Clause 12.05-2S (Landscapes)
- Clause 19.01-2S (Renewable energy).

(ii) Legislation, policy and guidelines

The following guidelines are relevant:

- Planning guidelines for development of wind energy facilities (DTP, September 2023)
- Best Practice Guidelines for the Implementation of Wind Energy Projects in Australia
- National Wind Farm Development Guidelines (draft).

6.2 Methodology

(i) The issue

The issue is whether the LVIA has applied an appropriate methodology for assessing landscape and visual impacts.

(ii) Evidence and submission

Submissions and evidence discussed the methodology in both general terms and in relation to cumulative impacts.

The Proponent submitted that the LVIA sets out a comprehensive assessment for landscape character of the Project and surrounds. It said the LVIA:

- identified six landscape character units within a 25-kilometre viewshed of the Project, and the main character of 'Volcanic Plains' had low scenic quality rating
- assessed turbine visibility based on distance from viewers and the human field of view where turbines can be seen
- modelled the theoretical visibility of turbines across the landscape
- assessed visual impacts on public and private viewpoints using a matrix considering viewer sensitivity and the scale and magnitude of visual effects, including distance, duration and screening
- assigned a visual effect rating to each viewpoint, including a residual effect rating after mitigation measures were applied.

The Proponent relied on the LVIA Peer Review findings which concluded that the LVIA methodology was comprehensive and appropriate for assessing visual impacts associated with the Project.

The Proponent called Mr Moir (a reviewer and approver of the LVIA) as a landscape and visual expert. He stated:

- the LVIA appropriately addressed the assessment requirement of the EES and was consistent with accepted landscape and visual assessment practice
- the landscape character description and scenic quality was informed by a range of factors including planning controls and the degree of landscape distinctiveness and overall condition
- 27 of 49 non-host dwellings within 3 kilometres of a turbine underwent detailed assessment and representative viewpoints were used for dwellings beyond 3 kilometres from a turbine
- 37 public viewpoints focussed on views from which the Project is most likely experienced, including around townships, intersections and major public roads
- photomontages were prepared for the public viewpoints to reflect a range of distances and orientations to the Project.

Mr Moir explained the 3 kilometre and 6 kilometre thresholds were determined by:

- modelling where turbines could theoretically be seen across the landscape and assessing the impact in terms of the extent of change and viewer sensitivity
- assessing how noticeable the turbines are by considering viewing distance and the proportion of the view they occupy
- assigned thresholds for visibility of turbines:
 - always visually dominant within 3 kilometres
 - visual and potentially dominant between 3 kilometres to 6 kilometres
 - not visually dominant beyond 6 kilometres.

Mr Moir explained that visibility of turbines was largely informed by distance, context in which the turbines are read, screening elements and landscape character as well as viewpoint type. On the question of subjectivity of impact, he considered:

- visual assessments should focus on measurable changes to views and landscape character rather than individual subjective responses
- personal attachments to the landscape and individual perceptions of visual change were matters more appropriately explored through social impact assessment and community engagement processes
- the methodology provided a framework for ensuring consistency, though the LVIA involves some professional judgement, particularly in distinguishing between moderate and high visual effect ratings.

Moyne Council put to Mr Moir that the LVIA's use of a 130-metre-tall turbine as a typical turbine design image for a project proposing 260 metres turbines was misleading and inappropriate. Mr Moir explained the image was intended to show form and not scale. The Proponent said the image had no role in assigning visual impact ratings.

Moyne Council focussed on the aspects of the methodology that required qualitative judgement and were beyond the scope of the LVIA Peer Review. It submitted:

- visualisation material is insufficient for a project of this scale
- alternative design options were not adequately tested
- the assessment relies too heavily on screening as a mitigation response.

Submissions raised concern about:

- the assumptions that turbines would not be visually dominant beyond 3 kilometres
- the accuracy and representativeness of photomontages and visual simulations
- the selection of viewpoints
- assessment of landscape sensitivity and scenic quality.

Cumulative impacts

Regarding the methodology for cumulative impacts, the Proponent submitted:

- The LVIA evaluates the combined visual effects of the Project and nearby wind energy facilities where they may be seen together.
- From some public viewpoints it may be possible to see the Project and turbines from other wind energy facilities.
- The LVIA concludes that cumulative impacts on private viewpoints are most likely to arise in combination with the proposed Mount Fyans wind energy facility.
- The impacts from private viewpoints are largely confined to the nine non-host dwellings within 6 kilometres of a turbine from either the Project or the Mount Fyans wind energy facility.

Mr Moir stated the LVIA assessed cumulative impacts by:

- considering the existing, approved and proposed wind energy facilities and other developments within a 100 kilometre radius
- assessing cumulative effects during both the construction and operational phases
- identifying the Mount Fyans as the wind energy facility most likely to generate cumulative visual effects with the Project
- assessing the potential for simultaneous views of multiple wind energy facilities
- considering the influence of existing vegetation and landscape features in fragmenting or screening views with potential cumulative impact.

Moyne Council considered that cumulative impacts have not been adequately assessed. It took issue with the cumulative impact assessment including lack of:

- photomontages (some submitters raised similar issues)
- site inspection for the nine dwellings identified by the LVIA as experiencing cumulative impacts, as the assessment was desktop only.

Other submissions considered:

- there was an inadequate assessment of cumulative effects of multiple wind energy facilities in the region
- the combined landscape and visual amenity impacts are greater than the impact of the Project alone.

(iii) IAC response

The IAC considers the LVIA methodology is generally sound and provides an appropriate basis for decision making.

The 3-kilometre and 6-kilometre thresholds:

- are generally reasonable for assessing visual impacts of the Project
- are based on landscape assessment principles relating to visual prominence and perception, and tailored to turbine height
- provide a practical way to estimate where impacts are likely to occur.

There was no competing evidence to suggest otherwise.

The LVIA does not rely on the thresholds alone and considers visibility (including theoretical), topography, screening elements, visual sensitivity and landscape character.

The IAC accepts the LVIA's underlying principles that:

- turbines closer to dwellings are more likely to appear dominant, particularly where there is little intervening vegetation or built form
- there is reduced visual dominance of turbines that are more distant, partially screened, or seen in the context of existing structures
- impact of turbines varies depending on viewpoint and whether views are experienced from a static position or as a road user.

The LVIA's approach to selecting private viewpoints is appropriate, whereby:

- some viewpoints underwent detailed assessment to verify or modify findings of the desktop assessment
- other viewpoints had sufficient representative examples in similar landscape contexts to demonstrate a range of viewpoint conditions.

It is appropriate to exclude host dwellings from visual impact rating, consistent with LVIAs for other wind energy facilities. Non-host dwellings are more likely (than host dwellings) to experience visual impacts without receiving direct benefit.

The public viewpoint locations were informed by locations most likely frequented by locals and visitors, and are distributed around the Project site.

Photomontages have limitations including the inability to represent actual views, by representing certain and stationary conditions. However, they remain a useful tool to

inform judgement, when used alongside other assessments including the theoretical visibility and site inspections.

That said, visual impact assessment requires professional judgement. Assigning impacts, particularly at the moderate and high level, is not purely quantitative. These aspects were not peer reviewed and Mr Moir acknowledged another expert may have applied the threshold differently. There is a notable distinction between moderate and high impact. The difference changes whether:

- turbines permanently change the landscape character
- they are seen in middle ground or foreground views.

This places greater weight on the consequences of the impacts.

The absence of a peer review on the qualitative judgements is not necessarily a shortcoming. Instead, it calls for closer examination of qualitative aspects such as the extent of change to landscape character.

The IAC is satisfied, with support from the LVIA Peer Review, that the LVIA adopts a generally accepted methodology and draws on recognised landscape assessment guidance. The scoping requirements have been appropriately addressed. The LVIA includes site inspections, landscape character assessment, visibility modelling and assessment of representative public viewpoints. The representation of the more open views in the photomontages is generally consistent with the IAC's site inspection. Any limitations of the LVIA will not undermine its overall conclusions.

The image of a shorter turbine than proposed is an acceptable representative form that has not informed visual impact assessment of the Project.

Cumulative impacts

The LVIA appropriately focuses on locations where cumulative effects are likely to be experienced.

The IAC accepts the focus of impact arises from simultaneous and sequential views of the Project and Mount Fyans wind energy facility from public viewpoints and nine private viewpoints. This aligns with the 6-kilometres threshold.

Cumulative impacts were considered across the broader South-West Renewable Energy Zone context, noting the other next nearest wind energy facilities are located about 15 kilometres away. The existing context comprises operating and approved wind energy facilities of which their visual impacts are not open for the IAC's re-examination.

The IAC notes Moyne Council's concern regarding the limited use of cumulative photomontages and the desktop assessment of the nine dwellings identified as potentially experiencing cumulative impacts. The LVIA has appropriately assessed private viewpoints because the photomontages show the proposed turbines in the most likely impacted view within the context of photographed existing vegetation and structures.

Additional photomontages may have been useful to illustrate the cumulative visual effects from some locations, however further assessment is unnecessary. The documented visibility mapping, viewpoint assessments and expert evidence are considered sufficient.

(iv) Findings

The Inquiry and Advisory Committee finds:

- The Landscape and Visual Assessment has applied an appropriate methodology for assessing landscape and visual impacts.
- It is acceptable for the Landscape and Visual Assessment to show the image of a shorter turbine than what is proposed, for the purpose of representing turbine form.

6.3 Resident and community impact

(i) The issue

The issue is whether the Project will result in significant or unacceptable visual impacts to nearby residents and communities.

(ii) Evidence and submissions

The issues raised focused on the visual impact ratings in the LVIA, the assessment methodology, proposed mitigation measures and the significance of any residual visual impacts following mitigation.

The Proponent submitted:

- the EES appropriately assessed visual amenity impacts and demonstrated that the resulting visual effects would be acceptable in planning terms
- the Project would change views from some non-host dwellings and several dwellings would experience moderate or high visual impacts
- any visual impacts should be weighed against:
 - the Project's broader renewable energy and community benefits
 - the broader planning framework, including the strong policy support for renewable energy development
 - the modified landscape character
 - the absence of planning controls identifying the area as a landscape of particular significance.
- the proposed mitigation measures would manage visual impacts, including permit conditions landscaping or cash contribution if a landowner chooses.

The Proponent submitted that, as supported by Mr Jennings, no aviation lighting is proposed and any future lighting impacts would be managed through permit conditions.

Mr Moir said the LVIA findings and conclusions remained valid after considering submissions and conducting additional site inspections. He explained:

- the impacts on dwellings were assessed through a combination of detailed dwelling assessments, representative viewpoints, visual catchment analysis, photomontages and viewer sensitivity
- both primary and secondary views were considered for dwellings within 3 kilometres of the turbine
- of the 49 non-host dwellings within 3 kilometres of a turbine:
 - existing vegetation or structures substantially screened 39 dwellings
 - there were detailed visual assessments for 27 non-host dwellings.

On mitigation, Mr Moir stated:

- measures were applied during the design phase, and relocation of turbines is not needed to address any identified impact
- landscaping had potential to manage impacts during the operation phase
- landscaping will be property-specific, negotiated with the landowner and should occur before construction
- measures other than landscaping would be available for landowners that prefer to maintain open views.

Moyne Council submitted:

- alternative turbine layouts, siting changes or turbine deletions had not been sufficiently explored to reduce impacts on affected dwellings
- too much reliance was placed on vegetation screening
- the long-term effectiveness of proposed landscaping measures had not been demonstrated
- the peer review process did not adequately test the aspects of the LVIA that relied on professional judgement.

Moyne Council sought a 5-kilometre turbine-free buffer to protect amenity of nearby townships and avoid cumulative impacts on residents and communities. This would require relocation of four turbines.

Hexham Community Environmental Action Group Inc (HAEC) submitted the visual impact would negatively impact the community's lived experience, enjoyment of dark skies, open views and rural character.

Other submissions raised issues related to:

- visual dominance of turbines from dwellings
- impacts on open views and change in rural character
- change to enjoyment of property
- effects on dark skies and the potential visibility of aviation lighting
- ineffectiveness of mitigation landscaping to screen the turbines
- potential for mitigation landscaping to enclose the openness of the landscape
- requests for alternative viewpoint locations in detailed dwellings assessments.

In closing, the Proponent maintained its primary position and submitted:

- the LVIA provided a robust basis for evaluating impacts
- the proposed permit conditions provided an appropriate framework for managing visual amenity impacts associated with the Project.

The Proponent, DTP and Moyne Council each proposed different drafting around the engagement with landowners about landscaping on properties:

- Proponent – offering landscaping to landowners
- DTP – consulting with landowners on the design and timing of landscaping implementation
- Moyne Council – added to DTP's condition that landscaping is established before uses start, should a landowner choose.

(iii) IAC response

The relevant question regarding visual impact from a private viewpoint is not whether the turbines will be visible but the extent of visual effects and whether they are acceptable. For a planning permit application, the impacts must be weighed against the Planning Scheme provisions and broader policy support for renewable energy.

Visual impact

Based on the evidence before it, including the photomontages and its site inspection, the IAC is satisfied that the LVIA adequately represents the likely visual relationship between the proposed turbines and nearby dwellings.

The Project has sufficiently demonstrated steps to avoid impacts by design. A default 1.5 kilometres buffer from turbines has been applied to most dwellings and permit conditions require use of non-reflective materials. These measures assist to reduce visual impacts without relying on mitigation. There was no evidence that turbine relocation or deletion is necessary to achieve an acceptable visual outcome.

The IAC accepts the LVIA's conclusion that the Project will result in a low visual impact for most dwellings. A low impact rating does not mean no impact. Turbines may be visible from these dwellings but are unlikely to dominate views or result in an unacceptable change to the landscape character. Intervening screening elements will filter or partly obscure views of the turbines from these dwellings.

Steps to avoid impacts through design are apparent through the default 1.5 kilometres that applies to most dwellings and permit conditions for use of non-reflective materials.

For several dwellings however, the visual impacts will be moderate to high. These impacts carry greater weight than those from public viewpoints because residents experience these views for longer periods from both indoor and outdoor primary living areas. These impacts are real and potentially significant visual impacts for the residents.

The LVIA assessed moderate visual impacts will be likely for dwellings D39, D295, D352, D413, D421, D435 and D425. Though the degree of prominence varies between dwellings, the photomontages show that for moderate impacts, the turbines will be a noticeable and visually prominent feature of the landscape. Views to some defining landscape features such as agricultural land use, shelter belts and landform will continue nonetheless, and to a greater degree than high impact views.

For the two dwellings assessed with a high visual impact rating (D622 and D445), the Project will result in a significantly changed visual experience that may remain even after mitigation. The turbines will occupy most of the views from these dwellings and become the dominant visual element. Most of the turbines, to their full height, will be visible and close to the dwellings. The high visual impact rating is appropriate.

Given the openness experienced in these views, additional screening itself may alter the landscape character that contributes to the amenity of these dwellings. The overall landscape effect after mitigation may not be moderate or low as assessed by the LVIA. The IAC is not entirely persuaded that mitigation measures would reduce impacts below a high to moderate level.

Lighting for aviation or as associated with ancillary infrastructure will be appropriately managed by the Proponent's proposed permit conditions. These include requirements to reduce the extent, duration and intensity of both temporary and permanent lighting.

Mitigation

The proposed mitigation framework is generally appropriate for achieving acceptable impacts.

The IAC accepts the expert evidence that further avoidance measures, including turbine relocation, is not required. No evidence demonstrated that such measures would materially improve the visual experience of viewpoints.

Landscaping is an accepted and commonly used technique to reduce the visual prominence of turbines from dwellings. Purposefully designed planting can filter foreground views, reduce contrast, soften the appearance of turbines and assist integrating turbines into the broader landscape. The permit conditions offer landscape screening to dwellings within 6 kilometres of a turbine, focussing on views from primary external or internal living areas, consistent with the LVIA thresholds and recommendations.

With landscaping mitigation:

- planting will take time to establish, may not fully screen turbines from all views and may not be landowners' preference
- in some cases, additional planting may itself change the valued openness of outlooks, or affect personal or business preferences for landowners
- different view locations on a property may result in different visual outcomes.

The proposed opt-in landscaping program is appropriate for achieving landscape outcomes. The program is property-specific, includes an establishment and maintenance schedule and offers an alternative cash contribution. Viewpoints with primary external or internal living area can be considered at this stage. Planting vegetation early so maturation occurs before the turbines are constructed would be ideal. However, this is not essential as any interim impact, though undesirable, will be temporary.

The IAC supports permit conditions from the Proponent and DTP to achieve engagement with landowners about landscaping on properties that includes:

- an offer of cash contribution to secure this as an alternative mitigation measure to landscaping, applicable to any facility operator
- consultation with landowners, as per standard wind energy facilities, is important given detailed assessments were not carried out for every relevant dwelling and visual impacts vary from different viewpoints.

There is sufficient flexibility in the two permit conditions to consider landowner preference for timing of landscaping.

On balance, the visual impacts on residents and communities are considered acceptable when balancing:

- the absence of specific landscape protection in the Planning Scheme
- the generally low impacts from private viewpoints
- the proposed mitigation measures.

The Project meets the relevant evaluation objective to avoid, minimise and manage potential adverse effects on landscape and visual amenity.

(iv) Findings

The Inquiry and Advisory Committee finds:

- The Environmental Effects Statement has appropriately assessed the landscape and visual impacts and addressed the scoping requirements.
- The Landscape and Visual Impact Assessment provides an appropriate basis for assessing landscape and visual impacts of the Project.
- The landscape, comprising the Project site and its surrounds, is not formally recognised as one with particular significance or value that should be protected.
- The Project will result in visual impacts to the landscape, but these impacts will generally be low, though moderate impacts will occur in some instances.

(v) Recommendation

The Inquiry and Advisory Committee recommends:

Revise the permit conditions (final version), as shown in Appendix F, to require consultation regarding landscaping on private properties with affected landowners in the condition related to off-site landscaping.

6.4 Landscape impact

(i) The issue

The issue is whether the potential effects on landscape are acceptable, including on significant volcanic and other landforms, through removal or covering of features or reshaping of surfaces.

(ii) Evidence and submissions

Submissions raised two key areas of dispute:

- the significance of the existing landscape
- the extent to which the LVIA assigns the scale of landscape change.

Proponent

The Proponent relied on the LVIA and the evidence of Mr Moir who concluded that the Project would result in acceptable landscape and visual effects.

The Proponent submitted:

- the LVIA comprehensively assesses landscape character and visual effects
- the Project will change the way that people experience the landscape from public viewpoints but, in most part, the turbines will not dominate these views
- the Project will change how people experience the landscape from public viewpoints but would not fundamentally alter the underlying rural and agricultural landscape character
- the impacts are clearly acceptable given the Project site and planning context

- the visual impacts should carry less weight in overall planning balance than in a more protected or scenic landscape context, given:
 - the Farming Zone mainly supports agriculture, though it considers amenity, visual character, vistas and scenic qualities
 - Clause 52.32 decision guidelines require consideration of impacts on significant views, visual corridors and sight lines
 - there are no formally identified significant views in the Planning Scheme within project site and context.

In response to questions from the IAC, the Proponent explained the vegetation the LVIA relies on to inform its assessment is not proposed to be removed.

Mr Moir considered the Project would result in low to moderate visual effects from most public viewpoints. He explained:

- the landscape comprises highly modified agricultural land that lacks significant views, heritage, major natural landscape features or remnant vegetation that materially contributes to landscape value
- the turbines would become the tallest structure in the landscape, but their visual prominence diminishes with distance and is influenced by topography, vegetation, built form and the broader viewing context
- the height of the turbine reads as less recessive in the landscape than a building of equivalent height as it occupies less space and is comparatively slender and lighter in appearance.

Mr Moir considered:

- the acceptability of visual impacts should be assessed against the scenic quality and significance of the landscape
- the surrounding landscape was not one where change should (or is sought to) be avoided.

Moyne Council

Moyne Council submitted the IAC should be cautious in relying on the LVIA conclusions that rely on professional judgement as they were not independently reviewed. It said that strong planning policy support for renewable energy does not remove the need for rigorous assessment of landscape and visual effects.

Moyne Council considered the LVIA:

- understates the scale of change that would result from the introduction of 106 turbines that are 260 metres tall
- does not adequately reflect:
 - the openness of the volcanic plains landscape
 - how prominent the turbines would be in the landscape
 - that additional mitigation landscaping may itself alter landscape character.

Other submissions

HAEC said the Project represents an industrial-scale development that is incompatible with the rural and agricultural character of the volcanic plains landscape. Other submitters raised similar concerns including of 'visual pollution'.

HAEC questioned whether the LVIA appropriately assesses the scenic value of the landscape and the visual effects of the Project. Other submitters raised concerns regarding the LVIA's inadequate reflection of local values for the openness, expansive views and volcanic plains character of the landscape.

Submissions disputed the existing vegetation screened impacts on public viewpoints to the extent relied on by the LVIA.

The Proponent maintained its position and submitted:

- neither the scale of the Project nor the height of the turbines will result in impacts that would be unacceptable
- any impacts must be considered within the planning context.

(iii) IAC response

Landscape character and value

Submissions sought to protect certain valued landscapes, however the Planning Scheme does not identify any of them as significant or for protection. The IAC is required to consider the significance and acceptability of potential landscape impact through the EES evaluation objectives and existing planning framework which includes the Planning Scheme provisions. This framework differentiates what is valued by the broader community from what is valued by a smaller number of local community members. The IAC agrees with the LVIA characterisation of the existing landscape as a modified agricultural landscape with relatively limited topographic variation.

Visual impact

The IAC agrees with the LVIA conclusions that visual impacts to landscape character will generally be low, though moderate and potentially high impacts will occur in some instances. The turbines will be significantly taller than existing landscape features and structures in numerical terms, however height alone is not a default for a high impact rating nor an indicator of acceptability. Visual effects vary considerably depending on viewing location, duration, distance, topography and intervening screening elements. These are appropriately addressed in the LVIA.

The IAC largely agrees with the findings of the LVIA in terms of landscape character and visual effects. The principles explained in the LVIA about how the turbines will be read in the landscape are generally consistent with the photomontages and the IAC's observations of the area during its site inspection. The landscape valued by the local communities will largely remain with the presence of turbines. Although they will be substantially taller than existing structures in the landscape, the turbines will not remove the key visual elements of the landscape and visual cues of the locale. These include predominantly agricultural land uses set on volcanic plains with open swathes of pastures, shelter belts and farm-related structures, as well as the landform itself. This is evident in the photomontages.

Most public viewpoints are experienced by road users in transit for short periods of time. Combined with the screening effect of intervening vegetation and structures, this reduces the duration and intensity of visual effects. There may be sections of roads

where the views to the turbines are longer in duration or greater in intensity than others, but they remain transient, nonetheless, reducing the overall impacts.

Importantly, the existing vegetation which limits views of the Project will largely remain, meaning the assumptions underpinning the assessment remain relevant during the operation phase.

From certain public viewpoints however, the Project may be moderately to highly visible, and these impacts are not understated in the LVIA. These are viewpoints VP03, VP04, VP05, VP12, VP16, VP22, VP23, VP28 and VP33. The turbines will be a prominent feature in these views, though the underlying landscape will remain visible. These views are mostly from major public roads, including locations where duration of views is longer, such as intersections, resulting in greater impact than most other public viewpoints.

Additional mitigation planting may be visible in various viewpoints, however the IAC is not convinced it would significantly alter the landscape character. Additional planting in the broader landscape context is comparable to landscaping commonly undertaken by landowners.

Limited issues were raised regarding visual impacts of ancillary infrastructure. These elements are materially smaller in scale than turbines and are more capable of being screened or visually integrated through siting and landscaping. The impacts can be managed to an acceptable level with the proposed permit conditions for an on-site landscaping plan that is managed through implementation, maintenance and monitoring.

Acceptability of landscape and visual effects

The planning framework does not seek to preserve the landscape in its current form. Relevantly:

- a purpose of Clause 52.32 is to minimise, not avoid, amenity impacts
- the decision guidelines of Clause 52.32 require consideration of development impacts on significant views, including visual corridors and sightlines however no such significance is formally recognised
- there is considerable policy support for renewable energy facilities in broad terms and legislative setting for wind energy facilities on the Project site.

The IAC considers the landscape impacts to be acceptable when assessed against the planning framework, noting that some of the impacts may be moderate. The local community strongly values the landscape, though views about acceptability of landscape and visual effects appeared to vary.

The IAC is satisfied the Project will sufficiently retain the broader landscape character of highly modified agricultural land. The landscape and visual effects, while significant in some locations, are acceptable in the context of the planning policy framework and the broader environmental and community benefits associated with renewable energy generation.

(iv) Findings

The Inquiry and Advisory Committee finds:

- The Environmental Effects Statement has appropriately assessed the landscape and visual impacts and addressed the scoping requirements.
- The Landscape and Visual Impact Assessment provides an appropriate basis for assessing landscape and visual impacts of the Project.
- The landscape, comprising the Project site and its surrounds, is not formally recognised as one with particular significance or value that should be protected.
- The Project will result in visual impacts to the landscape, but these impacts will generally be low, though moderate impacts will occur in some instances.

6.5 Cumulative impact

(i) The issue

The issue is whether the potential cumulative impacts of the Project and other operating and approved wind energy facilities on landscape values of the region are acceptable.

(ii) Evidence and submissions

Parties expressed differing views on the extent and significance of cumulative landscape and visual impacts.

Proponent

The Proponent submitted that the Project is unlikely to result in cumulative impacts and:

- views to the Project from private viewpoints are confined to nine non-host dwellings and are limited by screening elements
- impacts from public viewpoints would be limited due to viewing distance, travel direction and the transient nature of views experienced from roads.

Mr Moir stated:

- the cumulative visual impacts are generally likely to be low
- the LVIA recognised that landscapes identified for renewable energy development are expected to accommodate a degree of visual change
- the cumulative assessment focussed on:
 - views where multiple wind energy facilities may be visible simultaneously, particularly the Project and the Mount Fyans wind energy facility
 - whether the visibility of multiple wind energy facilities increases visual impact.
- there are limited opportunities for simultaneous views of both the Project and the Mount Fyans wind energy facility due to distance, vegetation and built form screening.

Moyne Council

Moyne Council considered that cumulative impacts have not been adequately assessed. It submitted:

- such impacts in the South-West Renewable Energy Zone are distinct due to the concentration, scale and height of existing, approved and proposed wind energy facilities

- the Project would double the number of turbines within 25 kilometres of the Project site.

Its submission to the consultation process disputed that the cumulative impacts are 'acceptable'. It said there would be no direction of travel through the region that would be free of views to wind energy facility infrastructure.

Other submissions

The HAEC characterised the region as having a high density of renewable energy infrastructure and said that adding the Project would:

- transform the south-west region from a predominantly rural landscape to an industrial energy landscape
- result in a loss of rural character, visual dominance from multiple directions and a permanent change to regional landscape identity
- create a cluster effect due to proximity and concentration of other wind energy facilities.

Similar concerns were raised by some other submitters.

The Proponent maintained that cumulative impacts had been appropriately assessed. It submitted the evidence demonstrated that cumulative visual effects with the Mount Fyans wind energy facility would generally be limited due to vegetation screening, viewing direction and the transient nature of views from public roads.

(iii) IAC response

The IAC accepts the Project may contribute to the broader cumulative wind energy landscape of the region. However, that broader landscape is one where the planning framework anticipates a renewable energy landscape, and that landscape already comprises approved and operating wind energy facilities.

For cumulative impacts from private viewpoints, the LVIA findings that impacts will likely be low are accepted. The aerial images show extensive existing landscaping around the affected dwellings which will likely limit opportunities to see turbines from the Project and Mount Fyans simultaneously or sequentially, in turn reducing cumulative impacts. Further mitigation landscaping is possible via the permit conditions.

For cumulative impacts across the broader landscape, the distinction made in the Willatook Inquiry and Panel Report between cumulative visibility and cumulative impact is relevant to the Project. Visibility of multiple wind energy facilities within the same view does not necessarily mean that cumulative impacts are unacceptable. The relevant consideration is the extent to which the additional presence of the Project materially alters the visual experience of that view.

Although road users will experience some simultaneous or sequential views to the Project and Mount Fyans wind energy facility, the experience is characterised by movement, changing viewing angle and intermittent screening. The cumulative effect is experienced only briefly.

The 15-kilometre distance to the next nearest wind energy facilities means the grouping of turbines, when seen as a road user, will be distinct and not read as simultaneous to the Project. This lessens the cumulative impact of the Project.

The IAC acknowledges that, across the landscape however, the Project will contribute to an increased perception of landscape change. However, the scale of that increase will not fundamentally change the visual experience of the landscape beyond that established by existing and approved wind energy facilities.

The acceptability of the cumulative impacts from the Project must be assessed within the planning context. That context anticipates a changing landscape that increasingly accommodates turbines across a wide area and at scale, and combined with the low scenic quality rating, the Project's addition to the landscape is considered acceptable.

These findings are made on the basis that IAC has not been asked to reassess the visual acceptability of the other facilities or determine an appropriate regional turbine cap or density. Other facilities form part of the existing landscape.

That said, the IAC recognises that cumulative effects associated with the concentration of wind energy facilities within this region differs from other parts of Victoria. The Project will contribute to an emerging landscape character that increasingly concentrates wind energy infrastructure in areas of the Moyne Shire.

(iv) Findings

The Inquiry and Advisory Committee finds:

- The Environmental Effects Statement has adequately assessed the cumulative impacts.
- Views towards the Project and other wind energy facilities may be possible from certain public and private viewpoints.
- Approved and operating wind energy facilities form part of the existing landscape context of the Project site.
- There may be cumulative visual impacts in simultaneously and sequential views of the Project and other wind energy facilities (particularly Mount Fyans).
- Some public and private viewpoint locations are likely to have cumulative impacts that are the moderate to high.
- The cumulative visual impacts of the Project are likely to be low due to the location, type of viewpoint and extent of intervening screening elements.
- The impacts from private viewpoints can be mitigated through the implementation of proposed mitigation measures.

7 Other key EES matters

7.1 Surface water

(i) The issue

The issue is whether effects on surface water have been appropriately assessed and are acceptable.

(ii) Background

The *Environment Protection Regulations 2021* is relevant.

EES evaluation objective:

- To maintain the functions and values of aquatic environments, surface water and groundwater quality and stream flows and avoid adverse effects on protected environmental values.

The EES identifies key issues as:

- potential for the Project to have a significant effect on hydrology and affect existing sedimentation and erosion processes leading to land and aquatic habitat degradation
- potential for the Project to have a significant effect on surface water and/or groundwater and its environmental values and use, including through the temporary on-site quarry
- potential for the Project to have significant impact on wetland systems, including, but not limited to, Seasonal Herbaceous Wetlands (EPBC Act listed community), and the ability for wetland systems to support habitat for flora species listed under the FFG Act and EPBC Act.

Relevant EES sections:

- Chapter 12 (Surface water)
- Appendix B (Surface water and groundwater impact assessment).

Relevant EMF mitigation measures for surface water:

- SW01 – requires a detailed drainage design to be prepared in consultation with the water authority
- SW02 – requires a licence for any relevant works within a water course
- SW03 – requires the Construction Environmental Management Plan to address impacts on watercourse crossings
- SW04 – requires the Proponent to prepare a Sediment, Erosion and Water Quality Management Plan, as a sub-plan to the Construction Environmental Management Plan
- SW05 – requires the Construction Environmental Management Plan to document how collected water will be discharged in accordance with the *Environment Protection Regulations 2021*.

(iii) Evidence and submissions

The Proponent relied on the evidence of Mr Hughes, and accepted his recommended changes to the EMF to manage surface water flows around the BESS and terminal station which included the additional mitigation measure added as SW01(2f):

A standalone flood impact assessment (FIA) and stormwater management plan (SWMP) be established for the BESS and terminal station. The [Flood Impact Assessment] and [Storm Water Management Plan] will incorporate the requirement to minimise the potential impact of earthworks on flood levels and extents on adjacent properties, treat stormwater runoff and retain firefighting runoff (as per EMM08).

Mr Hughes agreed with the methodology and conclusions of the EES and supported the mitigation measures. He added:

- surface water impacts of the Project are expected to be low
- hydrological modelling was confirmed by site inspections of wetlands
- modelling had been developed to inform an understanding of the baseline surface water environment and potential impact pathways
- modelling had also been used to guide mitigation and management measures which are aimed at ensuring there are no impacts on water availability or quality within or surrounding the development
- modelling and its use in the EES is an appropriate tool and best practice.

In response to submissions, Mr Hughes stated:

- the number of waterway crossings within the Project site reflects the number of waterways and topography, not how well a design has avoided the construction of waterway crossings
- climate change analysis undertaken provides a conservative assessment of the potential impacts of climate change on flooding
- the modelling undertaken as part of the EES demonstrates the turbines do not significantly adversely impact flood levels surrounding them
- modelling of the indicative bunding around the terminal station does cause upstream ponding that will need to be dealt with as part of the design process
- water balance modelling of the quarry was undertaken to size the quarry storage.

Mr Hughes concluded that after the proposed mitigation measures are applied, impacts on the Project site's watercourses will be negligible, very low or low.

The Glenelg Hopkins Catchment Management Authority (Glenelg Hopkins CMA) is the relevant water management authority and did not object to the Project, subject to the following conditions:

- no turbines to be installed within:
 - 50 metres of a designated waterway
 - 100 metres of wetlands and major waterways
 - 30 metres of ephemeral waterways
- before works start, Works on Waterways Licences must be obtained from the Glenelg Hopkins CMA to construct all proposed vehicular and underground cable crossings of designated waterways
- appropriate machinery hygiene measures shall be put in place during the construction phase

- construction machinery shall be washed down before entering and (where required) exiting the Project site
- sediment control measures to be implemented before and during the construction phase of the Project
- sediment fences to be installed within waterways downstream of any culvert crossing on the construction site during the construction works and 3 months thereafter
- where silt fences are employed for sediment control, they shall be constructed with a centre section lower than the ground levels at either end of the silt fence to avoid outflanking during storm events
- where surface water or groundwater is to be used for construction purposes, the appropriate permits shall be obtained from Southern Rural Water before commencement of works
- quarry and associated infrastructure material plants will be located at least 100 metres from any watercourse
- any washout area established at infrastructure plants will be located at least 100 metres from waterways or stormwater drains
- any (domestic wastewater) treatment system installed is located at least 100 metres from drainage lines and water bodies
- development works shall not cause adverse flood impact on neighbouring properties without a permit or consent from those landowners.

Mr Hughes agreed these conditions should be reflected in the EMF.

Moyne Council raised the following issues with the surface water assessment:

- the modelling is based on hydrological baselines derived from years in which rainfall records were below the long-term average
- as a result, where cumulative catchment impacts are modelled from a dry-year baseline, the modelling may under-predict wet-year conditions impacting the conclusions of the EES
- the 1 per cent Annual Exceedance Probability flood modelling for the Hopkins River event identifies turbines T102 and T106 as exceeding the applicable design depth criterion
- the water quality assessment is based on a limited evidence base, comprising a single round of summer sampling undertaken in January 2023 and historic datasets dating from 1975 to 2005
- the Water Quality Monitoring Plan referenced in the EES has not yet been prepared
- climate scenario testing was not undertaken on a defensible range of scenarios.

Other submissions considered:

- there are many water crossings
- there is insufficient data on surface water and limited climate change analysis
- there is a lack of water balance modelling for the quarry
- the Project may:
 - impact the water availability and quality in the Hopkins River and surrounding wetlands
 - alter the water flow, and increase sediment build-up of the river

- result in flooded infrastructure including the terminal station and turbines.

(iv) IAC Response

The IAC is satisfied the surface water assessment is appropriate and has been prepared with consideration of relevant regulations and guidelines. Although some infrastructure required to be developed for the Project will intersect surface water flow paths, these impacts can be appropriately managed.

The IAC accepts the evidence of Mr Hughes that the surface water impacts are likely to be limited and are acceptable, subject to implementing the EMF. Mr Hughes' response to issues raised in evidence are accepted. The IAC supports the permit conditions recommended by the Glenelg Hopkins CMA.

(v) Findings and recommendation

The Inquiry and Advisory Committee finds:

- Surface water effects have been appropriately assessed and are acceptable.
- The Environmental Management Framework should be revised to add an Environmental Management Measure that requires the preparation of a standalone flood impact assessment and stormwater management plan for the Battery Energy Storage System and the terminal station.
- The new Environmental Management Measure SW01(2) requirement would need to be reflected as a planning condition to give it statutory effect.

The Inquiry and Advisory Committee recommends:

Amend the Environmental Management Framework at Environmental Management Measure SW01(2) to add:

A standalone flood impact assessment (FIA) and stormwater management plan (SWMP) be established for the BESS and terminal station. The [Flood Impact Assessment] and [Storm Water Management Plan] will incorporate the requirement to minimise the potential impact of earthworks on flood levels and extents on adjacent properties, treat stormwater runoff and retain firefighting runoff.

7.2 Aboriginal cultural heritage

(i) The issues

The issues are whether:

- the Environmental Effects Statement has appropriately assessed the potential impact to Aboriginal cultural heritage
- the Project may destroy or disturb sites or places of Aboriginal cultural heritage
- there is potential for indirect impacts on sites or places of Aboriginal significance close to the project areas, both known and unknown
- there is potential for impacts on intangible Aboriginal cultural heritage values associated with the project areas and surrounds.

(ii) Background

EES

Evaluation objective

Protect, avoid, or minimise where avoidance is not possible, adverse effects on ... tangible and intangible Aboriginal cultural heritage values, in partnership with Traditional Owners.

The EES identifies key issues as:

- potential for destruction or disturbance of sites or places of Aboriginal cultural heritage
- potential for indirect impacts on sites or places of Aboriginal significance close to the project areas, both known and unknown
- potential for impacts on intangible Aboriginal cultural heritage values associated with the project areas and surrounds.

EES Chapter 18 (Aboriginal cultural heritage) assesses aboriginal cultural heritage.

EES Appendix J includes an Aboriginal Cultural Heritage and Impact Assessment.

Chapter 18 explains:

- a Cultural Heritage Management Plan (CHMP) must be prepared for the Project site before commencing works
- the Project is considered a high impact activity and a CHMP has been prepared
- both the Eastern Maar Aboriginal Corporation (EMAC) and the Gunditj Mirring Traditional Owners Corporation were consulted during preparation of the CHMP, though the EMAC is now the appointed Registered Aboriginal Party
- the CHMP does not form part of the EES and will be lodged with the EMAC once the Minister for Planning makes an assessment the EES.

The methodology for the Aboriginal Cultural Heritage and Impact Assessment (ACHIA) includes:

- a desktop review of previous investigations, the Victorian Aboriginal Heritage Register and historical information
- consultation with the Registered Aboriginal Party (EMAC)
- field-based standard assessments to survey the Project site
- complex assessments including subsurface testing and excavation in areas of archaeological potential
- three-dimensional modelling of the landscape to identify cultural features
- assessment of both tangible and intangible Aboriginal cultural heritage values
- evaluation of the likely impacts of all Project phases
- development of avoidance, mitigation, monitoring and management measures to inform the CHMP and Project design.

The ACHIA concludes that the Project has the potential to impact on Aboriginal cultural heritage values, but those values can be reduced through management and primarily through the CHMP.

The key findings of the ACHIA are:

- The Project site contains significant Aboriginal cultural heritage values, including 114 registered Aboriginal places, mostly mound sites and artefact scatters.
- The area contains significant Aboriginal cultural values, including both tangible heritage (registered places) and intangible values.

- Intangible values are associated with Wedge-tailed Eagles, Southern Bent-wing bats, native vegetation, vegetation, hydrology and wetlands.
- A range of assessments were used to identify areas of archaeological potential.
- The investigations confirmed values are present across the Project site, particularly in association with waterways, floodplains and mound complexes.
- The Project has the potential to impact both known and previously unidentified values.
- There is potential for cumulative impacts to both tangible and intangible values in combination with past and future disturbance within EMAC country.
- Impacts can be managed through the CHMP process, including avoidance, salvage, contingency measures and monitoring, and consultation with the EMAC.
- Impacts to intangible values are to be managed through the environmental management measures and not the CHMP alone.

Relevant Planning Scheme provisions:

- Clause 15.03 (Heritage) seeks to protect and conserve places of Aboriginal cultural heritage significance.
- Clause 52.32 includes decision guidelines relating to Aboriginal cultural heritage values.

Legislation, policy and guidelines

Key legislation, policy and guidelines are:

- under the *Aboriginal Heritage Act 2006*, certain actions require the preparation of a CHMP if they are both a 'high impact activity' and within a defined area of Aboriginal cultural heritage sensitivity, or if an EES is required
- there are no Aboriginal places listed under the EPBC Act.

(iii) Evidence and submissions

The Proponent submitted:

- Aboriginal cultural heritage is a matter to be primarily addressed through the CHMP under the *Aboriginal Heritage Act 2006*
- a CHMP has been prepared and will be finalised following the EES process
- investigations found potential impacts to some low-density artefact scatters, but no impacts to high-density sites and no new heritage places
- consultation with EMAC identified intangible cultural values associated with fauna, flora and waterways, which have informed project design and avoidance measures (including buffers and micro siting)
- Aboriginal cultural heritage impacts are appropriately managed through the CHMP process under the Aboriginal Heritage Act and Regulations
- EMAC must approve the CHMP before construction can commence
- additional mitigation measures (AH01–AH07) are proposed to manage any residual cultural heritage impacts
- EMAC has not made a submission to the EES or permit process.

Moyne Council submitted the Aboriginal cultural heritage matters remain unresolved under CHMP 19602. It questioned the accuracy of the spatial dataset the ACHIA relies on.

Other submissions considered:

- Aboriginal mounds and heritage values were incorrectly documented
- the identification of values was insufficient
- EMAC was not appropriately engaged to share their relationship with the land
- the assessment lacked methodological rigour
- there may be cumulative impacts to Aboriginal cultural heritage values.

(iv) IAC response

The *Aboriginal Heritage Act 2006* sets the primary statutory framework for Aboriginal cultural heritage impacts. The CHMP process is the primary mechanism for managing residual impacts, including the discovery of previously unknown values. This is consistent with the ACHIA findings that impacts can be effectively managed through mitigation measures and the CHMP. Contingency, monitoring and ongoing consultation with the EMAC form part of these measures.

Within this context, the impact on Aboriginal cultural heritage is acceptable.

The ACHIA has appropriately investigated and assessed Aboriginal cultural heritage values for the purposes of the EES and planning permit application. The Traditional Owners were consulted when preparing the ACHIA and their involvement will continue through the CHMP process.

The Project has been designed to avoid areas of known cultural significance including higher-value cultural heritage elements (predominantly waterways) where practicable. The ACHIA recognises that some unknown subsurface values may persist despite previous ground disturbances.

The IAC accepts that the proposed measures to protect flora and fauna, including buffers, micro-siting and other avoidance and mitigation measures, are an appropriate way to manage impacts. Further consultation with the EMAC will enable ongoing management including currently unidentified intangible cultural values.

The IAC accepts the cumulative impact of the Project and other wind energy facilities on intangible heritage values across EMAC Country needs to be assessed and managed through consultation with the EMAC.

While most of the EMMs have been translated to permit conditions, AH03 relating to intangible values, has not. EMM AH03 seeks to ensure the EMAC has an ongoing role in monitoring effects on intangible values during construction and operation. An action focused on governance is better suited to remain an EMM and can inform the CHMP process.

(v) Findings

The Inquiry and Advisory Committee finds:

- The Environmental Effects Statement has satisfactorily assessed the potential impact to Aboriginal cultural heritage.
- The Project design has appropriately sought to avoid and minimise impacts to tangible and intangible Aboriginal cultural heritage values.

- The Cultural Heritage Management Plan, permit conditions and proposed mitigation measures can appropriately manage the Project's residual impacts on Aboriginal cultural heritage.
- Ongoing involvement of Eastern Maar Aboriginal Corporation is important, particularly regarding impacts on intangible values.

8 Other EES matters and matters with minimal impact

8.1 Other EES matters

This chapter relates to 'other EES matters' identified in Clauses 8b and 47 of the Terms of Reference. Clause 47 requires the report to cover 'other matters' that may relate to the EES at a high level only. Other EES matters are:

- Agriculture
- Community benefit
- Cumulative impacts
- Economic effect
- EES methodology and assessment
- Electromagnetic interference
- Energy policy
- Human health
- Land use and planning
- Social effect.

(i) Agriculture

EES Chapter 20 (Land use and planning) and Appendix H (Land use and planning) are relevant. The EES concluded:

The project's impacts on the reduction of available agricultural land during construction, decommissioning and operation are found to be minor with a short-term reversible localised impact on a small percentage of project site. Further, the proposed use of the land is compatible with the existing agricultural land use and will have a negligible impact on agricultural land use during the operation of the project and will provide diversification of the local agricultural economy supporting the enhanced agricultural production of the land.

Numerous submissions referred to agriculture matters including impact on animals and food production, fragmentation of agricultural land, interference with aerial spraying, biodiversity risks, land degradation, weed invasion, wind turbine foundations being left in the soil, and the soil impact assessment.

The IAC finds the EES has appropriately assessed and responded to agricultural matters.

(ii) Community benefit

EES Chapter 21 (Socio-economic) and Appendix I (Social and Economic Impact Assessment) are relevant.

Numerous submissions referred to community benefit resulting from the Project including one which considered renewable energy facilities benefited the community more fairly than fossil fuel facilities.

The IAC finds the EES has appropriately assessed and responded to socio-economic effects of the Project.

(iii) Cumulative impacts

EES Chapter 26 (Cumulative effects) is relevant.

Numerous submissions believed the cumulative impacts of the Project with other wind energy facilities in the region have not been fully assessed or adequately addressed by the adaptive management framework or assessment frameworks. Moyne Council submitted that Victoria had unresolved assessment frameworks and methodologies for considering cumulative impact of wind energy facilities.

In earlier chapters of this report, the IAC has found the EES has appropriately assessed cumulative impact of proposed and existing wind energy facilities in the region on biodiversity and habitat, and on the visual landscape. The IAC has formed its findings based on the existing assessment frameworks and methodologies for considering cumulative impact of wind energy facilities.

The IAC finds the EES has appropriately assessed and responded to cumulative impacts.

(iv) Economic effect

EES Chapter 21 (Socio-economic) and Appendix I (Social and Economic) are relevant.

The EES assessed the Project's residual economic effects (benefits) are anticipated economic effects to be high to very high subject to measures which enhance the expected project benefits.

Numerous submissions referred to economic effect including property devaluation, increased insurance cost, and impact on local businesses and farms.

The IAC finds the EES has appropriately assessed and responded to the economic effect of the Project. It accepts the Project is likely to result in high to very high economic effects.

(v) EES methodology and assessment process

EES Chapter 4 (Assessment framework) and Chapter 7 (Stakeholder consultation) are relevant.

Numerous submissions referred to the EES methodology and assessment process including insufficient community consultation, insufficient time to review the EES documents, insufficient information and data sources, and uncertainty of grid connection.

The IAC agrees that it is challenging for busy members of the community to read, understand, and prepare a submission to the EES within a six-week public exhibition timeframe. This was evident by parties who explained the reason they raised new and more detailed issues at the Hearing is because they had to prepare short submissions with limited detail to meet the tight deadline. The IAC process provided members of the community with a further opportunity to express their issues in more detail.

For reasons explained throughout this report, the IAC consider the EES documentation to be sufficient for assessing the identified issues.

Overall, the IAC finds EES methodology and assessment process does not raise any issue of concern.

(vi) Electromagnetic interference

EES Chapter 24 (Electromagnetic interference) and Appendix J (Electromagnetic interference) are relevant. The EES acknowledges wind turbines can interfere with electromagnetic signals and concludes:

Limited radiocommunication services are in the vicinity of the project, with five point-to-point links (operated by AusNet Services, VerTel and NBN Co) passing over the project site and two point-to-multipoint stations located within 20 kilometres of the site (operated by Aussie Broadband and Wannon Region Water Corporation).

Where feasible, engineering design measures have been implemented to avoid potential electromagnetic interference impacts to the services identified in the electromagnetic interference assessment as key issues. Management measures have been proposed for the pre-construction, construction and operational phases of the project to further manage potential impacts caused by electromagnetic interference. With the implementation of these design measures and management controls, the potential for electromagnetic interference to impact existing radiocommunication services is either unlikely or low, and the residual effects are negligible.

Numerous submissions considered the Project may impact result in electronic magnetic interference to phone signals, broadcast radio and television, weather radars and wireless and satellite internet signals, and farming operations.

The IAC is satisfied with the EES assessment, noting there are limited radiocommunication services near the Project site. The Project has appropriately sought to respond to potential impacts through its design.

(vii) Energy policy

EES Chapter 2 (Project rationale and benefits) is relevant.

Numerous submissions supported the Project's contribution to sustainable clean energy and reduced carbon emissions. Others considered there should be no renewable energy projects, considered wind energy facilities to be unreliable, disagreed with the Project's claim regarding its power generation and clean energy and that Moyne Council had a disproportionate share of Victoria's wind turbines. The Proponent and another party called expert evidence on energy policy.

The Project will result in a significant contribution to renewable energy in Victoria and the national grid more broadly. It will help achieve State policy objectives related to energy in the Planning Scheme.

(viii) Human health

EES Chapter 21 (Socio-economic) and Appendix I (Social and Economic Impact Assessment) are relevant. The EES assessed the significance of impacts to health and wellbeing associated with electromagnetic fields to be low.

Numerous submissions referred to human health issues related to sleep disturbance and deprivation, and impacts such as dust, noise and contamination on sensitive receptors during construction. They provided information to support these claims including social media posts by affected members of the community.

The IAC has carefully considered issues interrelated with human health (such as noise) to better understand potential health impacts. However, it could not reconcile information included in submissions with relevant studies, evidence and assessments that were provided to the IAC. The IAC is unable to find evidence that the Project will directly impact health and wellbeing.

The IAC finds the EES has appropriately assessed and responded to human health.

(ix) Land use and planning

EES Chapter 20 (Land use and planning) and Appendix H (Land use and planning) are relevant.

Moyne Council considered the wind turbines should be set back at least 1 kilometre from neighbouring property boundaries. It referred to Amendment VC212 and its planning policy as context. The Proponent explained that Amendment VC212 changed the Farming Zone to require a planning permit for the:

use of the land for dwellings and rural worker accommodation within 1 km from the nearest title boundary of land subject to a proposed wind energy facility for which an action has been taken under section 8(1), 8(2), 8(3) or 8(4) of the Environment Effects Act 1978.

The Proponent added:

- the Project has been designed to:
 - meet the relevant noise and shadow flicker limits
 - ensure that amenity impacts are acceptable
- it sees no basis to implement Council's preferred setback policy for the Project when its design has adequately addressed its due considerations.

The EES has appropriately assessed and responded to land use and planning. The Project does not have to be revised in response to Moyne Council's submission because it appropriately responds to its planning context and relevant policy and provisions.

(x) Social effect

EES Chapter 21 (Socio-economic) and Appendix I (Social and Economic Impact Assessment) are relevant.

Numerous submissions were concerned the Project would impact their lifestyle, reduce future land options, force them to move, and discourage the next generation from continuing the farming legacy of previous generations.

The Proponent referred to the socio-economic impact assessment which acknowledges that negative residual impacts and positive social impacts resulting from economic development and community sharing benefit. The Proponent considered the issues of land restrictions and forced moves to be unfounded.

The IAC finds the EES has appropriately assessed and responded to potential social effects.

8.2 Matters with minimal or negligible impact

Clause 48 (Stage 3 – Report) of the Inquiry’s Terms of Reference states:

Matters that the Inquiry determines have minimal or negligible impact and can be readily addressed through standard and proven environmental management techniques do not need to be examined by the Inquiry. Simple recording of these matters in the report will suffice.

The IAC found other EES matters but did not find any matter with minimal or negligible impact that can be readily addressed through standard and proven environmental management techniques.

PART C: KEY PLANNING PERMIT MATTERS

Part C includes key planning permit matters specified in Terms of Reference Clause 9.

Planning permit-related Key matters listed in Terms of Reference Clause 8a are in Part C of this report.

9 Traffic and transport

9.1 Background

The planning permit application included the Transport Assessment which based its assessment on:

- an indicative construction timeframe of 104 weeks (2 years)
- two quarry scenarios (on site and external where material is sourced offsite)
- assuming that heavy vehicles are needed during the construction phase.

The Transport Assessment concluded:

- traffic associated with the Project (Project traffic) on external roads generated during Project construction will comprise:
 - staff vehicles
 - heavy vehicle traffic associated with external bulk materials haulage
 - over-dimensional and over-size/over-mass vehicles
- additional Project traffic will be generated on local sections of Woolsthorpe-Hexham Road within the Project area
- during peak construction activity, Project traffic will add between 1,070-1,740 vehicle movements each day across the external road network subject to the level of on-site materials sourced for the quarry
- highest increases in traffic volumes will be along Woolsthorpe-Hexham Road, with the Project generating 600-750 vehicle movements each day, subject to the level of on-site materials sourcing
- Connewarren Lane will experience a significant increase of about 340-680 additional vehicles each day – within applicable target capacity thresholds
- in line with road construction standards in the Infrastructure Design Manual and Moyne Council road hierarchy, there will be a need to upgrade:
 - sections of Hamiltons Lane, Keillors Road, Immigrants Lane, Hexham-Ballangeich Road that Project traffic will rely on
 - single lane or narrow two-lane roads segments of Woolsthorpe-Hexham Road and Hexham-Ballangeich Road, north of Connewarren Lane
- the above roads and other local roads on and around the Project site relied on by Project traffic would be maintained by the Project operator during the construction phase through appropriate traffic management plans and road maintenance agreements
- the following intersections and gate locations will require right and/or left turn lane improvements works:
 - Warrnambool-Caramut Road / Hamiltons Lane
 - Warrnambool-Caramut Road / Keillors Road
 - Warrnambool-Caramut Road / Woolsthorpe-Hexham Road
 - access points to Woolsthorpe-Hexham Road
 - access to Immigrants Lane and Hamilton Highway
- the identified over dimensional vehicle route options from the Port of Portland or Port of Geelong to the Project site to transport the Wind Turbine Generator and other imported major components are suitable for over-dimensional and over-

size/over-mass transport vehicles, subject to resolving specific traffic management requirements

- local traffic impacts in the Project site during all Project phases can be suitably and safely managed.

The Transport Assessment identifies:

- the preferred material haulage routes to six potential offsite quarry sites, as shown in Figure 5
- the over-dimensional and over-size/over-mass delivery routes, as shown in Figure 6.

Figure 5 Project preferred material haulage routes

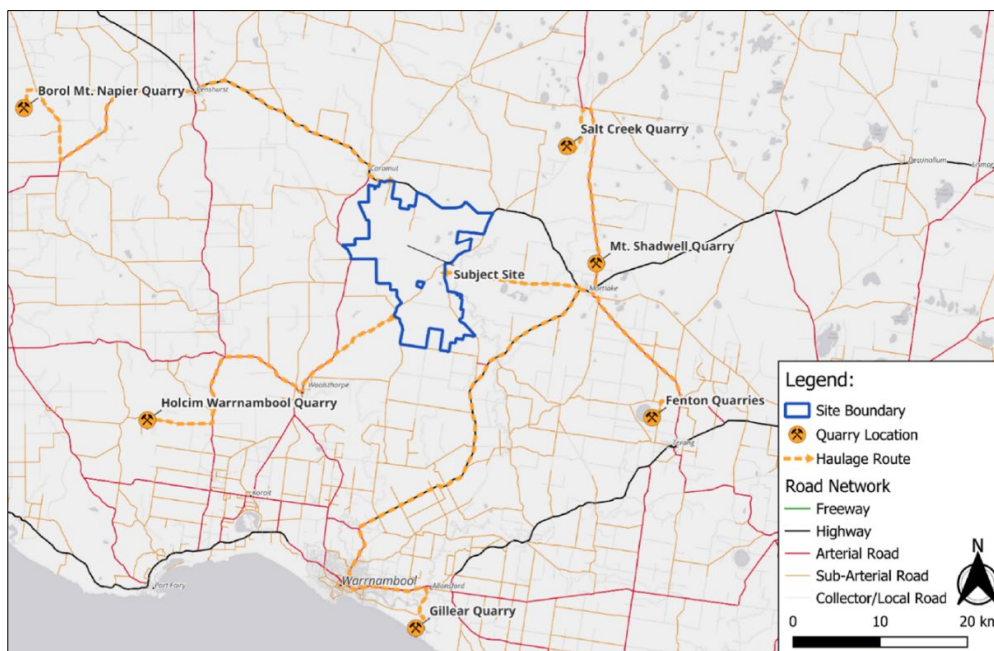
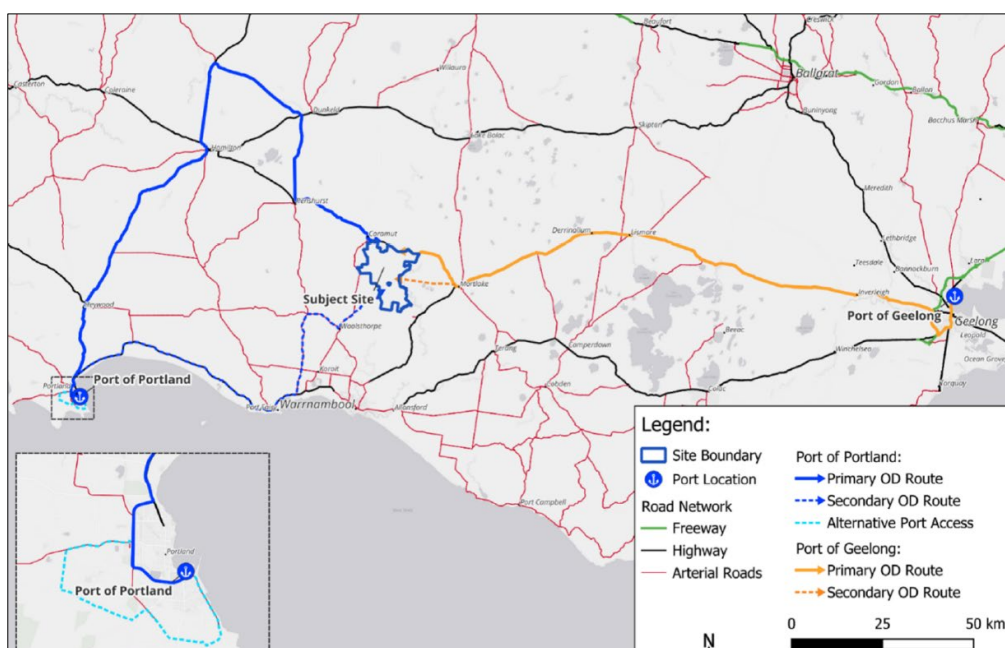


Figure 6 Over-dimensional and over-size/over-mass delivery routes



9.2 Access to a Transport Zone 2 road

(i) The issue

The issue is whether the Project's proposal to alter access to the Hamilton Highway and Warrnambool-Caramut Road will result in an acceptable impact to their operation.

(ii) Background

Permit application:	Proposes to alter access to the Hamilton Highway and Warrnambool-Caramut Road
Zone for both roads:	Transport Zone Category 2
Permit trigger:	Planning Scheme Clause 52.29 (Land adjacent to the principal road network) requires a permit to create or alter access to a road in this zone
Referral trigger:	Clause 66.03 requires such an application to be referred to Head TfV as a determining referral authority under PE Act section 55
PE Act sections:	61(2) requires the responsible authority to refuse the planning permit if the relevant determining referral authority objects to granting the permit 62(1)(a) requires the responsible authority to include any condition sought by a relevant referral authority 62(1)(b) prohibits a planning permit being granted if it has additional conditions which conflict with conditions sought by a determining referral authority.

(iii) Evidence and submissions

Head TfV did not object to the permit being granted subject to including its permit conditions. It noted the Project site would have direct new access from the Hamilton Highway and Warrnambool-Caramut Road. Head TfV explained it is currently unclear from the EES documents whether there will be on-site quarrying. It requested that both scenarios be assessed by the Proponent and submitted:

To ensure the safety and operation of the state arterial road network, all proposed access points to the site must be suitably designed and supported by necessary upgrade works at no cost and to the satisfaction of Head, TfV.

In response to a query from the IAC, Head TfV submitted that its role:

- as a determining referral authority was pursuant to Clause 52.29-5
- extended to determining whether a planning permit application referred to it was in the broad interests of DTP and whether it may be affected by the granting of a permit.

Moyne Council requested the planning permit require vehicle access points to be designed and located to its satisfaction.

Mr Young agreed there should be a permit condition that requires the proposed access points to the declared arterial road network be appropriately designed and supported by necessary upgrade works to the satisfaction of the Head TfV.

The Proponent submitted that Head TfV is a determining referral authority for the purposes of Clause 52.29 which includes:

- a purpose *"To ensure appropriate access to the Principal Road Network ..."*
- decision guidelines for the responsible authority to consider:
 - The Municipal Planning Strategy and the Planning Policy Framework.
 - The views of the relevant road authority.
 - The effect of the proposal on the operation of the road and on public safety.
 - Any policy made by the relevant road authority pursuant to schedule 2, clause 3 of the Road Management Act 2004 regarding access between a controlled access road and adjacent land.

The Proponent added that Head TfV's scope to require permit conditions is limited to the scope and purpose of the relevant provision pursuant to which it is a referral authority. Specifically, ensuring the two new road access points are designed and constructed safely without negatively affecting the operation of the two arterial roads. The Proponent considered any permit conditions sought by Head TfV beyond this scope were being requested as a submitting agency submitter rather than a determining referral authority.

(iv) IAC response

Head TfV's participation in the Hearing process and its response to IAC queries provided helpful insight into its statutory role when considering a planning permit application. Head TfV can seek broad ranging permit conditions that include potential impact on the road network impact. However, consistent with the Proponent's submission, the PE Act differentiates between permit conditions that:

- must be included because they are being requested by Head TfV within its scope as a determining referral authority
- should be considered for inclusion because they are being requested by Head TfV as the relevant road manager of potentially impacted arterial roads (as discussed in subsequent traffic chapters).

The scope of Head TfV as a determining referral authority relates to:

- creating or altering access to a road in a Transport Zone 2 (the permit trigger)
- ensuring appropriate access to the Principal Road Network or land planned to form part of the Principal Road Network (Clause 52.29 purpose)
- considering Clause 52.29 decision guidelines including:
 - the views of the relevant road authority (in this instance, Head TfV)
 - the effect of the proposal on the operation of the road and on public safety.

The decision guidelines and the Clause 52.29 purpose set the statutory scope for a responsible authority and determining referral authority. Permit conditions sought by Head TfV that are:

- within the scope of this permit trigger must be included on the planning permit
- outside this scope should be considered even if there is no obligation to include them.

Subject to the condition recommended by My Young and reflected in the permit (final version), the IAC considers the Project can be designed and constructed safely and can manage impacts on the operation of the two arterial roads acceptably. The following traffic subchapters discuss matters related to road network impact and traffic management requirements.

(v) Findings

The Inquiry and Advisory Committee finds:

- The Project's proposal to alter access to the Hamilton Highway and Warrnambool-Caramut Road will result in an acceptable impact to their operation.
- The permit conditions (final version) appropriately require the Traffic Management Plan to designate safe vehicle access points.

9.3 Road network impact

(i) The issue

The issue is whether Project traffic during construction and operation will result in acceptable impacts on the surrounding road network.

(ii) Evidence and submissions

The Proponent explained the proposed road, intersection and access gate upgrades are needed to accommodate vehicles that will transport the turbines and other Project components. It added that any cumulative impacts from overlapping construction activities for any other wind energy facility project can be managed through the Traffic Management Plan.

Moyne Council submitted:

- recent issued permits for energy projects have prioritised conditions requested by Head TfV at the expense of Council's role as a manager of local roads
- the local road network is unsuitable for the estimated volume and composition of traffic due to its existing condition – road width, pavement depth, bridge structural capacity and overall condition
- Connewarren Lane would need to be upgraded, including widening.

Head TfV did not object to the planning permit but raised concern regarding:

- mitigation of potential road damage caused by heavy vehicle truck movements from off-site quarries supplying construction materials
- safety and operation of the state arterial road network.

Other submissions considered the Project may or will:

- disrupt local access, delay traffic, temporarily block roads, and affect residents, farm operations and local businesses
- result in increased traffic that negatively affects emergency services and first responders to access properties
- reduce road reliability and efficiency, and delay agricultural activities, movement of goods, and business operations.

These submissions added:

- the existing local road network cannot accommodate the Project's construction traffic because it is of a low standard
- Project traffic may further degrade and damage local roads beyond typical maintenance requirements and result in safety issues.

Mr Young generally agreed with the methodology and conclusions reached in the Transport Assessment. He stated:

- the overall estimated Project traffic during construction is appropriate and, in some respects, conservatively assesses potential impacts
- the approach of assessing on-site and off-site material sourcing scenarios provides a suitable upper-bound assessment of heavy vehicle movements
- construction traffic is reasonably distributed across the surrounding road network and has been appropriately informed by consultation with Moyne Council
- the nominated over-dimensional and over-size/over-mass routes and construction material haulage routes are appropriate and can accommodate the anticipated vehicle types, subject to standard traffic management measures
- the traffic and transport mitigation measures proposed in the Transport Assessment are appropriate and will reasonably mitigate potential impacts from Project traffic
- Connewarre Lane caters for two-way traffic including heavy vehicles with a centre line with enough width for passing so it should remain in its pre-construction standard rather than be upgraded.

In response to Moyne Council's original submission, Mr Young stated that Connewarren Lane should be maintained in its pre-construction standard rather than upgraded. He explained it caters for two-way traffic, including heavy vehicles, with a centre line and adequate width for passing. In response to questions from Moyne Council, Mr Young added:

- as a two-lane road, it has a theoretical capacity of 18,000 vehicles a day
- a car and a truck can pass each other without either having to use the shoulder
- two trucks could pass each other, but one may need to use the shoulder depending on the section of the road.

(iii) IAC response

Like the Transport Assessment, the IAC has considered the potential impact on the road network based on the quarry being located offsite, though its location is currently unknown. Applying this most conservative scenario addresses issue associated with the different quarry location scenarios.

The Transport Assessment has appropriately considered potential impacts on the road network resulting from Project traffic. It recognises the surrounding road network needs works during the Project's construction phase to accommodate the volume and type of required vehicles. The IAC accepts the Transport Assessment has applied conservative upper figures to determine potential impact on local roads. This accounts for uncertainty associated with the Project, predominantly whether the quarry to source material is located on or off the Project site.

The IAC agrees with Mr Young that existing traffic volumes of about 400 vehicles each day across key local roads is relatively low. This means the estimated Project traffic of 1,070 to 1,740 vehicles each day during the Project's staged construction (if material is sourced on site) will be notable. This includes about 600 to 750 additional vehicles on Woolsthorpe-Hexham Road and 340 to 680 vehicles on Connewarre Lane. While there was concern about the impact of such volumes, no submission or evidence demonstrated how they would result in an unacceptable impact on the local road network.

In line with Moyne Council's submission, whether the additional Project traffic will be acceptable on the local road network depends on each affected road's condition, width and structural capacity. The permit conditions (final version) will help to determine this through the Traffic Management Plan that requires an existing conditions survey of relevant roads, measures to manage traffic impacts, a program to rehabilitate relevant roads, and to appoint a Road Quality Auditor.

The Traffic Management Plan will be assisted by the Transport Assessment which has identified specific upgrades to relevant roads. Road conditions and mitigation works can be further explored before each stage of the Project when more details are known. This may include Connewarre Lane. To assist this process, the permit conditions require the terms of reference for the Road Quality Auditor to specify:

- a program of regular inspections during Project construction to identify maintenance works necessary to relevant local roads
- standards to which all agreed local roads are constructed
- ongoing maintenance and repair regime during construction.

There is no evidence the estimated future traffic volume will have an unacceptable impact on emergency vehicles.

(iv) Findings

The Inquiry and Advisory Committee finds:

- The permit application is supported by an appropriate traffic impact assessment that has appropriately considered and applied relevant legislation, policies and guidelines.
- Project traffic during construction and operation can result in acceptable impacts on the surrounding road network subject to applying traffic management requirements through the planning permit conditions.

9.4 Project traffic management

(i) The issue

The issue is whether there the proposed planning permit conditions are appropriate for managing Project traffic on roads they will use during construction.

The IAC focusses on the (off-site or on-site) quarry with regards to associated heavy vehicles and haulage, potential road damage and rehabilitation.

(ii) Evidence and submissions

Head TfV explained that its key interest was the proposed off-site quarry from six identified locations and the potential for road damage. To satisfy itself that road damage can be mitigated and to better understand potential effects of construction activity, Head TfV requested the following information:

- Vehicle movements generated by quarry haulage and any associated construction activities for each quarry option, including route, vehicle class, and expected timing and duration.
- An assessment of impacts and structural assessment of affected state arterial roads, including capacity and operational impacts, required temporary traffic management measures, and any locations where haulage may require road pavements to be strengthened and or shoulder widening.
- ...
- Dilapidation surveys are required for all state arterial roads proposed as haulage routes.
- Surveys must include pre-construction and post-construction condition assessments, covering pavement, drainage assets, structures, and roadside furniture.
- Surveys must follow DTP standards, with costs borne by the proponent.
- Where damage is attributable to Project-related traffic, the proponent must complete restorative works at no cost and to the satisfaction of the Head, TfV.

In response to queries from the IAC, Head TfV submitted that, given off-site quarrying may occur, it requires:

- confirmation of heavy vehicle types, trip numbers and routes (distribution across the state network) between the quarry and Project site
- an assessment of the structural capacity of existing road pavements and consequential impact on the design life of the pavement due to the increased heavy vehicle loading over the construction period.

Head TfV explained that this is required because the Transport Assessment, for off-site quarrying, only quantifies total vehicle return trips across external roads rather than mapping these across given routes particularly state arterial roads that lead into and interface with the Project site.

Mr Young considered the Transport Assessment appropriately assessed on-site and off-site material sourcing scenarios which provides a suitable upper-bound assessment of heavy vehicle movements. He recommended the existing conditions survey (as reiterated in Chapter 9.5) should:

- apply only to relevant local roads relied on by the Project because *“arterial roads are the responsibility of the Head, TfV under the Road Management Act 2004, and it is not appropriate in my view for the Project to assume responsibility for the condition or rehabilitation of state-managed roads”*
- require visual condition surveys only, rather than onerous and intrusive testing of pavement or road base.

Mr Young considered a visual condition survey sufficient because:

- the Project will rely on key local roads that are proposed to be upgraded where necessary and maintained throughout construction
- what occurs beneath the road is typically reflected on the surface (in response to a question at the Hearing).

In response to the Head TfV submission, Mr Young stated:

- he agreed the Traffic Management Plan should include provision for pre- and post-construction road condition surveys where relevant for local roads, to confirm impacts and inform any necessary maintenance or reinstatement works
- dilapidation surveys and associated maintenance obligations for state arterial roads is not warranted or appropriate, as:
 - Head TfV is responsible for arterial roads that form part of the gazetted road network under the *Road Management Act 2004*
 - these roads are already subject to ongoing inspection, maintenance and repair obligations under the *Department of Transport Road Management Plan (2021)*
- Project traffic will contribute to overall traffic volumes, however pavement wear on arterial roads is cumulative from all users and environmental factors
- requiring the Proponent to undertake surveys and fund repairs would inappropriately transfer responsibility for arterial road maintenance to the Project.

(iii) IAC response

The IAC agrees with Head TfV that it is unclear what impact the quarry may have on the road network. Its impact depends on whether it is located offsite, and where that location is.

The permit conditions discussed in Chapter 9.3 would require the Traffic Management Plan to consider the Project traffic and vehicle type and volume including those associated with a future offsite or on-site quarry. As discussed, the Transport Assessment has considered the conservative upper traffic volume figures.

The permit conditions (final version) broadly respond to Head TfV's request for further information by requiring the Traffic Management Plan to:

- identify the number and type of anticipated vehicle movements and the time of day when local roads will be used
- require an existing conditions survey (visual conditions only) of relevant roads
- designate the appropriate vehicle routes to and from the Project site including those used for an on-site quarry
- minimise potential impacts to the transport network from the location of quarried materials to the Project site (once the quarry site is confirmed)
- provide a program to rehabilitate relevant roads used by the Project within agreed timeframes to the condition identified in the surveys or to the condition to which the relevant Roads have been upgraded, whichever is relevant.

While these conditions do not specifically identify what was requested by Head TfV, they:

- form an appropriate framework for managing traffic associated with the quarry
- do not preclude Head TfV from requesting such details through the Traffic Management Plan process.

Further transport management requirements are discussed in Chapter 9.5.

Permit conditions will require the Traffic Management Plan to:

- designate appropriate vehicle routes for Project traffic

- minimise potential impacts associated with the quarry to the transport network
- undertake an existing conditions survey of roads used by Project traffic as a comparative baseline.

Collectively, the permit conditions provide an appropriate framework for monitoring and maintaining designated vehicle routes, subject to whether:

- the existing conditions survey should be only a visual survey and only apply to relevant local roads
- it is fair for the Proponent to pay for restorative works if damage is attributed to Project traffic.

Existing conditions survey

The IAC agrees with Mr Young's reasons for requiring the existing conditions survey to be based on a visual assessment. It accepts that serious issues beneath the road surface will generally appear on the surface. Head TfV will be aware of the construction methods and standards applied to state arterial roads which will help to understand the type of heavy vehicles that they can support.

The existing conditions survey should apply to all sections of the roads expected to be used by the Project traffic. The IAC agrees that state arterial roads are generally designed to a higher standard than local roads to accommodate higher volumes of heavy vehicles. However, this is not a justified reason to exclude them from the survey.

Road rehabilitation

The IAC supports the permit conditions requiring the Traffic Management Plan to include a program to rehabilitate relevant roads to their condition identified in the existing conditions survey or upgraded condition at an agreed timeframe, whichever is relevant.

The program details should:

- specifically identify relevant roads
- include a process to monitor, identify and implement road damage and rehabilitation
- define agreed timeframes for different circumstances
- identify who will pay for the works.

The Project developer should be responsible for rehabilitating public roads within agreed timeframes and condition standards if the damage that can be evidently attributed to Project traffic. The Proponent should not be excused from restoring damage caused by Project traffic simply because it is a state arterial road managed by Head TfV.

The IAC agrees that the Proponent should not be responsible for financially contributing towards road upgrades to state roads, particularly without a contributions plan in place to fairly apportion costs in line with the PE Act. However, requiring the Proponent to restore damage it has evidently caused is a different proposition. This would be no different to, on a smaller scale, a responsible authority requiring a developer to repair any damage to its footpaths or crossovers.

While it is appropriate for the Project developer to pay for its damage, proving the damage is entirely attributable to the Project will be challenging. The IAC agrees with Mr Young that Project traffic with heavy haulage would be like other heavy vehicle including industrial and farming vehicles that use the same roads. Other vehicles not related to

the Project would also wear out and damage these roads so it is unclear how vehicles associated with the Project's construction can be singled out.

Through the *Department of Transport Road Management Plan (2021)*, Head TfV will organise to repair state arterial roads where it cannot be proven the damage is attributable to Project traffic. This could be in most cases.

It is unclear how the arrangement between a private developer and public road manager can be seamlessly co-ordinated.

However, this uncertainty does not justify excluding state roads from the existing conditions survey or not requiring the Proponent to rehabilitate roads it has damaged. The IAC supports flexible permit conditions that enable details to be determined later and included in the approved Traffic Management Plan.

(iv) Findings

The Inquiry and Advisory Committee finds:

- The permit conditions (final version) appropriately respond to potential impacts associated with a quarry used to service the Project.
- The existing conditions survey should:
 - apply to the sections of all roads expected to be used by the Project traffic irrespective of who manages those roads
 - be visual only without the need for intrusive below ground testing because this, combined with knowledge of the road's construction standards, will sufficiently identify any notable issues.
- The Proponent should be responsible for rehabilitating public roads within agreed timeframes and condition standards if the damage can be evidently attributed to Project traffic.
- The permit should require a program that facilitates road rehabilitation.

9.5 Other transport management requirements

(i) The issue

The issue is whether the proposed traffic management requirements are appropriate to respond to identified traffic issues.

(ii) Evidence and submissions

Moyne Council considered that permit conditions should recognise its role as a road manager and be tailored to its local road network for the Project. It requested that permit conditions require:

- Moyne Council to endorse the pre-Traffic Management Plan investigations
- Moyne Council to approve the Pre-Construction Public Road Survey before submission to the Minister for Planning for endorsement
- the Traffic Management Plan be prepared to the satisfaction of:
 - Moyne Council and Head TfV (submission to exhibited permit application)
 - Moyne Council and endorsed by the Minister for Planning (Hearing submission)

- written consent from Moyne Council and the Minister for Planning to change the Traffic Management Plan
- before the Traffic Management Plan is endorsed:
 - the permit holder to submit to Moyne Council for approval the identity of a suitably qualified engineer independent of the Proponent's traffic adviser, to be the Road Quality Auditor as defined in the Plan
 - Moyne Council to approve the Road Quality Auditor's terms of reference
- before Project construction starts, construction of all external road upgrades required by the permit to be certified by the Road Quality Auditor as satisfying the Traffic Management Plan requirements and the relevant conditions of the permit, to the satisfaction of Moyne Council, unless otherwise approved in writing by Moyne Council
- the Project to install traffic count devices inside each site access point, at the eastern end of Connewarren Lane and the western end of Woolsthorpe-Hexham Road during construction, with data provided periodically to Council to assist in comparing predicted and actual construction vehicle numbers and types
- municipal road upgrades outside the Project site to be completed to its satisfaction before starting any on-site works in each relevant site zone – except for Connewarren Lane and Woolsthorpe-Hexham Road, and the northern section of Hexham-Ballangeich Road which would need to be completed before any on-site works.

In response to Moyne Council's original submission, Mr Young stated:

- a suitably robust Traffic Management Plan:
 - is an appropriate mechanism to manage construction impacts
 - should be required to be prepared and approved before construction starts
- traffic count devices are not needed or informative for managing Project impacts.

Head TfV requested the inclusion of 12 permit conditions (see Table 12) that:

- require a detailed Traffic Management Plan before development starts and after construction methods and transport routes are revealed
- before the Traffic Management Plan is endorsed:
 - require the identity of the suitably qualified engineer who will undertake the duties of the Road Quality Auditor identified in the plan
 - require endorsed terms of reference for the Road Quality Auditor
- enable Head TfV to require the appointment of an alternate proposed Road Quality Auditor in certain circumstances
- require plans endorsed under the permit to be undertaken, completed, assessed and approved by the Independent Road Quality Auditor before construction starts for wind turbine footings crane hardstand, internal access roads, the substation or transmission towers and road construction works
- require traffic management and road upgrades and maintenance works identified in the endorsed Traffic Management Plan to be carried out to the satisfaction of Head TfV

- require a Decommissioning Transport Management Plan before decommissioning the renewable energy facility (decommissioning to the satisfaction of Head TfV and the responsible authority)
- require the applicant to enter into a works agreement with Head TfV before any works start in any arterial reserve.

Table 12 Requested Traffic Management Plan permit conditions

Head TfV	Related submissions and evidence
1) Before the development starts and once construction methods and transportation routes are revealed, a detailed Traffic Management Plan must be prepared to the satisfaction of the Head, Transport for Victoria, and the Minister for Planning. When approved, the Traffic Management Plan will be endorsed by the Minister for Planning and the Head, Transport for Victoria. The Traffic Management Plan must be complied with, unless varied by the Head, Transport for Victoria. The Traffic Management Plan must include:	Moyne Council: Traffic Management Plan should be prepared to satisfaction of Moyne Council and Head TfV
a) The number and type of anticipated vehicle movements and the time of day when local roads will be used.	Moyne Council: The Project to install traffic count devices inside each site access point, at the eastern end of Connewarren Lane and the western end of Woolsthorpe-Hexham Road during construction, with data provided periodically to Council to assist in comparing predicted and actual construction vehicle numbers and types
b) The nominated routes for traffic accessing and departing the wind energy facility site.	-
c) An existing conditions survey (including testing of road base) of public roads that may be used in connection with the wind energy facility (for access, preconstruction, or construction purposes), including details of the suitability, design, condition, and construction standard of the relevant public roads.	Mr Young: - Apply only to relevant local roads relied on by the Project - Require visual condition surveys only, rather than intrusive testing of pavement or road base
d) The designation of all vehicle access points to the wind energy facility site from surrounding roads. Vehicle access points must be designed and located to ensure safe sight distances, turning movements, and avoid potential through traffic conflicts.	-
e) The designation of appropriate pre-construction, construction, and transport vehicle routes to and from the wind energy facility site, including designation of transport vehicle routes being used to establish the on-site quarries.	-

Head TfV	Related submissions and evidence
f) Engineering plans demonstrating whether, and if so how, truck movements to and from the wind energy facility site can be accommodated on sealed roadways and turned without encroaching onto the incorrect side of the road.	Mr Young: Delete reference to trucks not encroaching to the incorrect side of the road
g) To minimise potential impacts to the transport network from the location of quarried materials to the project site (once the quarry site is confirmed).	-
h) Measures to be undertaken to record traffic volumes on the nominated road network during the construction of the wind energy facility.	Mr Young: Delete Condition 1(h)
i) Recommendations regarding the need for road and intersection upgrades to accommodate any additional traffic or site access requirements (whether temporary or ongoing), and the timing for the delivery of those upgrades.	Moyne Council: External municipal road upgrades to be completed to its satisfaction before starting any on-site works in each relevant site zone – except for Connewarren Lane and Woolsthorpe-Hexham Road, and the northern section of Hexham-Ballangeich Road which would need to be completed before any on-site works Mr Young: - Require detailed engineering plans be prepared and approved before relevant works are undertaken, rather than as part of the Traffic Management Plan - Remove the requirement for full engineering detail to be included in the Traffic Management Plan
j) Where upgrades are required, the Traffic Management Plan must include detailed engineering plans showing the required works, including cross sections which show their formation, depth, drainage, and surface levels and the timing of when the works are to be undertaken.	-
k) Proposed measures to ensure workers enter and exit the wind energy facility site from the designated site entrances.	-
l) Proposed measures to ensure construction vehicles are easily identifiable.	-
m) The designation of mitigation measures, including operating hours and speed limits for trucks on routes accessing the wind energy facility site which provide for appropriate safety measures around school bus routes and school	Mr Young: Remove reference to setting specific speed limits

Head TfV	Related submissions and evidence
bus times where relevant; and provide for resident safety.	
n) Proposed measures to manage traffic impacts associated with the ongoing operation of the wind energy facility on the traffic volumes and flows on surrounding roads.	-
o) A program to rehabilitate existing public roads within agreed timeframes to the condition identified in the surveys carried out under the above condition or to the condition to which the roads have been upgraded, whichever is relevant.	Mr Young: - Apply only to relevant local roads used by the Project - Remove Project responsibility to rehabilitate state arterial roads
p) Where there are significant increases in vehicle numbers, determined by the Road Quality Auditor, above the anticipated vehicle movements identified in the endorsed Traffic Management Plan; or any change to an endorsed vehicle route identified in the Traffic Management Plan, the Traffic Management Plan must be updated to the satisfaction of the Head, Transport for Victoria within 28 days of the event described in this condition or the above condition.	-

The IAC asked Head TfV whether it agreed with any of Mr Young's recommended changes to the permit conditions sought by Head TfV. Head TfV supported changes to conditions regarding the provision of detailed engineering plans in the Traffic Management Plan. It did not support recommendations to:

- replace 'state' roads with 'local roads'
- replace specific references to identified road and responsible authorities with 'relevant road management authority'
- emphasise staging of the Traffic Management Plan through conditions, as it would create unnecessary duplication
- remove reference to vehicles turning out 'without encroaching onto the incorrect side of the road'
- remove reference to the designated speed limits for trucks.

Head TfV did not object to the traffic and transport related permit conditions (version 2) subject to changes which the Proponent responded to in permit conditions (final version) as summarised in Table 13.

Table 13 Requested changes to permit conditions and responses

Head TfV (Document 122a)		Proponent (Document 147b)	
Condition number and requests		Condition number and response	
19	delete 'detailed' from 'detailed Traffic Management Plan'	37	Accepted except in some instances
19(j)	delete as a requirement of the Traffic Management Plan: <i>Where upgrades are required, the Traffic Management Plan must include detailed engineering plans showing the required works, including cross sections which show their formation, depth, drainage, and surface levels and the timing of when the works are to be undertaken.</i>	37(j)	Accepted
24	replace 'engineering plans' with 'functional design plans'	41	Accepted
24(a)	delete 'detailed' from 'detailed design'	37	Accepted
30	translate the following Decommissioning Traffic Management Plan requirement into an independent permit condition : <i>Prior to any works commencing within any arterial road reserve, the applicant must enter into a works agreement with the Head, Transport for Victoria, confirming design plans and works approvals processes, including the determination of fees and the level of the Head, Transport for Victoria service obligations ...</i>		Accepted

(iii) IAC response

There were many requests from different parties to apply, change or not apply traffic management requirements.

The degree of detailed information sought by Head TfV would benefit future decisions but does not need to be specified through permit conditions. The permit conditions (final version) do not preclude such information from being requested or provided. Head TfV will have an influential role because the relevant condition requires the Traffic Management Plan to be prepared to the satisfaction of the relevant road management authority.

Engineering plans

The IAC agrees with Head TfV that the engineering plans included in the Traffic Management Plan should demonstrate whether truck movements can be accommodated without encroaching onto the incorrect side of the road. This does not prohibit such movements. Rather, this would inform about the type and extent of such movements so that they can be appropriately managed.

Traffic Management Plan approval

Moyne Council is the road management authority for local roads that will be affected by the Traffic Management Plan so it should also approve that plan. The IAC agrees with the permit conditions (final version) which refers to the 'relevant road authority' – this general term includes Head TfV for state roads and Moyne Council for local roads.

Road Quality Auditor

The IAC agrees with Moyne Council's request for permit conditions to require the independent Road Quality Auditor and associated terms of reference to be approved by the relevant road management authority. The permit conditions (final version) reflect Moyne Council's request.

Traffic counts

The proposed permit conditions require the Traffic Management Plan to include the number and type of anticipated vehicle movements and the time of day when local roads will be used. The Transport Assessment found that surrounding roads can accommodate additional traffic during construction without notable or negative impact. The IAC considers it unnecessary to install traffic count devices inside each site access point, at the eastern end of Connewarren Lane and the western end of Woolsthorpe-Hexham Road during construction. Based on the volume of estimated traffic, it is not justified as a permit condition. If Council considers that a traffic count may be helpful to comparison purposes, it is able to organise it through an alternative process.

(iv) Findings

The Inquiry and Advisory Committee finds the Traffic Management Plan requirements specified in the permit conditions shown in Appendix F:

- are appropriate to respond to identified traffic issues
- do not preclude Head, Transport for Victoria from requesting the inclusion of more detailed information when considering whether to approve the Traffic Management Plan, therefore the degree of that information does not have to be specified as a permit condition
- should require the Traffic Management Plan to be approved by the relevant road management authority
- should require the Traffic Management Plan to demonstrate in the engineering plans whether trucks can be accommodated without encroaching onto the incorrect side of the road
- should include the Road Quality Auditor conditions sought by Moyne Council
- should not require traffic counts at the eastern end of Connewarren Lane and the western end of Woolsthorpe-Hexham Road during construction.

10 Other key planning permit matters

10.1 Aviation safety

(i) The issues

The issues are whether the Project will:

- have an acceptable impact on the Warrnambool Airport
- create safety impacts for aircraft from local farm airstrips, aerial firefighting or low-level flying operations from agricultural aerial spraying.

(ii) Background

The aeronautical impact assessment supporting the permit application concludes the Project will not impact the:

- Obstacle Limitation Surface of any certified aerodrome
- Lowest Safe Altitude for air routes in the vicinity
- *Procedures for Air Navigation Services – Aircraft Operations* (PANS-OPS) surfaces associated with the Instrument Approach Procedures at Hamilton
- performance of Navigation Aids and Communication Facilities
- performance of any surveillance radars.

The assessment also concludes the Project will impact the 10 nautical mile (nm) Minimum Safe Altitude (MSA) for Warrnambool Airport:

- because a significant number of turbines, with a Lowest Safe Altitude (LSALT) of 2,300 feet are within the 5nm buffer
- so, it must be raised from 2,200 feet to 2,300 feet to maintain the required *Procedures for Air Navigation Services – Aircraft Operations* safety clearance
- that would require a change to the Instrument Flight Rules landing procedures.

The permit conditions (all versions) include aviation safety conditions that, among other things, require:

- details of wind turbines and meteorological monitoring masts exceeding 100 metres above ground level to be reported to Airservices Australia and the Civil Aviation Safety Authority (CASA) before development of wind turbine towers starts
- any obstacles above 100 metres above ground level (including temporary construction equipment) to be reported to Airservices Australia one month before works start
- local and regional aircraft operators must be advised of the wind energy facility location and height before development starts.

(iii) Evidence and submissions

The evidence and submissions were focussed on:

- safety impacts from turbines on local farm airstrips, particularly during take-off and landing

- the requirement to increase the 10nm MSA for Warrnambool airport, and the potential for added complexity and risk for aircraft using Warrnambool airport.
- potential restrictions to aerial firefighting capability
- potential restrictions on low-level flying operations, particularly agricultural aerial spraying.

Safety Impacts of Turbines and MSA increase

CASA reviewed the aeronautical impact assessment and stated:

- the Project will impact the Warrnambool Airport 10nm MSA because a significant number of turbines, with an LSALT of 2,300 feet, are within the 5nm buffer
- the Warrnambool Airport 10nm MSA would therefore need to be raised from 2,200 feet to 2,300 feet to maintain the required PANS-OPS safety clearance
- the Project will have an *“unacceptable effect on the safety of existing and future air transport operations at Warrnambool Aerodrome”* until all impacts to the aerodrome are resolved.

Mr Jennings noted in his evidence that CASA is not a referral authority. He stated:

- there are 5 local uncertified airstrips, but they are sufficiently distant from the turbines to have no impact on continued safe operations
- the Warrnambool Airport 20nm MSA is unaffected, and the only required change is the administrative raising of the 10nm MSA by 100 feet, from 2,200 feet to 2,300 feet
- an increase of the MSA is unlikely to result in any safety or negative operational issue
- the Project will therefore have minimal impact on aviation safety and activity
- no additional mitigations are recommended beyond those already proposed in the EES.

In response to questions from Moyne Council, Mr Jennings explained:

- if Warrnambool Council did not consent to raising the MSA, he expected the Airservices Australia process would raise the MSA unilaterally without Warrnambool Council’s consent if the Project is approved
- if the MSA is increased by 100 feet, the Instrument Approach Procedures used by aircraft operating under Instrument Flight Rules would need to be updated by AirServices Australia to reflect the change
- this change would not result in a requirement to materially change the Instrument Approach Procedures since they already require an approach beginning from a height of 3,300 feet – which is higher than the 2,300 feet MSA in any case – that is, aircraft landing using the appropriate Instrument Approach Procedures would be required to be 1,000 feet above the ‘adjusted’ MSA.

Warrnambool Council and Moyne Council objected to the Warrnambool Airport 10nm MSA being raised by 100 feet. Warrnambool Council, being the owner, operator and manager of Warrnambool Airport, submitted:

- any increase has inherent risk through the added complexity posed on pilots
- the Proponent has not consulted with Warrnambool Council or other local operators (as advised by them)
- a risk assessment is cursory and inaccurate without this consultation

- the aeronautical impact assessment does not appear to consider Warrnambool Airport's future operations following upgrades
- the Southwest Victorian Alliance has adopted the Southwest Victorian Air Services Development Strategy that nominates Warrnambool as the future regional hub for air services
- while it generally did not oppose renewable energy projects, it is important they do not impact on airport and surrounding critical airspace.

Warrnambool Council requested:

- turbine tip heights be restricted to eliminate the need to raise the MSA, or the turbines affecting the MSA be removed from the Project site or relocated away from the airport
- consultation with Warrnambool Airport and the existing user groups.

At the Hearing, Warrnambool Council confirmed that it did not object to the proposed wind energy facility but was concerned with the risk associated with increasing the MSA by requiring sharper angles on arrival and take-off. In response to IAC questions, it explained that it opposed increasing the MSA to accommodate the Woolsthorpe wind energy facility, however it opted not to pursue its opposition because it would have been raised irrespectively.

Moyne Council requested:

- for Warrnambool Airport – no turbine within the MSA zone without the written consent of Warrnambool Council and Airservices Australia
- for private airstrips (including the Manifold airstrip) – each operator's rights and operations be the subject of an individual mitigation plan agreed before enabling any turbine within 5 kilometres.

The Proponent considered that increasing the MSA at Warrnambool Airport would not negatively impact the airport's operations. It considered this issue was appropriately considered for the Woolsthorpe wind energy facility where the Panel stated in its report:

Warrnambool Airport is a certified airport that must comply with CASA's regulations.

As discussed in the above Chapter, the turbines do not need to be modified to achieve airport safety. Accordingly, the Panel supports raising the MSA.

This Panel does not see, in spite of the objection by Warrnambool City Council, any impediment to raising the MSA to 2200 feet. It is Airservices Australia that advises CASA that the MSA is to be raised. It then follows that once the location of the turbines is finalised the Applicant needs to [provide] Airservices Australia with the details so Airservices Australia can advise CASA. The proposed permit conditions need to reflect this.

The Panel concludes that, on the basis that aviation safety has been adequately assessed, the MSA should be changed to reflect the changed conditions. To facilitate this, a new permit condition should be included requiring copies of the approved development plans be provided to Airservices Australia.

In response to submissions and evidence, the Proponent submitted it now appears that consent is not required from Warrnambool Council to raise the MSA.

Aerial firefighting capability and low-level flying operations

Other submissions were concerned about the impact of wind turbines on farm airstrips and farming activities. One submission included a statement from a pilot who cautioned about the impact that wind turbines would have on aerial firefighting and agriculture.

The Proponent called Mr Taylor of Fire Risk Consultants as a bushfire expert. Mr Taylor stated:

- previous bushfires in an around wind energy facilities across Australia and overseas have proven that aircraft pilots can travel through and around these areas
- the Project complies with CFA Guidelines, and will have no material impact on aerial firefighting since flying is conducted with greater limitations due to other matters, for example, the prevailing weather conditions, terrain and smoke.

The Proponent relied on the evidence of Mr Jennings and Mr Taylor who considered the Project will not negatively impact aerial firefighting or operations.

(iv) IAC response

The IAC Terms of Reference identify aviation safety as a key planning permit matter. This does not extend to considering the Project's potential impact on Warrnambool Airport's operation beyond safety. Having reviewed the relevant submissions, expert statements and questions put to the experts, it is the IAC's understanding that:

- Warrnambool Airport has been consulted about the required change to the Warrnambool Airport 10nm MSA and maintains its opposition to the change
- the airport operator is usually required to support any change to the MSA, because the required changes to the Instrument Approach Procedures are a 'commercial transaction' (Airservices Australia must be paid to make the required changes)
- the process to adjust MSA is a matter for Airservices Australia and outside the planning process.

The Proponent could have designed the Project to avoid wind turbines in areas that would require the Warrnambool Airport 10nm MSA to be raised. However, it has proposed to construct turbines in locations that require the Warrnambool Airport 10nm MSA to be raised by 100 feet. It is understood that this will require the Instrument Approach Procedures to be updated, but that this will not require steeper landings and take-offs at Warrnambool Airport or other material changes to the aircraft Instrument Approach Procedure.

The IAC acknowledges that if Warrnambool Airport does not consent to increasing the MSA by 100 feet, the increase (and associated changes to the MSA in the Instrument Approach Procedures) will be triggered 'automatically' when CASA and AirServices Australia is notified about the structures. As Mr Jennings explained, the MSA is expected to be raised through the Airservices Australia process after a wind turbine intrusion into the airport's MSA results in the existing Instrument Approach Procedures being cancelled. This is how the Airport's MSA was previously raised by 100 feet (from 2,100 to 2,200 feet) for the Woolsthorpe wind energy facility, despite that change also being opposed by Warrnambool Airport.

From an aviation safety perspective, the IAC accepts the aviation and bushfire evidence that the Project has applied the CFA Guidelines in relation to spacing, layout and operations of turbines and that there will be no material impacts on aerial firefighting or low-level agricultural flying.

There was no supporting information to support claims that the Project will result in negative safety impacts for aircraft from local airstrips.

(v) Findings

The Inquiry and Advisory Committee finds:

- The permit application is supported by an appropriate aeronautical impact assessment that has appropriately considered and applied relevant legislation, policies and guidelines.
- The Project will:
 - from a safety perspective, have an acceptable safety impact on Warrnambool Airport's operations
 - not create any negative safety impacts for aircraft from local airstrips
 - not materially restrict aerial firefighting capability or low-level flying operations from agricultural aerial spraying.

10.2 Fire safety

(i) Background

The planning permit application was supported by a Risk Management Plan (including Fire Safety Study). The Risk Management Plan concludes that, with the proposed CFA management measures in place, the Project would not increase fire risk to surrounding communities or assets.

The Risk Management Plan key findings are:

- the Project site is in a designated bushfire-prone area, primarily used for agriculture with limited native vegetation
- historical bushfires in the surrounding landscape were driven by northwest and southwest winds, but no large bushfires have directly impacted the Project site
- the Project complies with CFA Guidelines and the Planning Scheme (including Clause 13.02-1S and Clause 44.06)
- the design incorporates fire risk management measures to meet regulatory requirements and minimise fire hazards
- key fire risks include electrical hazards, ignition of dangerous goods, fire water runoff and safety hazards for first responders
- the bushfire risk associated with the construction and operation of the Project can be mitigated to acceptable levels
- the likelihood and consequences of fire risks were assessed using a risk matrix, with management controls reducing risks to acceptable levels
- management measures include:
 - fire suppression systems in the nacelles and battery energy storage systems
 - fire breaks around infrastructure and spacing of turbines for firefighting access
 - construction of access tracks for firefighting and maintenance
 - installation of water tanks and fire protection systems

- development of Risk Management, Fire Management, and Emergency Management Plans in consultation with the CFA which include measures for fire prevention, response procedures and mitigation of fire water runoff
- ongoing consultation with the CFA
- after implementing management controls, fire risks are reduced to low or medium levels.

(ii) Legislation, policy and guidelines

The Project site is:

- partly affected by the Bushfire Management Overlay
- in the Bushfire Prone Area (like most of Victoria).

Relevant legislation, policy and guidelines include:

- Planning Scheme at:
 - Clause 13.02 (Bushfire Planning) generally seeks to reduce bushfire risk and prioritise the safety of people through planning decisions
 - Clause 44.06 (Bushfire Management Overlay)
 - Clause 52.32 requires applications to include a site context analysis that considers bushfire risks
 - Clause 71.02 calls for planning decisions to balance objectives but, in bushfire-affected areas, to prioritise the protection of human life.
- Design Guidelines and Model Requirements for Renewable Energy Facilities (CFA Guidelines)
- Barwon South West: Bushfire Management Strategy 2020 (DELWP, 2020b)
- Moyne Municipal Fire Management Plan (Moyne Shire Council, 2020)
- Dangerous Goods (Storage and Handling) Regulations 2008 in relation to BESS.

(iii) The issues

The issues are whether:

- fire safety risk has been appropriately assessed
- the permit conditions set an appropriate framework to address fire safety risks.

(iv) Evidence and submissions

In closing, the Proponent made submissions regarding the scope of 'fire safety':

- While the EES scoping requirements focus fire safety on aviation safety and aerial firefighting operations, the Risk Management Plan provides a broader assessment of fire risk.
- Given the Terms of Reference, the IAC should assess fire safety through the planning scheme provisions relevant to the permit application.
- There is a legal question about whether Clause 13.02 has any substantive role in assessing the Project at all, given the relevant permit triggers:
 - The Project site is largely in a bushfire prone area, but the Project does not require a permit under the Bushfire Management Overlay.
 - Clause 13.02 (Bushfire Planning) may not be relevant because the permit triggers do not contain specific bushfire assessment requirements.

- VCAT decision Booth v Strathbogie Shire Council found the aspirations of Clause 13.02 are not necessarily engaged without a planning control mechanism for assessing bushfire risk and the same reasoning applies to the Project.

The Proponent had earlier submitted:

- Clause 13.02-1S is relevant and requires consideration of:
 - the protection of human life
 - the proper identification and assessment of bushfire risk
 - achieving no net increase in bushfire risk.
- Clause 52.32 and Clause 71.02 require consideration of bushfire risk, aircraft safety and prioritisation of human life and are relevant.
- The EES provides a comprehensive assessment against Clause 13.02 and the CFA Guidelines, and the latter informed Project design.
- The project satisfies the relevant CFA aerial firefighting recommendations.
- The potential for increases to bushfire risk relates to the risk of ignition in the nacelles but is very low with the application of appropriate fire detection and suppression technologies.
- Modern turbine and BESS design, together with fire detection, suppression and emergency management measures.
- Bushfire risks can be reduced to an acceptable level.
- The Project will not result in a net increase in bushfire risk and will not materially affect aerial firefighting capability.
- The conditions requested by WorkSafe and the CFA were included in the permit conditions (final version).
- The EMMs were generally translated into permit conditions.

The Proponent circulated written evidence from Mr Taylor but did not call him as a witness. Mr Taylor stated:

- The Risk Management Plan concluded the Project will not materially increase fire risk and that any residual risk can be reduced to an acceptable level through mitigation measures.
- There are several fire risks:
 - the Project causing a fire
 - a bushfire affecting the Project
 - the Project making firefighting more difficult
 - fire impacts on nearby people, property and infrastructure.
- The Project incorporates several features that reduce fire risk, including:
 - additional access tracks and firebreaks
 - increased firefighting water supplies
 - greater on-site presence than present for early fire detection
 - modern fire detection and suppression systems in turbines and the BESS.
- The Project will not impede firefighting operations, including aerial firefighting, and includes commitments to emergency planning and ongoing engagement with local CFA brigades.
- No evidence supports the issue raised by submitters that clustering wind energy facilities decreases firefighting effectiveness at the landscape level.

- It is rare to have a fire at a wind energy facility and BESS.
- Fire detection and suppression systems are industry best practice and can significantly reduce the likelihood of fire.
- Bushfire risk can be mitigated to an acceptable level through implementation of the Risk Management Plan, Fire Management Plan and Emergency Management Plan in accordance with CFA guidelines.
- The proposed mitigation measures are appropriate and meet the requirements outlined in the CFA Guideline. The exception is the need to add additional requirements of the Risk Management Plan as requested by the CFA in the EMMs. The Proponent submitted this change was unnecessary as the specific additional detail is already covered by the CFA Guidelines as referenced in the conditions.

Mr Jennings provided evidence that aerial firefighting:

- is conducted by pilots who are suitably trained and endorsed for low level flying and who meticulously plan such operations with the relevant authorities
- will continue with minor changes to accommodate the Project including modified flight tracks.

WorkSafe is a determining referral authority for permit applications involving risks from Dangerous Goods. It did not object to the permit application subject to conditions:

- The Risk Management Plan must be updated once the site design and battery supplier has been finalised to confirm the requirements of the CFA Guidelines are met, and to the satisfaction of the CFA's Dangerous Goods Unit, prior to BESS arrival on site.
- The applicant must undertake a Fire Management Plan and Emergency Response Plan in line with the CFA Guidelines, conducted by a suitably competent person and to the satisfaction of the CFA's Dangerous Goods Unit, prior to BESS arrival onsite.

Though not a formal referral authority, the CFA made a submission to the permit application. It requested several conditions be included in the permit relating to minimum separation distances between batteries, structures and vegetation. The Proponent accepted these conditions as sensible and appropriate.

Council did not challenge the Risk Management Plan on technical grounds, or the proposed bushfire response measures, including fuel management, access tracks and CFA engagement. It requested that the measures be secured through enforceable permit conditions rather than through the EMM alone, as the measures depend on ongoing operator commitments.

Other submissions considered:

- the Risk Management Plan is inadequate, including its representation of typical landscape conditions and lack of fire-behaviour modelling
- aerial firefighting and CFA volunteers would be negatively affected some pilots are not equipped to deal with firefighting on the Project site
- a Fire Management Plan should be prepared as a prerequisite to obtaining a planning permit
- fire risks, including the introduction of new fire risks, cannot be managed
- the construction phase lacked fire management measures
- the clustering of wind energy facilities in the Moyne Shire affects fire safety and cumulative assessment was lacking.

(v) IAC response

Regarding its scope, the IAC:

- agrees the Terms of Reference limits its consideration to fire risk within the scope of the planning permit application which does not equate to bushfire risk
- has focussed on assessing fire risk associated with the Project and its site, rather than bushfire risk
- has referred to Clause 13.02 and the prioritisation of human life, within the context of fire safety.

The Project is in a bushfire-prone landscape and introduces components with potential fire hazards. The evidence demonstrates these risks can be managed through proposed design measures, fire detection and suppression systems, access arrangements, water supplies and operational management plans. Subject to appropriate permit conditions, the Project is not expected to cause an unacceptable fire risk or compromise firefighting operations.

The evidence of Mr Taylor, which was not tested or contested, was generally consistent with the findings of the Risk Management Plan. It found that fire risks can be appropriately managed through the proposed design and operational measures, which the IAC accepts.

Project design features that will help manage fire risk include:

- industry-standard fire detection and suppression systems incorporated into the modern wind turbines and BESS facilities
- locating the wind turbine generators, terminal station and BESS outside land subject to the Bushfire Management Overlay
- access tracks, firebreaks and dedicated firefighting water supplies that may improve firefighting access and capability compared to existing conditions.

The IAC agrees with evidence that aerial firefighting activities can continue to occur safely in and around the Project site. The proposed turbine spacing of 300 metres is consistent with the CFA Guidelines relating to spacing for the purposes of aerial firefighting and is referred to the permit conditions. A range of other fire response measures will be available to emergency services.

Concerns regarding the cumulative effect of multiple wind energy facilities within the broader Moyne Shire and the potential for 'clustering' to reduce firefighting effectiveness are acknowledged. There is insufficient evidence to conclude the cumulative impacts would be unacceptable.

The proposed permit conditions are considered appropriate and consistent with recommendations from the relevant agencies because:

- give statutory effect to the management measures identified in the CFA Guidelines and the EEMs generally
- require fire protection measures to be implemented before operation can commence.

These conditions require a range of management measures that are logically focussed on the BESS and related infrastructure. They include:

- identifying risks and hazards of the facility and a description of risk controls

- set design parameters for the BESS
- continuous monitoring systems
- monitoring of vegetation growth during the fire danger period
- preparation and implementation of a Fire Management Plan before development starts
- preparation and implementation of an Emergency Management Plan
- ongoing consultation with CFA
- provision and maintenance of firefighting water supplies
- provision and maintenance of access tracks and firebreaks.

The IAC considers it premature to require the Fire Management Plan as a prerequisite to planning permit issue as the plan should be based on the final design layout, including the location of any components with fire risk.

The conditions as required by WorkSafe, a determining referral authority, have been included in the permit (final version) are appropriate. They are similar to permit conditions for other wind energy facilities and focus on the BESS. Importantly, they require the Risk Management Plan to be updated once the site design and battery supplier and associated specifications are confirmed so that fire risks can be identified.

CFA is the agency with primary responsibility and expertise in both fire management and emergency response, though not a formal referral authority. Its recommended conditions were accepted the Proponent, supported by evidence and are accepted by the IAC. Noting the need to use the CFA Guidelines to inform the Risk Management Plan, rather than listing the detailed requirements in the permit condition, is acceptable. The CFA can require any detailed requirements from the CFA Guidelines when reviewing the Risk Management Plan under the permit conditions.

There was limited concern regarding fire safety during decommissioning. The permit conditions will ensure that technical input is sought from the CFA and WorkSafe to ensure any decommissioning activities manage fire safety.

(vi) Findings

The Inquiry and Advisory Committee finds:

- The permit application is supported by an appropriate fire safety study and risk management plan that have appropriately considered and applied relevant legislation, policies and guidelines.
- The fire risks have been appropriately identified, including in relation to the Battery Energy Storage System.
- The Project, subject to permit conditions, will appropriately manage fire risk.
- The conditions requested by the Country Fire Authority and WorkSafe to be included on the planning permit provide an appropriate planning framework for assessing and managing fire safety associated with the Project's use and development.
- The Project will not negatively impact aerial firefighting capability.

10.3 Noise

(i) The issue

The issue is whether the Project may cause noise and vibration that negatively impacts amenity at sensitive receptors during construction, operation and decommissioning.

(ii) Background

The key relevant Victorian legislation and guidelines are:

- *Environment Protection Regulations 2021* (EP Regulations), which requires the Project operation to comply with the noise limits set by New Zealand Standard (NZS) 6808.2 (the New Zealand Standard) – being the higher of 40 decibels, measured as the A-weighted sound level exceeded for 90 per cent of the measurement period (40 decibels LA90) or the background noise level plus 5 decibels
- EPA Publication 1834.2 which provides guidance for managing construction noise and vibration in accordance with the general environmental duty under the *Environment Protection Act 2017*.

The Noise and Vibration Assessment supporting the permit application found:

- the Project can comply with the requirements of the applicable Victorian legislation and guidelines.
- the applicable noise limits:
 - were the higher of 40 dBL_{A90} or the background noise level plus 5 decibels for non-stakeholder dwellings
 - were the higher of 45 dBL_{A90} or the background noise level plus 5 decibels for seven stakeholder dwellings where noise agreements were proposed
 - did not need to comply with high amenity area noise limit.

The Noise Audit Report prepared by Tonkin & Taylor which assessed the Noise and Vibration Assessment and supported the permit application made no recommendation and concluded:

- the 2025 pre-construction noise assessment includes the information specified in New Zealand Standard, EPA Publication 3011 and EPA Publication 1692.1
- the 2025 pre-construction noise assessment adequately addresses and meets the intent and required outcomes of EPA Publication 1692.1 and specifically the requirements of the New Zealand Standard.

Resonate peer reviewed the Noise and Vibration Assessment and made the following recommendations:

- The pre-construction noise assessment required by MM-NV04 should be prepared by a suitably qualified and experienced acoustic consultant and include the outcomes of any additional background noise monitoring deemed necessary based on the assessment of the final detailed design of the Project as required by NZS 6808:2010.
- The schedule of sound power level testing required by MM-NV05 should also include near field tonality testing as is normal for near field sound power level testing.

- As recommended by MM-NV07, a condition should be imposed requiring a pre-construction noise assessment for noise from ancillary infrastructure. This should be carried out by a suitably qualified and experienced acoustic consultant.

Permit conditions (version 1) required:

- a construction noise and vibration management plan to be:
 - submitted before each stage of development starts
 - approved and endorsed by the responsible authority
 - implemented to the satisfaction of the responsible authority
- the Construction Environmental Management Plan to prescribe management of and/or mitigation of impacts on noise and vibration
- a pre-construction (predictive) noise assessment before development starts, including the BESS based on its final layout
- a decommissioning Noise and Vibration Management Plan
- the Project to be tested for noise emissions before it starts operating
- the Stakeholder Engagement Plan to include a complaints management procedure for noise complaints at pre-existing dwellings within 5 kilometres of the Project site
- the Complaints Register to record the findings and recommendations of a noise compliant investigation report undertaken in accordance with the endorsed noise management plan.

(iii) Evidence and submissions

The evidence and submissions were focussed on:

- whether the Project can comply with the criteria and recommendations of the applicable Victorian legislation and guidelines
- suitability of background noise monitoring, determination of the noise limits, and whether the High Amenity Area noise limit should be adopted
- the application of the General Environmental Duty to Project noise
- the adequacy of the Noise and Vibration Assessment, including the adoption of appropriate modelling parameters, the consideration of low-frequency noise and the influence of wake effects
- cumulative impacts from other wind energy facilities.

Compliance with the Criteria

Mr Delaire and Mr Evans stated:

- the noise assessment for the Project was undertaken in accordance with the requirements of the EP Regulations and using the New Zealand Standard
- the operational noise from the wind turbines is predicted to comply with the base (40 dBA) noise limit specified in the New Zealand Standard (the applicable standard under Victorian EP legislation)
- operational noise from the associated terminal station and BESS was also predicted to comply with limits from the Victorian EPA Noise Protocol
- noise and vibration from the construction and decommissioning phases can:
 - comply with the requirements of EPA Publication 1834.2

- be reasonably addressed with 'good practice' measures to manage construction noise and vibration.

Suitability of background noise monitoring, determination of the noise limits and adoption of the High Amenity Area

Submissions including Moyne Council considered the noise limits were not adequately defined because the Proponent had not undertaken background noise monitoring at enough locations.

Mr Delaire stated:

- the New Zealand Standard requires background noise levels to be measured only at receivers that are within the predicted 35 dBL_{A90} noise level contour
- there are only two non-stakeholder receivers (D620 and D622) within that contour, and permission was not granted to monitor at one of those locations
- background monitoring was undertaken at seven locations around the Project site
- in any case, the background noise level was not used to set an allowable noise limit in accordance with the New Zealand Standard because the more conservative 40 dBA 'base noise limit' was adopted for all receivers rather than adopting a higher limit based on the background noise level plus 5 decibels where the background noise is higher than 35 dBA.

During questioning, Mr Delaire explained the locations had been selected based on their distance to the Project site, a review of aerial photography and discussions with the Proponent about access to the Project site.

Mr Evans stated the number and location of background noise level measurements was appropriate, consistent with other relevant projects in Victoria, and reflected the relatively low number of 'non-involved' dwellings close to the wind turbines.

Both Moyne Council and Mr Huson requested the High Amenity Area noise limit be applied to properties in the Farming Zone. They explained this would result in applying a lower base noise limit of 35 dBL_{A90} or background plus 5 decibels above 30 dBA at low wind speeds (less than 6 metres per second) rather than the normal base limit of 40 dBL_{A90}.

Both Mr Delaire and Mr Evan agreed:

- the EPA technical guidelines (Publication 3011) explicitly state that receivers in the Farming Zone should not be considered as High Amenity Areas
- the 'standard' noise limit is appropriate.

When questioned by the IAC, Mr Delaire stated the lower High Amenity Area limit was predicted to be achieved at the two noise sensitive receivers within the 35dBA contour at low wind speeds in any case.

Some submissions believed the L_{A90} noise level metric used to assess wind energy facility sound was inappropriate. Mr Huson considered the L_{A90} noise level metric would not properly account for potentially high levels of wind turbine noise emission.

Mr Evans stated the L_{A90} is adopted to appropriately filter out noise from intermittent and louder sources of noise such as wind gusts.

Applying the General Environmental Duty to noise

Submissions considered compliance with the noise limits to be insufficient to demonstrate that the General Environmental Duty, as required by the EP Act, would be met.

Mr Evans and the Proponent each stated the compliance note under Regulation 131C says that for wind energy facilities, the General Environmental Duty is met where the noise requirements of the EP Regulations are met – that is:

- the noise levels are compliant with the applicable noise limits
- a Noise Management Plan has been prepared and will be implemented
- after construction, annual compliance statements are provided
- five-yearly monitoring is undertaken.

Adequacy of the Noise and Vibration Assessment and consideration of low-frequency noise and influence of wake effects

Submissions noted the Noise and Vibration Assessment was based on a 'candidate' wind turbine. They were concerned the actual turbine used in the Project may produce more noise than what was assumed.

Mr Huson considered the noise predictions were not conservative because they:

- had 'incorrect' ground absorption values
- did not include an allowance for uncertainty.

He added:

- the operational noise assessment did not account for low frequency noise emission from the turbines and the potential increase in turbine noise emissions due to inflow turbulence
- the sound levels predicted in the Noise and Vibration Assessment are conservatively 5 decibels too low and that they should be penalised for amplitude modulation due to the closeness of the wind turbines to each other and the potential influence of wake effects.

Mr Delaire and Mr Evans stated:

- it is usual for assessments to adopt a reasonable candidate wind turbine at the planning stage of the project
- an updated assessment would be required for the final turbine that will be used before construction
- the parameters used for the noise assessment are consistent with industry guidance, including the United Kingdom Institute of Acoustics Good Practice Guide
- in their experience, the prediction methodology produced reasonable estimates of wind energy facility sound in practice
- the EP Regulations are expressed as a 'performance requirement' to achieve the noise limits at the relevant residential properties
- the risk of exceeding the limits could be managed by adjusting the wind energy facility operating parameters if required.

They both added:

- wind energy facilities do not commonly produce amplitude modulation

- wake effects have not been found to result in increased noise emissions from wind energy facilities in practice.

Cumulative Impacts

Several submissions considered there may be cumulative impacts from neighbouring wind energy facilities including Mount Fyans and Mortlake.

Mr Delaire stated:

- other wind energy facilities were greater than 10 kilometres from the Project site therefore turbine noise levels from other wind energy facilities would be more than 10 decibels below the noise level from the Project
- detailed cumulative noise level predictions were therefore not warranted.

Mr Evans considered that cumulative noise was not likely to present a risk given the significant separation distance between the Project and other existing and approved wind energy facilities.

(iv) IAC Response

The IAC is satisfied that the Noise and Vibration Assessment has reasonably addressed the requirements of the relevant Victorian legislation and guidelines. The Proponent has provided a peer review of the assessment that was also subject to a review by an EPA Accredited auditor in accordance with Planning Scheme Clause 52.32-4.

The number of, and selection of locations used to undertake the background noise monitoring locations is reasonable, given the size of the Project site, and the distance to non-related landowners.

The IAC accepts that properties in the Farming Zone should not be classified as a High Amenity Area either by the New Zealand Standard or following the guidance of EPA publication 3011. The approach taken for determining noise limits is consistent with the requirements of the EP Act, EP Regulations and the New Zealand Standard.

There was no evidence presented to the IAC to suggest that adopting the L_{A90} noise metric to measure wind energy facility sound is unreasonable. This metric is adopted as the preferred method for measuring wind energy facility sound in most jurisdictions globally. It is apparent that adopting a L_{Aeq} metric to measure wind energy facility sound is technically dubious and would result in the measurement of significant extraneous noise unrelated to the wind energy facility.

There was no credible evidence presented to the IAC to suggest that wind energy facility sound varies by a significant amount over short-term measurement periods. Using the L_{A90} metric, as adopted in the New Zealand Standard and elsewhere globally, is the most reasonable approach for measuring quasi-static wind energy facility sound levels in the presence of other extraneous environmental sounds.

For these reasons, the noise criteria adopted by the relevant noise assessments is consistent with the requirements of the Victorian legislation.

The IAC does not agree with Mr Huson that the noise predictions are 'wrong' or insufficiently conservative because they do not adopt conservative assumptions or

account for increased noise emissions due to inflow turbulence. The IAC was not presented with credible evidence to suggest:

- actual wind energy facility sound levels are likely to be significantly higher than those presented in the Noise and Vibration Assessment
- inflow turbulence results in higher turbine noise emissions in practice.

Even if the turbine noise levels are unexpectedly higher than has been predicted, the Project must meet the required post-construction performance criteria in accordance with the EP Regulations. There are reasonable noise mitigation options that can be applied to reduce noise emissions if the operational noise limit is found to be exceeded after the Project is constructed.

Regarding compliance with the General Environmental Duty, the Victorian legislation is clear that compliance with the applicable noise limit, in conjunction with fulfilling the other requirements of the EP Regulations is sufficient to satisfy the operators duties in section 25 of the EP Act.

The IAC accepts the adoption of noise emissions levels for the 'candidate' turbine. As noted for other projects, it is normal for a wind energy facility to be assessed based on an indicative or candidate turbine. Manufacturers are likely to further develop turbines before the Project is constructed so it would be unreasonable to restrict the Project to currently available turbines.

In any case, the permit conditions require an updated pre-construction noise assessment which can assess the final turbine selection.

The IAC agrees with Mr Delaire that a more detailed cumulative noise assessment is not required because the nearest adjacent wind energy facilities are sufficiently distant that they will not materially contribute to cumulative wind energy facility noise at receivers near to the Project.

No expert evidence or submission referred to noise during decommissioning of the Project at some stage in the future. While a specific assessment of decommissioning was not undertaken as part of the EES, it is accepted that the decommissioning of the Project will be comparable or less intensive than the activities required to construct the Project. Any noise from decommissioning can be managed in a similar manner to achieve the requirements of the EPA guidelines for construction and demolition noise.

(v) Findings

The Inquiry and Advisory Committee finds:

- The permit application is supported by noise and vibration assessments that have appropriately considered and applied relevant legislation, policies and guidelines.
- The Project will not cause noise and vibration that negatively impacts amenity at sensitive receptors during construction, operation and decommissioning.
- The proposed permit conditions provide a suitable framework to ensure noise and vibration impacts are appropriately managed.

10.4 Blade glint and shadow flicker

(i) The issue

The issue is whether the Project may cause blade glint and shadow flicker from turbine operation that negatively impacts surrounding amenity.

(ii) Background

The Shadow Flicker Assessment that supported the permit application concluded:

- the Project complies with the Victorian Planning Guidelines at the theoretical modelled level of shadow flicker for the provided 106 turbine layout
- the modelled shadow flicker duration results (within 50 metres, representing garden fenced area) predict:
 - all non-stakeholder receptors comply
 - two non-stakeholder receptors would receive some shadow flicker, of between 15 and 30 hours each year
 - 24 stakeholder receptors would receive some shadow flicker, of which 21 receive greater than 30 hours, and three receive less than 30 hours each year
- management measures such as screening (vegetation or artificial) or selective turbine control and shutdown could be used after construction to significantly mitigate any issues raised if recorded data exceeds guidelines, agreements or modelled data
- shadow flicker may cause annoyance in exceptional cases, and may be pre-emptively mitigated by offering vegetation screening to those:
 - with identified shadow flicker occurrence that are not involved (by agreement) landowners
 - up to 1 kilometre beyond the modelled shadow flicker range
- blade glint should be mitigated by applying a low reflectivity treatment on the wind turbine blades – the residual impact will be negligible.

The Planning Guidelines for Development of Wind Energy Facilities state a facility must not result in more than 30 hours of shadow flicker each year onto the garden-fenced area surrounding a dwelling.

(iii) Evidence and submissions

The Proponent submitted:

- the assessment was undertaken in accordance with the relevant guidelines, and is inherently conservative
- all non-host receptors complied with the requirements for shadow flicker (less than 30 hours each year)
- some host receptors would receive greater than 30 hours, but:
 - the guideline requirements would be waived by their host agreements
 - they would be offered visual screening to mitigate the impacts.

Several submissions considered the EES did not adequately address shadow flicker and may result in impacts, including on stock movements and work areas. Moyne Council

requested the IAC examine whether the proposed shutdown protocols were sufficient to protect residential amenity.

No expert was called to provide evidence on blade glint and shadow flicker.

(iv) Assessment

While the Shadow Flicker Assessment indicates there may be shadow flicker at some farmland locations near the turbines, the guidelines are intended to protect residential uses. The assessment's modelling is sufficient to demonstrate that there will be only short periods of shadow flicker at a small number of non-host receptors. Visual screening will be available to reduce the potential impacts on host-receivers who may experience more than 30 hours each year of shadow flicker. This is an appropriate mitigation response.

The blades will be painted so they will not result in significant blade glint.

Other wind energy facilities such as Mount Fyans are sufficiently distant to avoid material cumulative impacts from shadow flicker on residential receivers near to the Project.

(v) Findings

The Inquiry and Advisory Committee finds:

- The permit application is supported by an appropriate shadow flicker assessment that has appropriately considered and applied relevant legislation, policies and guidelines.
- The Project will not cause blade glint and shadow flicker from turbine operation that negatively impacts surrounding amenity.

11 Permit condition drafting

11.1 Introduction

Terms of Reference Clause 46 requires the IAC to make recommendation that focus on key matters and cover other matters at a high level only. The way in which all the permit conditions are drafted affects how the IAC's recommendations to these matters are implemented. The IAC requested changes be tracked through different versions throughout the process (see Table 14).

Table 14 Permit condition versions

Date	Version	From	Doc No	Notes
24 Apr	1	Proponent	57	First version, as there were no exhibited permit conditions
6 May	2	Proponent	82	
18 May	2	DEECA	111	Comments to Version 2
20 May	2	DTP Energy Assessment	121	Edits to Version 2 based on standard permit condition format
21 May	3a	Proponent	124	Tracked against Version 2
21 May	3a	Proponent	125	Tracked against Version 1
21 May	3b	Proponent	127	Tracked against DTP permit conditions

Parties were given an opportunity to respond to the final version of the permit conditions (versions 3a and 3b).

Table 15 Responses to permit conditions (version 3a and b)

Date	From	Doc No	Notes
28 May	DEECA	141	Response email
28 May	Ms Lehmann	142	Response document (non-drafting comments redacted)
29 May	Mr Cumming	143	
29 May	Moyne Council	144	
29 May	Head TfV	145	Response letter
29 May	DTP Energy Assessment	146a	Comments to final version

The Proponent was given an opportunity to consider party tracked changes and comments and to provide a final version of the permit conditions. The Proponent provided its final version through Document 147b.

11.2 Drafting matters

General drafting

The IAC has reviewed the different permit condition versions, including associated tracked changes and comments, listed in Table 14 and Table 17. Identified drafting matters can be summarised as:

- permit structure fragmentation
- conditions format, particularly their alignment with the standardised approach in *Writing Planning Permits* (DTP, 2023)
- conditions which guide rather than regulate
- unnecessary conditions
- misalignment with EPA standards
- unclear drafting making them difficult to determine and implement
- conditions that should be deleted because they relate to matters that do not need to be regulated through the permit.

The IAC supports drafting that:

- is consistent with the modern approach in *Writing Planning Permits* including:
 - condition layout (section 4.3)
 - language to use and avoid (section 4.4)
- aligns with the permit structure and conditions drafting in Document 121a, which itself is consistent with *Writing Planning Permits*
- clarifies the permit condition's intent
- applies 'relevant road management authority' to recognise different road managers for state and local roads
- improves the permit condition's operation and implementation
- removes repetitive and unnecessary content and conditions
- removes permit conditions that seek to achieve outcomes that are regulated through separate legislation.

Shall versus must

Writing Planning Permits states the expression 'shall' should be "*generally avoided or carefully used when writing a planning permit condition*". It advises that 'shall':

- is not plain English and ambiguous
- unclear whether the obligation is mandatory or discretionary
- should only be used where a discretion is intended.

It refers to 'must' as an alternative expression.

The IAC has reviewed permit conditions consistent with this guide and recommended 'must' where the action is a requirement.

Staging

DTP (Energy Assessment) advised that Condition 3 enables corresponding obligations arising from the permit to be completed in stages, so stages do not have to be referred to in later conditions. These references remained in the Proponent's permit conditions (final version). The IAC agrees.

IAC recommended drafting changes

Appendix F shows the IAC's recommended permit conditions that:

- reflects recommendations in this report
- shows the recommended drafting form
- applies the Proponent's final permit conditions version as a base and tracks subsequent changes.

Any other content shown in Appendix F is provided for context to the IAC's recommended permit conditions.

(i) Finding

The Inquiry and Advisory Committee finds the permit conditions should reflect drafting shown in Appendix F, consistent with *Writing Planning Permits* (Department of Transport and Planning, 2023).

PART D: APPENDICES

Appendix A Terms of Reference

Hexham Wind Farm Inquiry and Advisory Committee

Version: January 2026

The Hexham Wind Farm Inquiry and Advisory Committee (IAC) is appointed to inquire into, and report on, the potentially significant environmental effects of the proposed Hexham Wind Farm (the project) assessed in the environment effects statement (EES) and planning merits of the planning permit application, in accordance with these terms of reference.

The IAC is appointed pursuant to section 9(1) of the Environment Effects Act 1978 (EE Act) as an inquiry, and part 7, section 151(1) of the Planning and Environment Act 1987 (PE Act) as an advisory committee.

Name

1. The IAC is to be known as the 'Hexham Wind Farm IAC'.

Skills

2. The IAC is to consist of members with expertise in:
 - a. assessment of wind farms and associated mitigations;
 - b. biodiversity/ecology, particularly avifauna and bats;
 - c. visual impact and landscape character; and
 - d. land use planning.
3. The IAC will comprise an appointed Chair (IAC Chair), a Deputy Chair and other appropriately qualified members.

Purpose of the Inquiry and Advisory Committee

4. The IAC is appointed by the Minister for Planning (the Minister) under section 9(1) of the EE Act to hold an inquiry into and report on the environmental effects of the project. The IAC is to:
 - a. review and consider the EES and submissions received in relation to the EES with a focus on the key EES matters;
 - b. consider and report on the significance and acceptability of the environmental effects of the project, having regard to relevant policy and legislation and relevant evaluation objectives in the scoping requirements;
 - c. consider and report on potential significant impacts on relevant matters of national environmental significance protected under the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act), including the significance and acceptability of residual impacts;
 - d. identify if any additional mitigation measures and/or project modifications are required beyond those identified in the EES to avoid, mitigate or manage the

significant environmental effects of the project consistent with relevant policy and legislation; and

- e. advise on how these modifications and measures should be implemented through the necessary approvals and consents for the project.
5. The IAC is also appointed as an advisory committee under Part 7, section 151(1) of the PE Act to:
- a. review the planning permit application and any referred submissions and make recommendations for the Minister for Planning to consider in determining the planning permit application;
 - b. provide specific advice on the key planning matters that the IAC recommends should be addressed in the planning permit, if the Minister decides to grant a permit for the project.
6. The IAC must produce a report of its findings and recommendations to the Minister consistent with clauses 46–49, to inform:
- a. the Minister’s assessment under the EE Act, which will be considered by statutory decision makers for the project; and
 - b. the Minister’s consideration of the planning permit application under the PE Act.
7. The report should include information and analysis of the project’s significant environmental effects focussing on key EES matters and key planning permit matters with coverage of ‘other matters’ that may relate to the EES at a high level only.

Key matters and other matters

8. The Hexham Wind Farm Environment Effects Statement Scoping Requirements, September 2024 (Scoping Requirements) list, in Table 1, key matters with potentially significant environmental effects.
- a. Key matters have been refined through the development of the EES. The extant ‘key EES matters’ are:
 - i. biodiversity values, including threatened species and communities listed under the Flora and Fauna Guarantee Act 1988 and Environment Protection and Biodiversity Conservation Act 1999;
 - ii. native vegetation and ecology of the area’s terrestrial environment and freshwater environments, including wetlands and creeks;
 - iii. Aboriginal cultural heritage, and
 - iv. landscape and visual amenity.
 - b. Other matters which are considered less likely to have significant environmental effects (‘other EES matters’).
9. Key matters which relate to the planning permit application include those listed in clause 8a (insofar as they are relevant to the planning application), in addition to

traffic, noise, fire safety, shadow flicker and aviation safety ('key planning permit matters').

Background

Project outline

10. The Hexham Wind Farm project comprises the development of:
 - a. a wind energy generation facility within predominately agricultural land, 15 kilometres west of Mortlake and 15 kilometres north-east of Woolsthorpe, Victoria; and
 - b. approximately 147 kilometres of new access tracks and an on-site terminal station.
11. The project site, which encompasses all elements of the project, covers an area of approximately 16,000 hectares.
12. The key components of the project include:
 - a. up to 106 wind turbines;
 - b. a 200 megawatt battery energy storage system;
 - c. an on-site terminal station;
 - d. approximately 139 kilometres of underground electricity cables;
 - e. permanent and temporary ancillary infrastructure, including operations and maintenance facilities, site access points and access tracks, transmission and grid connection infrastructure, meteorological masts, concrete batching plants and site storage areas;
 - f. road and intersection upgrade works.
13. The project's proponent is Hexham Wind Farm Pty Ltd (the proponent), which is responsible for preparing technical studies, consulting with the public and stakeholders, preparing an EES and planning permit application.

EES assessment process

14. In response to a referral under the EE Act from the proponent, the Minister for Planning determined on 19 April 2022 that an EES was required for the project and issued their decision with procedures and requirements for the preparation of the EES as specified in Attachment 1.
15. The EES was prepared by the proponent in response to the EES scoping requirements issued by the Minister for Planning in September 2024.
16. The EES, will be placed on public exhibition for 30 business days. The public comment period for the EES is in accordance with the procedures and requirements issued for this EES by the Minister. The proponent is responsible for public notice of EES exhibition.

Commonwealth assessment process

17. Because of its likely significant impacts on matters of national environmental significance, the project was determined to be a controlled action requiring assessment and approval under the EPBC Act on 31 August 2022. The relevant controlling provisions under the EPBC Act are listed threatened species and communities (sections 18 & 18A) and listed migratory species (sections 20 & 20A).
18. Under the EPBC Act bilateral agreement between the Australian and Victorian governments, the Victorian EES process is serving as the accredited assessment process to address EPBC Act assessment requirements for this project. The assessment of environmental effects to be made by the Victorian Minister for Planning will be provided to the Commonwealth Minister for Environment and Water to inform the approval decision under the EPBC Act.

Planning permit application process

19. The project requires a planning permit under the Moyne Planning Scheme in accordance with the PE Act. The proponent has prepared a planning permit application (reference no. PA2504115) which will be placed on public notice while the EES is on public exhibition.
20. Notice of the planning permit application will be given in accordance with the requirements of section 52 of the PE Act.

Other approvals

21. The project may require other statutory approvals and/or consents, as outlined in the EES, including the following key approvals:
 - a. an approved work plan and work authority under the *Mineral Resources (Sustainable Development) Act 1990* (MRSD Act);
 - b. an approved cultural heritage management plan under the *Aboriginal Heritage Act 2006*;
 - c. consents under the *Road Management Act 2004*, to conduct works in, on, or under roads;
 - d. a permit to remove listed flora and fauna from public land under section 48 of the *Flora and Fauna Guarantee Act 1988*; and
 - e. an authority to take or disturb wildlife under the *Wildlife Act 1975*.

Process

Stage 1A – Submissions to the EES

22. Submissions on the EES are to be provided in writing on or before the close of submissions date.
23. The IAC must not consider submissions that relate to matters that have not been assessed in the EES (refer to section 4 of the Scoping Requirements) and should prioritise its focus into EES submissions that relate to key EES matters set out in these terms of reference.

24. Submissions on the EES will be collected by the office of Planning Panels Victoria (PPV) through the Engage Victoria platform. All submissions must state the name and address of the person making the submission. Submissions will be collected and managed in accordance with the privacy guidance on the PPV website.
25. Petition responses will be treated as a single submission and only the first names from a petition submission will be registered and contacted.
26. Pro-forma submitters will be registered and contacted individually if they provide their contact details. However, the IAC should encourage pro-forma submitters who want to be heard at the hearing to present as a group, given their submissions raise the same issues.
27. All written submissions received by PPV and other supporting documentation or evidence received through the course of the IAC process should be published online, unless the IAC specifically directs that the submission or other material, or part of it, is to remain confidential. Requests for submissions or other material to be kept confidential must be clearly stated in writing with reasons to the IAC through PPV, consistent with the process outlined in the IAC's Privacy Collection Statement. The IAC will review these and base its decision to maintain confidentiality on whether it would be fair to the proponent and other parties to the hearing.
28. Electronic copies of each submission on the EES are to be provided to the proponent, Department of Transport and Planning (DTP) (Impact Assessment and Energy Assessment), Moyne Shire Council and the Eastern Maar Aboriginal Corporation.
29. PPV must retain any written submissions and other documentation provided to the IAC for a period of five years after the time of the IAC's appointment.

Stage 1B – Objections and submissions to the planning permit application

30. Objections and submissions to the planning permit application are to be made in writing to the Minister for Planning, through the Department of Transport and Planning.
31. Objections and submissions to the planning permit application will be collected by the Department of Transport and Planning Energy Assessment team by email to developmentassessment@transport.vic.gov.au or by mail to:
The Minister for Planning
C/- Department of Transport and Planning
GPO Box 2392
Melbourne 3001.
32. Objections and submissions should state the name and address of the person making the objection and include the reasons for the objection, stating how the objector would be affected by the grant of the permit. Objections will be collected and managed in accordance with the requirements of the PE Act.
33. If a number of persons make one objection, they may give the responsible authority the name and address of the person to whom the responsible authority is to give notice of the decision.

34. Pro-forma objections and submissions will be registered and contacted individually if they provide their contact details. However, the IAC should encourage pro-forma submitters who want to be heard at the hearing to present as a group, given their submissions raise the same issues.
35. Objections and submissions to the planning permit application that are received before the directions hearing held in accordance with clause 38 will be referred to the IAC.
36. PPV must retain any written objections to the planning permit application and other documentation provided to the IAC for a period of five years after the time of the IAC's appointment.

Stage 2 – Public hearing

37. The IAC must hold a public hearing and may make other such enquiries as are relevant to undertaking its role. The public hearing is to be focussed on key EES and planning permit matters, and the IAC may direct that:
 - a. submissions, evidence and other material presented to the IAC focus on key EES matters and key planning permit matters;
 - b. 'other matters' are not discussed at the public hearing and will be considered by the IAC based on documents (by way of further written material).
38. Prior to the commencement of the public hearing, the IAC must hold a directions hearing to make directions it considers necessary or appropriate as to the conduct, scope or scheduling of the public hearing, including the preparation and publication of a Request for Further Information report if required.
39. When it conducts a public hearing, the IAC has all the powers of an advisory committee that are specified in section 152(2) of the PE Act.
40. The IAC may inform itself in any way it sees fit, but must review and consider:
 - a. the exhibited EES and the planning permit application;
 - b. all submissions on the EES, the objections and submissions referred to the IAC on the planning permit application and evidence provided to the IAC by the proponent, state agencies, local councils and submitters, in so far as they relate to matters assessed in the EES and the planning permit application;
 - c. the views (if known) of Traditional Owners and Registered Aboriginal Parties;
 - d. any information provided by the proponent and parties that respond to submissions or directions of the IAC; and
 - e. any other relevant information that is provided to, or obtained by, the IAC, in relation to the matters assessed in the EES and planning permit application.
41. The IAC must conduct its process in accordance with the following principles:
 - a. the public hearing will be conducted in an open, orderly and equitable manner, in accordance with the principles of natural justice;

- b. the public hearing will be conducted with a minimum of formality and without legal representation being necessary for parties to be effective participants;
 - c. the IAC process and hearing is to be exploratory and constructive, with adversarial behaviour discouraged and with cross-examination/questioning to be regulated by the IAC in the context of these principles.
 - d. The IAC may limit the time of parties appearing before it.
42. The IAC may direct that a submission or evidence is confidential in nature and the hearing be closed to the public and not recorded for the purposes of receiving that submission or evidence.
43. The IAC may conduct a public hearing when there is a quorum of at least two of its members present or participating through electronic means, one of whom must be the IAC Chair or Deputy Chair.
44. If directed by the IAC, an audio recording of the hearing must be procured by the proponent. If recorded, the audio recording will be provided to PPV as a weblink and should be made publicly available as soon as practicable after the conclusion of each day of the hearing, or otherwise as directed by the IAC.
45. Any other recording of the hearing by any other person or organisation may only occur with the prior consent of, and strictly in accordance with, the directions of the IAC.

Stage 3 – Report

46. The IAC must produce a written report for the Minister for Planning containing its:
- a. analysis and conclusions with respect to the environmental effects of the project and their significance and acceptability;
 - b. findings on whether acceptable environmental outcomes can be achieved, having regard to legislation, policy, best practice, and the principles and objectives of ecologically sustainable development;
 - c. recommendations and/or specific measures that it considers necessary and appropriate to prevent, mitigate or offset adverse significant environmental effects;
 - d. recommendations relating to any feasible modifications to the design or management of the project that would offer improved environmental outcomes in relation to reducing/mitigating significant environmental effects;
 - e. recommendations for any appropriate mitigations or changes that may be lawfully imposed on any approval for the project, including with respect to the planning permit application and the content of a work plan or conditions on any approval required for the on-site quarry, if issued under the MRSD Act;
 - f. recommendations as to the structure and content of the proposed environmental management framework, including with respect to monitoring of environmental effects, contingency plans and site rehabilitation; and

- g. specific findings and recommendations about the predicted impacts on matters of national environmental significance and the acceptability, including appropriate controls and environmental management.
- 47. The report should include information and analysis of the significant environmental effects, in support of the IAC's findings and recommendations. The report should:
 - a. focus on the key EES matters and key planning permit matters only; and cover 'other matters' that may relate to the EES at a high level only; and
 - b. include information and depth of analysis proportionate to the significance of the environmental effects.
- 48. Matters that the IAC determines have minimal or negligible impact and can be readily addressed through standard and proven environmental management techniques do not need to be examined by the IAC. Simple recording of these matters in the report will suffice.
- 49. The report should include:
 - a. a list of all recommendations, including cross-references to relevant discussions in the report;
 - b. description of the public hearing conducted by the IAC, and a list of those persons consulted with or heard;
 - c. a list of all submitters in response to the exhibited EES and those objections and submissions referred to the IAC in regard to the planning permit application; and
 - d. a list of the documents tabled during the proceedings.

Timing

- 50. The IAC must conduct a directions hearing no later than 20 business days from the final date of the exhibition period of the EES.
- 51. The IAC needs to commence the hearing no later than 40 business days from the final date of exhibition period for the EES.
- 52. The IAC must submit its report in writing to the Minister for Planning within 30 business days from its last day of its proceedings, unless the report writing period spans the Christmas-New Year period, in which case 40 business days will apply.
- 53. The DTP's Impact Assessment Unit and Energy Assessment Team must liaise with PPV to agree on the directions hearing and hearing dates.

Minister's assessment

- 54. The Minister for Planning will make an assessment of the environmental effects of the project after considering the IAC's report as well as the EES, submissions and any other relevant matters.
- 55. PPV will notify submitters on the EES of the release of the Minister's assessment and the IAC report.

Fee

- 56. The fees for the members of the IAC will be set at the current rate for a panel appointed under part 8 of the PE Act.
- 57. All costs of the IAC, including the costs of obtaining any expert advice, technical administration and legal support, venue hire, accommodation, recording proceedings and other costs must be met by the proponent.

Miscellaneous

- 58. The IAC may apply to the Minister for Planning (or their delegate) to request variation to these terms of reference in writing, at any time before submission of its report. This includes requesting any variation to the required hearing or reporting timeframes.
- 59. The IAC may retain specialist expert advice, additional technical support, or legal counsel to assist if considered necessary.
- 60. PPV is to provide any necessary administrative support to the IAC. The proponent is to provide any necessary administrative or technical support to the IAC in relation to the conduct of the hearing.



Dr Bruce Abernethy
Executive Director,
State Planning Assessment and Facilitation

Date: 20/1/2026

Appendix B Submitters to the EES and planning permit application

Table 16 Submitters to the EES

No	Submitter	No	Submitter
1	Vivien Holyoake	29	Amy Mifsud
2	Martin Rusnak	30	Joy Howley
3	Tom Casey	31	Geoff Howley
4	Michele S [surname not provided]	32	Robert Mifsud
5	Juby George	33	Maria Elisa Weatherly
6	Mark Olsen	34	Department of Energy, Environment and Climate Action
7	Harry Skewes	35	Rebecca Manifold
8	Greg Johnson	36	Richard Manifold
9	Michelle Lehmann	37	William Manifold
10	Viva-Lyn Lenehan	38	Samantha Barton
11	Lucy Gubbins	39	Robert Mann
12	John McBratney	40	Kristina Zuniga
13	Hamish Cumming	41	Warrnambool City Council
14	Susan Dennis	42	Tom Gubbins
15	Guido Soares	43	Maurice Schinkel
16	Janet Addinsall	44	Ashlea Ranken
17	Hamish Weatherly	45	Dougal Ranken
18	Paul Madden	46	Helen Ranken
19	John Broadbent	47	Nicholas Ranken
20	Scott Bell	48	Elizabeth Mann
21	Carol Addinsall	49	Skye Ranken
22	Alexander Bell	50	Joanne O'Sullivan
23	Jennifer Weatherly	51	Todd O'Sullivan
24	Kristy Cameron	52	Head, Transport for Victoria
25	Richard Weatherly	53	Moyne Shire Council
26	Zane Cameron	54	Kim [surname not provided]
27	Leticia Cameron	55	Lachlan Ranken
28	Leanne Mifsud	56	Georgina Manifold

No	Submitter	No	Submitter
57	Tracey Madden	62	Nathan Mann
58	Mark Madden	63	Tess Madden
59	Julia Mann	64	Josh Meulendyks
60	Hexham Community Environmental Action Group Inc	65	Dianna Meulendyks
61	James Barton	66	Save Our Surroundings Riverina

Table 17 Submitters to the planning permit application

No	Submitter	No	Submitter
PP001	Heritage Victoria	PP023	Ashlea Ranken
PP002	Civil Aviation Safety Authority	PP024	Dianna Meulendyks
PP003	Country Fire Authority	PP025	Dougal Ranken
PP004	Environment Protection Authority	PP026	Elizabeth Mann
PP005	Wannon Water	PP027	Georgina Manifold
PP006	Glenelg Hopkins Catchment Management Authority	PP028	Helen Ranken
PP007	Sid Sprague	PP029	Hamish Weatherly
PP008	Sally Gilleece	PP030	Hexham Community Environmental Action Group Inc
PP009	Viva-Lyn Lenehan	PP031	John and Roselyn Harris
PP010	Michael and Alison Kearns	PP032	James Barton
PP011	Hamish Cumming	PP033	James Cochran
PP012	Wimmera Mallee Environmental and Agricultural Protection Association Inc	PP034	Joy Howley
PP013	Paul Madden	PP035	Julia Mann
PP014	John Broadbent	PP036	Josh Meulendyks
PP015	Lucy Gubbins	PP037	John Moore
PP016	Scott Bell	PP038	Joanne O'Sullivan
PP017	Carol Addinsall	PP039	Kristina Zuniga
PP018	Alexander Bell	PP040	Leanne Mifsud
PP019	Jennifer Weatherly	PP041	Lachlan Ranken
PP020	Kristy Cameron	PP042	Moyne Shire Council
PP021	Zane Cameron	PP043	Mark Madden
PP022	Amy Mifsud	PP044	Maria Elisa Weatherly

No	Submitter	No	Submitter
PP045	Moyne Council	PP056	Tom Gubbins
PP046	Nicholas Ranken	PP057	Todd O'Sullivan
PP047	Paul and Michelle Neal	PP058	Tess Madden
PP048	Paul Bourke	PP059	Tracey Madden
PP049	Rebecca Manifold	PP060	William Manifold
PP050	Robert Mann	PP061	Nathan Mann
PP051	Robert Mifsud	PP062	Geoff Howley
PP052	Richard Weatherly	PP063	Ali [surname not provided]
PP053	Susan Dennis	PP064	Skye Ranken
PP054	Samantha Barton	PP065	Neil Blain
PP055	Save Our Surroundings Riverina		

Table 18 Submission types

Submission No		Same*		Category	Location	Address**
EES	Permit					
1	-			Individual submitter(s)	Regional Victoria***	
2	-			Individual submitter(s)	Melbourne	
3	-			Individual submitter(s)	Regional Victoria	
4	-			Individual submitter(s)	Melbourne	
5	-			Individual submitter(s)	Regional Victoria	
6	-			Individual submitter(s)	Melbourne	
7	-			Individual submitter(s)	Regional Victoria	
8	-			Individual submitter(s)	Regional Victoria	
9	PP042	Yes		Individual submitter(s)	Local community	1
10	PP009			Individual submitter(s)	Regional Victoria	
11	PP015	Yes		Individual submitter(s)	Local community	18
12	-			Individual submitter(s)	Regional Victoria	
13	PP011			Individual submitter(s)	Regional Victoria	
14	PP053			Individual submitter(s)	Local community	2
15	PP004			Government agency or authority		
16	PP012			Community group	Regional Victoria	
17	PP029			Individual submitter(s)	Local community	13
18	PP013	Yes		Individual submitter(s)	Local community	12

Submission No		Same*		Category	Location	Address**
EES	Permit					
19	PP014			Individual submitter(s)	Local community	3
20	PP016	Yes		Individual submitter(s)	Local community	19
21	PP017	Yes		Individual submitter(s)	Local community	4
22	PP018	Yes		Individual submitter(s)	Local community	19
23	PP019			Individual submitter(s)	Local community	13
24	PP020	Yes		Individual submitter(s)	Local community	17
25	PP052			Individual submitter(s)	Local community	13
26	PP021	Yes		Individual submitter(s)	Local community	17
27	-	Yes		Individual submitter(s)	Local community	17
28	PP040			Individual submitter(s)	Local community	22
29	PP022			Individual submitter(s)	Local community	5
30	PP034			Individual submitter(s)	Regional Victoria	
31	PP062			Individual submitter(s)	Regional Victoria	
32	PP051			Individual submitter(s)	Local community	22
33	PP044			Individual submitter(s)	Local community	13
34	-			Government agency or authority	Not applicable	
35	PP049	Yes		Individual submitter(s)	Local community	14
36	-	Yes		Individual submitter(s)	Local community	14
37	PP060	Yes		Individual submitter(s)	Local community	14
38	PP054	Yes		Individual submitter(s)	Local community	20
39	PP050			Individual submitter(s)	Local community	15
40	PP039			Individual submitter(s)	Overseas	
41	-			Government agency or authority	Not applicable	
42	PP056	Yes		Individual submitter(s)	Local community	18
43	-			Individual submitter(s)	Regional Victoria	
44	PP023	Yes		Individual submitter(s)	Local community	23
45	PP025	Yes		Individual submitter(s)	Local community	16
46	PP028	Yes		Individual submitter(s)	Local community	16
47	PP046	Yes		Individual submitter(s)	Local community	16
48	PP026			Individual submitter(s)	Local community	15

Submission No		Same*	Category	Location	Address**
EES	Permit				
49	PP064	Yes	Individual submitter(s)	Local community	6
50	PP038	Yes	Individual submitter(s)	Local community	24
51	PP057		Individual submitter(s)	Local community	24
52	-		Government agency or authority	Not applicable	
53	PP045		Government agency or authority	Not applicable	
54	-		Individual submitter(s)	Local community	12
55	PP041		Individual submitter(s)	Local community	23
56	PP027	Yes	Individual submitter(s)	Local community	14
57	PP059	Yes	Individual submitter(s)	Local community	12
58	PP043	Yes	Individual submitter(s)	Local community	12
59	PP035		Individual submitter(s)	Local community	15
60	PP030		Community group	Local community	
61	PP032	Yes	Individual submitter(s)	Local community	20
62	PP061		Individual submitter(s)	Local community	15
63	PP058	Yes	Individual submitter(s)	Local community	12
64	PP036	Yes	Individual submitter(s)	Local community	21
65	PP024	Yes	Individual submitter(s)	Local community	21
66	PP055		Community group	Interstate, NSW	
-	PP047		Individual submitter(s)	Local community	7
-	PP031		Individual submitter(s)	Local community	8
-	PP007		Individual submitter(s)	Local community	9
-	PP033		Individual submitter(s)	Regional Victoria	
-	PP037		Individual submitter(s)	Regional Victoria	
-	PP048		Individual submitter(s)	Unknown	
-	PP001		Government agency or authority	Not applicable	
-	PP002		Government agency or authority	Not applicable	
-	PP003		Government agency or authority	Not applicable	
-	PP005		Government agency or authority	Not applicable	
-	PP006		Government agency or authority	Not applicable	
-	PP008		Individual submitter(s)	Local community	10

Submission No Same*		Category	Location	Address**
EES	Permit			
-	PP010	Individual submitter(s)	Local community	11
-	PP063	Individual submitter(s)	Unknown	
-	PP065	Individual submitter(s)	Regional Victoria	

* 27 submissions based on the same content

** Affected address in immediate local area (numbers assigned by the PPV for comparison purposes)

*** Submitter from Regional Victoria but not in the immediate local area

Appendix C Parties to the Hearing

Submitter	Represented by
Hexham Wind Farm Pty Ltd	Emily Porter SC and Jordan Wright of Counsel instructed by White & Case who called expert evidence on: - energy policy from Richard Bolt of Richard Bolt Consulting Pty Ltd - noise from Christophe Delaire of MDA - noise from Thomas Evans of Resonate Consultants - aviation from Ian Jennings of Chiron Aviation Consultants - traffic evidence from Brett Young of Ratio - landscape and visual from David Moir of Moir Studio - surface water from Benjamin Hughes of Water Technology Pty Ltd - ecology from Inga Kulik of Nature Advisory
Warrnambool City Council	Abel Farrell
Moyne Shire Council	Maria Marshall and Lorcan Cullen of Maddocks
Department of Energy, Environment and Climate Action	Melanie Savage
Department of Transport and Planning on behalf of the Head, Transport for Victoria	Jozef Vass
Save Our Surroundings Riverina	Lynette LaBlack, Kathryn Reynolds, and Mr Grant Piper (aeronautical engineer and pilot), who called expert evidence on: - agriculture from Prof Ivan Kennedy, professor in agricultural and environmental chemistry - electrical engineering and energy from Ben Beattie - energy analysis from Aidan Morrison
Hexham Community Environmental Action Group Inc	Leanne Mifsud who called expert evidence on acoustics from Les Huson of L Huson & Associates Pty Ltd
Neil Blain	
John Broadbent	
Hamish Cumming	
Susan Dennis	
Michelle Lehmann	
Viva-Lyn Lenehan	
Mark Madden	Paul Madden

Submitter	Represented by
Paul Madden	
Elizabeth Mann	
Leanne Mifsud	
Dr Ashlea Ranken	
Dougal Ranken	
Helen Ranken	
Lachlan Ranken	
Nicholas Ranken	
Skye Ranken	
Hamish Weatherly	
Jennifer Weatherly	
Maria Elisa Weatherly	
Richard Weatherly OAM	

The following submitters requested to be a party to the Hearing but withdrew without making a further submission:

- Carol Addinsall
- Alexander Bell
- Scott Bell
- Georgina Manifold
- Rebecca Manifold
- Richard Manifold
- William Manifold.

The following submitters requested to be a party to the Hearing but did not appear and did not send a courtesy email to advise accordingly:

- Michele S [surname withheld]
- Maurice Schinkel.

Appendix D Procedural matters

D:1 Party conduct

At the Directions Hearing, the IAC requested that parties follow its directions to ensure a fair, safe and efficient process. The IAC continually reminded parties to follow its directions because a small number of parties disrupted the IAC process by:

- raising procedural matters at inappropriate times
- expressing opinions and making submissions outside the Hearing process
- arguing with IAC decisions made in response to raised procedural matters
- including offensive or potentially defamatory content in their emails
- when asking experts questions, expressing opinions, making comments and asking irrelevant or beyond-scope questions after being repeatedly being asked not to.

This misbehaviour contrasted the conduct of parties in most planning panels. It caused unnecessary disruptions, delays, and a disproportionately more formal process.

At the start of the first Hearing day, the IAC referred to:

- sections 152, 160 162, 165 and 169 of the PE which are overarching laws that apply to an advisory committee like the IAC
- the following specific sections:

Section 169 (Offences)

A person who—

- (a) insults, assaults or obstructs a member of a panel while the member is performing functions or exercising powers as a member; or
 - (b) insults, assaults or obstructs any person attending a hearing before a panel; or
 - (c) misbehaves at a hearing before a panel; or
 - (d) repeatedly interrupts a hearing before a panel; or
 - (e) without lawful excuse disobeys a direction of a panel—
- is guilty of an offence.

Section 160(2)

A panel may by order exclude from its proceedings a person who does an act referred to in section 169.

The IAC requested parties to respect the process and other parties by following its directions. The same parties continued to disregard the IAC directions throughout the process.

D:2 Questions of experts

The IAC regulated questions of experts to effectively inquire into key referred matters.

Directions which the IAC continually reminded parties throughout the process include to:

- ask questions within the scope of the Terms of Reference and the expert's field of expertise
- not ask questions which dispute or seek to change any Victorian regulations, guidelines or standards
- not express an opinion when asking a question
- not comment on any expert response to a question

At least one party continued to disregard these directions, even after regular reminders. Compared to other PPV hearings, the IAC spent a disproportionate amount of time having to manage procedural issues and obstructions during questions of experts.

D:3 Requests for documents

Taylor and Tonkin report

At the Directions Hearing, Mr Blain noted the EES relied on Marshall Day Acoustics Hexham Wind Farm – Environmental Noise & Vibration Assessment (8 October 2025) but there is a January 2026 version. He requested the IAC direct the Proponent to engage Tonkin and Taylor to prepare a new Environmental Audit Report (current version 8 October 2025) that responds to the revised Marshall Day report.

The IAC partly agreed with Mr Blain and responded at the Directions Hearing. The IAC's response was subsequently reflected in Direction 26 which states:

The Proponent must circulate by 12 noon on Monday, 13 April 2026:

- a) the 6 January 2026 version of the Marshall Day Acoustics Hexham Wind Farm – Environmental Noise & Vibration Assessment which tracks changes from the 8 October 2025 version
- b) the Tonkin and Taylor Environmental Audit Report dated 8 October 2025.

A tracked change version is clearer and more effective for comparing the two versions rather than having to spot differences between the two documents.

Mr Blain argued with the IAC's decision on this procedural matter through a series of emails. This included an email to the Chief Panel Member on 16 April 2026.

The Chief Panel Member responded that she was satisfied the process adopted by the IAC was appropriate, transparent and procedurally fair. Three minutes earlier, Mr Blain had emailed the Minister for Planning (and copied in the PPV Office) claiming the IAC and Chief Panel Member had 'failed' to respond to his matter.

For fairness and transparency, the IAC raised this at the start of the Hearing.

Documents intended to be referred to Dr Kulik during questions

In an email, Mr Cumming indicated he was proposing to refer Dr Kulik to certain documents when asking her questions. The Proponent requested the IAC make a direction asking the documents to be provided by 24 April 2026. The IAC considered it important for:

- Mr Cumming to have an opportunity to refer to these documents during his questions of Dr Kulik
- Dr Kulik to have a reasonable opportunity to review the documents, which would also enable more insightful responses.

The IAC made a direction accordingly.

Reports from a non-party

Mr Cumming asked the IAC to make a direction for the Proponent or the authoring consultancy to provide post-completion reports from certain historic wind energy facility projects.

The IAC advised that it is unable to direct a private organisation that is not a party to the IAC process to provide reports. The Proponent explained that it did not have these reports to provide.

Mr Cumming then asked the IAC direct that DEECA provide them because they would have them. The author prepared these reports with a specific intent, and it would be highly unlikely for DEECA to provide them without permission from the owner of the intellectual property owner.

As a preliminary matter at the Hearing on 28 April 2026, the IAC responded to the request by stating it was unable to make a direction for these documents because it does not have the necessary power. Later that day and on 29 April 2026, Mr Cumming emailed the IAC and parties arguing against the IAC decision.

Questions on notice for DEECA

The IAC asked DEECA questions on notice on 8 May 2026 before the DEECA submission. Mr Cumming considered this to be an open invitation and submitted his own questions. The IAC asked DEECA further questions based on Mr Cumming's request. Documents 87 and 93 reflects the questions which the IAC considered would assist the Hearing process. Document 110 sets out DEECA's response to the IAC questions.

D:4 Independence of IAC member

At the Directions Hearing

The IAC members made their declarations at the Directions Hearing on 31 March 2026. The Directions Hearing was the correct time for parties to raise any concern regarding their view regarding the independence of an IAC member.

After the Directions Hearing

Soon after the Directions Hearing, Ms Lenehan started a series of emails from Mr Blain, Mr Cumming and herself requesting that Member Burgemeister (the member) recuse himself because they believed he had either a conflict of interest, an apprehension of bias or both. They asserted the member:

- had been or will be a client of Marshall Day Acoustics (the acoustic consultants involved in the Hexham project) after citing his role as an independent expert witness in a Queensland court process (Claim 1)
- appears to be Victoria's only EPA auditor and will be auditing the proposed Hexham project (Claim 2)
- expressed opinion in a letter to the editor in a publication about 14 years ago (responding to an article on professional ethics) (Claim 3)
- expressed opinions in previous matters (Claim 4).

Collectively, the three parties sent emails on 4, 6, 7, 8, 15, 16, 20 and 21 April 2026.

Mr Blain wrote to the Minister for Planning on 21 April 2026² (copied in the PPV Office) expressing his view on this matter. For transparency, the PPV office on behalf of the IAC

² Document 51C

requested he provide this email to parties so they could understand his grounds for recusal.

As this correspondence was outside the IAC process and not addressed to the IAC, Mr Blain was invited to express opinions expressed in Document 51C to all parties on the first day of the Hearing.

At the Hearing

The IAC raised the recusal request as a preliminary matter on the first day of the Hearing. It invited Mr Blain, Mr Cumming and Ms Lenehan to express their views, where other parties had an opportunity to comment.

Mr Blain was given an opportunity to outline the views expressed in his emails, including Document 51C. He opted not to. The IAC Chair advised Mr Blain that his emails including Document 51C would be taken as read by the member when considering the recusal request.

Mr Cumming also relied on views expressed in his email without raising anything further.

In addition to her emails, Ms Lenehan referred to *Cherry Tree Wind Farm Pty Ltd v Mitchell SC & Ors (Includes Summary) (Red Dot) [2013] VCAT 521* where the member was an independent acoustic expert. She continued to believe a “fair-minded lay observer” may reasonably apprehend the member would not bring a partial mind and that he had a conflict of interest.

The Proponent referred to the following case law which contradicted the views of Mr Blain, Mr Cumming and Ms Lenehan:

- *Ebner v Trustee in Bankruptcy* (2000) 205 CLR 337³
- *Owners Corporation PS419696X v Goh* (2021) 63 VR 497.⁴

With *Ebner v Trustee in Bankruptcy*, the Proponent referred to:

...a judge is disqualified if a fair-minded lay observer might reasonably apprehend that the judge might not bring an impartial mind to the resolution of the question the judge is required to decide.

...

The apprehension of bias principle admits of the possibility of human frailty. Its application is as diverse as human frailty. Its application requires two steps. First, it requires the identification of what it is said might lead a judge (or juror) to decide a case other than on its legal and factual merits. The second step is no less important. There must be an articulation of the logical connection between the matter and the feared deviation from the course of deciding the case on its merits. The second step is no less important. There must be an articulation of the logical connection between the matter and the feared deviation from the course of deciding the case on its merits. The bare assertion that a judge (or juror) has an “interest” in litigation, or an interest in a party to it, will be of no assistance until the nature of the interest, and the asserted connection with the possibility of departure from impartial decision making, is articulated. Only then can the reasonableness of the asserted apprehension of bias be assessed.

...

Secondly, few administrative decision makers would enjoy the degree of independence and security and security of tenure which judges have.

³ Document 58a

⁴ Document 58b

Regarding the final extract, the Proponent stated the apprehension of bias test remains the same, however the context may differ when the fair-minded person considers the test.

With *Owners Corporation PS419696X v Goh (2021) 63 VR 497*, the Proponent referred to:

- 45 The question of whether a fair-minded lay observer might reasonably apprehend a lack of impartiality is largely a factual one, which must be considered in the legal, statutory and factual contexts in which the decision is made. The cases cited by the parties bear out the strong factual component in the determination of apprehended bias.
- 46 While the governing principle applies to decision-makers such as the Board, it is necessary to recognise and accommodate differences between court proceedings and other kinds of decision-making. The analogy with the curial process is less apposite the greater divergence there is from the judicial paradigm.
- 47 How the principle respecting apprehension of bias is applied depends on the nature of the decision and its statutory context, what is involved in the making of the decision, and the identity of the decision maker. The principle is an aspect of wider principles of natural justice, which have been recognised as having a flexible quality, differing according to the circumstances in which a power is exercised. The hypothetical fair-minded observer assessing possible bias is taken to be aware of the nature of the decision and the context in which it is made, as well as to have knowledge of the circumstances leading to the decision. The possibility of bias must be 'real and not remote'.

...

- 60 The Board's powers in cl 15 of sch 3 are consistent with its role as a specialist expert tribunal. It can proceed by way of written submissions. It may inform itself in any manner it thinks fit. It is bound by the rules of natural justice, but not by any rule or practice as to evidence. It may conduct a proceeding in private if it considers it in the public interest or the interest of justice to do so. It must proceed with as little formality and technicality and with as much expedition as the requirements of the relevant statutes and the proper consideration of the matter before it permit. All of these provisions reflect the statement of intent in the second reading speech that a 'non-legalistic approach' 'will be, and must be continued' as was characteristic of the Board's predecessor, the Building Referees Board.
- 61 Review of these provisions shows an underlying recognition and intention by Parliament that sessional members of the Board would be drawn from the building industry and from the professions and trades which constitute it. The need to appoint expert members to the Board to hear appeals is met by the ministerial appointment of skilled persons in the industry. Clause 6 of sch 3 gives definitive guidance as to how conflicts of interest are to be managed, and plainly contemplates that sessional members of the Board will ordinarily be able to actively pursue their occupations in the industry.

...

Was it necessary for the Board to exclude Dr Barnett's report and evidence in order not to have a reasonable apprehension of bias?

- 94 In my view, the Board did not err in determining that it was not disqualified from receiving Dr Barnett's report and hearing his evidence as:
 - (a) the Board's role is that of a specialist technical tribunal composed of well qualified and experienced members drawn from the building industry;
 - (b) a large number of proceedings before the Board involve the evaluation and determination on the merits of technical issues with the assistance of expert evidence;
 - (c) it is inherent in the role, establishment and structure of the Board that members acting in their ordinary professional capacities will appear as witnesses before the Board;
 - (d) this is the inevitable consequence of the technical jurisdiction of the Board and the sessional nature of Board membership;

...

- 97 Rather, a fair-minded lay observer would have regard to the qualifications and expertise of Board members, their substantial experience in the building industry, and to their

significant legal and public responsibilities when making decisions about fire safety. There is no logical reason why a fair-minded lay observer would consider that the members of the panel might depart from decision making on the merits merely because an expert appearing before them was a past Board member.

Regarding Claim 1, the Proponent stated it understood:

- the member was retained by lawyers acting on instructions by an insurance company in a Queensland civil claim, and the insurer paid the fees
- the Queensland matter settled in mid-2024 before going to hearing and there has been no ongoing professional association since then
- the member has been an expert for other matters
- the member is a Sessional Panel Member for Planning Panels Victoria who is entitled to continue his private professional practice which include EPA auditing work and appearing as an expert witness or project consultant
- the member's expertise in wind energy facilities and associated mitigation is why he is a member of the IAC
- the case was in a different state, involved a different wind energy facility and different parties to the proceedings
- there is no connection with the facts in 2024 and the fear he might deviate from his role on the IAC.

Regarding Claims 2, 3 and 4, the Proponent stated:

- the member is entitled to continue his professional role including as EPA auditor and expert
- even a judge is not expected to recuse themselves simply because they expressed an opinion in the past.

Mr Blain spent considerable time during the Hearing over numerous occasions to revisit this matter after it had been comprehensively considered and responded to.

Member response

On 8 April 2026, after considering relevant correspondence regarding Claim 1, the member responded:

My declaration, that I have no known conflict of interest in the Hexham Wind Energy Facility matter, continues to stand.

In the three matters referred to by a party, I was engaged by legal firms (not by any consultancy firm) to provide independent expert advice regarding wind energy facility noise assessments for these projects. My instructions were to provide independent impartial expert advice specific to those projects to assist the Court.

Regarding Claims 2, 3 and 4, the member considered all correspondence to date, relevant tabled documents including relevant content in Document 51C and discussion during preliminary matters. Of note, the member:

- has never been a client of Marshall Day Acoustics, and is employed by one of its competitors
- had an independent role to the Queensland court process
- is not the only EPA auditor for wind energy facilities in Victoria.

Later in the first day of the Hearing, the member declared:

I reiterate my declaration that I have no known conflicts of interest as I do not have any pecuniary interest in this specific matter.

I do not believe that a reasonable person knowing all the relevant facts would entertain a reasonable apprehension of bias or that I would not make a decision impartially or without prejudice.

Mr Blain revisited this as a preliminary matter at the Hearing on 14 May 2026 by seeking clarification regarding the member's declaration. The IAC referred him to the audio recording for a record of what was said. Mr Blain decided to use his requested time to solely revisit procedural matters associated with his claims. During his submission time, Mr Blain did not raise any concern about the proposed Hexham project. The IAC has considered his original written submission.

D:5 Other procedural matters

Allocated submission times

At the Directions Hearing, the IAC explained its approach to allocating submission times to parties after receiving requests for exorbitant timeframes. This included a request for up to a day to speak to a submission which was just over two pages in length.

As 27 of the submissions broadly copied each other's content, the IAC encouraged parties to consider presenting together. This would provide them with more time to explain each matter rather than repeat the same matters across parties that copied similar content.

The IAC provided each party with reasonable time to speak to their original written submissions at a good pace and to allow time for any IAC questions. At the Hearing, most parties finished earlier than their allocated time.

Requests for individual support and advice

Several parties requested the PPV project officer provide procedural or legal advice, share and operate their documents online, or redact content from their documents. The IAC had to remind parties that the PPV project team's role is to support the IAC process and not to provide individual or personal support.

Appendix E Document list

No	Date	Description	Provided by
2026			
1	19 Mar	Directions Hearing notification letter	Planning Panels Victoria (PPV)
2	19 Mar	Email to IAC – procedural matter	Hamish Cumming
3	20 Mar	Email to IAC – information request	Viva-Lyn Lenehan
4	26 Mar	Email to IAC – procedural matter	Neil Blain
5	27 Mar	Additional documents a) Cover email b) Hexham Wind Farm Background Noise Monitoring Report (Marshall Day Acoustics, 8 Oct 2025) c) Corrected Map Book Figure 10.1 d) Corrected Map Book Figure 10.3	Hexham Wind Farm Pty Ltd (Proponent)
6	27 Mar	Email to IAC – procedural matter	Proponent
7	30 Mar	Email to parties ahead of Directions Hearing	PPV
8	30 Mar	Email to IAC – procedural matter	Hamish Weatherly
9	30 Mar	Email to IAC – procedural matter	Richard Weatherly OAM
10	30 Mar	Email to IAC – procedural matter	Neil Blain
11	31 Mar	Email to IAC – information request	Neil Blain
12	31 Mar	Email to IAC – procedural matter	Hamish Cumming
13	2 Apr	IAC Directions, Hearing Timetable (version 1) and Distribution List (version 1)	PPV
14	1 Apr 4 Apr 4 Apr 4 Apr 6 Apr 7 Apr 7 Apr	a) Email to IAC – procedural matter b) Email to IAC – procedural matter c) Attachment A – Expert report front cover to Supreme Court of Queensland – Dr Kym Burgemeister d) Attachment B – Cape Bridgewater Wind Farm Report (ARUP, 15 June 2020) e) Email to IAC – procedural matter f) Email to IAC – procedural matter g) Email to IAC – complaint regarding submission time	Viva-Lyn Lenehan
15	7 Apr	Document sharing platform for parties: a) Cover email with links b) Dropbox upload instructions	Proponent

No	Date	Description	Provided by
16	7 Apr	Declaration regarding use of artificial intelligence	Hexham Community Environmental Action Group (HCEAG)
17	8 Apr	Response to Direction 21 a) Cover email b) Table – Southern Bent-wing Bat and Black Falcon Mortalities	Department of Energy, Environment and Climate Action (DEECA)
18	8 Apr	Email to parties regarding Member Burgemeister	PPV
19	8 Apr	Email to IAC	Hamish Cumming
20	9 Apr	Preferred format for planning permit conditions	Department of Transport and Planning (DTP) Energy Assessment
21	10 Apr	Email to IAC regarding procedural matter	Neil Blain
22	10 Apr	Email to IAC regarding procedural matter	Viva-Lyn Lenehan
23	10 Apr	Email to IAC regarding procedural matter	Hamish Cumming
24	10 Apr	Site inspection itinerary documents a) Unaccompanied site inspection itinerary b) Map – project boundary c) Map – site visit driving routes d) Map – site visit locations e) Map – wind turbines Note: files 24b) – 24e) not published on Engage Victoria, as file types not supported for online hosting	Proponent
25	13 Apr	Confidential – Submitter Map Note: As outlined in Direction 27d), the Submitter Map has only been provided to the IAC and will not be published nor made available to other parties for privacy reasons.	Proponent
26	13 Apr	a) Proponent background and context submission b) Map – distances to closest dwellings and townships / urban areas c) Map – notable conservation, recreation areas and water features d) Map – tourist routes, major roads, airports, aerodromes e) Map – existing and proposed wind energy facilities	Proponent

No	Date	Description	Provided by
27	13 Apr	Marshall Day Acoustics Environmental Noise and Vibration Assessment (track changes)	Proponent
28	13 Apr	Tonkin + Taylor Auditor Verification of Pre-Construction Noise Assessment (8 October 2025)	Proponent
29	14 Apr	Unaccompanied site inspection suggestions	Hamish Weatherly
30	14 Apr	Expert Witness Statement – Ben Hughes (surface water)	Proponent
31	14 Apr	Expert Witness Statement – Brett Young (traffic)	Proponent
32	14 Apr	Expert Witness Statement – Christophe Delaire (noise)	Proponent
33	14 Apr	Expert Witness Statement – Graeme Taylor (bushfire)	Proponent
34	14 Apr	Expert Witness Statement – Ian Jennings (aviation)	Proponent
35	14 Apr	Expert Witness Statement – Richard Bolt (energy policy)	Proponent
36	14 Apr	Expert Witness Statement – Tom Evans (noise)	Proponent
37	14 Apr	IAC Directions, Hearing Timetable (version 2) and Distribution List (version 2)	PPV
38	14 Apr	Expert Witness Statement – David Moir (landscape and visual)	Proponent
39	14 Apr	Expert Witness Statement – Inga Kulik (ecology)	Proponent
40	17 Apr	Expert Witness Statement – Les Huson (acoustics)	HCEAG
41	17 Apr	Expert Witness Statement – Professor Ivan Kennedy (agriculture)	Save Our Surroundings Riverina (SoSR)
42	17 Apr	Expert Witness Statement – Ben Beattie (electrical engineering and energy) – updated 19 April 2026	SoSR
43	17 Apr	Expert Witness Statement – Aidan Morrison (energy analysis)	SoSR
44	20 Apr	Email to IAC regarding post completion and Bat and Avifauna Management Plan reports	Proponent
45	20 Apr	IAC Directions, Hearing Timetable (version 3) and Distribution List (version 3)	PPV
46	23 Apr	Main Submission	Proponent
47	23 Apr	IAC Directions, Hearing Timetable (version 4) and Distribution List (version 4)	PPV
48	23 Apr	Documents for cross-examination: a) Victorian Civil and Administrative Tribunal (VCAT) matter: Cherry Tree Wind Farm Pty Ltd v Mitchell SC & Ors [2013] VCAT 521 b) Alleged Nuisance and Noise Impact Assessment for Cape Bridgewater Wind Farm (ARUP, 15 June 2020)	Viva-Lyn Lenehan

No	Date	Description	Provided by
		c) Extracts from MDA Appendix E1 – Background Noise Level vs Predicted Noise Level (Table 25 vs Table 49)	
		d) Guidelines for Community Noise (World Health Organisation, 1999)	
		e) Environmental Noise Guidelines for the European Region (World Health Organisation, 2018)	
		f) Clause 35.07 to the Victoria Planning Provisions (Farming Zone)	
		g) Victorian Supreme Court matter: Uren v Bald Hills Wind Farm Pty Ltd [2022] VSC 145	
		h) Victoria Government Gazette No. S 245 (26 May 2021)	
		i) Research Paper: <i>Community Noise</i> (Berglund & Lindvall, 1995)	
		j) Dundonnell Wind Farm Noise Compliance Testing Report (Sonus, September 2022)	
		k) Meeting Minutes: Mortlake South Wind Farm Community Engagement Committee (28 October 2019)	
		l) Media Release: Mortlake South Wind Farm, Maintenance Update (21 Dec 2023)	
		m) Mortlake South Wind Farm – excerpts from a variety of sources regarding noise testing (July 2023 – December 2024)	
		n) Correspondence from Neil Blain regarding Mortlake South Wind Farm noise monitoring (26 May 2025)	
		o) Project Update: Mortlake South Wind Farm Community Engagement Committee (Acciona, meeting of 6 Dec 2023)	
		p) Hexham Wind Farm Fact Sheet: Noise and Vibration (Wind Prospect, May 2025)	
		q) 'Listen Well' Podcast Transcript (Epiq Australia Pty Ltd)	
		r) Review of the preconstruction environmental noise assessment of the Woolsthorpe Wind Farm (Dr John Cumming, 3 June 2022)	
		s) Graph: Variation in sound level over a 10-minute period outside a dwelling 800 metres from two wind turbines	
		t) VCAT matter: Naroghid Wind Farm Pty Ltd v Minister for Planning [2019] VCAT 800	
		u) Tasmanian Civil and Administrative Tribunal matter (transcript): No Turbine Petition Group Inc v Central	

No	Date	Description	Provided by
		Highlands Council and St Patricks Plains Wind Farm Pty Ltd (March 2025)	
		v) Explanatory Report to Planning Scheme Amendment VC212	
		w) Mortlake South Wind Farm Noise Compliance Testing Plan (Marshall Day Acoustics, 8 Jan 2019)	
		x) Research Paper: Wind turbine sound limits: Current status and recommendations based on mitigating noise annoyance (JL Davy and others, 2018)	
		y) Research Paper: A review of the potential impacts of wind turbine noise in the Australian context (JL Davy and others, 2020)	
		z) Research Paper: Comparison of predicted and measured wind farm noise levels and implications for assessments of new wind farms (Evans & Cooper, 2011)	
		aa) Written overview of low-frequency noise prediction in Denmark (author unspecified)	
		bb) Outtakes from public Facebook posts (Diary of a Wind Farm Neighbour)	
		cc) Media Release: Public Health and Wellbeing Amendment Bill 2020 (Dr Tim Read, Greens MP for Brunswick, 25 November 2020)	
		dd) Victorian Supreme Court matter: Anderson v PWM (Lyndhurst) Pty Ltd & Anor (Costs Ruling) [2024] VSC 516	
		ee) EPA Tasmania Board Policy, Noise limits for wind energy projects (Environment Protection Authority Tasmania, 29 July 2025)	
		ff) Correspondence from Neil Blain to Moyne Shire Councillors regarding Mortlake South Wind Farm noise monitoring (2 April 2025)	
		gg) High Court of Australia matter: Hunt Leather Pty Ltd v Transport for NSW [2025] HCA 53	
		hh) Endorsed Dundonnell Wind Farm Site Layout Plan (Version C, 3 August 2020)	
		ii) Written overview of jackhammer noise impacts (author unspecified)	
		jj) Summary of noise guidelines from the World Health Organisation (1999 and 2018) and Davey et al. (2020)	
		kk) Planning Panels Victoria – Mount Fyans Wind Energy Facility Panel Report (8 August 2023)	
49	24 Apr	Covering email filing the following documents:	Hamish Cumming
		a) Raptor death calculation method comparisons (Hamish Cumming, 29 January 2017)	

No	Date	Description	Provided by
		b) Research Paper: Bird displacement by wind turbines: assessing current knowledge and recommendations for future studies (Marques et al, 2021)	
		c) Internal Memo: <i>Approval of a brolga breeding habitat buffer option for wind energy facilities</i> (Department of Environment, Land, Water and Planning, 11 August 2020)	
		d) Ararat Wind Farm Bird and Bat Monitoring Program – First Year Annual Report Apr 2017 – Mar 2018 (BL&A, July 2018)	
		e) Ararat Wind Energy Facility Panel Report (September 2010)	
		f) Technical Report: Investigation of existing post-construction mortality monitoring at Victorian wind farms to assess its utility in estimating mortality rates (Moloney et al, Sept 2019)	
		g) Report: Willatook Wind Farm – Brolga movements and spatial requirements during breeding (Ecology and Heritage Partners, Nov 2013)	
		h) Research Paper: How far are birds, bats, and terrestrial mammals displaced from onshore wind power development? A systematic review (Tolvanen et al, 2023)	
		i) Webpage: Review – several groups of birds and mammals avoid wind turbines (Luke, 18 Dec 2023)	
		j) Letter from Andrew Chapman to the Ombudsman Victoria requesting a review of bird impact monitoring at the Bald Hills Wind Farm (15 July 2016)	
		k) Bald Hills Wind Farm Bat and Avifauna Management Plan – Year One Implementation (BL&A, October 2016)	
		l) Berrybank Wind Farm Bat and Avifauna Management Plan (Nature Advisory, July 2020)	
		m) Berrybank Wind Farm – First Annual Report on the Implementation of the Bird and Avifauna Management Plan (Nature Advisory, June 2022)	
		n) Written submissions by Hamish Cumming, referencing and attaching report at Document 49m) Berrybank Wind Farm – First Annual Report (NA, June 2022)	
		o) BL&A webpage summary outtake, September 2014	
		p) Newspaper Article: ‘Cutting edge’ wind farm kills 8 eagles, prompting moratorium call (M. Denholm, The Australian, 17 Aug 2023)	

No	Date	Description	Provided by
		q) Chepstowe Wind Farm – Avifauna Management Plan (Plume Ecology, October 2014)	
		r) Hand annotated report extract: Brolga sighting map in Chepstowe March 2010	
		s) Chepstowe Wind Farm Avifauna Management Plan – Year Two 2016 – 2017 (Plume Ecology, April 2017)	
		t) Report extract: Map identifying turbine exclusion zones for Chepstowe Windfarm	
		u) Email correspondence from Hamish Cumming to DELWP referencing and attaching the Yambuk and Codrington Wind Farm Avifauna Monitoring Survey 2000-2003 (Biosis)	
		v) Draft Research Paper: Sandhill Crane Collisions with Wind Turbines in the Southern High Plains of Texas (Navarrete and Griffis-Kyle)	
		w) Dundonnell Wind Farm Year 2 Annual Report (Tilt Renewables, April 2021)	
		x) Dundonnell Wind Farm Year 3 Annual Report (Tilt Renewables, April 2022)	
		y) Research Paper: Migrating whooping cranes avoid wind-energy infrastructure when selecting stopover habitat (Pearse et al. 2021)	
		z) Map of flocking records at Dundonnell Wind Farm (BL&A, 23 Jul 2012)	
		aa) Dundonnell Brolga Compensation Plan – Year 1 Evaluation Wetlands Report (Ondonata Foundation, 9 Dec 2021)	
		bb) Dundonnell Brolga Compensation Plan – Year 2 Evaluation Wetlands Report (Ondonata Foundation, 9 Dec 2022)	
		cc) Dundonnell Brolga Compensation Plan – Year 3 Evaluation Wetlands Report (Ondonata Foundation, 9 December 2023)	
		dd) Dundonnell Wind Farm Brolga Assessment (BL&A, October 2014)	
		ee) Submission to the Dundonnell Wind Farm EES (Inka Veltheim)	
		ff) Dundonnell Wind Farm – First Year Annual Report Bat and Avifauna Management Plan (Biosis, 13 May 2022)	
		gg) Golden Plains Wind Farm East – First Annual Report on the Implementation of the Bird and Avifauna Management Plan (Nature Advisory, November 2025)	

No	Date	Description	Provided by
		hh) Golden Plains Wind Farm Brolga Monitoring and Compensation Plan – Year 1 Evaluation Report (Odonata Foundation, October 2023)	
		ii) Golden Plains Wind Farm Brolga Monitoring and Compensation Plan – Year 2 Evaluation Report (Odonata Foundation, October 2024)	
		jj) Golden Plains Wind Farm Flora and Fauna Management Plan (Nature Advisory, 11 March 2022)	
		kk) Parliamentary Debates (Hansard), Legislative Assembly, Parliament of Victoria (8 Dec 2004)	
		ll) Written submissions by Hamish Cumming referencing and attaching extract from Parliamentary Debates (Hansard), Legislative Assembly, Parliament of Victoria (8 December 2004)	
		mm) Parliamentary Debates (Hansard), Legislative Assembly, Parliament of Victoria (23 February 2005)	
		nn) Kentbruck Green Power Hub Project Inquiry and Advisory Committee Report (Planning Panels Victoria, 8 October 2025)	
		oo) Planning Permit No. PL-SP/05/0461-2, issued on 30 April 2009 by delegate for the Minister for Planning (Lal Lal Wind Farm)	
		pp) Elaine Wind Farm Bat and Bird Management Plan (BL&A, December 2017)	
		qq) Lal Lal Wind Energy Facility Panel Report (February 2009)	
		rr) Written annotations by Hamish Cumming referencing extract from Document 49qq)	
		ss) Macarthur Wind Farm - Utilisation of habitat by Brolga during the breeding season of 2016 (Australian Ecological Research Services, 8 February 2017) – Part 1 of 2	
		tt) Macarthur Wind Farm – Utilisation of habitat by Brolga during the breeding season of 2016 (Australian Ecological Research Services, 8 February 2017) – Part 2 of 2	
		uu) Macarthur Wind Farm – Bat activity August and Spring 2014 (Australian Ecological Research Services, Jun 2015)	
		vv) Macarthur Wind Farm – Bat and Avifauna Mortality Monitoring March 2013 to Feb 2014 (Australian Ecological Research Services, Jun 2014)	
		ww) Macarthur Wind Farm – Utilisation of habitat by Brolga 2013 (Australian Ecological Research Services)	

No	Date	Description	Provided by
		xx) Macarthur Wind Farm – Bat and Avifauna Mortality Monitoring March 2014 to Feb 2015 (Australian Ecological Research Services, May 2015)	
		yy) Macarthur Wind Farm – Utilisation of habitat by Brolga 2014 (Australian Ecological Research Services)	
		zz) Various document extracts and commentary by Hamish Cumming regarding the Cattle Hill Wind Farm, Macarthur Wind Farm and Woolnorth Wind Farm	
50	24 Apr	a) Mortons Lane Wind Farm – Operational Brolga and Bat Monitoring Report 2013 (Biosis, 3 March 2014) b) Mortons Lane Wind Farm – Operational Brolga and Bat Monitoring Report 2014 (Biosis, 10 April 2015) c) Mortons Lane Wind Farm – Operational Brolga and Bat Monitoring Report 2015 (Biosis, 9 March 2016) d) Extract from Mortlake South and East Wind Farms Flora and Fauna Assessment (BL&A, Report No. 7128 (2.8), pages 39 - 106) e) Mortlake Wind Energy Facility Panel Report, August 2010 f) Mortlake South Wind Farm – Summary of Year 1 Implementation of the Bird and Bat Adaptive Management Plan (Nature Advisory, August 2025) g) Mortlake South Wind Farm – Summary of Year 2 Implementation of the BBAMP (Acciona Energia) h) Mount Mercer Wind Farm – Post Construction Bat and Avifauna Monitoring Results for Year 1 (Ecology and Heritage Partners, Feb 2016) i) Mount Mercer Wind Farm – Post Construction Bat and Avifauna Monitoring Results for Year 2 (EHP, May 2017) j) Mount Mercer Wind Farm Panel Report, December 2006 k) Mount Fyans Wind Energy Facility Panel Report, 8 August 2023 (with mark-ups by Hamish Cumming) l) Oaklands Hill Wind Farm – Bird utilisation, Brolga and Bat studies (Biosis, June 2007) m) Oaklands Hill Wind Farm – Bird and Bat Mortality Monitoring May 2019 – May 2021 (AERS, 12 November 2021) n) Various pages from the Oaklands Hill Wind Farm Panel Report, and correspondence from the Minister for Planning	Hamish Cumming

No	Date	Description	Provided by
		o) Oaklands Hill Wind Energy Facility – Bat Activity Report (AERS, 2011)	
		p) Oaklands Hill Wind Farm – Bat Utilisation Monitoring Sept 2011 to Winter 2012 (AERS, March 2013)	
		q) Oaklands Hill Wind Farm – Bat Utilisation Monitoring Spring 2012 to Winter 2013 (AERS, November 2013)	
		r) Oaklands Hill Wind Farm Project Feature Summary (Australian National Construction Review)	
		s) Oaklands Hill Wind Farm – Utilisation of habitat by Brolga (AERS, 17 May 2017)	
		t) Planning Permit No. PL-SP/05/0548/D, issued on 26 Oct 2010 by delegate for the Minister for Planning (Stockyard Hill)	
		u) Report: Comparison of pre and post construction survey results for birds and bats at Victorian wind energy facilities (ARI & DEECA, May 2025)	
		v) Hawkesdale Wind Farm – Bat and Avifauna Management Plan (Nature Advisory, May 2024)	
		w) Salt Creek Wind Farm – Bat and Avifauna Management Plan – First Annual Report (Nature Advisory, April 2020)	
		x) Salt Creek Wind Farm – Bat and Avifauna Management Plan – Second Annual Report (Biosis, 16 November 2020)	
		y) Stockyard Hill Wind Farm – Bird and Bat Impact Assessment (Biosis, 1 May 2016)	
		z) Stockyard Hill Wind Farm Panel Report, August 2010	
		aa) Written submissions by Hamish Cumming, referencing and attaching excerpts from the Stockyard Hill Bird and Bat Monitoring Year 1 Report	
		bb) Summary Paper: Wind Turbine Separation Distances Matter (P. Mitchell, June 2014)	
		cc) Presentation: Simulation of wind power plants, fourth workshop on systems engineering Denmark (E. Bossanyi, 14 September 2017)	
		dd) Submission by Hamish Cumming in respect to the effects of the Macarthur Wind Farm on Brolga (2 Dec 2014)	
		ee) Research Paper: Partial migration of Brolgas within a restricted range is revealed by GPS tracking (Veltheim and others, 2022)	
		ff) Letter to Hamish Cumming from Acciona Energy regarding Waubra Wind Farm (22 June 2012)	

No	Date	Description	Provided by
		gg) Waubra Wind Farm Project Overview (Acciona Energy, Jan 2023)	
		hh) Media Article: <i>Waubra wind turbines kill 192 birds</i> (N Cairns of the Courier, 18 June 2012)	
		ii) Waubra Wind Farm Panel Report, March 2005	
		jj) Lal Lal Wind Farm – Expert Witness Statement of Brett Lane (Oct 2016)	
		kk) Willatook Wind Farm – Brolga Movements and Spatial Requirements During Breeding, SW Victoria (EHP, Nov 2013)	
		ll) Woolsthorpe Wind Farm Panel / Advisory Committee Report, February 2008	
		mm) Expert Witness Statement of Ian John Smales (Stockard Hill Wind Farm)	
		nn) Yaloak Wind Farm Panel Report, March 2005	
		oo) Yaloak Wind Farm – Modelled collision risk for wedge-tailed eagles (Biosis, 5 November 2004)	
		pp) Biodiversity Interactive Map depicting Brady Swamp and Lake Bullabool	
		qq) Webpage: <i>Why Are Cranes So Special?</i> (The Wandering Naturalist)	
		rr) DEECA presentation regarding biodiversity impacts in renewable energy projects, and various other correspondence	
		ss) Brief to Minister for Environment regarding draft consultation documents, various internal DEECA correspondence and documents, emails from Wind Prospect	
		tt) Email correspondence between DEECA and Wind Prospect	
		uu) Various internal DEECA correspondence, documents and presentations – Part 1	
		vv) Various internal DEECA correspondence, documents and presentations – Part 2	
		Note: document 50qq) was not published on Engage Victoria, as file type was not supported for online hosting	
51	24 Apr	a) Email from Neil Blain to the Minister for Planning requesting information regarding conflict of interest obligations of the IAC (20 April 2026)	Neil Blain
		b) Email from Neil Blain to the Minister for Planning requesting the IAC direct the Proponent to prepare a new environmental audit (20 April 2026)	
		c) Email from Neil Blain to the Minister for Planning raising potential procedural matter (21 Apr 2026)	

No	Date	Description	Provided by
		d) Email attachments to Document 50c)	
		e) Mount Fyans Wind Farm Community Consultation Report (July 2022)	
		f) Webpage: Acousticians sound off over rising tide of wind farm opposition (Oliver Wagg from Renew Economy, 26 Jul 2013)	
		g) Acoustics Australia, Volume 40 Number 3 (Australian Acoustical Society, December 2012)	
52	24 Apr	Opening address and EES background	DTP Impact Assessment Unit
53	24 Apr	Planning permit application background	DTP Energy Assessment
54	24 Apr	Reply evidence of Tom Evans (noise)	Proponent
55	24 Apr	Detailed Flora and Fauna Investigations (Ecology and Heritage Partners, June 2014), in three (3) parts: a) Part 1 b) Part 2 c) Part 3	Proponent
56	24 Apr	a) Cover email b) Corrected map book figures and land use impact assessment table	Proponent
57	24 Apr	Draft permit conditions (version 1)	Proponent
58	24 Apr	Procedural matter references: a) Ebner v Trustee in Bankruptcy (2000) 205 CLR 337 b) Owners Corporation PS419696 v Goh (2021) 63 VR 497	Proponent
59	25 Apr	Email to IAC raising procedural matter	Viva-Lyn Lenehan
60	27 Apr	Expert Witness Presentation – Christophe Delaire (noise)	Proponent
61	27 Apr	Expert Witness Presentation – Tom Evans (noise)	Proponent
62	27 Apr	IAC Directions, Hearing Timetable (version 5) and Distribution List (version 5)	PPV
63	28 Apr	Expert Witness Presentation – Ian Jennings (aviation)	Proponent
64	28 Apr	Draft summary of wind energy facility EES and post completion reports	Hamish Cumming
65	28 Apr	Email responding to Hamish Cumming email regarding document request	PPV
66	28 Apr	Response to IAC point of clarification	DTP Energy Assessment
67	28 Apr	a) Photograph 1 for traffic expert cross examination	Moyne Council

No	Date	Description	Provided by
		b) Photograph 2 for traffic expert cross examination	
68	29 Apr	Documents for cross examination: a) DEECA Internal Memo: Approval of a Brolga breeding habitat buffer option for wind energy facilities b) Letter from RMIT University Prof Stone to Hamish Cumming (20 March 2018) c) Interim Guidelines for the Assessment, Avoidance, Mitigation and Offsetting of Potential Wind Farm Impacts on the Victorian Brolga Population (Rev 1 – 1 February 2012) d) Maps: DEECA GPS Brolga Tracking 2024 e) Action Statement – <i>Flora and Fauna Guarantee Act 1988</i> (No 119) Department of Sustainability and Environment f) Penshurst Wind Farm – Targeted fauna assessment report (Biosis, May 2011) g) Research Paper: <i>Cranes of the World</i> (P. A. Johnsgard, 1983) h) Research Paper: A dynamic Brownian bridge movement model to estimate utilisation distributions for heterogeneous animal movement (Kranstauber and others, 2012) i) Extract from document cited as Campbell 1974 j) Handbook of Australian, New Zealand and Antarctic Birds – Volume 2 (Marchant & Higgins et al., 1993) k) Research Thesis: Movements, behaviour and ecology of the Brolga at multiple spatial and temporal scales (Veltheim) l) Research Paper: Breeding home range movements of pre-fledged Brolga chicks, <i>Antigone rubicunda</i> (Gruidae) in Victoria, Australia - Implications for wind farm planning and conservation (Veltheim and others, 2019) m) Draft Research Paper: Review of effectiveness of onshore and offshore wind farm collision risk avoidance and mitigation measures (Harten and others, March 2026)	Viva-Lyn Lenehan
69	29 Apr	Email to IAC disputing IAC decision on document request	Hamish Cumming
70	29 Apr	Expert Witness Presentation of Ian Jennings (aviation) – updated	Proponent
71	29 Apr	Hexham Crash Statistics	Proponent
72	29 Apr	Email to IAC requesting information from EPA	Viva-Lyn Lenehan

No	Date	Description	Provided by
73	30 Apr	Email to IAC and parties regarding New Zealand Standard NZS 6808:2010 (Acoustics – Wind farm noise)	Proponent
74	1 May	Expert Hearing presentation – Ben Hughes (surface water)	Proponent
75	1 May	Expert Hearing presentation – Inga Kulik (ecology)	Proponent
76	1 May	Cross-examination questions of Dr Inga Kulik	DEECA
77	4 May	Brolga breeding records for some Victorian wind farms	Hamish Cumming
78	4 May	IAC directions for expert questions	PPV
79	4 May	Expert statement – Prof Ivan Kennedy (agriculture) – reissued version	SoSR
80	4 May	Expert statement – Ben Beattie (electrical engineering and energy) – reissued version	SoSR
81	6 May	SWIFT Website – Brolga breeding pairs in Victoria	Viva-Lyn Lenehan
82	6 May	Draft permit conditions (version 2)	Proponent
83	6 May	Environmental Management Measures reference table	Proponent
84	7 May	Memorandum of Ben Hughes (Surface Water) – wetland assessment clarification	Proponent
85	7 May	Catalogue of measures to avoid and mitigate collisions of birds and bats with onshore and offshore wind farms, Draft for consultation (DCCEEW, 2026)	Proponent
86	8 May	Hearing submission	Moyne Council
87	8 May	IAC questions to DEECA	PPV
88	10 May	Email to IAC requesting information from DEECA	Hamish Cumming
89	11 May	a) Presentation b) Management of the Brolga in Victoria (Arnol and others, November 1984)	Susan Dennis
90	11 May	a) Email with presentation references b) Document: Storage requirement for 100 per cent renewables on the Eastern Australian Grid c) Email with link to document: <i>Wind farms in Eastern Australia – Recent Lessons</i> (Paul Miskelly, 2012)	SoSR
91	12 May	Victorian Supreme Court matter: Anderson v PWM (Lyndhurst) Pty Ltd & Anor [2024] VSC 417	Viva-Lyn Lenehan
92	12 May	Hearing presentation	Lucy Gubbins and Tom Gubbins
93	12 May	Additional questions to DEECA from the IAC	PPV
94	12 May	IAC Directions, Hearing Timetable (version 6) and Distribution List (version 5)	PPV

No	Date	Description	Provided by
95	12 May	IAC Hearing Notes presented by Leanne Mifsud	HCEAG
96	12 May	IAC Hearing Presentation with attachments: a) Weatherly Interview 190815 (Attachment 1) b) Weatherly Brolga records (Attachment 2) c) Weatherly map of water bodies (Attachment 3) d) White Case email chain 1 (Attachment 4) e) White Case email chain 2 (Attachment 5)	Hamish Weatherly
97	12 May	Hearing presentation – Richard Weatherly OAM	Hamish Weatherly
98	12 May	Hearing submission – Elisa Weatherly	Hamish Weatherly
99	12 May	Hearing presentation with attachment: a) Video – dogs barking Note: 99a) not published on Engage Victoria, unsupported file type	Michelle Lehmann
100	13 May	IAC Hearing Presentation with attachments: a) Video – Grey Headed Flying Fox Flying West (14 Feb 2026) b) Video – Grey Headed Flying Fox Flying West Group (14 Feb 2026) c) Video – Narong Wetland (15 Oct 2022) Note: 100a) – 100c) not published on Engage Victoria, unsupported file type	Lachlan Ranken
101	13 May	IAC changes to Directions 43 and 44	PPV
102	13 May	Email to all parties seeking to revisit a previously responded procedural matter	Neil Blain
103	15 May	a) Written summary of verbal submission b) Extract of Appendix A: Dwelling Assessments c) Statement of correction to document 103a (filed 17 May 2026)	Michelle Lehmann
104	15 May	Written summary of verbal submission	Elizabeth Mann
105	15 May	Hearing presentation – Grant Piper (presented by Kathryn Reynolds)	SoSR
106	15 May	Statement – Prof Ivan Kennedy (read by SoSR as submission)	SoSR
107	15 May	Documents supporting Hearing submission: a) Response from Environmental Goods and Product Safety Section within the Australian Border Force (ABF) – regarding Importation of Banned PFOS & Asbestos in Solar / Wind / BESS Components b) Our Assessment of the Response from Environmental Goods and Product Safety Section within the ABF	SoSR

No	Date	Description	Provided by
		regarding Importation of Banned PFOS & Asbestos in Solar / Wind / BESS Components c) Toxic Contaminating Solar / Wind / BESS d) Summary of photograph references e) Photographs (Reference 35) f) Photographs (Reference 37) g) Photographs (Reference 38) h) Lal Lal Wind Farm references and photographs	
108	17 May	Documents supporting Hearing submission: a) Excerpts from PPV reports summarising issues with Brolga and fauna assessments for proposed wind farms (Hamish Cumming, Nov 2022) b) Thesis Paper: Behavioural effects of wind farms on wintering Sandhill Cranes (Navarrete, 2011) c) Brolga Breeding Habitat – A guide to managing wetlands on your farm (Corowa District Landcare Inc. 2018) d) Web Article – Dancing Brolgas (Matthew Herring, Australian Crane Network, 2004) e) Map of Mortlake (west) – Brolga maternity flock data (DEECA, Nature Kit) f) Map of Mortlake (north) – Brolga maternity data (DEECA, Nature Kit) g) Supplemental material including Brolga chick capture data	Hamish Cumming
109	18 May	a) Hearing submission presented on 14 May 2026 b) Emails between PPV and Neil Blain (22 April 2026)	Neil Blain
110	18 May	Response to IAC Questions	DEECA
111	18 May	Comments on Proponent's Draft Permit Conditions (version 2)	DEECA
112	19 May	Hearing submission – response to DEECA responses	Hamish Cumming
113	19 May	Email to all parties seeking to revisit a previously responded procedural matter	Neil Blain
114	19 May	Hearing submission	The Head, Transport for Victoria
115	19 May	Email to Neil Blain regarding the previously responded procedural matter	PPV
116	19 May	Hearing presentation	DEECA
117	19 May	a) Hearing presentation	Hamish Cumming

No	Date	Description	Provided by
		b) Video file – GPS data (south of Skipton) between November 2010 and December 2011 Note: file 117b) not published on Engage Victoria, as file type not supported for online hosting	
118	19 May	Hearing presentation	Viva-Lyn Lenehan
119	19 May	Email to IAC regarding Stockyard Hill post-completion reports, with attachment: a) Stockyard Hill Wind Farm Bird and Bat Monitoring Year 1 Report (SMEC, November 2024)	Hamish Cumming
120	20 May	Email to IAC with link to Renew Economy website	Hamish Cumming
121	20 May	Email to IAC regarding drafting of permit conditions, with attachments: a) Edits to Proponent's permit conditions (version 2) – tracked changes b) Edits to Proponent's permit conditions (version 2) – clean version	DTP Energy Assessment
122	21 May	Response to IAC questions, with attachments: a) Attachment 1 – Draft permit conditions b) Attachment 2 – Planning Permit PA2503551 Swansons Lane	The Head, Transport for Victoria
123	21 May	Part C Submission (Reply)	Proponent
124	21 May	Permit conditions (version 3a) – markup against Version 2	Proponent
125	21 May	Permit conditions (version 3a) – markup against Version 1 to comply with condition 43b	Proponent
126	21 May	Environmental Management Measures reference table (updated for version 3)	Proponent
127	21 May	Permit conditions (version 3b) – markup of DTP permit conditions	Proponent
128	21 May	Memorandum from Graeme Taylor regarding Amendment VC248	Proponent
129	21 May	Relevant property locations mapped onto Figure 11 turbine free buffer	Proponent
130	21 May	Email from Dr Kulik – correction to the Brolga Impact Assessment (Nature Advisory)	Proponent
131	21 May	High resolution image of D404 photomontage	Proponent
132	21 May	Brewster Wind Farm Permit	Proponent
133	21 May	Mount Fyans Wind Farm Permit	Proponent
134	21 May	Swansons Lane Wind Farm Permit (PA2503552)	Proponent

No	Date	Description	Provided by
135	21 May	Woolsthorpe Wind Farm Permit	Proponent
136	21 May	Dederang BESS Permit	Proponent
137	21 May	Elaine BESS Permit	Proponent
138	21 May	Glenrowan BESS Permit	Proponent
139	21 May	Heywood BESS Permit	Proponent
140	27 May	Drafting comments on final version project documentation	Environment Protection Authority
141	28 May	Drafting comments on final version project documentation	DEECA
142	28 May	Drafting comments on final version project documentation	Michelle Lehmann
143	29 May	Drafting comments on final version project documentation	Hamish Cumming
144	29 May	Drafting comments on final version project documentation	Moyne Council
145	29 May	Drafting comments on final version project documentation	Head TfV
146	29 May	Covering email responding to Direction 44 with attachment: a) Drafting comments on final version project documentation	DTP Energy Assessment
147	5 June	Final reply comments, with attachments: a) Response to Final Drafting Comments b) Permit Conditions (final version) – tracked against version 3a	Proponent

Appendix F Recommended planning permit conditions

The IAC's recommended planning permit conditions:

- are based on the Proponent final version of the permit conditions (Document 147b)
- generally, accept and track the permit structure and permit conditions drafting of Document 121a
- do not track inconsequential changes related to the permit's structure or conditions drafting
- should be read with Chapter 11 and recommendations elsewhere in this report
- include conditions from Document 147b that were not referred matters and not considered by the IAC, for reference and context only
- show merit changes that depart from Document 147b as:

[Tracked Added](#) ~~Tracked Deleted~~

Permit No.: [PA2504115](#)

Planning scheme: Moyne Planning Scheme

ADDRESS OF THE LAND: [insert title details of land and any road reserves as per planning permit application PA2504115]

THE PERMIT ALLOWS:

Planning scheme clause	Matter for which the permit has been granted
Clause 35.07-1	Use land for a wind energy facility and utility installation.
Clause 35.07-4	Construct a building and construct or carry out works for a wind energy facility and utility installation. Buildings set back from any other road (not in a Transport Zone 2 or land in a Public Acquisition Overlay) less than 20 metres as specified in Schedule 1 and less than 100 metres from a waterway, wetland or designated flood plain. Earthworks which change the rate of flow or the discharge point of water across a property boundary or increase the discharge of saline groundwater.
Clause 52.05-2	Business identification signage in a Farming Zone (Category 4).
Clause 52.17-1	Removal, destruction or lopping of native vegetation, including dead vegetation.
Clause 52.29-2	Alteration of access to a Transport Zone 2.
Clause 52.32-2	Use and development of land for a wind energy facility.

THE FOLLOWING CONDITIONS APPLY TO THIS PERMIT:

Compliance with documents associated with this permit

1. At all times what the permit allows must be carried out in accordance with the requirements of any document approved under this permit to the satisfaction of the responsible authority.

Commencement

2. This permit will operate from the issued date of this permit.

Development Plans

3. Before ~~each stage of~~ development starts, amended development plans ~~for that stage~~ must be ~~submitted to,~~ approved and endorsed by the responsible authority.

The plans must be fully dimensioned, drawn to a scale. They must be generally in accordance with the plans at Appendix B of planning permit application PA2504115 (comprising Figure B.1 to Figure B.4 to Figure B.8 and associated undated plans), but modified to show ~~(as applicable to the relevant stage):~~

- a) ~~detailed, fully dimensioned location / site layout, floor, elevation and other detail plans (including the specifications, model, dimensions and materials) of all proposed buildings and works, including showing a~~ maximum of 106 turbines with the following specifications:
 - i. ~~the overall m~~Maximum blade tip height of ~~the wind turbines (to the tip of the rotor blade when vertical) must not exceed~~ 260 metres above ground level
 - ii. ~~the ground clearance from the bottom of the blades to the ground level is not less than~~ Minimum blade tip clearance of 40 metres from ground level
 - iii. ~~each wind turbine is to have not more than three rotor blades, with a~~ Maximum rotor diameter of ~~no greater than~~ 190 metres
 - iv. ~~the relocation of the hardstand area for turbine T106, as shown on Figure B.4: Development Plans—construction phase (4 of 4) to avoid the removal of trees T54 and T61~~
- b) the locations, specifications, materials and finishes of the wind energy facility
- c) ~~the layout and siting of other buildings and works adjusted as follows:~~
 - i. ~~[describe required changes]~~
 - ii. ~~[describe any other adjustments required, e.g. use of low reflective materials or finishes]~~
- d) detailed, fully dimensioned layout of the Battery Energy Storage Systems (BESS), including internal separation setbacks and battery models, to demonstrate compliance with CFA's Guidelines and Model Requirements for Renewable Energy Facilities CFA 2025 (the CFA Guidelines)
- e) ~~the transformer associated with each wind generator located beside each tower, or enclosed within the tower or nacelle structure~~
- f) ~~electricity cabling between the turbines~~
- g) details of ~~any~~ aviation safety lighting (if proposed), ~~which is to be in accordance with any relevant requirements of the Civil Aviation and Safety Authority (CASA)~~
- h) the colours and finishes ~~of all buildings and works (including turbines)~~, which must be non-reflective ~~so as~~ to minimise the visual impact of the development on the surrounding area
- i) any staging of the permitted development

- j) ~~any modifications to avoid harm to identification of new Aboriginal places in the continuing assessment under CHMP 19602;~~
- k) ~~the selection of materials to reduce greenhouse gas emission impacts of materials and energy consumption as far as reasonably practicable; and~~
- l) any changes required to comply with:
 - the relevant fire authority's conditions 33 to 37, inclusive;
 - iii. EPA Publication 1826.4; ~~and~~
 - iv. [any other authority's conditions 17 to 73, inclusive].
- m) compliance with the turbine free buffer areas identified in Figure 11 of the *Hexham Wind Farm Brolga Impact Assessment* (Nature Advisory, November 2025).

Written consent to modify endorsed plans

4. ~~Except as permitted under conditions 85 and 86, t~~The use and development must be generally in accordance with [the plans approved](#) and endorsed [under this permit](#) ~~plans~~. The [use and development as shown on the](#) endorsed plans must not be altered or modified without the written consent of the responsible authority.

Staging

5. The use and development may be completed in stages in accordance with the endorsed plans. The corresponding obligations arising under this permit may be completed in stages.

Preparatory works

6. ~~Preparatory works may be undertaken before any obligations arising under a condition in this permit (other than obligations arising under this condition) are satisfied. Preparatory works include, but are not limited to:~~
 - a) ~~investigating, testing and preparatory works to determine the suitability of land, and condition surveys (including geotechnical works);~~
 - b) ~~creation and use of construction access points and working platforms;~~
 - c) ~~establishment of environment and traffic controls;~~
 - d) ~~removal of native vegetation (as otherwise authorised by this permit) to the minimum extent necessary to enable preparatory works; and~~
 - e) ~~salvage of Aboriginal cultural heritage material and other management actions required to be undertaken in compliance with the relevant cultural heritage management plan approved under the Aboriginal Heritage Act 2006 or other compliance with that Act and to the satisfaction of the Eastern Maar Aboriginal Corporation.~~
7. ~~Prior to removal of any native vegetation for preparatory works, information about the native vegetation to be removed must be provided to the satisfaction of the Secretary to DEECA. The information provided to the Secretary to DEECA must include a description of, and maps showing, the native vegetation to be removed.~~
8. ~~Any removal of native vegetation under condition 6 must be included in the total amount of native vegetation permitted to be removed, destroyed or lopped under condition 28.~~

On-site landscaping

9. Before ~~each stage of the~~ development starts, an on-site landscaping plan ~~for that stage~~ must be submitted to, approved and endorsed by the responsible authority. ~~Each on-site~~ [The](#) landscaping plan must [be prepared to the satisfaction of the responsible authority and include:](#)

- a) landscaping or other treatments to reduce the visual impact of the BESS and any substations, buildings and other infrastructure~~describe the landscaping proposed to screen the relevant infrastructure; and~~
- b) ~~include~~ details (including type, location, species and height at maturity) of all vegetation buffers of plant species to be used, and
- c) a schedule for implementing landscaping works
- d) a maintenance and monitoring program to ensure the ongoing health of landscaping and the replacement of dead or diseased plants
- e) any changes required to comply with any other conditions of this permit.

~~10. The endorsed on-site landscaping plan(s):~~

- ~~a) must be implemented to the satisfaction of the responsible authority~~
- ~~b) must not be altered or modified without the written consent of the responsible authority.~~

Construction Noise and Vibration Management Plan

11. Before each stage of development starts, a Construction Noise and Vibration Management Plan (CNVP) for that stage must be submitted to, approved and endorsed by the responsible authority. Once endorsed, the CNVP(s) will form part of the permit. The CNVP(s) must include (as relevant to the stage):
 - a) a clear description of the proposed construction program including the expected timing and duration of key elements of the works
 - b) details of all reasonably practicable measures proposed to fulfil the general environmental duty under the *Environment Protection Act 2017* (EP Act), accounting for guidance under EPA Publication 1834.2: *Civil construction, building and demolition guide*. The measures will include:
 - i. restriction of construction activities to normal working hours wherever practical
 - ii. selection of major construction plant to achieve low noise emissions and minimise any distinctive undesirable characteristics;
 - iii. maintenance of site equipment and infrastructure to minimise noise emissions
 - iv. planning for the most efficient way to complete the works and minimise duration of the noise;
 - v. processes and governance for addressing the general environmental duty, with particular reference to any out of hours work;
 - c) a schedule of noise emission data for the major plant items to be used for construction of the project, including the source reference for this data;
 - d) proposed scheduling, definitions and justifications for all anticipated unavoidable works (as reasonably required for safety, technical or program reasons), low-noise works and managed-impact works which may occur outside of normal working hours;
 - e) details relating to proposed routing and timing of construction traffic, including protocols to minimise noise along local roads and within Mortlake to the extent reasonably practicable; and avoid heavy vehicle movements related to construction aggregate sourcing from local quarries (if required) ~~prior to~~ before 7am on the local road network around the land subject to this permit or within local townships;
 - f) management measures relating to off-site vehicle movements including education of drivers about the general environmental duty under the EP Act and considerate driving practices;

- g) details of the measures to be implemented to address noise characteristics such as tonality, impulsive noise and low frequency noise, including consideration of residential receivers and noise levels in natural areas;
 - h) identify specific activities which require notification of neighbouring residents in advance of the work occurring, including unavoidable works outside of normal working hours, peak periods of off-site construction traffic, and activities with potential to cause perceptible vibration;
 - i) the proposed scheduling of any out of hours works, and provide evidence to support that low-noise or managed-impact works meet the criteria defined in EPA Publication 1834.2
 - j) requirements for periodic reviews and updates as necessary; ~~and~~
 - k) design and operational requirements for temporary concrete batching plants in accordance with the general management measures in EPA Publication 1806: *Reducing risk in the premixed concrete industry*. The design and operation of the batching plants will implement measures to:
 - i. minimise the risk of harm from operational noise so far as reasonably practicable, in accordance with the general environmental duty under the Environment Protection Act 2017 (EP Act);
 - ii. prevent prescribed unreasonable noise by complying with noise limits determined in accordance with EPA Publication 1826.5: Noise limit and assessment protocol for the control of noise from commercial, industrial and trade premises and entertainment venues (Noise Protocol); ~~and~~
 - iii. prevent unreasonable noise according to the factors defined in part (a) of the definition of unreasonable noise in section 3(1) of the EP Act, accounting for the low frequency guidance of EPA Publication 1996: Noise guidelines: assessing low frequency noise (as amended or replaced from time to time).
12. The endorsed CNVP(s):
- l) must be implemented to the satisfaction of the responsible authority; ~~and~~
 - m) must not be altered or modified without the written consent of the responsible authority.

Sustainability

- ~~13. Before development starts, a sustainability management plan (SMP) must be submitted to, approved and endorsed by the responsible authority. When endorsed the SMP will form part of this permit. The SMP must include:~~
- ~~a) measures to meet sustainability targets and specified ratings;~~
 - ~~b) a requirement to monitor and report on the progress of achieving the sustainability targets during construction and operation;~~
 - ~~c) integrate sustainable design practices into the design process to minimise to the extent practicable, greenhouse gas emissions arising from construction, and operation of the project to achieve the sustainability targets and ratings including by:~~
 - ~~i. considering the selection of materials in detailed design;~~
 - ~~ii. where feasible, during design and procurement adopt innovative technologies and the use of sustainable design practices and renewable energy sources during construction;~~
 - ~~iii. investigating, documenting and implementing opportunities to use renewable energy sources during construction;~~
 - ~~d) a requirement for vendors to implement alternatives which avoid or minimise SF6 utilisation so far as reasonably practicable;~~

- ~~e) — review measures to ensure BESS operations are the most efficient (and low carbon) usage of energy where practicable; and~~
- ~~f) — a Green Travel Plan to encourage sustainable travel and minimise project traffic generation.~~

~~14. The endorsed SMP:~~

- ~~a) — must be implemented to the satisfaction of the responsible authority; and~~
- ~~b) — must not be altered or modified without the written consent of the responsible authority.~~

Construction Environmental Management Plan

~~Construction Environmental Management Plan~~

15. Before ~~each stage of~~ development starts, including native vegetation removal, a Construction Environmental Management Plan (CEMP) for that stage must be prepared in consultation with DEECA and submitted to, approved and endorsed by the responsible authority. When endorsed the CEMP(s) will form part of this permit. The CEMP for each stage must include (but is not limited to) as relevant:
 - a) measures to manage the use, storage, transfer, disposal and handling of hazardous materials in accordance with EPA Publication 1698: Liquid handling and storage guidelines and EPA Publication 1700: Preventing liquid leaks and spills from entering the environment to manage potential pollutants from entering the environment, including the following requirements for the storage of liquid fuels and chemicals:
 - i. containment within bunded areas or equivalent facilities
 - ii. being located more than 50 metres from waterways
 - iii. placement within designated areas of the project site
 - b) requirements for spill response kit(s) to be located at waterway crossings, at locations where machinery/plant are operating, and refuelling and fuel/chemical storage areas during construction
 - c) incorporation of spill containment measures into the drainage design
 - d) measures to maintain and service vehicles, plant and equipment in accordance with manufacturer specifications to ensure they operate in a proper and efficient manner. Where possible, vehicles, plant and equipment will be switched off when not in-use
 - e) measures to plan and co-ordinate project works with other relevant wind farm projects located proximate to the wind energy facility so that cumulative impacts at sensitive receptors are avoided to the extent possible
 - f) measures to address potential risks that may arise from earthworks and development on site, including the management of any waste soil
 - g) the sub-plans and matters in condition 17 – 26;
 - h) a process for review of the CEMP and associated sub-plans to be verified by an independent environmental auditor with suitable qualifications and experience (IEA), before the CEMP is submitted for approval; and
 - i) the provision of six-monthly audit reports to be prepared by the IEA and provided to the responsible authority.
16. The endorsed CEMP(s):
 - a) must be implemented to the satisfaction of the responsible authority; and
 - b) must not be altered or modified without the written consent of the responsible authority.

SECRETARY TO DEECA CONDITIONS (recommending referral authority ~~conditions~~)

17. The CEMP(s) for each development stage must include biodiversity and biosecurity measures, including the following (as applicable to the relevant development stage):
- a) an amended plan for the approved use and development drawn at appropriate scale with dimensions, standard property identifiers and geo-references that clearly shows:
 - i. the location of all temporary site offices, equipment/materials storage and stockpiling, and works areas
 - ii. all access/egress points to the site, including primary and other access points
 - b) include recommendations outlined in *Hexham Wind Farm Flora and Fauna Assessment* (Nature Advisory, January 2026) to mitigate impacts on native vegetation and fauna or as otherwise approved by DEECA
 - c) include a detailed description, including relevant diagrams, of the measures to be implemented to protect retained native vegetation during construction activities as prescribed in the native vegetation management plan endorsed under this permit;
 - d) require a contractor briefing advising personnel undertaking the works on site to be advised of the requirements of the plan and all relevant permit conditions and associated statutory requirements or approvals;
 - e) include an environmental audit process to monitor the plan's actions for the duration of construction activities
 - f) include a detailed description of:
 - i. management zones
 - ii. construction zones
 - iii. site preparation and access
 - iv. schedule and timing of works, including daily start and end times
 - v. construction activities, including all earth-disturbance works
 - g) include protocols to mitigate impacts on wildlife (or reference to a subordinate fauna management plan). These protocols must:
 - i. specify for implementation to be undertaken by suitability qualified person holding a management authorization under the *Wildlife Act 1975*;
 - ii. outline methodology for the capture and relocation (salvage) of wildlife, including proposed release areas (located within 100 metres of capture locations)
 - iii. specify procedures to follow if pest or threatened species are encountered, an animal is injured or fauna is unable to be relocated to an appropriate location within 100 metres of capture
 - h) prescribe management of and/or mitigation of impacts on:
 - i. surface water;
 - ii. erosion and sedimentation;
 - iii. land management, reinstatement and rehabilitation;
 - iv. dust, odour and air quality;
 - v. noise and vibration;
 - vi. waste management;
 - vii. hazardous materials;
 - viii. environmental incidents and emergencies;
 - ix. fire hazards;

- x. any other requirements to the satisfaction of the responsible authority;
 - i) requiring biosecurity signage at all project site entry points;
 - j) habitat restoration from construction impacts in areas not required to support operation of the project;
 - k) decontamination bays at all project site entries;
 - l) measures to ensure any materials imported to the project site are free from biosecurity risks, including record keeping of all materials;
 - m) measures to minimise the disturbance of banks, channels and nearby vegetation where essential wind farm infrastructure (e.g. access roads, or transport route swept paths) crosses a watercourse or wetland identified as potential habitat of a listed aquatic fauna species; ~~and~~
 - n) measures to ensure compliance with the cultural heritage management plan approved under the *Aboriginal Heritage Act 2006* (Vic), including a cultural heritage induction process for key personnel.
- 18. No structures are to encroach or overhang Crown land unless with the consent of DEECA. For further information or advice on Crown land matters contact DEECA at publicland.bsw@deeca.vic.gov.au.

Water management plan

- ~~19.—The CEMP for each development stage must include a Water Management Plan (WMP). The WMP(s) must, as applicable to the relevant development stage:~~
 - ~~a)—detail groundwater management approaches required to identify, avoid and minimise impacts to groundwater levels, flow and quality as far as reasonably practicable~~
 - ~~b)—respond to any final design details and ensure all risks are appropriately managed~~
 - ~~c)—identify construction activities and temporary works that may impact on groundwater discharge, surface permeability and groundwater flow~~
 - ~~d)—identify measures to minimise groundwater discharge, recharge and flow related impacts including but not limited to:~~
 - ~~i.— revegetation of disturbed areas~~
 - ~~ii.— backfilling cabling trenches using excavated material where possible, or a material of a similar permeability where this is not possible~~
 - ~~iii.— micro-siting turbine foundation excavations and trenches to avoid unmapped springs and watercourses.~~

Sediment Erosion and Water Quality Management Plan

- ~~20.—The CEMP for each development stage must include a Sediment Erosion and Water Quality Management Plan (SEWQMP), including a separate flood impact assessment for the BESS and terminal station. The SEWQMP(s) must be prepared in consultation with the Glenelg Hopkins Catchment Management Authority and in accordance with the EPA Publication 1834:2 Civil construction, building and demolition guide.~~
- ~~21.—Before each stage of development starts, a detailed drainage design must be developed in consultation with Glenelg Hopkins Catchment Management Authority to minimise impacts to surface waters and supported ecosystems, considering best practice design guidelines.~~

Acid Sulfate Soil Management Plan

- ~~22.—The CEMP for each development stage must include an Acid Sulfate Soil Management Plan. The plan(s) must follow a risk-based approach to management of potential acid sulfate soil,~~

actual acid sulfate soil and potentially contaminated soils in accordance with the National Acid Sulfate Soils Guidance series, Victorian Best Practice Guidelines for Assessing and Managing Coastal Acid Sulfate Soils (Department of Sustainability and Environment, 2010), and EPA Victoria Publication 655.1: Acid sulfate soil and rock.

Spoil Management Plan

23.—The CEMP for each development stage must include a Spoil Management Plan:

Air Quality Management Plan

24.—The CEMP for each development stage must include an Air Quality Management Plan (AQMP). The AQMP(s) must identify potential and existing dust sources and outline best practice design controls and management practices. The plan(s) must consider the following measures, where reasonably required, and as applicable to the relevant development stage:

- a) —watering of unsealed roads to reduce wheel generated dust;
- b) —use of wheel wash measures to minimise transfer of dust from the project site;
- c) —use of water sprays to reduce wind erosion from material stockpiles and exposed areas;
- d) —constructing stockpiles slopes no greater than 2:1 (horizontal to vertical);
- e) —use of water sprays as required for material transfer operations and quarry activities (e.g., drilling rock, crushing and screening);
- f) —restricting vehicle speeds near sensitive areas such as dwellings;
- g) —site specific dust control measures for dust producing activities;
- h) —ensure the area of cleared land is minimised during the drier months of the year, when potential for dust generation is at its greatest;
- i) —ensuring that smooth surfaces are deep ripped and left rough and cloddy to reduce the wind velocity at the soil surface;
- j) —rehabilitation and revegetation of permanently inactive stockpiles and disturbed areas to reduce wind erosion;
- k) —selection of equipment, e.g., concrete batching plants, which have integrated best practice dust control features;
- l) —regular monitoring of the effectiveness of dust control measures. If dust controls are found to be ineffective, these would be reviewed and amended as reasonably necessary;
- m) —complaint investigation and response measures.

Heritage Management Plan

25.—The CEMP for each development stage must include a Heritage Management Plan (HMP) consistent with the requirements of the Heritage Act 2017 and undertaken in consultation with Heritage Victoria. The HMP(s) must include management measures to avoid impact to known registered historic heritage places, as relevant to the applicable development stage, including:

- a) —displaying all relevant registered historic heritage places and management measures on the CEMP;
- b) —implementing protection buffers or temporary fencing to prevent inadvertent harm to historic heritage places;
- c) —routinely inspecting management measures implemented for known historical heritage places to ensure they remain fit for purpose; and
- d) —developing and implementing an Unexpected Finds Protocol to manage the discovery of previously unknown historic archaeological features or artefacts, if found, including the following requirements:

- i. ~~site workers will be inducted as to the nature of unexpected finds and what action to take if any are found; and~~
- ii. ~~if any unknown historic archaeological features or artefacts are encountered, works in the immediate area will cease and a reasonable buffer zone will be established. A suitably qualified historical archaeologist will be contacted to provide an emergency assessment of the discovery to Heritage Victoria for direction on next steps.~~

Agricultural Management Plan

26. ~~The CEMP for each development stage must include an Agricultural Management Plan. The plan(s) must:~~

- a) ~~outline the existing land use of surrounding agricultural practices and management commitments to reduce impacts on agricultural operations, such as the sowing and harvesting of crops, including in relation to traffic movements; and~~
- b) ~~identify processes for movement of stock during construction to avoid adverse impacts on animal welfare, which must include consultation with host landowners and owners of land adjacent to the subject land of this permit.~~

Secretary to DEECA (recommending referral authority conditions)

Native Vegetation Removal

27. ~~Before each stage of development starts, all persons undertaking the native vegetation removal or works on-site must be advised of all relevant permit conditions and associated statutory requirements or approvals.~~

28. Before ~~each stage of development that includes native vegetation removal~~ works and native vegetation removal starts, a plan showing the native vegetation permitted to be removed, destroyed or lopped for the use and development that stage must be approved and endorsed by the responsible authority. This plan must include Native Vegetation Removal Report ID: NAA_2025_010 showing ~~the native vegetation to be removed for the relevant stage forms part of~~ the permitted removal of 8.533 hectares comprised of:

- a) 8.352 hectares of proposed native vegetation removal in Moyne Shire
- b) 8 large trees proposed to be removal in Moyne Shire.

Offset Requirement

29. To offset the removal of native vegetation, as identified in Native Vegetation Removal Report ID: NAA_2025_010, a native vegetation offset must be secured, in accordance with the *Guidelines for the removal, destruction or lopping of native vegetation* (DEECA 2025) as specified below:

- a) a general offset of 2.911 general habitat units:
 - i. located within the Glenelg Hopkins Catchment Management Authority boundary or the municipal district of the Moyne Shire Council
 - ii. with a minimum strategic biodiversity value score of at least 0.349
- b) the offset(s) secured must provide protection of at least 8 large trees.

Offset Evidence and timing

30. Before any native vegetation is removed, evidence that the required offset for the project stage has been secured must be provided to the satisfaction of the responsible authority. This evidence is one or both of the following:

- a) credit extract(s) allocated to the permit from the Native Vegetation Credit Register, or

- b) an established first party offset site including a security agreement signed by both parties, and a management plan detailing the 10-year management actions and ongoing management of the site.
31. A copy of the offset evidence must be endorsed by the responsible authority and will form part of this permit.

Native Vegetation Management Plan

32. Before works start ~~for each development stage~~, a Native Vegetation Management Plan (NVMP) ~~for that stage~~ must be prepared in consultation with DEECA Regions and to the satisfaction of the responsible authority. The NVMP(s) must include (but is not limited to):
- a) confirmation of the native vegetation to be removed for the final transport route (Portland and/or Geelong route), in accordance with the *Guidelines for the removal, destruction or lopping of native vegetation* (DEECA 2025)
 - b) a map drawn at scale with dimensions, standard property identifiers and geo-references (such as VicGrid94 co-ordinates) that clearly shows the locations of all native vegetation and biodiversity values (including communities) present on site that must be retained throughout the use and development
 - c) measures to be implemented to protect native vegetation and other biodiversity values retained on site and on land directly adjoining the site, including roadsides, during construction, maintenance activities and decommissioning phases. These measures must:
 - i. prohibit the following activities within areas of native vegetation to be retained and any tree or vegetation protection zone associated with the permitted use and/or development without written consent of the responsible authority:
 - a. vehicle access;
 - b. trenching or soil excavation;
 - c. storage or dumping of any soils, materials, equipment, vehicles, machinery or waste products;
 - d. entry and exit pits for the provision of underground services;
 - e. any other actions or activities that may result in adverse impacts to retained native vegetation; ~~and~~
 - ii. describe the type of No Go Zone fencing and signage to be used to protect areas of retained native vegetation within 15 metres of any works, including tree protection zones. Fencing must comply with AS 4970-2025 Protection of trees on development site; ~~and~~
 - d) detailed prescriptions to avoid and mitigate sources of environmental impact on retained areas of native vegetation and biodiversity values on site throughout the approved use (operation and maintenance).

COUNTRY FIRE AUTHORITY CONDITIONS (not a referral authority) ~~and Worksafe Conditions~~

33. Before plans ~~for each development stage~~ are endorsed under condition 3, in consultation with the CFA, a Risk Management Plan (RMP) must be submitted to, approved and endorsed by the responsible authority. The RMP must be prepared in accordance with the CFA Design Guidelines and Model Requirements for Renewable Energy Facilities (as at the date of submission of the plan for endorsement) (CFA Guidelines), and ~~must (as applicable to the relevant to each stage of development):~~

- a) describe the risks and hazards at the facility to and from the BESS and related infrastructure
- b) describe the risk controls for the facility, which are to:
 - i. include the fire protection systems/fire water supplies for the BESS:
 - a. of a quantity no less than 576kL (40L/s for four hours) effective capacity
~~b. with a retention basin to capture firefighting water;~~
 - c. provided otherwise in accordance with the CFA Guidelines and AS 2419.1-2021: Fire hydrant installations
 - d. located reasonably adjacent to the BESS but in a position that is accessible without undue danger in an emergency, to the satisfaction of CFA
 - e. commissioned ~~prior to~~ before the arrival of the BESS enclosures/containers at the facility
 - ii. include the fire protection systems/fire water supplies for the wind energy facility infrastructure:
 - a. of a quantity of no less than 45,000L effective capacity, located at each entrance to the wind energy facility, and at the substation
 - b. additional static fire water tanks of at least 45,000L effective capacity, the number and location of tanks are to be to the satisfaction of CFA
 - c. provided otherwise in accordance with the CFA Guidelines and AS 2419.1-2021: Fire hydrant installations
- c) specify the separation distance:
 - i. of no less than 3 metres between battery containers/enclosures to adjacent battery containers/enclosures, to the side with the battery module access doors
 - ii. of battery containers/enclosures and related battery infrastructure, buildings/structures, and vegetation based on radiant heat flux (output) as an ignition source
- d) specify the fire risk controls for the storage of battery energy storage system enclosures/containers on-site, ~~prior to~~ before their installation, for any length of time
- e) include a copy and summary of the findings of WorkSafe and [ESV's Arc Flash Self-Audit Tool](#) (dated June 2022), including the proposed risk controls to manage arc flash risks for site personnel and emergency responders
- f) where noise walls/acoustic barriers are proposed at the battery energy storage system, include consequence modelling and assessment of toxic gas releases that takes into account the proposed position of acoustic barriers, in accordance with Part 3 of [CFA's Fire Safety Studies for Battery Energy Storage Systems Guidelines](#) (dated June 2025)
- g) list and describe all other controls for the management of on and off-site hazards and risks at the facility (including all proposed battery energy storage system safety and protective systems)
- h) provide an evidence-based determination of the effectiveness of the risk controls against the identified hazards, including justification for the omission of any safety and protective system/s
- i) form the basis for the design of the facility
- j) include a requirement for smoke detection and fire suppression systems to be monitored 24/7 by an on-site monitoring system

- k) require monitoring of vegetation growth and additional inspections during the fire danger period to ensure all weeds and other vegetation is removed from fire breaks and other critical areas.

WORKSAFE CONDITIONS (determining referral authority)

- 34. The RMP must be updated once the site design and battery supplier has been finalised to confirm the requirements of the CFA Guidelines are met, and to the satisfaction of the CFA's Dangerous Goods Unit, ~~prior to~~before BESS arrival on site.
- 35. Before plans are endorsed under condition 1, an Emergency Plan (EP) and Fire Management Plan (FMP) must be submitted to, approved and endorsed by the responsible authority. The EP and FMP must be prepared by a suitably competent person in consultation with CFA and be in accordance with the CFA Design Guidelines and Model Requirements for Renewable Energy Facilities (as at the date of submission of the relevant plan for endorsement) to the satisfaction of the CFA's Dangerous Goods Unit (~~prior to~~before BESS arrival on site).
- 36. Before the use commences, all fire protection measures shown on the endorsed plans (including separation distances, emergency vehicle access, firefighting water supply and equipment, and fire breaks) must be implemented. Fire protection measures must be maintained on a continuing basis for the life of the permit, to the satisfaction of the responsible authority.
- 37. Planning for decommissioning of all or part of the facility must be in consultation with CFA.

HEAD, TRANSPORT FOR VICTORIA CONDITIONS (determining referral authority for Clause 52.29 conditions)

- 38. In conditions 37-47:
 - a) 'Roads' means local roads and any arterial roads to be used for construction haulage, as agreed with the relevant road management authority.

Traffic management plan

- 39. Before ~~each stage of the~~the development starts and once construction methods and transportation routes are confirmed, a Traffic Management Plan (TMP) for that stage must be prepared to the satisfaction of the relevant road management authority, and the responsible authority. The TMP must be prepared at no cost to relevant road management authority and the responsible authority. When approved, the TMP will be endorsed by the responsible authority in consultation with the relevant road management authority. ~~The TMP must be complied with, unless a variation is agreed by the responsible authority in consultation with the relevant road management authority.~~

The TMP ~~for each stage~~ must include ~~the following (as applicable to the relevant development stage):~~

- a) the number and type of anticipated vehicle movements and the time of day when local roads will be used
- b) the nominated routes for traffic accessing and departing the ~~land~~project site
- c) an existing conditions survey (visual conditions only) of relevant Roads that may be used in connection with the wind energy facility (for access, preconstruction, or construction purposes), including details of the suitability, design, condition, and construction standard of the relevant Roads
- d) the designation of all vehicle access points to the project site from surrounding roads. Vehicle access points must be designed and located to ensure safe sight distances, turning movements, and avoid potential through traffic conflicts

- e) the designation of appropriate pre-construction, construction, and transport vehicle routes to and from the wind energy facility site, including designation of transport vehicle routes being used for the on-site quarry
 - f) engineering plans demonstrating whether, and if so how, truck movements to and from the wind energy facility site can be accommodated on sealed roadways and turned
 - g) to minimise potential impacts to the transport network from the location of quarried materials to the project site (once the quarry site is confirmed)
 - h) recommendations regarding the need for road and intersection upgrades to accommodate any additional traffic or site access requirements (whether temporary or ongoing), and the timing for the delivery of those upgrades
 - i) proposed measures to ensure workers enter and exit the wind energy facility site from the designated site entrances
 - j) proposed measures to ensure construction vehicles are easily identifiable
 - k) the designation of mitigation measures, including operating hours [and speed limits](#) for trucks on routes accessing the wind energy facility site which provide for appropriate safety measures around school bus routes and school bus times where relevant; and provide for resident safety
 - l) consideration of vehicle movements associated with construction traffic from other wind energy facilities within 25 kilometres of the development
 - m) proposed measures to manage traffic impacts associated with the ongoing operation of the wind energy facility on the traffic volumes and flows on surrounding roads
 - n) a program to rehabilitate relevant Roads used by the Project within agreed timeframes to the condition identified in the surveys carried out under the above condition or to the condition to which the relevant Roads have been upgraded, whichever is relevant
 - o) where there are significant increases in vehicle numbers, determined by the Road Quality Auditor, above the anticipated vehicle movements identified in the endorsed traffic management plan; or any change to an endorsed vehicle route identified in the traffic management plan, the traffic management plan must be updated to the satisfaction of the relevant road management authority within 28 days of the event described in this condition or the above condition.
40. Before the TMP for each stage of development is endorsed, the developer of the wind energy facility must submit to the relevant road management authority for approval the identity of a suitably qualified engineer, independent of the proponent's traffic adviser who will undertake the duties of the Road Quality Auditor identified in the TMP. Once approved, the developer of the wind energy facility must engage, at its cost, the approved Road Quality Auditor to fulfil the requirements of the Road Quality Auditor as defined in the TMP.
41. The relevant road management authority may require at any time the appointment of an alternate proposed Road Quality Auditor within 21 days of making a written request to the wind energy facility developer, if the appointed Road Quality Auditor is unable to maintain independence or is unable to meet project timelines to the relevant road management authority's satisfaction. The alternate Road Quality Auditor must, if approved, be appointed by the wind energy facility developer to undertake the duties identified under the TMP.
42. Before the TMP ~~for each stage of development~~ is endorsed, the terms of reference for the Road Quality Auditor must be approved by the relevant road management authority, including but not limited to:

- a) a program of regular inspections to be carried out during the construction of the wind energy facility to identify maintenance works necessary ~~because of construction traffic to relevant local roads~~
 - b) frequency of inspections
 - c) frequency of reporting to the wind energy facility developer to the Head, Transport for Victoria
 - d) standards to which all agreed local roads are constructed
 - e) ongoing maintenance and repair regime during construction of the wind turbine generators
 - f) procedures for corrective works resulting from non-compliance
 - g) penalties for non-compliance.
43. Before ~~each~~ development ~~of the wind energy facility~~ ~~stage~~ starts, functional design plans for all road works required by the relevant TMP must be submitted to the relevant road management authority for approval. The plans must be designed to Australian Standards and in accordance with VicRoads guidelines and include:
- a) the location and detailed design of the connection between the internal access tracks and the public roads; ~~and~~
 - b) a demonstration that safe sight distances, turning movements, and the avoidance of traffic conflicts at the intersection of internal roads and public roads will be achieved to the satisfaction of the ~~the~~ relevant road management authority.
44. Before the start of construction of wind turbine footings, crane hardstand, internal access roads, the substation or transmission towers, road construction works necessary for each of these components as shown on the plan(s) endorsed under this permit, must be undertaken, completed, and assessed and approved by the Road Quality Auditor to the satisfaction of the relevant road management authority. The road construction works may be staged as required to enable the construction of individual turbine groupings and other components of the wind energy facility or BESS to be completed in stages.
45. The traffic management and road upgrades and maintenance works identified in the endorsed TMP(s) must be carried out to the satisfaction of the relevant road management authority ~~prior to the commencement of any onsite works within each relevant site zone.~~

Decommissioning Transport Management Plan

46. Before the decommissioning of the Renewable Energy Facility, a Decommissioning Transport Management Plan (DTMP) must be submitted to and approved by the Head, Transport for Victoria and the Responsible Authority. Once approved the DTMP will be endorsed by the Responsible Authority and form part of the permit.
47. The DTMP must:
- a) be prepared to the satisfaction of and at no cost to the Head, Transport for Victoria and the Responsible Authority; and
 - b) include details of measures to manage transport impacts associated with removing the infrastructure, equipment, buildings and structures from the site.
48. The decommissioning of the Renewable Energy Facility must be carried out in accordance with the endorsed DTMP to the satisfaction of and at no cost to the Head, Transport for Victoria and the Responsible Authority.
49. The endorsed DTMP must not be modified except with the prior written consent of the Head, Transport for Victoria and the Responsible Authority.

50. ~~Note: Prior to~~Before any works ~~commencing~~ within any arterial road reserve start, the applicant must enter into a works agreement with the Head, Transport for Victoria, confirming design plans and works approvals processes, including the determination of fees and the level of the Head, Transport for Victoria service obligations. Contact:

regionalexternalworks@transport.vic.gov.au

- ~~51. Where traffic upgrade works are recommended or required under the, endorsed TMP(s), or any other plan required by any condition of this permit, the following documents must be submitted to, approved and endorsed by the responsible authority prior to commencement of the traffic upgrade works:~~

- ~~a) detailed engineering plans showing the required works including cross-sections which show their formation, depth, drainage, and surface levels; and~~
~~b) the timing of when the works are to be undertaken must be prepared and approved prior to the relevant works being undertaken.~~

~~The plans / program required under this condition must be prepared in consultation with the relevant road management authority. Traffic upgrade works must be completed to the satisfaction of the relevant road management authority.~~

- ~~52. The traffic management and road upgrade works required on local roads must be carried out to the satisfaction of the relevant road management authority.~~

- ~~53. Any temporary infrastructure works required to mobilise oversize and overmass vehicles must be designed in consultation with, and completed to the satisfaction of the relevant road management authority.~~

AUSNET CONDITIONS (determining referral authority ~~conditions~~)

54. ~~No~~A wind turbine ~~must not~~shall be constructed within 350 metres of AusNet Transmission Group's easement, and ~~no~~an anemometry masts ~~must not~~shall be constructed within 300 metres of the easement.
55. No buildings or structures are permitted on AusNet Transmission Group's easement other than interface works required for connection of the wind farm electrical system to the 500kV transmission line. Design plans for such work must be submitted to and approved in writing by AusNet Transmission Group ~~prior to~~before the ~~commencement of~~ construction starts.
56. Details of any road or track construction and the installation of services within the easement must be submitted to AusNet Transmission Group and approved in writing ~~prior to~~before the ~~commencement of~~ work on site starts.
57. Gates must be installed in any new boundary fences that cross the easement to enable access by AusNet Transmission Group vehicles.
58. Natural ground surface levels on the easement must not be altered by the stockpiling of excavated material or by landscaping without prior written approval from AusNet Transmission Group.
59. A 'Permit to Work Adjacent to Exposed High Voltage Electrical Apparatus' must be obtained ~~prior to~~before the ~~commencement of~~ any works start on the easement that involves the use of any plant or equipment exceeding 3 metres operating height.
60. Parking, loading, unloading and load adjustment of large commercial vehicles is not permitted on the easement.
61. All future works in the easement must be submitted to AusNet Transmission Group and approved in writing ~~prior to~~before the ~~commencement of~~ work on site starts.

GLENELG CATCHMENT MANAGEMENT AUTHORITY CONDITIONS (not a referral authority)

62. ~~No~~A wind turbines ~~must not~~~~shall~~ be installed within 50 ~~metres~~ of a designated waterway, 100 metres of a wetland and major waterways, or 30 ~~metres~~ of ephemeral waterways.
63. Before development starts, Works on Waterways Licences must be obtained from Glenelg Hopkins CMA for construction of all proposed vehicular and underground cable crossings of designated waterways.
64. Appropriate machinery hygiene measures ~~must~~~~shall~~ be put in place during the construction phase.
65. Construction machinery ~~must~~~~shall~~ be washed down before entering and (where required) exiting the project site.
66. Sediment control measures ~~shall~~~~must~~ be implemented ~~prior to commencement and during the before~~ construction ~~phase~~ of the wind farm ~~starts and during construction~~.
67. Sediment fences ~~shall~~~~must~~ be installed within waterways downstream of any culvert crossing on the construction site for the duration of the construction works and 3 months thereafter.
68. Where silt fences are employed for sediment control, they ~~must~~~~shall~~ be constructed with a centre section lower than the ground levels at either end of the silt fence to avoid outflanking during storm events.
69. Where surface water or groundwater is to be used for construction purposes the appropriate permits ~~must~~~~shall~~ be obtained from Southern Rural Water before ~~commencement of~~ works ~~start~~.
70. Quarry and associated infrastructure material plants will be located at least 100 metres from any watercourse.
71. Any washout area established at infrastructure plants will be located at least 100 metres from waterways or stormwater drains.
72. Any (domestic wastewater) treatment system installed is located at least 100 ~~metres~~ from drainage lines and water bodies.
73. Development works ~~must~~~~shall~~ not cause adverse flood impact on neighbouring properties without a permit or consent from those landowners.

Complaint Investigation and Response Plan

74. Before development starts, a Complaint Investigation and Response Plan (CIRP) must be submitted to, approved and endorsed by the responsible authority.
75. The CIRP must:
 - a) respond to all aspects of the construction and operation of the facility, other than operational noise from the turbines
 - b) be prepared in accordance with Australian Standard 10002 Guidelines for complaint management in organisations
 - c) include a process to investigate and resolve complaints (different processes may be required for different types of complaints)
 - d) include a process for investigating and resolving complaints received regarding the effect of the facility on telecommunications reception at a pre-existing dwelling as of [insert date] within 5 kilometres of the site, which If an investigation indicates that the facility has had a detrimental impact on the quality of reception, requires the operator to

restore reception at the pre-existing dwelling to at least the quality determined in the Telecommunications Reception Strength Survey required by this permit, to the satisfaction of the responsible authority

Community engagement and complaints

76.—~~Before development of any stage starts, a Stakeholder Engagement Plan (SEP) must be submitted to, approved and endorsed by the responsible authority. When endorsed the SEP will form part of this permit. The SEP shall consider:~~

- ~~a) —an approach for ongoing engagement with the broader community about the long-term benefits and opportunities of the project;~~
- ~~b) —maintenance of a stakeholder database;~~
- ~~c) —procedures and mechanisms for the regular distribution of accessible information relevant to the project;~~
- ~~d) —identification of opportunities to provide timely, useful and accurate information regularly about construction activities, schedules and milestones;~~
- ~~e) —measures to notify affected landowners and neighbours well in advance about any specific construction issues with direct impacts on properties and provide details of project personnel for immediate contact;~~
- ~~f) —mechanisms for advising the community in advance of upcoming works (where necessary) and how the proponent will work with community to mitigate the negative impacts of construction whenever possible;~~
- ~~g) —a Construction Accommodation and Employment Strategy, which shall consider:~~
 - ~~i. —reasonable measures to ensure sufficient accommodation is available for the construction and operational workforce associated with the project;~~
 - ~~ii. —reasonable measures to maximise benefits to the local economy and business community;~~
 - ~~iii. —consideration of potential cumulative impacts associated with concurrent developments in social locality;~~
 - ~~iv. —workforce codes of conduct;~~
 - ~~v. —promotion of strategies to facilitate engagement and integration of the temporary workforce in community life, through preparation of workforce welcome packs and community inductions and participation in community events and membership of local community groups;~~
 - ~~vi. —support for local community groups, organisations and programs that address local community needs, through both in-kind (company and workforce participation) and monetary investment activities that create social value at the community level;~~
 - ~~vii. —construction of a purpose-built temporary workforce accommodation facility, subject to further planning approvals (if reasonably required);~~
 - ~~viii. —inviting local businesses, local employment agencies, training and education providers to participate in the project, for example,~~
 - ~~a. —partnering with education and training organisations to offer special apprenticeships and programs;; and/or;~~
 - ~~b. —developing a local procurement strategy for employment or contracts that gives consideration to local and regional residents and businesses, including incorporating local content requirements into key project contracts to maximise local employment opportunities;~~

- ~~h) — ongoing engagement with the community and Aboriginal organisations to explore ways in which connections to local cultural heritage can be preserved and enhanced~~
- ~~i) — consultation with relevant landowners about potential impacts to groundwater bores to limit disruption to water access and support the identification of mitigation measures or alternative supply options~~
- ~~j) — workforce education on Aboriginal history and cultural heritage~~
- ~~k) — procedures for consultation with the CFA for the storage of dangerous goods in accordance with Dangerous Goods (Storage Handling) Regulations 2022~~
- ~~l) — consultation with point to point and point to multipoint service operators, radio communication operators, telecommunications and NBN service operators to identify potential for electromagnetic interference based on the final project design and measures to mitigate any identified impacts~~
- ~~m) — a complaints management procedure that:

 - ~~outlines the process for making and recording complaints~~
 - ~~ix. — provides a range of avenues (e.g., email) for community members to express their concerns or ask questions~~
 - ~~x. — specifies response and resolution procedures to ensure timely responses are provided to complaints raised~~
 - ~~xi. — outlines roles and responsibilities within the project team for the receipt, handling and escalation of complaints~~
 - ~~xii. — outline how community members can escalate their concerns should they not receive a response that meets their expectations~~
 - ~~xiii. — The complaints management procedure must include a process for managing complaints relating to noise, and radio reception strength at pre-existing dwellings within 5 kilometres of the project site.~~~~

~~77. — The endorsed SEP must:~~

- ~~a) — be implemented to the satisfaction of the responsible authority~~
- ~~b) — not be altered or modified without the written consent of the responsible authority.~~

Publishing information about complaints handling

78. Before the development ~~of any stage~~ starts, the following information must be made publicly available and readily accessible from the wind farm project website, or another publicly available resource to the satisfaction of the responsible authority:
- a) a copy of the endorsed complaint investigation and response plan; ~~and~~
 - b) a toll-free telephone number and email contact for complaints and queries to the wind energy facility operator.

Complaints Register

79. Before development of any stage starts, a complaints register must be established which records:
- a) the complainant's name and address (if provided), including (for noise complaints) any applicable property reference number contained in the pre-construction noise assessment approved under condition 92 and 123;
 - b) a receipt number for each complaint, which must be communicated to the complainant;

- c) the time and date of the incident, and the prevailing weather and operational conditions at the time of the incident;
 - d) a description of the complainant's concerns; ~~and~~
 - e) the process for investigating the complaint, and the outcome of the investigation, including:
 - i. the actions taken to resolve the complaint; ~~and~~
 - ii. ~~for noise complaints, the findings and recommendations of an investigation report undertaken in accordance with the endorsed noise management plan.~~
80. All complaints received must be recorded in the complaints register.
81. A complete copy of the complaints register along with a reference map of complaint locations must be provided to the responsible authority on each anniversary of the date of this permit, and at other times on request.

Emergency Services

82. Before the development ~~of any stage~~ starts, spatial information data must be provided to Land Use Victoria via email vicmap@transport.vic.gov.au to be used to direct emergency services to and within the site. This information must be in the ESRI Shapefile or Geodatabase .gdb format, GDA94 or GDA2020 datum and include:
- a) the location and boundaries of the facility extents polygon(s)
 - b) all access entry points onto private property
 - c) all internal roads
 - d) the locations of site compound, substations, maintenance facilities.
83. If there are any subsequent changes to infrastructure location, internal roads or access points during construction, or after completion of construction, updated data must be provided to Land Use Victoria via email vicmap@transport.vic.gov.au within 30 days of the change, to enable details of any changes to the facility to be known to emergency services dispatchers.

~~PART B—SPECIFIC CONDITIONS: WIND ENERGY FACILITY AND ON-SITE TERMINAL STATION~~

- ~~84. Conditions 85—122 apply to the development and use of land for the wind energy facility and on-site terminal station approved under this permit.~~

Micro-siting of turbines

85. Before development of the wind energy facility starts, a Micro-Siting Plan must be submitted to, approved and endorsed by the responsible authority, identifying a footprint at ground level within which each turbine may be located. When endorsed the Micro-Siting Plan will form part of this permit.
- The Micro-Siting Plan must be fully dimensioned and drawn to scale. The footprint for each turbine identified on the Micro-Siting Plan must not:
- a) extend more than 100 metres in any direction from the centre of the turbine at ground level as shown on the development plans endorsed under condition 3
 - b) be within 1 [kilometre](#) of a dwelling that existed as at 10 December 2025 unless the operator has provided evidence to the satisfaction of the responsible authority that the owner of the dwelling has consented in writing to the location of the turbine footprint
 - c) include areas identified as vegetation or tree protection zones, watercourse and wetland buffers (except at watercourse crossings) and any other buffer or setback areas required under any plans endorsed under this permit.

86. Any changes to access tracks, electricity cabling and associated infrastructure arising from micro-siting a turbine in accordance with the endorsed Micro-Siting Plan do not require further written consent of the responsible authority, and do not require amendments to the development plans endorsed under condition 3.

~~87. The endorsed Micro-Siting Plan must not be altered or modified without the written consent of the responsible authority.~~

Off-site landscaping program

88. Before ~~the~~ development ~~of the wind energy facility~~ starts, an Off-site Landscaping Program must be submitted to, approved and endorsed by the responsible authority. When endorsed, the Off-site Landscaping Program will form part of this permit.

~~Note: For the purpose of this condition, the term "landscaping" refers to: soil improvement and preparation in planting areas, tree/plant supply and installation, mulch, irrigation, and animal fencing to protect landscape work from pests and stock. It excludes pavements, structures, lighting, retaining walls and other landscape features.~~

89. The Off-site Landscaping Program must:

- a) include a plan identifying all non-stakeholder dwellings within 6 kilometres of a turbine
- b) provide for off-site landscaping to reduce the visual impact of the turbines from any non-involved dwelling that existed as at 10 December 2025 within 6 kilometres of a turbine(s) where a turbine is visible from a primary external or internal living area (including lounge rooms, kitchens, dining areas, deck areas, pool areas and other outdoor entertaining areas), to the satisfaction of the responsible authority
- c) include a methodology for determining:
 - i. the type, ~~amount and location~~ of landscaping ~~or other~~ treatments to be proposed
 - ~~ii. the species and plant maturity to be used~~
 - iii. a timetable for establishing and maintaining the landscaping ~~or other~~ treatments for at least two years
- ~~d) ensure off-site landscaping implements the requirements of the Bushfire Management Overlay, where applicable, maintaining a 20-metre buffer between any landscape mitigation planting and existing vegetation, and a 10-metre buffer from the residence~~
- e) include a process ~~and timeline for consultation with affected~~ making offers to eligible landowners ~~to undertake landscaping on affected landowner's land that will be available for acceptance up to 1 year post completion of construction to either~~ (as if elected by the landowner):
 - ~~i. establish and maintain the landscaping on the landowner's land, for a period of at least two years, or~~
 - ~~ii. make a cash contribution in lieu (which must be sufficient to cover the cost of the landowner establishing and maintaining the landscaping, for a period of at least two years)~~
- ~~f) include a process for recording:~~
 - ~~i. offers that have been made to landowners;~~
 - ~~ii. whether or not the offers are accepted;~~
 - ~~iii. when and how offers are actioned following acceptance; and~~

- g) ~~include a process for the preparation and provision of progress reports regarding the implementation of the endorsed Off-site Landscaping Program to be provided to the responsible authority annually from the date of this permit, and at other times on request.~~

90. ~~The endorsed Off-site Landscaping Program:~~

- a) ~~must be implemented to the satisfaction of the responsible authority; and~~
- b) ~~must not be altered or modified without the written consent of the responsible authority.~~

Noise

91. In conditions 92 - 96:

- a) 'the Standard' means New Zealand Standard 6808:2010, Acoustics – Wind Farm Noise
- b) noise sensitive location means a location that meets the definition in the Standard and that was present or approved at 10 December 2025.

Pre-Construction Wind Turbine Noise Assessment

92. Before the development ~~of the wind energy facility and on-site terminal station~~ starts, a ~~pre-construction~~ (predictive) noise assessment based on the final turbine layout and turbine model must be undertaken and the results submitted to the ~~satisfaction of the~~ responsible authority. The ~~pre-construction~~ (predictive) noise assessment ~~is to be prepared by a qualified acoustic consultant, and~~ must:

- a) demonstrate to the satisfaction of the responsible authority that the proposal can comply with the Standard including an assessment of whether a high amenity noise limit is applicable under Section 5.3 of the Standard
- b) be made publicly available and readily accessible from the wind farm project website, or another publicly available resource to the satisfaction of the responsible authority
- c) ~~in respect of turbines, be prepared in accordance with the Standard, and specifically address:~~
 - i. ~~be representative of noise emission data for the final selected wind turbine model and the location of all noise sensitive locations around the wind energy facility~~
 - ii. ~~identify all stakeholder receivers where noise agreements in respect of turbines have been established~~
 - iii. ~~compliance with the applicable noise limits at surrounding noise sensitive locations and receivers~~
 - iv. ~~any updated background noise monitoring required as a result of the final turbine layout and turbine model.~~

93. ~~The pre-construction (predictive) noise assessment report must demonstrate to the satisfaction of the responsible authority that:~~

- a) ~~the wind energy facility can comply with the Standard, including with an assessment of whether a high amenity noise limit is applicable under Section 5.3 of the Standard; and~~
- b) ~~the on-site terminal station can:~~
 - i. ~~minimise the risk of harm from operational noise so far as reasonably practicable in accordance with the general environmental duty under the Environment Protection Act 2017 (EP Act);~~
 - ii. ~~comply with the noise limits determined in accordance with EPA Publication 1826.5: Noise limit and assessment protocol for the control of noise from commercial, industrial and trade premises and entertainment venues (Noise Protocol); and~~

- iii. ~~prevent unreasonable noise according to the factors defined in part a) of the definition of unreasonable noise in section 3(1) of the EP Act with regards to EPA Publication 1996: Noise guidelines: assessing low frequency noise (as amended or replaced from time to time).~~

94. An environmental auditor appointed under Part 8.3 of the *Environment Protection Act 2017* must prepare a report that verifies if the acoustic assessment undertaken for the purpose of the ~~pre-construction~~ (predictive) noise assessment report has been conducted in accordance with the Standard. The verification report must be made publicly available and readily accessible from the wind farm project website, or another publicly available resource to the satisfaction of the responsible authority.

~~95. Before operation of the wind energy facility commences, a schedule of sound power level testing and reporting must be prepared to verify that the noise emissions of a representative selection of installed turbines are consistent with the noise emissions presented in the pre-construction noise assessment report endorsed under condition 92. A report verifying the schedule of sound power level testing must be prepared by an a suitably qualified person, including a person qualified to undertake audits under Part 8.3 of the EP Act. The schedule of sound power level testing and the environmental auditor's verification report must be provided to EPA Victoria upon request. The sound power level testing and reporting must be implemented in accordance with the schedule.~~

Noise (unrelated to wind turbines)

96. Before the endorsement of development plans in accordance with condition 3 of this permit, a Predictive Noise Assessment must be submitted to the responsible authority and must:
- a) model the final design layout and all electrical components of the facility and assess this against EPA Publication 1826.5
 - b) demonstrate compliance of the proposal with EPA Publication 1826.5
 - c) include details of any mitigation measures that will be implemented to achieve compliance with EPA Publication 1826.5.

Shadow flicker

~~97. Before development of the wind energy facility starts, a pre-construction assessment of the potential effects of shadow flicker from turbines at any dwellings that existed on 10 December 2025 is to be undertaken for the final turbine layout in accordance with the Planning Guidelines for the Development of Wind Energy Facilities in Victoria (Department of Transport and Planning, 2023). The assessment must be submitted to, approved and endorsed by the responsible authority.~~

98. Shadow flicker from the wind energy facility must not exceed 30 hours each year at any dwelling that existed on 10 December 2025 unless an agreement has been entered into with the relevant landowner waiving this requirement. The agreement must be in a form that applies to the land comprising a pre-existing dwelling for the life of the wind energy facility to the satisfaction of the responsible authority, and must be provided to the responsible authority upon request. ~~Mitigation measures must be implemented to meet this limit where required, with consideration given to measures such as:~~
- ~~a) the micro-siting of turbines in the final design;~~
 - ~~b) establishment of strategic screen plantings;~~
 - ~~c) use of smaller blade sizes, or~~
 - ~~d) implementation of a curtailment strategy.~~

~~This condition does not apply where an agreement has been entered into with the relevant landowner waiving this requirement. The agreement must be in a form that applies to the land comprising the dwelling for the life of the wind energy facility to the satisfaction of the responsible authority, and must be provided to the responsible authority upon request.~~

Telecommunications and electromagnetic ~~vision and radio reception and~~ interference

99. Before development starts, a ~~signal~~ telecommunications reception strength survey must be submitted to, approved and endorsed by the responsible authority. ~~Once endorsed, the survey will form part of the permit.~~

Unless otherwise agreed in writing by the responsible authority, the ~~signal~~ telecommunications reception strength survey must:

- a) be carried out by a suitably qualified and experienced telecommunications or electromagnetic interference specialist
 - b) include a baseline survey of all relevant services, including, Bureau of Meteorology radar, mobile phone services and GPS guidance systems used for precision agronomy, within 5 kilometres of the wind energy facility to enable the average signal strengths to be determined for all relevant services.
 - ~~c) address television, radio-satellite internet, and other point-to-point services that could be impacted by electromagnetic interference from the wind energy facility;~~
 - ~~d) be based on consultation carried out with relevant radio service operators and point-to-point and point-to-multipoint service operators to confirm potential effects (or lack thereof) from project design;~~
 - ~~e) be carried out by a suitably qualified and experienced independent specialist; and~~
 - ~~f) include testing at selected locations within 5 kilometres of the wind energy facility (including as identified in the DNV 'Hexham Wind Farm EMI Assessment' 10429837-AUMEL-R-01, Rev. J dated 20 August 2025), to enable average relevant signal strength to be determined.~~
100. If a complaint is received regarding the effect of the wind energy facility on ~~television or radio~~ telecommunications reception at a pre-existing dwelling ~~that existed on as of~~ 10 December 2025 within 5 kilometres of the wind energy facility, the operator must:
- a) investigate the complaint in accordance with the complaint investigation and response plan required by this permit
 - b) if the investigation indicates that the wind energy facility has had a detrimental impact on the quality of reception, develop a mitigation strategy in consultation with the landowner and service provider to restore reception at the dwelling to at least the quality determined in the signal strength survey required by this permit, to the satisfaction of the responsible authority.
101. The Bureau of Meteorology must be notified of:
- a) any material changes to the wind farm design, including varying the wind energy facility layout, changing the turbine locations by more than 100 metres or altering the turbine height
 - b) at least two weeks ~~prior to~~ before any planned shut down of the wind energy facility for more than 12 hours due to maintenance.
- ~~102. In the event of a severe weather condition, the wind energy facility operator must collaborate with the Bureau of Meteorology to assist in endeavours of community safety.~~

Operations Environmental Management Plan

103. ~~Prior to~~Before the use of the wind energy facility and on-site terminal station ~~starts commencing~~, an Operations Environmental Management Plan (OEMP) must be submitted to, approved and endorsed by the responsible authority, and reviewed and verified by the IEA. When endorsed, the OEMP will form part of this permit:
104. Before the development starts, or otherwise agreed to in writing by the responsible authority, an operations environmental management plan (OEMP) must be submitted to, approved and endorsed by the responsible authority. The OEMP ~~for the wind energy facility and on-site terminal station~~ must:
- e) describe measures to avoid and minimise amenity and environmental impacts during the operation of the energy facility ~~manage the use, storage transfer and disposal of hazardous materials in accordance with EPA Publication 1698: Liquid handling and storage guidelines and EPA Publication 1700: Preventing liquid leaks and spills from entering the environment to manage potential pollutants from entering the environment; including:~~
 - i. ~~the following requirements for the storage of liquid fuels and chemicals:~~
 - a. ~~containment within bunded areas or equivalent facilities;~~
 - b. ~~being located more than 50 metres from waterways; and~~
 - c. ~~placement within designated areas of the project site;~~
 - ii. ~~requirements for spill response kit(s) to be located at waterway crossings, at locations where machinery/plant are operating, and refuelling and fuel/chemical storage areas during construction;~~
 - iii. ~~incorporation of spill containment measures into the drainage design;~~
 - b) include design measures and / or procedures to manage dust, odour, light spill, mud, flood, surface water quality and stormwater run-off
 - c) include response measures to environmental incidents, including a program for recording and reporting environmental incidents
 - d) include organisational responsibilities, and procedures for staff training and communication
 - e) be prepared in consultation with relevant authorities (including Department of Energy, Environment and Climate Action, Moyne Shire Council) to the satisfaction of the responsible authority
 - f) ~~include measures to maintain and service vehicles, plant and equipment in accordance with manufacturer specifications to ensure they operate in a proper and efficient manner. Where possible, vehicles, plant and equipment will be switched off when not in use~~
 - g) ~~include measures to minimise operational dust impacts in accordance with the general environmental duty in the EP Act, including:~~
 - i. ~~limiting the extent of cleared areas of vegetation, to the extent practicable, to reduce the potential for dust arising from wind erosion effects;~~
 - ii. ~~inspecting and maintaining unsealed access tracks~~
 - iii. ~~reviewing meteorological and ambient air quality conditions and planning activities accordingly~~
 - h) ~~include the following sub-plans (which may be the same as or based on sub-plans to the GEMP):~~
 - i. ~~Bat and Avifauna Management Plan (BAM Plan);~~

~~ii. – Brolga Compensation Plan;~~

~~iii. – WMP;~~

~~iv. – SEWQMP;~~

~~v. – HMP;~~

~~i) – a process for review of the OEMP and associated sub-plans to be verified by an IEA before the OEMP is submitted for approval; and~~

~~j) – the provision of audit reports to be prepared by an IEA and provided to the responsible authority.~~

~~105. The endorsed OEMP for the wind energy facility and on-site terminal station:~~

~~a) – must be implemented to the satisfaction of the responsible authority; and~~

~~b) – must not be altered or modified without the written consent of the responsible authority.~~

SECRETARY TO DEECA CONDITIONS (not a referral authority)

Crown land

106. No structures are to encroach or overhang Crown land. Authorisation is required from DEECA to use or occupy Crown land. For further information or advice on Crown land matters contact DEECA at publicland.bsw@deeca.vic.gov.au.

Bat and Avifauna Management Plan

107. The OEMP must include a bat and avifauna management plan (BAM Plan), prepared in consultation with DEECA Regions and the Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW) and must be generally in accordance with the *Bat and Avifauna Management Plan included as appendix 5 of the expert witness statement of Inga Kulik (Nature Advisory)* dated 14 April 2026.

108. For BAM Plan conditions:

- 'listed species' means all bird and bat taxa listed as threatened under the *Flora and Fauna Guarantee Act 1988* (FFG Act) and all bird and bat taxa listed as threatened or migratory under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).
- 'the first turbine commences operating' means the time from which a turbine first commences generating electricity.

109. The BAM Plan must include:

- a) a statement of the objectives and overall strategy for minimising bird and bat strike arising from the operation of the facility which includes:
 - i. definitions of impact 'triggers' for action
 - ii. processes (including roles, responsibilities, timing) for implementing mitigation measures and/or compensation action once an impact to listed bird species has been triggered.
- b) a monitoring program of Brolga breeding wetlands for five years within 5 [kilometres](#) of the wind energy facility site where access to the relevant land is granted
- c) mitigation measures (including roles and responsibilities for undertaking mitigation measures) for listed or threatened species including but not limited to:
 - i. Blue-winged Parrot (*Neophema chrysostoma*)
 - ii. White-throated Needletail (*Hirundapus caudacutus*)
 - iii. Fork-tailed Swift (*Apus pacificus*)

- iv. Brolga (*Antigone rubicunda*)
 - v. Black Falcon (*Falco subniger*)
 - vi. Wedge-tailed Eagle (*Aquila audax*)
 - vii. Grey-headed Flying-fox (*Pteropus poliocephalus*)
 - viii. Southern Bent-wing Bat (*Miniopterus orianae bassanii*)
 - ix. Yellow-bellied Sheath-tailed Bat (*Saccolaimus flaviventris*)
 - x. Gang-gang Cockatoo (*Callocephalon fimbriatum*)
- d) a mortality monitoring program of at least 5 years duration that commences when the first turbine ~~starts~~~~commenees~~ operating or such other time approved by DEECA Regions to inform adaptive management of the collision risk and assess the general mortality of listed and non-listed fauna. The monitoring program must include:
- i. procedures for reporting bird and bat strikes of listed species to DEECA Regions/DCCEEW within 7 days of becoming aware of any strike
 - ii. procedures for reporting any bird and bat strikes other than listed species to DEECA Regions and DCCEEW quarterly
 - iii. information on the efficacy of searches for carcasses of birds and bats, and, where practicable, information on the rate of removal of carcasses by scavengers, so that correction factors can be determined to enable calculations of the likely total number of mortalities
 - iv. procedures for the regular removal of carcasses likely to attract raptors to areas near turbines
 - v. procedures for annual reporting to DEECA Regions and the responsible authority, within agreed timeframes, of the findings of the mortality and operational monitoring program. Reports must be made publicly available on the operator's website
- e) curtailment measures, including:
- i. the minimum required wind speed for night-time operation of moderate and higher-risk turbines (i.e., the night-time low windspeed cut-in) increased to 4.5 m/s during periods when Southern Bent-wing Bat are most actively moving across the landscape specified in the Draft BAM Plan (Nature Advisory, April 2026)
 - ii. curtailment conditions for each turbine, updated as required (in consultation with DEECA) in response to raptor monitoring undertaken as part of the BAM Plan, including temporary daytime curtailment of turbine(s) within a 600-metre buffer of active Black Falcon (*Falco subniger*) nests and within a 500-metre buffer of active Wedge-Tailed Eagle (*Aquila audax*) nests identified during operation
- f) implementation of blade feathering to all turbines
- g) a requirement for the feasibility of acoustic deterrent trials to be investigated, in consultation with DEECA Regions
- h) a requirement for bat detector surveys to be undertaken for at least two years post-all turbines ~~starting~~~~commeneing~~ operation to collect further data on temporal activity patterns of Southern Bent-wing Bat and Yellow-bellied Sheath-tail Bat in the project site
- i) a Grey-headed Flying-fox monitoring program to be undertaken for the first two years post-all turbines commencing operation. This monitoring program will inform field surveys for this species and be based on:
- iii. annual habitat suitability assessments in and around the project site

- iv. annual reviews of relevant databases for current Grey-headed Flying-fox camp locations and numbers
 - v. regular discussions with wind farm personnel, landholders, DEECA and DCCEEW regarding the species presence, and assess its potential increase in prevalence within the site and its surroundings
 - j) demonstrate how farming activities will be adequately managed to minimise risk of Black Falcon (*Falcon subniger*) turbine collision and establish communication procedures with relevant land managers. Any established procedures must be included in the BAM Plan.
110. When the monitoring program required under the BAM Plan is complete, the operator must submit a report to the responsible authority and DEECA Regions, setting out the findings of the program. The report must be:
- a) to the satisfaction of the responsible authority
 - b) made publicly available on the operator's website.
111. After considering the findings of the monitoring program and consulting with DEECA, the responsible authority may direct further investigation of impacts on birds and bats. The further investigation must be undertaken to the satisfaction of the responsible authority.

Brolga

112. The OEMP must include a Brolga Compensation Plan prepared:
- a) in accordance with the Interim Guidelines for the Assessment, Avoidance, Mitigation and Offsetting of Potential Wind Farm Impacts on the Victorian Brolga Population (Department of Sustainability and Environment (2012))
 - b) in consultation with DEECA Regions, Glenelg Hopkins Catchment management Authority, Moyne Shire Council and participating landowners.
113. The Brolga Compensation Plan must be placed on the project website for the operating period of the plan. The plan must include:
- a) arrangements to offset the impacts on the Brolga population predicted in a population viability analysis based on the final wind turbine layout
 - b) specification of accountabilities for plan implementation and monitoring
 - c) the principles for the selection of offsite historical and potential Brolga breeding wetlands that will be enhanced
 - d) evidence of agreements to participate in the breeding site enhancement project for its duration for the life of the wind energy facility
 - e) methods of enhancement appropriate to each enhancement site
 - f) where appropriate, a program of fox baiting leading up to each breeding season in areas subject to the plan
 - g) five yearly performance targets for each enhancement site and the program, consistent with the outcomes of a population viability analysis based on the final wind turbine layout
 - h) monitoring and reporting requirements (including public reporting every year for the first 5 years and then every 5 years for the life of the project from when the plan is approved) on whether the plan is expected to achieve the 25-year zero net impact objective.
114. Before the use starts, the operator of the wind energy facility must commence implementation of the Brolga Compensation Plan and then implement it to the satisfaction of the responsible authority.

Other threatened species

115. Before development starts, a Threatened Species Management Plan must be prepared in consultation with the DEECA Regions and completed to the satisfaction of the responsible authority. The plan must include specific measures to avoid, minimise and mitigate potential impacts on listed State and Commonwealth threatened species (with the exception of birds and bats) within the land during development of the wind energy facility and on-site terminal station, including but not limited to, a program for pre-construction surveys and adaptive management of listed communities and listed species of flora and fauna within the project site as outlined in *Hexham Wind Farm Flora and Fauna Assessment* (Nature Advisory, January 2026), or as otherwise agreed to by DEECA.

Aviation

116. Before development of wind turbine towers starts, details of wind turbines and meteorological monitoring masts exceeding 100 metres above ground level (AGL) must be reported to Airservices Australia and CASA, in accordance with:
- a) the procedure for reporting tall structures contained in *AC139.E-01v1.0 Reporting of tall structures* to ensure the height and location of wind turbines and meteorological monitoring masts are recorded in the Vertical Obstacle Database
 - b) Civil Aviation Safety Regulation 139.165(2) and Civil Aviation Safety Regulations subpart 175.E *Aeronautical Information Management – objects and structures that affect aviation safety*
 - c) the information necessary to ensure that the location of the wind farm can be promulgated in the Aeronautical Information Publication (AIP) for the information of pilots.
117. One month ~~prior to before~~ works ~~start commencing~~, any obstacles above 100 metres AGL (including temporary construction equipment) should be reported to Airservices Australia via vod@airservicesaustralia.com so that an Aeronautical Information Publication Supplementary Notice (AIP SUP) or a NOTAM (Notice to Airmen) can be published advising pilots that construction of tall structures in the area is commencing (date) and is due for completion by (date).
118. Within 30 days of the completion of works, Airservices Australia must be advised ~~via~~ [through vod@airservicesaustralia.com](mailto:vod@airservicesaustralia.com) of the surveyed height and location of each turbine so that the wind farm details can be accurately recorded in the Vertical Obstacle Database (VOD) and published in the Aeronautical Information Publication and on aeronautical charts.
- ~~119. Meteorological monitoring masts must be marked in accordance with the National Airports Safeguarding Framework Guideline D: Managing the Risk to Aviation Safety of Wind Turbine Installations (Wind Farms)/Wind Monitoring Towers, with additional marker balls on the lower third of the outer guy wires and no flashing strobe light in order to improve visibility of these structures for low flying aircraft, particularly aerial agricultural operations. All markings must be maintained to the satisfaction of the responsible authority.~~
120. Before the development starts, local and regional aircraft operators must be advised of the wind ~~farm~~ [energy facility](#) location and height.

Marking and lighting of wind monitoring tower

121. The anemometer must include:
- a) the top third of the anemometer tower painted in alternating contrasting bands of colour to improve visibility

- b) marker balls or high visibility flags or high visibility sleeves placed on the outside guy wires
- c) guy wire ground attachment points have contrasting colours to the surrounding ground/vegetation.

Lighting

122. Permanent project lighting associated with the on-site terminal station and temporary lighting associated with construction areas must be installed in accordance with *Australian Standard AS 4282: Control of the obtrusive effects of outdoor lighting*. These measures include:
- a) minimisation of security lighting throughout the wind farm, switching station and the sub-station to decrease the contrast between the wind farm and the nighttime landscape of the area
 - b) use of motion detectors to activate nighttime security lighting when required, reducing the duration of lighting
 - c) lighting design to ensure it is baffled and directed to the ground so that light spill onto nearby roads or residences is minimised.

~~PART C—BATTERY ENERGY STORAGE SYSTEM~~

~~Pre-Construction Noise Assessment~~

- ~~123. Before development starts, a pre-construction (predictive) noise assessment based on the final BESS layout must be undertaken and submitted to the responsible authority. The pre-construction (predictive) noise assessment is to be prepared by a qualified acoustic consultant, and must demonstrate to the satisfaction of the responsible authority that the BESS can:~~
- ~~a) minimise the risk of harm from operational noise so far as reasonably practicable in accordance with the general environmental duty under the Environment Protection Act 2017 (EP Act);~~
 - ~~b) comply with the noise limits determined in accordance with EPA Publication 1826.5: Noise limit and assessment protocol for the control of noise from commercial, industrial and trade premises and entertainment venues (Noise Protocol); and~~
 - ~~c) prevent unreasonable noise according to the factors defined in part a) of the definition of unreasonable noise in section 3(1) of the EP Act with regards to EPA Publication 1996: Noise guidelines: assessing low frequency noise (as amended or replaced from time to time).~~

~~Operations environmental management plan~~

- ~~124. Prior to the use commencing, an Operations Environmental Management Plan for the BESS (BESS OEMP) must be submitted to, approved and endorsed by the responsible authority, and reviewed and verified by the IEA. When endorsed, the BESS OEMP will form part of this permit:~~
- ~~125. The BESS OEMP must:~~
- ~~a) describe measures to manage the use, storage transfer and disposal of hazardous materials in accordance with EPA Publication 1698: Liquid handling and storage guidelines and EPA Publication 1700: Preventing liquid leaks and spills from entering the environment to manage potential pollutants from entering the environment; including~~
 - ~~i. the following requirements for the storage of liquid fuels and chemicals:~~
 - ~~a. containment within bunded areas or equivalent facilities;~~

- ~~b.—being located more than 50 metres from waterways; and~~
 - ~~c.—placement within designated areas of the project site;~~
 - ~~ii.—requirements for spill response kit(s) to be located at waterway crossings, at locations where machinery/plant are operating, and refuelling and fuel/chemical storage areas during construction; and~~
 - ~~iii.—incorporation of spill containment measures into the drainage design;~~
 - ~~b)—include measures to maintain and service vehicles, plant and equipment in accordance with manufacturer specifications to ensure they operate in a proper and efficient manner. Where possible, vehicles, plant and equipment will be switched off when not in use;~~
 - ~~e)—include measures to minimise operational dust impacts in accordance with the general environmental duty in the EP Act, including:

 - ~~i.—limiting the extent of cleared areas of vegetation, to the extent practicable, to reduce the potential for dust arising from wind erosion effects;~~
 - ~~ii.—inspecting and maintaining unsealed access tracks; and~~
 - ~~iii.—reviewing meteorological and ambient air quality conditions and planning activities accordingly;~~~~
 - ~~d)—include the following sub-plans (which may be the same as or based on the sub-plans to the GEMP):

 - ~~i.—WMP;~~
 - ~~ii.—SEWQMP;~~
 - ~~iii.—HMP; and~~~~
 - ~~e)—a process for review of the BESS OEMP and associated sub-plans to be verified by an IEA before the OEMP is submitted for approval; and~~
 - ~~f)—the provision of audit reports to be prepared by an IEA and provided to the responsible authority.~~
126. The endorsed BESS OEMP:
- ~~a)—must be implemented to the satisfaction of the responsible authority; and~~
 - ~~b)—must not be altered or modified without the written consent of the responsible authority.~~

Lighting

127. Permanent project lighting associated with the BESS and temporary lighting associated with related construction areas must be installed in accordance with Australian Standard AS 4282: Control of the obtrusive effects of outdoor lighting. These measures include:
- ~~a)—minimisation of security lighting throughout the wind farm, switching station and the sub-station to decrease the contrast between the wind farm and the nighttime landscape of the area;~~
 - ~~b)—use of motion detectors to activate nighttime security lighting when required, reducing the duration of lighting; and~~
 - ~~c)—lighting design to ensure it is baffled and directed to the ground so that light spill onto nearby roads or residences is minimised.~~

PART D—DECOMMISSIONING: WIND ENERGY FACILITY, ON-SITE TERMINAL STATION AND BESS

Decommissioning

128. Once the facility permanently ceases operation, the responsible authority and Moyne Shire Council must be notified within three months.
129. Once the facility permanently ceases operation, all buildings and works must be removed from the land, and the land or the relevant part of the land must be rehabilitated and reinstated to the general condition it was in before the development started, unless otherwise agreed with the landowner, subject to the written consent of the responsible authority.
130. Within three months of the facility permanently ceasing operation, a Decommissioning Management Plan (DMP) prepared by a suitably qualified and experienced person must be submitted to, approved and endorsed by the responsible authority.
131. The DMP must include:
 - a) identification of infrastructure, equipment, buildings, structures and signs to be removed, and details of how these will be removed
 - b) details of how the site will be rehabilitated to meet the requirements of condition 129
 - c) a requirement that all decommissioning works identified in the DMP be completed to the satisfaction of the responsible authority as soon as practicable, but no later than 12 months after the DMP is endorsed, or such other period approved by the responsible authority.
- ~~132. The following requirements must be met when a turbine(s) permanently ceases operation:~~
 - ~~a) the responsible authority must be notified within two (2) months after the turbine(s) permanently ceases operation~~
 - ~~b) all infrastructure, plant, equipment and access tracks that are no longer required for the ongoing use or decommissioning of the turbine must be removed from the site, or the relevant part of the site, to the condition it was in prior to the commencement of development must occur to the satisfaction of the responsible authority. This does not apply to turbine foundations, which may be left in situ, provided each foundation is covered with topsoil to a minimum depth of 500mm; and~~
 - ~~c) explore opportunities to recycle steel, concrete and other materials as an alternative to sending the material to landfill and implement where practicable.~~
- ~~133. Prior to commencing decommissioning works for each of the wind energy facility, on-site terminal station or BESS, which may occur in stages, a Decommissioning Plan (or plans) must be submitted to, approved and endorsed by the responsible authority. The Decommissioning Plan(s) must:~~
 - ~~a) outline mitigation measures for managing potential environmental impacts associated with decommissioning works~~
 - ~~b) outline measures to manage the use, storage, transfer, disposal and handling of hazardous materials in accordance with EPA Publication 1698: Liquid handling and storage guidelines and EPA Publication 1700: Preventing liquid leaks and spills from entering the environment to manage potential pollutants from entering the environment, including:~~
 - ~~the following requirements for the storage of liquid fuels and chemicals:~~
 - ~~iv. containment within bunded areas or equivalent facilities;~~
 - ~~v. being located more than 50 metres from waterways;~~

- ~~vi. — placement within designated areas of the project site;~~
- ~~vii. — requirements for spill response kit(s) to be located at waterway crossings, at locations where machinery/plant are operating, and refuelling and fuel/chemical storage areas during construction;~~
- ~~viii. — incorporation of spill containment measures into the drainage design; and~~
- ~~e) — include the following sub-plans~~
 - ~~ix. — HMP (which may be the same as or based on the relevant sub-plan to the GEMP;~~
 - ~~x. — Decommissioning Transport Management Plan (as required in condition 134);~~
 - ~~xi. — Decommissioning Noise and Vibration Management Plan (as required in condition 119); and~~
 - ~~xii. — Dust Management Plan.~~

Decommissioning Transport Management Plan

~~134. Before the decommissioning of each of the wind energy facility, on-site terminal station or BESS, a Decommissioning Transport Management Plan (DTMP) must be submitted to and approved by the relevant road management authority and the responsible authority. Once approved the DTMP will be endorsed by the responsible authority and form part of the permit.~~

~~135. The DTMP must:~~

- ~~a) — be prepared to the satisfaction of and at no cost to the relevant road management authority and the responsible authority~~
- ~~b) — include details of measures to manage transport impacts associated with removing the infrastructure, equipment, buildings and structures from the site.~~

~~136. The decommissioning of the wind energy facility must be carried out in accordance with the endorsed DTMP to the satisfaction of and at no cost to the relevant road management authority and the responsible authority.~~

~~137. The endorsed DTMP must not be modified except with the prior written consent of the relevant road management authority and the responsible authority.~~

Decommissioning Noise and Vibration Management Plan

~~138. The Decommissioning Plan(s) must include a Decommissioning Noise and Vibration Management Plan (DNVMP). The DNVMP must include:~~

- ~~a) — a detailed assessment of decommissioning noise and vibration from proposed works and specify~~
- ~~b) — measures to minimise impacts associated with the decommissioning works.~~

~~139. The endorsed DNVMP:~~

- ~~a) — must be implemented to the satisfaction of the responsible authority~~
- ~~b) — must not be altered or modified without the written consent of the responsible authority.~~

Notification of works commencing

~~140. The Department of Transport and Planning (DTP) must be notified when decommissioning works commence on site, via email development.assessment@transport.vic.gov.au.~~

GENERAL CONDITION: EXPIRY

~~141. This permit will expire if one of the following applies:~~

- ~~a) the development is not started within ~~five~~(5) years of the date of this permit~~

- b) the development is not completed within ~~ten (10)~~ years of the date of this permit; ~~or~~
- c) the use has not commenced within 3 years of the completion of the development.

Notes:

- 1. ~~For conditions referring to the distance between a turbine and any other feature (eg a dwelling), the distance is to be measured from the centre of the turbine at ground level to the closest point on the other feature. Preliminary investigative works for the purposes of gathering data or making assessments necessary or desirable to prepare the development plans or other plans specified in this permit is not considered to be commencement of the development.~~
- 2. ~~Regulation and enforcement of operational wind turbine noise is undertaken by the Environment Protection Authority pursuant to the *Environment Protection Act 2017*.~~
- 3. ~~Any off-site works required under this permit may require separate planning permission.~~
- 4. ~~References to DELWP are references to the Department of Environment, Land, Water and Planning.~~
- 5. ~~Before any works on public land start, a permit to take protected flora under the *Flora and Fauna Guarantee Act 1988* may be required. For further information or to apply for a Protected Flora Permit, please contact DEECA at bsw.environment@deeca.vic.gov.au.~~
- 6. ~~The *Environment Protection Act 2017* introduced the general environmental duty (GED) and it applies to all Victorians. If your business engages in activities that may give rise to a risk to human health or the environment from pollution or waste, you must understand those risks and take action to minimise them as far as reasonably practicable.~~

~~This involves a continuous, preventative approach and should be undertaken with the understanding that where an operation presents low-level risks, or already has appropriate risk mitigation measures in place, further mitigation measures may still be necessary at a future point.~~

~~For further information on what the laws mean for Victorian businesses and community go to: <https://www.epa.vic.gov.au/general-environmental-duty>~~