



New South Wales Government
Independent Planning Commission

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Valley of the Winds Wind Farm

SSD-10461

Statement of Reasons for Decision

Richard Pearson (Chair)
Suellen Fitzgerald
Sarah Dinning

11 June 2025

Executive Summary

ACEN Australia Pty Ltd (**Applicant**) has sought consent for the development of the Valley of the Winds Wind Farm (SSD-10461) (the **Project**), a 943-megawatt (**MW**) wind farm with a 320 MW battery energy storage system (**BESS**). The site of the Project (the **Site**) is located within the Central-West Orana Renewable Energy Zone (**CWO REZ**) approximately 94 km northeast of Dubbo, 35 km north of Gulgong and between Coolah, Leadville and Uarbry within the Warrumbungle Shire local government area (**LGA**).

The Project represents an approximately \$1.68 billion investment and is predicted to generate up to 400 construction-related jobs and up to 50 operational jobs.

The NSW Independent Planning Commission (**Commission**) is the consent authority for the Project as more than 50 public submissions by way of objection were made to the Department of Planning, Housing and Infrastructure (**Department**), and Warrumbungle Shire Council (**Council**) objected to the proposal.

Commissioners Richard Pearson (Panel Chair), Suellen Fitzgerald and Sarah Dinning were appointed to constitute the Commission Panel and determine the Application. As part of its determination, the Panel undertook a site inspection and met with representatives of the Applicant, the Department, Council and NSW EnergyCo. The Panel also received written submissions and held a Public Meeting for the Project on 10 April 2025, which was livestreamed via the Commission's website.

After consideration of the material, including additional information received from the Department and the Applicant, and the views of the community, the Commission has determined that conditional development consent should be granted to the Application. Key issues raised by the community, considered by the Commission and addressed in this Statement of Reasons include issues relating to the renewable energy transition, visual impacts, biodiversity, traffic and transport, socio-economic impacts, decommissioning and rehabilitation, and the cumulative impacts of this and other nearby developments.

The Commission has imposed conditions which seek to prevent, minimise, mitigate and/or offset the adverse impacts of the Project and ensure appropriate ongoing monitoring and management of the residual impacts. The Applicant will be required to prepare a number of management plans and strategies, report on mitigation and monitoring outcomes, and demonstrate compliance with performance criteria on an ongoing basis.

The conditions imposed by the Commission include several changes to the Department's recommended Conditions of Consent following the Commission's consultation process with the community and stakeholders. These changes strengthen the environmental management of the development, including a requirement to prepare a water sourcing plan, soil and water management plans and a decommissioning and rehabilitation plan. The Commission's additions to the recommended conditions also respond to concerns raised by the community and stakeholders during the Commission's consideration of the Project by setting requirements for ongoing community consultation, compliance with approved traffic routes, bush fire management and facilitation of continuing aviation activities at nearby aerodromes. Given the fact the Project is in a relatively early cohort of projects for the CWO REZ, the Commission finds its cumulative impacts with those of existing and approved projects to be acceptable.

The Site is suitable for renewable energy development given its location close to the approved CWO REZ transmission line, wind resources, topography, avoidance of major environmental constraints and access to the regional road network. The Project is consistent with the strategic land use planning and energy policy framework and relevant statutory requirements. The Commission has considered the public interest and is satisfied that the Project is in accordance with the objects of the EP&A Act.

The Commission's reasons for approval of the Project and its consideration of key issues raised by the community are set out in this Statement of Reasons for Decision.

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Defined Terms

ABBREVIATION	DEFINITION
Applicant	ACEN Australia Pty Ltd (ACEN)
Application	Valley of the Winds Wind Farm (SSD-10461)
AR para	Paragraph of the Department's Assessment Report
BC Act	<i>Biodiversity Conservation Act 2016</i>
BESS	Battery energy storage system
CASA	Australian Civil Aviation Safety Authority
CCPF	NSW Climate Change Policy Framework
CEEC	Critically Endangered Ecological Community
CPHR	Conservation Programs, Heritage and Regulation Group within the NSW Department of Climate Change, Energy, the Environment and Water.
CWO REZ	Central West Orana Renewable Energy Zone
Commission	Independent Planning Commission of NSW
Council	Warrumbungle Shire Council
CPI	Consumer Price Index
NSW DCCEEW	NSW Department of Climate Change, Energy, the Environment and Water
DCP	Development Control Plan
Department	Department of Planning, Housing and Infrastructure
Department's AR	Department's Assessment Report, dated March 2025
EIS	Applicant's Environmental Impact Statement, dated 28 April 2021
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EPA	NSW Environment Protection Authority
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999 (Cth)</i>
EPI	Environmental Planning Instrument
ESD	Ecologically Sustainable Development
FRNSW	Fire and Rescue NSW
LGA	Local Government Area
Mandatory Considerations	Relevant mandatory considerations, as provided in s 4.15(1) of the EP&A Act
Material	The material set out in Appendix B
Minister	Minister for Planning and Public Spaces
Project	Valley of the Winds Wind Farm as described in Section 2
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2021</i>
RFS	NSW Rural Fire Service
RtS	Response to Submissions
SAII	Serious and Irreversible Impact
SEPP	State Environmental Planning Policy
SEPP Planning Systems	<i>State Environmental Planning Policy (Planning Systems) 2021</i>
Site	Valley of the Winds Wind Farm project site described in Section 2
SSD	State Significant Development
TEC	Threatened Ecological Communities
Visual Bulletin	Wind Energy Guideline's Visual Assessment Bulletin 2016
VIZ	Visual Impact Zone
VPA	Voluntary Planning Agreement

1. Introduction

1. On 19 March 2025, the NSW Department of Planning, Housing and Infrastructure (**Department**) referred the State significant development (**SSD**) application SSD-10461 (**Application**) from ACEN Australia Pty Ltd (**Applicant**) to the NSW Independent Planning Commission (**Commission**) for determination.
2. The Application seeks approval for the Valley of the Winds Wind Farm (the **Project**) located in the Warrumbungle Local Government Area (**LGA**) under section 4.38 of the *Environmental Planning and Assessment Act (EP&A Act)*.
3. In accordance with section 4.5(a) of the EP&A Act and section 2.7 of the *State Environmental Planning Policy (Planning Systems) 2021 (SEPP Planning Systems)*, the Commission is the consent authority as more than 50 public submissions have been made by way of objection, and Warrumbungle Shire Council (**Council**) has also objected to the Project.
4. Andrew Mills, Chair of the Commission, determined that Richard Pearson (Chair), Suellen Fitzgerald and Sarah Dinning would constitute the Commission for the purpose of exercising its functions with respect to the Application.
5. The Department concluded in its Assessment Report (**AR**) that the Project achieves an appropriate balance between maximising the efficiency of the wind resource development and minimising the potential impacts on surrounding land uses and the environment. On balance, the Department considered that the Project is in the public interest and is approvable, subject to its recommended conditions of consent.
6. Material considered by the Commission in its determination is detailed at Appendix B, planning framework considerations are provided at Appendix C, a summary of the community engagement which has been undertaken for the Project is set out in Appendix D and the Department's AR is provided at Appendix E.

2. The Application

7. The Project site (the **Site**) as illustrated in Figure 1 is located within the Central-West Orana Renewable Energy Zone (**CWO REZ**), approximately 94 km northeast of Dubbo, 35 km north of Gulgong and between Coolah, Leadville and Uarbry. Key aspects of the Application are set out in Table 1 below.

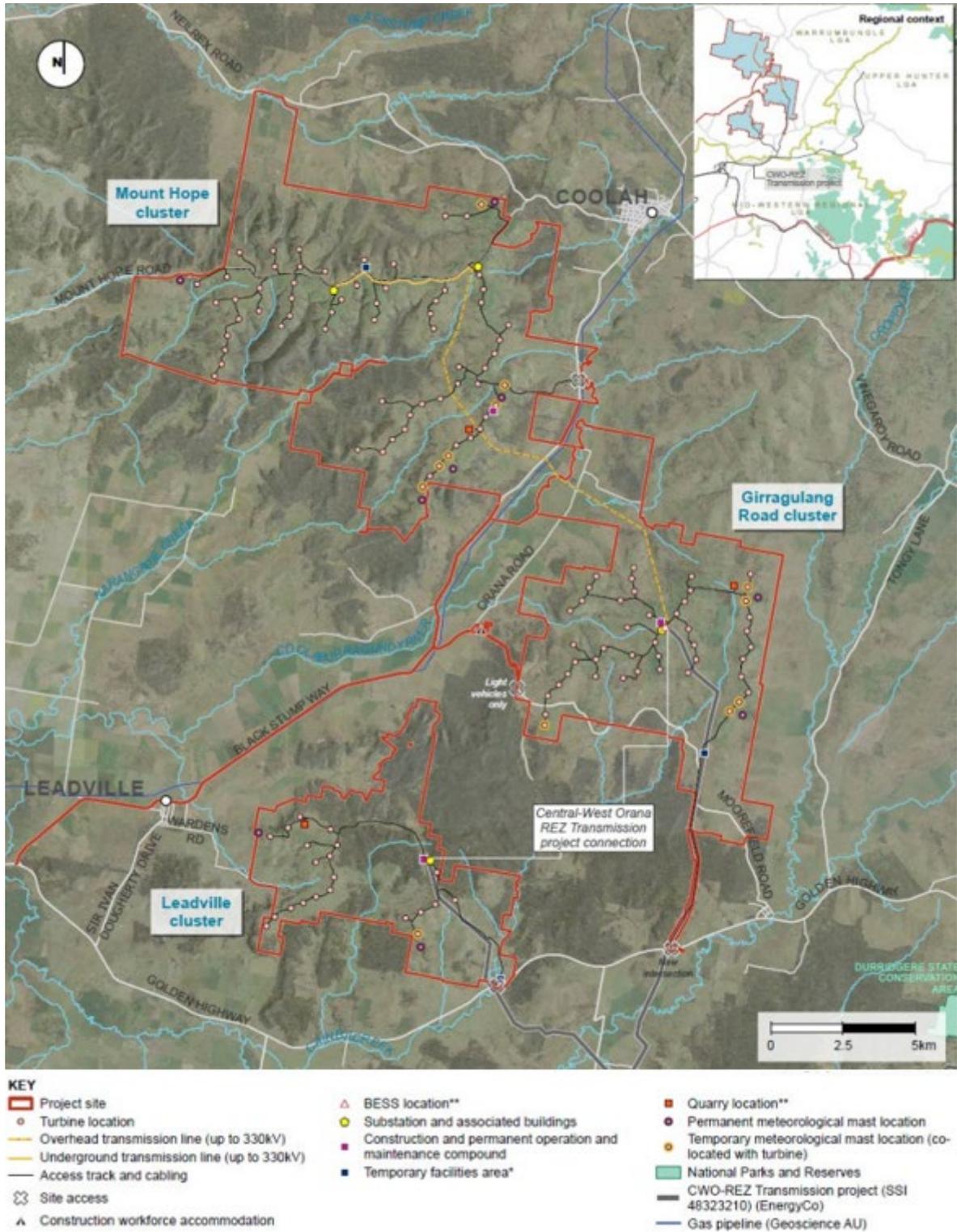
Table 1 - Key aspects of the Project¹

Aspect	Proposed
Project summary	<ul style="list-style-type: none"> • Up to 131 turbines and associated infrastructure (around 943 megawatts (MW) capacity) • Centralised battery energy storage system (BESS) with a capacity of up to 320 MW / 640 MWh
Project area	<ul style="list-style-type: none"> • Project site: 24,120 ha • Development corridor: 2,802 ha • Development footprint: 734.96 ha

¹ Source: Department's AR

Wind turbine dimensions	<ul style="list-style-type: none"> • Maximum tip height of 250 m • Turbine hub height of 160 m • Maximum blade length of 90 m
Ancillary infrastructure	<ul style="list-style-type: none"> • Connection to the approved CWO REZ transmission line within the Site • One central substation (Girragulang Road cluster) and three collector substations (one in Leadville cluster, two in Mount Hope cluster) • 17.5 km of overhead and 110.5 km of underground transmission line and underground reticulation connecting all turbines to the central substation, operation and maintenance facility, utility services and signage • Temporary facilities including three construction compounds, three concrete batching plants, up to three materials storage and laydown areas and one 400-bed construction workforce accommodation camp • Up to 116 km of new internal access tracks and four site access points • Up to nine permanent and 12 temporary meteorological masts up to 160 m in height
Quarries	<ul style="list-style-type: none"> • Three on-site quarries (one located in each turbine cluster) proposed for the extraction of construction material for access tracks and hardstands. Up to 548,000 tonnes of material would be extracted.
Off-site road works	<ul style="list-style-type: none"> • Upgrades to intersections, local road network and waterway crossings
Construction	<ul style="list-style-type: none"> • Construction would last for approximately 42 months, with a 12-16 month peak • Hours limited to Monday to Friday 7am to 6pm, Saturday 8am to 1pm
Operations	<ul style="list-style-type: none"> • Approximately 30 years. However, the Project may involve infrastructure upgrades that could extend its operation
Access route	<ul style="list-style-type: none"> • Heavy vehicles requiring escort: Port of Newcastle via Selwyn Street, George Street, Industrial Drive, Pacific Highway (Maitland Road), New England Highway, John Renshaw Drive, Hunter Expressway, New England Highway, Golden Highway and Black Stump Way • A high-load bypass route around Denman, which travels along Denman Road (north-east of Denman), Bengalla Road, Wybong Road before re-joining the Golden Highway • Three new primary Site access points: two off the Golden Highway and one-off Black Stump Way and one light vehicle only access point on Moorefield Road (west).
Decommissioning and rehabilitation	<ul style="list-style-type: none"> • The Project includes decommissioning at the end of the Project life, which would involve removing all above ground infrastructure
Employment	<ul style="list-style-type: none"> • Up to 400 construction jobs and 50 operation jobs
Capital Investment Value (CIV)	<ul style="list-style-type: none"> • \$1.68 billion
Voluntary Planning Agreement (VPA)	<ul style="list-style-type: none"> • Up to \$24.8 million (adjusted to consumer price index (CPI) and based on a 131-turbine layout)

Figure 1 - Project site and layout²



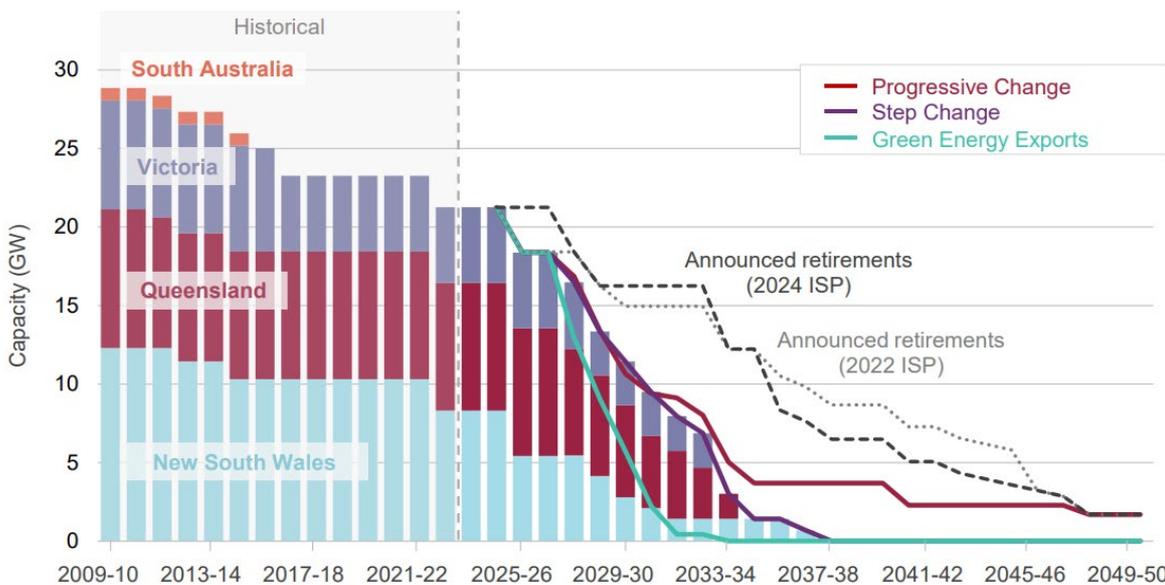
² Source: Department's AR

3. Reasons for Decision

3.1 Energy transition

- 8. The Project has the capacity to generate approximately 943 MW of energy, sufficient to power about 519,000 homes per year (AR para 66). The 320 MW / 640 MWh BESS would enable renewable energy to be stored for dispatch to the grid, increasing grid stability and energy security.
- 9. The Australian Energy Market Operator’s (AEMO) latest *Integrated System Plan (2024 ISP)* notes that retirements have been announced for all but one of Australia’s remaining coal-fired power stations. Half are intended to be closed by 2035, with the rest retired by 2051 (p. 9). However, to meet government policy objectives, the 2024 ISP forecasts that the remaining coal fleet will likely close two to three times faster than those announcements, even faster than was projected in the 2022 ISP (p. 10). AEMO’s projections are illustrated in Figure 2 (below).

Figure 2: Coal Capacity, National Energy Market³



- 10. According to the Australian Government’s *Long Term Emissions Reduction Plan 2021*, solar, wind and other renewable technologies are projected to provide over half of Australia’s total electricity generation by 2030. The Plan states that “an increased share of renewables will be the foundation for a near zero emission grid by 2050” (p. 45), that “energy storage technologies are essential for Australia to shift to lower emission electricity systems” and that “the challenge is to ensure our electricity system remains secure, reliable and affordable as the share of variable renewables grows” (p. 45 and 52).
- 11. Accordingly, the Project will assist NSW in achieving the emission targets established by the *Climate Change (Net Zero Future) Act 2023* and is consistent with the NSW Climate Change Policy Framework objective of achieving net zero emissions by 2050 and the *Net Zero Plan Stage 1: 2020 – 2030* (see Appendix C).

³ Source: AEMO’s 2024 Integrated System Plan

12. The Project will increase renewable energy generation and capacity and contribute to the State's transition to renewable energy as coal-fired power stations are closed. For this reason, and on the basis that other key impacts set out below are managed appropriately by conditions, the Commission has granted conditional consent to the Application.

3.2 Visual impact

13. The visual impact of the wind turbines for the surrounding landscape and individual receivers was raised as a major issue for members of the community, particularly those that provided submissions by way of objection. Key concerns were that the turbines will alter the landscape, dominate the skyline and create an industrial feel to what is currently a rural and scenic area, described as "...*fundamentally change[ing] the broader landscape characteristics of the Coolah area in general and Turee and Talbragar valleys*". Some submissions did not consider the Applicant's visual renderings, or the land for which visual screening was offered, to be adequate.
14. In response to similar community concerns raised during public exhibition, the Applicant amended the Application to reduce the number of turbines from 148 to 131. The removal of 17 turbines reduced potential visual impact at some non-associated receivers (i.e. residences), particularly in and around Coolah (AR para 146). In response to concerns raised by the Department about the impact on nearby residents, the Applicant also secured neighbour agreements with 22 additional landowners, bringing the total number of associated receivers to 59.
15. The Department assessed the visual impacts of the Project against the requirements of the Wind Energy Guideline's *Visual Assessment Bulletin 2016 (Visual Bulletin)*. A new Energy Policy Framework is being implemented by the Department which includes the new *Wind Energy Guideline* finalised in 2024. According to the *Renewable Energy Planning Framework – Transitional Arrangements (2024)*, the new Energy Policy Framework does not apply to the Project as the Applicant lodged its Environmental Impact Statement, dated 28 April 2021 (**EIS**), prior to 12 November 2024.
16. Although the new Energy Policy Framework is not required to be applied to this Project, the Department has considered the approach prescribed in the *Wind Energy Visual Technical Supplement (2024)* regarding visual magnitude in its assessment of the project against the visual performance objectives set out in the existing Visual Bulletin (AR, para 22). The Department's AR identifies 87 non-associated residences within 4.95 km of the nearest proposed turbine. As detailed in Table 8 of the AR, the visual performance objectives set out in the Visual Bulletin are achieved at all receivers.
17. During the Commission's Site inspection and locality tour, views of the proposed turbine locations were observed from surrounding roads, receivers R277 and R288, the towns of Leadville and Coolah, as well as from four residential clusters: Northern, Black Stump Way, Leadville, and the South-eastern cluster (see AR, Figure 4).
18. Although the Project would be visible from non-associated receivers, resulting in a change to their visual amenity, these impacts would not exceed the moderate Visual Impact Zone (**VIZ**) 2 rating set out in the Visual Bulletin, thereby meeting the visual performance objectives of the Visual Bulletin at all non-associated receivers.
19. The Commission acknowledges that there will be some negative visual impacts on non-associated receivers – however these impacts are not so severe as to outweigh the strategic benefits of the Project and to warrant refusal of the Application given:
- the surrounding topography and existing vegetation screens some views of the Project at certain receivers; and

- additional at-receiver vegetation screening recommended by the Visual Bulletin is capable of further mitigating impacts on visual amenity.
20. On the basis of submissions raising concerns regarding the adequacy of particular photomontages relating to views from Uarbry village, the Commission has also specifically considered potential impacts of the Project on key public viewpoints.
21. The Applicant undertook a Public Viewpoint Analysis assessing visual impacts from 41 public viewpoints in relation to the performance objectives in the Visual Bulletin. This included 4 photomontages from in and around Uarbry village. There are no viewpoints with a high VIZ 1 rating, two viewpoints with a moderate VIZ 2 rating and 39 viewpoints with a low VIZ 3 rating. The evidence indicates that the majority of these viewpoints would experience low visual impacts – accordingly, the Commission does not find the impacts on public viewpoints to be a reason for refusal of the Application.
22. The Project is a large-scale development with a 42-month construction timeframe. Given the long construction period and to allow all non-associated residences adequate time to experience the actual visual impacts of the Project, including those impacted by the last turbines to be constructed, the Commission has imposed a condition allowing for a seven-year period for landowners to request visual mitigation measures from the commencement of construction.
23. In relation to shadow flicker, the Project would not exceed the recommended limit of 30 hours per year of shadow flicker at any non-associated receivers set out in the Visual Bulletin. The impacts associated with blade glint can be addressed by treating the turbines with a low reflectivity surface treatment and the Commission has imposed conditions to give effect to these requirements.
24. In relation to aviation lighting, the Civil Aviation Safety Authority (**CASA**) recommended that the Project be ‘obstacle lit’. It is a requirement that the consent authority must consider the NSW Government’s *Dark Sky Planning Guideline* for State significant development that is likely to impact the night sky and is within 200 km of the Siding Spring Observatory. The Project is located within 80 km of the Observatory.
25. Aviation lighting has the potential to be a noticeable element in the nighttime landscape. The Department consulted with the Observatory who requested that the Applicant consult with them in relation to the installation of aviation lighting. The Commission has accordingly imposed a condition of development consent (condition B3) which requires the Applicant to undertake relevant consultation with the Observatory. The Applicant has proposed mitigation measures including use of the lowest candela intensity allowed by CASA, treatment of the rear of the blades with a non-reflective finish and the implementation of shielding to restrict the downward spill of light. The Commission finds that the proposed mitigation measures are appropriate in reducing the visual impacts of aviation lighting as much as possible while still maintaining safety standards. In any event, the addition of aviation lighting is not of such significance as to change the Commission’s findings on the visual impacts of the Project.
26. The Commission has imposed conditions that require the Applicant to:
- consult with CASA, Siding Springs Observatory and the Australian Government Department of Defence regarding nighttime obstacle lighting requirements. This includes consulting on the potential use of aircraft detection lighting systems (ADLS), which activate only when aircraft are within a defined buffer zone
 - implement visual impact mitigation measures such as landscaping and/or vegetation screening at non-associated residences (including their curtilages) within 4.95 km of any approved turbine, upon receiving a written request from the owners of those residences;

- take all reasonable steps to minimise the off-site visual impacts of the development;
 - ensure the wind turbines are painted off white/grey and finished with a surface treatment that minimises the potential for glare and reflection;
 - ensure the visual appearance of all ancillary infrastructure blends in as far as possible with the surrounding landscape;
 - minimise the visual impacts of any aviation lighting; and
 - ensure that shadow flicker associated with wind turbines does not exceed 30 hours per annum at any non-associated residence.
27. The Commission acknowledges that the Project, like others occurring throughout the CWO REZ, would result in a broad change to the local landscape character and its visual amenity. Visual impacts to individual residences will be reduced by the requirements within the conditions of consent. Further requirements for turbine reductions would place an unreasonable burden on the development that is not justified by its potential impact. The visual change that will result after the conditions of consent are complied with are an inevitable outcome of a Project of this nature. The Commission finds that these do not outweigh the public interest in delivering on the Government's policy to provide a secure renewable energy resource for the State.
28. The Commission finds that although there will be visual change within the locality, the Project's benefits balance the change and such impacts do not constitute grounds for refusal of the Application.

3.3 Traffic and transport

29. The Project involves the delivery of plant, equipment and materials, including by the movement of heavy vehicles requiring escort, which has the potential to impact the local and regional road network (AR para 199). Submissions raised concerns about damage to the roads from heavy vehicles, the creation of dangerous driving conditions from additional traffic, as well as water run-off impacts from road construction.
30. To facilitate access for Project construction vehicles, the Applicant is required to upgrade the transport routes surrounding the Site, including sealing, widening, and intersection improvements, to the satisfaction of the relevant roads authority as set out in condition B39. Additionally, as part of the TfNSW Port to REZ program, EnergyCo will undertake upgrade works for the Golden Highway / Black Stump intersection (AR para 223 – 224).
31. During the peak construction period, the Project is expected to generate up to 72 heavy vehicle movements and up to 128 light vehicle movements per day, based on the assumption that most workers will travel from the temporary accommodation camp via shuttle buses (AR para 219). Shared transport from the accommodation camp would lower traffic volumes in comparison to a scenario where construction workers individually drive to and from the Site each day. Between 1 and 5 high-risk heavy vehicles (also known as oversized and over-mass vehicles) requiring escort per day will deliver the turbine blades. These are restricted to travelling outside peak commuting hours. During the operational phase, up to 100 light vehicle movements per day (associated with 50 operational staff) are expected (AR para 219 – 221).
32. The Commission finds that traffic and transport impacts during construction and operation will not significantly affect the local or broader road network. The proposed transport routes can be sufficiently upgraded to facilitate the transportation of large turbine components to Site and can safely accommodate the proposed traffic volumes. Traffic volumes in the construction period will be minimised by the establishment of an onsite accommodation camp and managed through conditions of consent.

33. The Commission heard concerns from several community members about development-related vehicles not adhering to approved transport routes during the Project's construction phase. To address this, the Commission's conditions of consent require the Applicant to prepare a Traffic Management Plan (**TMP**) in consultation with TfNSW, EnergyCo and Council. The TMP must detail transport routes of vehicles travelling to and from the site, local road upgrades and measures to minimise traffic impacts during construction and/or decommissioning works.
34. The Commission has also imposed conditions that require the Applicant to:
- implement road upgrades within the relevant timing requirements, comply with the *Austrroads Guide to Road Design*, and ensure the upgrades are carried out to the satisfaction of the relevant roads authority;
 - prepare a transport strategy in consultation with TfNSW and relevant councils for heavy vehicles exceeding 6.3 m in height, 5.8 m in width or for turbine blade lengths longer than 85 m;
 - prepare and undertake road maintenance in consultation with the relevant council.
35. The Commission is satisfied that any residual traffic and transport impacts would be primarily limited in time (to the construction period) and able to be minimised and managed.

3.4 Biodiversity

36. The Application requires the clearing of 649.92 ha of native vegetation during construction, which would cause direct and indirect impacts to listed threatened flora, fauna and vegetation communities (AR, para 70). Other potential biodiversity impacts, which were also raised in community submissions during operation include negative impacts to birds and bats, including wedge tail eagles.
37. In NSW the Biodiversity Offsets Scheme (**BOS**) provides a mechanism to avoid, minimise and offset biodiversity impacts of a proposed development. Projects that will significantly affect biodiversity values must first seek to avoid and minimise that impact. A biodiversity credit obligation is then imposed upon an Applicant for any remaining unavoidable impacts should a project be approved. The Biodiversity Assessment Method (**BAM**) provides guidance on how to avoid and minimise impacts and calculate biodiversity offsets. This is documented in a Biodiversity Development Assessment Report (**BDAR**) which can only be prepared by an assessor who is appropriately qualified and accredited by the NSW Department of Climate Change, Energy, the Environment and Water (**NSW DCCEEW**) under the *Biodiversity Conservation Act 2016 (BC Act)*.
38. As required for SSDs, the BDAR was prepared by the Applicant. The Department and the Conservation Programs, Heritage and Regulation Group (**CPHR**) within the NSW DCCEEW initially raised concerns on the application of the BAM in the preparation of the Project's BDAR, in particular the land categorisation methodology, species polygon approach, assessment of potential serious and irreversible impacts (**SAII**), targeted surveys for threatened species and requirements for bird and bat utilisation surveys (**BBUS**) (AR, para 74).
39. The Applicant addressed the CPHR advice and public submissions received by the Department via a revised BDAR, which also included proposed changes to the Project as per the Applicant's Amendment Report. During the Department's assessment, a further revised BDAR and additional biodiversity information was provided by the Applicant.
40. Biodiversity considerations are discussed in further detail in the sections below.

3.4.1 Avoidance and mitigation

41. The Project has been designed to avoid some impacts on threatened ecological communities (**TECs**), threatened species and woodland areas of high conservation value (AR, para 77). Other avoidance and mitigation measures include:
- locating turbines and ancillary infrastructure in cleared areas (noting 80% of the Site is paddock areas) and in areas that avoid TECs, threatened species and woodland areas of high conservation value, as far as practicable;
 - removal of three meteorological masts and relocation of seven others;
 - reducing the development footprint from 1,318 ha to 734.96 ha post the Department's exhibition period, inclusive of a reduction in total impacts to White Box-Yellow Box-Blakely's Red Gum Woodland (**Box Gum Woodland**) and Derived Native Grassland (**DNG**) Critically Endangered Ecological Community (**CEEC**) from 429 ha to 294.30 ha (31% reduction);
 - avoiding areas of Box Gum Woodland CEEC and DNG and limiting fragmentation to connectivity values surrounding the Site where possible;
 - removing the proposed site access through Uarbry Village (5.74 ha reduction in impacts on Box Gum Woodland CEEC);
 - pre-clearance surveys and micro-siting of turbines and ancillary infrastructure during the detailed design stage to further avoid impacts to ecologically sensitive areas, as far as practicable;
 - development and implementation of a Biodiversity Management Plan (**BMP**) and Bird and Bat Adaptive Management Plan (**BBAMP**); and
 - preserving an additional area of Box Gum Woodland (above and beyond the requirements of the BAM) to further offset impacts to Box Gum Woodland in recognition of it being an entity at risk of SAI (discussed further below) (AR, para 78).

3.4.2 Native vegetation impacts

42. The Project development footprint (including road upgrades) would disturb 734.96 ha of land, which includes 649.92 ha of native vegetation. Of the native vegetation, 78% (509.20 ha) is DNG and 22% (140.72 ha) is woodland. TECs would be impacted by the Project, being:
- 294.30 ha of Box Gum Woodland listed as CEEC per the BC Act and 36.01 ha listed as CEEC per the EPBC Act, inclusive of 120.63 ha of woodland condition and 173.67 ha of DNG.
 - 4.71 ha of Inland Grey Box Woodland in the Riverina, NSW South Western Slopes, Cobar Peneplain, Nandewar and Brigalow Belt South Bioregions, listed as an endangered ecological community (**EEC**) under the BC Act and EPBC Act. This includes 0.67 ha of woodland condition and 4.04 ha of DNG (AR, para 80-81).
43. The Application proposes to further minimise clearing of TECs via micro-siting the Project's turbines and offset residual impacts via the retirement of biodiversity credits per the BOS. The Commission has imposed conditions of consent to ensure this appropriate micro-siting takes place and that credits are retired prior to the commencement of works that could impact the Site's biodiversity values. Biodiversity offsets are addressed further below in this report.

3.4.3 Threatened fauna impacts

44. Vegetation clearing within the development footprint would result in the loss of habitat for 38 species identified or predicted to occur as ecosystem credit species. Ecosystem credits measure 'ecosystems', specifically threatened ecological communities, threatened species habitat for species that can be reliably predicted to occur with a plant community type and plant community types generally. Sixteen threatened fauna species per the BC Act were recorded within or adjacent to the Site (eleven of which have been considered under ecosystem credit species), two of which are also listed under the EPBC Act. Species credits (which measure the threatened species found at a location that cannot be reliably predicted to occur within the ecosystems identified) are required for 14 species listed under the BC Act, six of which are also listed under the EPBC Act. Five of these species would experience direct impacts from the proposed construction. The Applicant has also assumed the remaining species are present. Two bats listed as entities at risk of serious and irreversible impact (SAII) were recorded on site (SAII is discussed below at **section 3.4.5**) (AR, para 86-90).
45. Potential threatened fauna impacts are required to be offset by ecosystem and species credit requirements, which must be retired prior to carrying out any development that could directly or indirectly impact the biodiversity values requiring offset. Biodiversity offsets are addressed further below in this report.

3.4.4 Prescribed impacts

46. Like all wind farms, the Project has the potential to impact birds and bats due to changes in air pressure (barotrauma) or collisions with wind turbines (bird and bat strike). The assessment of bird and bat strike is considered a 'prescribed impact', rather than a 'direct impact' (such as clearing or habitat loss) or an 'indirect impact' (such as weed invasion or introduced predators). There is currently no policy on how to calculate or quantitatively assess these prescribed impacts, and no requirement to provide biodiversity offset credits for prescribed impacts in accordance with the BOM (AR, para 91-93).
47. For all wind farms in NSW, a combination of a risk assessment followed by post-determination adaptive management is adopted for prescribed impacts. This involves stringent requirements for baseline monitoring, ongoing monitoring of any strike during operation, and triggers for adaptive management measures to avoid or minimise further impacts (AR, para 94).
48. During the Department's assessment, CPHR requested further information relating to bird and bat strike. A revised BDAR was provided by the Applicant, inclusive of a revised assessment of potential bird and bat strike and further information on proposed mitigation measures and monitoring. Of the 50 bird and bat species identified, 11 of which are threatened species, a moderate risk of blade strike is anticipated for the Nankeen Kestrel and Wedge-tailed Eagle. However, neither species is listed under the BC Act or EPBC Act as threatened. The remaining bird and bat species are considered to be subject to a low risk of blade strike (AR, para 96).

49. CPHR raised concerns about bat strike in relation to the extent and timing of at-height monitoring data for the large-eared pied bat and the large bent-winged bat (both entities at risk of SAIL). CPHR argued that there is uncertainty around the potential for turbine strike impacts to these two species and therefore the potential for SAIL is uncertain. The Department's assessment is that the bats are listed as entities at risk of SAIL on the basis of impacts to breeding habitat, and as no breeding habitat will be impacted by the Project, any potential for strike impacts would not be a SAIL and could be appropriately managed with the implementation of the Bird and Bat Adaptive Management Plan (**BBAMP**) (AR, para 97-98) (discussed further below in **section 3.4.5**).
50. In consultation with CPHR, the Department recommended conditions requiring a comprehensive regime of adaptive management to address the risk of bird and bat strike, including:
- the collection of baseline data on threatened and 'at risk' species and populations in the locality;
 - a detailed description of the measures that would be implemented for minimising bird and bat strike during operation of the Project, including wind turbine curtailment (if required);
 - identifying trigger levels for further investigation of the potential impacts of the Project on particular bird or bat species or populations;
 - an adaptive management program that would be implemented if the development is having an adverse impact on a particular threatened or 'at risk' bird or bat species or population;
 - a detailed program to monitor and report on the effectiveness of these measures and any bird and bat strikes on Site; and
 - submitting monitoring data to CPHR and the Planning Secretary.
51. As the Department and CPHR are satisfied that implementation of the BBAMP and the recommended conditions would be effective in mitigating the risk of bird and bat strike AR (para 100), the Commission finds the approach to managing prescribed impacts associated with the Project are acceptable, and has imposed conditions as recommended by the Department to ensure risks are adequately managed.

3.4.5 Serious and irreversible impacts (SAIL)

52. Pursuant to the BC Act, the consent authority must consider if the Project is likely to have a SAIL on biodiversity values and, if so, whether there are any additional and appropriate measures that will minimise those impacts. The Project has the potential to impact three entities at risk of SAIL:
- Box Gum Woodland;
 - Large-eared Pied Bat; and
 - Large Bentwinged Bat.
53. CPHR identified that the Project is likely to result in SAIL on Box Gum Woodland, and that there is the potential for SAIL on cave-dwelling microbats but that this could be managed with recommended measures (AR, para 104-105).

Box Gum Woodland

54. As Box Gum Woodland is listed as CEEC based on 'population size' and 'rate of decline', the Department considers that it is relevant to consider the Project's potential impacts on Box Gum Woodland as a proportion of the total area remaining in NSW. In 2006 the Threatened Species Scientific Committee estimated that the extent of Box Gum Woodland was 250,729 ha (**Committee figure**), therefore with 294.30 ha of clearing required for the Project, this would represent a loss of 0.11% of the total area of Box Gum Woodland in NSW (AR para 109-110). The Commission notes the Department has also considered other more recent evidence from 2022, which suggests there is a significantly larger area of Box Gum Woodland remaining in NSW. However, the Commission finds it appropriate to consider potential impacts based on the more conservative Committee figure.
55. The Department notes that there are a significant number of upcoming projects in the CWO region, including multiple wind farms, solar farms and coal mining projects, and is looking carefully at potential cumulative impacts on biodiversity, particularly in relation to Box Gum Woodland. Considering this, the Department conservatively estimates that there could be a total impact of up to 2,000 ha on Box Gum Woodland in the CWO region. Using the Committee figure, this would result in a loss of 0.85% of Box Gum Woodland in NSW (AR, para 111).
56. The Department considers that a cumulative impact of less than 1% using the most conservative assumptions (i.e. the Committee figure) is still unlikely to contribute significantly to the extinction of Box Gum Woodland and therefore is unlikely to be a SAIL. However, the Department acknowledges that a precautionary approach may be appropriate and has been advising proponents to seek a 'nature positive' outcome to further protect the Box Gum Woodland community (AR, para 112).
57. On this basis, the Applicant further proposes to minimise Box Gum Woodland impacts by securing and conserving additional land for protection and enhancement within the locality. These measures are additional to the credit liability required to be offset under the BOS. Consequently, in accordance with CPHR advice, a condition is imposed by the Commission which requires the Applicant to restore and enhance 282 ha of Box Gum Woodland within a conservation agreement (in perpetuity) to ensure a benefit to the Box Gum Woodland community commensurate to the impacts of the Project.
58. The Commission agrees with the Department that the Project's impacts would not contribute significantly to the risk of extinction of Box Gum Woodland and therefore would not constitute SAIL.

Microbats

59. Two threatened microbat species recorded during Site surveys - the large-eared pied bat and large bent-winged bat - are listed entities at risk of SAIL. SAIL for these species are related to impacts on breeding habitat. Breeding habitat includes caves in scarps, cliffs and rock overhangs as well as disused mines (AR, para 119-120).
60. CPHR concluded the likelihood of SAIL on both species is uncertain due to insufficient survey data. The Applicant undertook additional surveys for threatened microbat species, which recorded one male large-eared pied bat, no large bent-winged bats and no breeding individuals. The criteria for breeding habitat were not met for these species (AR, 121-122). CPHR raised residual concerns around the extent and seasonality of the Applicant's data for the microbats, and maintained the view that the potential for turbine strike was uncertain and the Project has the potential to result in SAIL due to the potential loss of breeding microbat individuals.

61. In consideration of the concerns raised by CPHR and the community, the Commission has imposed conditions (Condition B33) to require the BBAMP to include additional at-height monitoring as part of baseline data surveys and the option for a wind turbine curtailment strategy should this data indicate a significant risk of impact. The Applicant has designed the Project to avoid cliff line and cave habitat and is required to micro-site all turbines to be at least 200 m from these habitat features (condition A8). Accordingly, the Commission finds that no breeding structures would be directly impacted by the Project.
62. Accordingly, the Commission accepts the Department's assessment that the Project's impacts would not contribute significantly to the risk of extinction of the large-eared pied bat and large bent-winged bat and therefore would not constitute SAIL.

3.4.6 Commonwealth matters

63. The Commonwealth Minister for the then Department of Agriculture, Water and the Environment (**DAWE**) (now the Australian Government Department of Climate Change, Energy, the Environment and Water (**AG DCCEEW**)) determined the Project to be a 'controlled action' (EPBC 2020/8668) in accordance with section 75 of the *Environment Protection and Biodiversity Conservation Act 1999* (**EPBC Act**) due to the likely significant impacts to listed threatened species and communities (sections 18 and 18A) and listed migratory species.
64. The Department consulted with the AG DCCEEW and provided draft copies of its assessment report and the recommended conditions of approval to AG DCCEEW for comment as part of the bilateral agreement between the NSW and Commonwealth Governments (AR, para 39-41).
65. All threatened species and communities included in the Commonwealth Referral Decisions (EPBC 2020/8668) were identified and addressed by the Applicant. Assessments of Significance were undertaken for threatened species and communities known or likely to be impacted by the Project, including two threatened ecological communities, nine threatened fauna species and one threatened flora species. Assessments of significance concluded that the Project is unlikely to result in significant impacts to Matters of National Environmental Significance (**MNES**) (AR, para 126-128).
66. The Department considered Commonwealth matters in consultation with CPHR and AG DCCEEW, inclusive of the Applicant's assessments of significance and the relevant approved conservation advice, recovery plans and threat abatement plans. Subject to the recommended conditions, the Department considers that the Project can be carried out in a manner that is consistent with the relevant advice and plans (AR, Appendix K). The Commission notes that following determination of the Project, it would be referred to the AG DCCEEW in accordance with the EPBC Act for a final decision.

3.4.7 Biodiversity offsets

67. As discussed in Sections 3.4.2 and 3.4.3 above, the Project creates biodiversity credit liabilities requiring offset by the Applicant pursuant to the BOS. The Department and CPHR are satisfied the Project's offset credit requirements have been correctly calculated, equating to 6,307 ecosystem credits and 2,928 species credits.
68. Condition B29 of the Commission's development consent require the Applicant to retire the required biodiversity offset credits in accordance with the NSW Biodiversity Offsets Policy for Major Projects prior to carrying out any development that could directly or indirectly impact the biodiversity values requiring offset.

69. Further avoidance measures during the detailed design phase of the Project (such as micro-siting) could potentially reduce the number and class of credits required to be offset. Credits would be re-calculated when the final layout design of the Project is known and this incentivises the Applicant to avoid and minimise biodiversity impacts.
70. The BC Act requires that concurrence is sought from the Minister for the Environment for State significant development where consent conditions differ from the credit requirements in a BDAR, and/or allow for post-approval modification or any deferred offsetting arrangements, or the implementation of a Biodiversity Offset Package where not in accordance with the BDAR.
71. A condition of development consent imposed by the Commission (condition B29) requires the Applicant to appropriately retire calculated biodiversity credits, unless the Planning Secretary agrees otherwise. The inclusion of the Planning Secretary's discretion was considered by the Department to be a mechanism which would allow for post-approval modification. The Planning Secretary's discretion is included in the conditions as it would permit credit re-calculation as discussed above in paragraph 70 and facilitate a better environmental outcome. Accordingly, concurrence was sought from the Minister for the Environment by the Department on 13 May 2025, with concurrence provided on 23 May 2025. The Minister for the Environment's provided concurrence conditions which the Commission has included as conditions of development consent. The concurrence conditions require the Planning Secretary to consult with the DCCEEW Secretary on any post-development consent biodiversity credit changes.
72. The Commission finds the Project's biodiversity offsets to have been satisfactorily determined. Biodiversity credits must be retired by the Applicant pursuant to the BOS to ensure the Project's residual biodiversity impacts are appropriately offset and this is reinforced via the Commission's conditions of development consent.

3.4.8 Conclusion (biodiversity)

73. The Commission is satisfied that the Project has been designed to minimise its potential biodiversity impacts, noting the Department and CPHR are also satisfied that the Project could be undertaken in a manner that maintains the biodiversity values of the locality over the medium to long term (AR, para 135).
74. The Project has been designed and refined to avoid and mitigate potential biodiversity impacts, noting further micro-siting and avoidance is to take place during the Project's detailed design development phase. Residual impacts are able to be offset through the appropriate retirement of credits and the restoration and enhancement of 282 ha of Box Gum Woodland within a conservation agreement (above and beyond the minimum credit liability) provides for further mitigation. Subject to conditions of consent as summarised below, the Commission finds the Project's biodiversity impacts to be acceptable.
75. Conditions imposed by the Commission require the Applicant to:
- secure land comprising 282 ha of Box Gum Woodland and implement measures to enhance and protect, in perpetuity, this vegetation to a condition commensurate with Box Gum Woodland;
 - avoid impacts as far as practicable;
 - ensure impacts are confined to the Site;
 - not clear any native vegetation or fauna habitat located outside the development corridor;
 - minimise the clearing of native vegetation and key habitat, minimise impacts on hollow bearing trees and impacts on threatened bird and bat populations;

- retire ecosystem and species credits in accordance with the BOS;
- prepare a comprehensive Biodiversity Management Plan which must include details on how the Applicant will minimise, mitigate and where possible rehabilitate impacts to biodiversity, including entities at risk of SAIL;
- construct turbines away from microbat breeding habitat and prepare a detailed BBAMP which includes measures to minimise bird and bat strike and adaptively manage operations in response to adverse impacts on bird and bat species; and
- restore native vegetation as a part of the decommissioning and rehabilitation process.

3.5 Socio-economic

76. The potential social and economic impacts of the Project were raised in submissions to the Commission, particularly in the context of other nearby proposed and approved renewable energy projects which could generate cumulative impacts.⁴
77. Community concerns about negative economic and social impacts included declining property values for non-associated properties, reduced agricultural trade and concurrent population decline with flow-on impacts for health and other services in the area. There was some concern about the level of community consultation on the VPA terms. A common view was that the community is 'bearing the brunt' of the impacts associated with renewable energy development.
78. However, submissions also identified positive social and economic impacts from the Project. These include funding for land holders and the community flowing from the VPAs and community enhancement funds, which can be used to provide economic resilience to droughts, bushfires and other extreme weather events. More broadly, the project was viewed by some as stimulating employment opportunities and boosting the local economy.
79. The Commission's findings on the Project's key potential social and economic impacts and its reasons for decision are discussion in the subsections below.

3.5.1 Workforce population and accommodation camp

80. The peak Project construction workforce is expected to be 400 people, which would inevitably increase demand for housing and accommodation in towns surrounding the Project. When combined with the workforces from other projects in the CWO REZ, this could potentially result in cumulative adverse impacts across the region, particularly in the context of short-term accommodation and housing availability. The Applicant's Social Impact Assessment (**SIA**) also identifies that there is a shortage of accommodation in the region (AR, Table 9).
81. The Applicant proposed two options to accommodate its workforce, a distribution across towns within the locality or a workforce accommodation camp. The Department's assessment considered the latter was necessary to appropriately manage potential impacts on housing and accommodation within the area (AR, table 9). For this reason, the Commission agrees with the Department and finds the accommodation camp to be a critical and necessary element of the Project.

⁴ The Commission's consideration of cumulative impacts is detailed in section 3.7 of this report

82. There are community concerns about a consequential significant population increase within the locality and the potential adverse impacts that may arise from this. However, the Commission finds that the additional workforce population can also positively contribute to social and economic outcomes within the locality by supporting local businesses, providing training and employment opportunities for locals and integrating the workforce with the local community.
83. The Commission has imposed conditions of development consent to manage the accommodation camp's potential impacts. The conditions require the Applicant to:
- prepare an Accommodation and Employment Strategy in consultation with EnergyCo and Warrumbungle Shire Council. The strategy must include:
 - proposed measures to ensure there is sufficient accommodation for the required workforce;
 - consider the cumulative impacts associated with other similar projects in the area;
 - investigate options for prioritising the training and employment of First Nations people and local workers for the construction and operation of the development, where feasible; and
 - include a program to monitor and review the effectiveness of the strategy.
 - prepare an Accommodation Camp Management Plan in consultation with EnergyCo, Western NSW Local Health District and Council, which must include (but is not limited to):
 - strategies to encourage the accommodation camp's population integrating with the local community, such as (but not limited to) sport and recreation clubs, community events/activities and other voluntary activities;
 - measures to provide the camp with health and medical services and to notify the relevant health authorities of the final measures; and
 - measures which facilitate supporting local suppliers in servicing the camp wherever possible.

3.5.2 Economic impacts

84. In addition to its contribution to the energy transition as previously discussed in this report, the Project would generate direct and indirect benefits to the local community via:
- a Voluntary Planning Agreement (**VPA**) between the Applicant and Council, equal to \$1,050 per MW generation capacity installed, payable to Council per year for the duration of the Project – up to \$24.8 million (adjusted to CPI and based on 131 turbine layout);
 - up to 400 construction jobs and 50 ongoing operational jobs;
 - a commitment by the Applicant to prepare a Local Participation Plan prior to construction to investigate prioritising local workers where feasible (AR, Table 13); and
 - the procurement of goods and services by the Applicant and associated contractors.
85. The community's concerns regarding impacts to property values is detailed in section 3.8 of this report. Pursuant to the EP&A Act, property values are not a matter for consideration.
86. The Commission agrees with the Department that the Project's positive social and economic impacts outweigh the potential adverse impacts which may arise. To facilitate these positive impacts and mitigate any negative impacts, the conditions of development consent require the Applicant to:

- enter into a VPA with Council, per the terms of Council's letter dated 28 February 2024;
- operate a Community Consultative Committee for the development to ensure communities are kept informed of the status of the Project and are able to provide feedback on issues that may arising during it's implementation
- develop and implement an environmental management strategy which includes an ongoing community communication plan to:
 - keep the local community and relevant agencies informed about the operation and environmental performance of the Project;
 - receive, handle, respond to, and record complaints;
 - resolve any disputes that may arise;
 - respond to any non-compliances; and
- construct and operate the accommodation camp prior to commencing other construction activities.

3.5.3 General community and health services impacts

87. As with any large-scale development, there are differing views and levels of acceptance of the development within the community, and community cohesion itself was identified as a concern in submissions and by speakers at the public meeting.
88. The Commission has imposed conditions of development consent to encourage the construction workforce to integrate with local communities and develop an accommodation and employment strategy to promote training and employment opportunities for the local population. These opportunities are considered to be positive socio-economic outcomes that would otherwise not be realised within the area if the development did not proceed.
89. Understanding that the locality has constrained health services available, conditions imposed by the Commission require the Applicant to prepare an Accommodation Camp Management Plan in consultation with the Western NSW Local Health District which details proposed health and medical services to be implemented on-Site. The Commission notes the Applicant has also committed to providing health and welfare services for the occupants of the camp, including on-site nursing practitioners, telehealth services and first aid training.

3.5.4 Conclusion (socio-economic)

90. The Commission finds that, on balance, the actual, perceived and potential adverse socio-economic impacts of the Project are outweighed by its positive impacts.
91. The inclusion of an accommodation camp for the Project's construction workforce is considered critical to alleviating housing and accommodation availability pressures in nearby towns. The subsequent additional population increase within the locality during the Project's construction phase will create a positive socio-economic outcome locally through the population's patronage of local businesses and integrating with communities. Potential training and employment opportunities for locals will also result in a beneficial outcome for the region.
92. Understanding the region has existing health servicing constraints, the Commission has imposed conditions of development consent which will ensure an appropriate level of health services are provided directly to the accommodation camp occupants. The Commission is satisfied that through appropriate consultation with NSW Health, the Project's workforce will not exacerbate the demand for health services within the existing local community.

3.6 Decommissioning and rehabilitation

93. Decommissioning and rehabilitation concerns are a common issue for renewable energy developments, specifically around defining who would be responsible for removing turbine infrastructure, and the capacity of the Site to be returned to pre-development conditions. The Commission heard similar concerns from community members at the Project's public meeting.
94. Information and evidence provided to the Commission by the Department and contained with the Applicant's EIS demonstrates that the Project (including the accommodation workforce camp), can be decommissioned and the Site appropriately rehabilitated. It should also be noted that future infrastructure upgrades could extend the Project's operation beyond its approximate 30-year lifespan.
95. In addition to the Department's recommended conditions of consent which specify objectives for decommissioning and rehabilitation, the Commission has imposed a condition requiring the Applicant to prepare a comprehensive Decommissioning and Rehabilitation Management Plan. The Plan must be prepared within 3 years of commencement of operation and reviewed at years 10 and 20 of the Project. Early preparation and periodic review of this Plan ensures consideration is given to more contemporary rehabilitation practices, advancements in recycling technology and innovations in waste management initiatives. Additionally, this approach means the Plan is regularly updated to reflect any rehabilitation efforts undertaken over the life of the Project.
96. The Commission has imposed conditions of consent requiring the Applicant to:
- prepare and implement a Decommissioning and Rehabilitation Management Plan, which is to be reviewed and updated across the life of the Project;
 - decommission and rehabilitate the accommodation camp within 12 months of commencing operation of the Project;
 - undertake progressive rehabilitation following disturbance; and
 - decommission and rehabilitation of the Site within 18 months of cessation of operations in compliance with the rehabilitation objectives set out in the consent.

3.7 Cumulative impacts

97. The Commission heard significant concern at the public meeting and in submissions about the potential cumulative impacts from multiple renewable energy and transmission line projects within the CWO REZ which are at various stages of planning and development which are reflected in Appendix D. Concerns about cumulative impacts are a valid planning consideration and the Commission notes that the NSW Government has committed to undertake cumulative impact studies for the CWO REZ to identify the appropriate levels of support for host communities of multiple renewable energy projects. These studies have not been released at the time of writing. The Commission supports their finalisation as soon as possible to give the community greater certainty about how cumulative impacts will be managed as the CWO REZ continues its rollout.
98. In the absence of a specific NSW Government position, policy or plan on cumulative impacts within the CWO REZ, the Commission is satisfied that the impacts of this Project – together with existing and approved projects in the CWO REZ – will not overwhelm key regional infrastructure (including roads, housing, and social services) and that appropriate upgrades and augmentations are, or will be, undertaken in a timely manner. The Commission is also satisfied that there are no other unacceptable cumulative impacts, including visual impacts and impacts to biodiversity.

99. As the Valley of the Winds Project is in a relatively early cohort of projects going through the planning approval process within the CWO REZ, its cumulative impacts, when combined with existing and approved projects in the REZ, are manageable and do not warrant refusal of this specific Application.
100. Further, consideration of an all-encompassing future scenario for the CWO REZ (i.e. if the CWO REZ was to be developed to full capacity) is not required in order to approve this Project as there are many factors which contribute to whether approval for future development proposals will be sought and/or whether such developments would proceed. Accordingly, comprehensively foreshadowing these potential future cumulative impacts would be outside the Commission's role in deciding the present Application. As such, the Commission has considered the key cumulative impacts of the Project and other existing and approved and imminently developable renewable energy developments within its proximity, with any additional development proposals proceeding within the CWO REZ subsequently being required to do the same.

3.7.1 Visual

101. The development of multiple wind farms within a region will unavoidably change the overall landscape character irrespective of whether they are confined to a single viewshed. The Commission agrees with community concerns that these projects would result in a fundamental change to the broader landscape in addition to cumulative visual impacts at specific non-associated residences and public viewpoints.
102. There are several proposed wind farms at varying stages of development within the CWO REZ. The Applicant's Amendment Report identifies eight non-associated dwellings located within 8 km of both the Project and the approved Liverpool Range Wind Farm located to the north-east. The Commission finds that views from these receivers would be distant and partially screened by existing vegetation. Wire frame diagrams prepared by the Applicant indicate that the distance between the two projects limits the opportunity to view both projects concurrently in the one field of view.
103. Due to the distance between projects and undulating topography, there would be limited opportunities to view both projects simultaneously from publicly accessible locations. The Commission further notes that the wind farm known as Barney's Reef which was proposed to be located approximately 25 km to the south-west of the Site has been withdrawn and is no longer proceeding. Therefore, any potential cumulative impacts which may have arisen from the Barney's Reef project are also removed.
104. There are three non-associated receivers in proximity to both the Project and the CWO REZ transmission line (less than 2 km). These receivers are all more than 2 km from the nearest turbine and are well screened by existing vegetation. Additional vegetation screening is available to them on request.
105. For these reasons, the cumulative visual impacts contributed to by the Project at assessed non-associated receivers and publicly accessible locations would not dominate the landscape in an unacceptable manner.
106. The strategic context of legislated climate and energy transition objectives is relevant when considering the cumulative visual impact of wind farm developments in the region. The Project's site suitability, including its location within the CWO REZ, its proximity close to the approved transmission line and regional road network, its access to wind resources, suitable topography and avoidance of major environmental constraints make it a suitable proposal to support the Commonwealth and State's legislated pathway to net-zero emissions. The Commission finds that the change to the character of the landscape is consistent with the Government's adopted strategic position and on balance is not detrimental to the public interest.

107. It is inevitable that a wind farm Project of the size and scale proposed, combined with existing and approved developments would result in a change to the local landscape and visual amenity of the locality. To this end, it is therefore unreasonable to find this change unacceptable within a legislatively defined REZ.

3.7.2 Traffic and transport

108. EnergyCo, as the infrastructure planner for the State's renewable energy zones (**REZs**), has identified sections of the State road network which require upgrading to enable movement of oversized and over-mass (**OSOM**) components for renewable energy and transmission projects in the REZs. Upgrades are being carried out by EnergyCo and Transport for NSW (**TfNSW**) as part of the 'Port to REZ Project' and are subject to separate approval, with the Central West Orana (**CWO**) Port to REZ upgrades expected to be completed late in 2025 (AR, para 203-204).
109. To transport the Project's components to the Site, a route from the Port of Newcastle via Selwyn Street, George Street, Industrial Drive, Pacific Highway (Maitland Road), New England Highway, Hunter Expressway and New England Highway is proposed to be used. This route (up to and including the intersection of Golden Highway and Black Stump Way) is included in the Port to REZ Project. The Department's recommended conditions require all approvals (including the Port to REZ Project works) to be in place prior to use by heavy vehicles requiring an escort (AR, para 206-209).
110. The Applicant's Transport Assessment undertook a cumulative impact review of adjacent approved developments including the Liverpool Range Wind Farm, Ungula Wind Farm, Wollar Solar Farm, Stubbo Solar Farm and Dunedoo Solar Farm. This assessment considered the greatest combined volume of these projects along the Golden Highway and noted that whilst traffic volumes along the Golden Highway have seen a sharp increase in recent years (likely due to similar renewable energy and mining projects in the area), concluded that the resultant cumulative traffic volume would still satisfy the Austroads roadway design standards for a rural highway. The Applicant's Transport Assessment has taken a conservative approach in its assessment by assuming a 3% per annum growth rate for background traffic on the Golden Highway and Black Stump Way. The Department's AR (para 229) further notes that traffic modelling indicates the Golden Highway has sufficient capacity to accommodate potential cumulative traffic impacts if concurrent construction were to occur with surrounding State significant projects in the region.
111. The Commission is satisfied that there would be no material cumulative traffic impacts on the State, regional or local road networks as a result of the Project. Cumulative traffic impacts from the Project and other renewable and SSD projects are able to be co-ordinated through the development of the TMP in consultation with TfNSW, EnergyCo and Council. As part of the TMP the Applicant must also include measures to minimise potential cumulative traffic impacts with other projects along the access route.

3.7.3 Workforce accommodation, employment, social and health services

112. The proximity of the Project to the approved CWO REZ Transmission project, the Liverpool Range Wind Farm and Birriwa Solar Farm, means that cumulative accommodation and employment related impacts are possible, particularly if peak construction periods for the projects overlap. The Applicant has proposed a temporary workers accommodation camp to minimise impacts on the availability of local accommodation.

113. As previously noted, the community has raised concerns about the capacity of health services in the area that are struggling to meet current demand coping with increased demand during construction and ongoing operations. The Commission has imposed conditions that require the Applicant to provide health and medical services for the Valley of the Winds workforce.
114. Cumulative impacts arising from an increased population in the locality due to the workforce associated with the Project, as well as with other renewable and SSD projects, will be managed under an Accommodation Camp Management Plan that the Applicant must develop in consultation with EnergyCo, NSW Health and Council. As part of this Plan, the Applicant must ensure utilities are provided in accordance with Council's requirements, include health and medical services to support local suppliers in servicing the camp where possible.
115. The Application commits to providing health and welfare services within the workforce accommodation camp to alleviate any potential cumulative impacts on local health service capacity. Consultation with NSW Health will further reinforce health service requirements for the Project and a condition of development consent ensures.
116. Additionally, the Applicant must prepare and implement an Accommodation and Employment Strategy in consultation with EnergyCo and Council that includes consideration of the cumulative impacts of other SSD projects within the vicinity to ensure a coordinated and sustainable approach to workforce planning.
117. Community concern was also raised about cumulative strain on other social services in the locality such as policing and emergency services. The Applicant's EIS states the workforce accommodation camp would be managed by an experienced operator and would include (but is not limited to) security and shuttle bus services for camp residents. These arrangements are also typical for other renewable energy workforce accommodation camps.
118. A management/mitigation commitment of the Applicant (as noted within its EIS and social impact assessment) further states a plan of management will be developed for the workforce accommodation camp in consultation with relevant stakeholders, including community representatives, council and emergency services. The primary purpose of the plan is to (EIS, Section 15.4):
- outline how the proposed construction workers accommodation will maintain a high level of amenity for neighbouring properties and for the workforce;
 - strategies to encourage the integration of the workers camp with local communities to ensure that the economic benefits associated with the presence of a workforce are received by local businesses and service providers;
 - policies and guidelines around expectations for workforce behaviours; and
 - consider appropriate safety and security measures.
119. The Commission finds the above to be an acceptable measure to mitigate any possible strain to policing and emergency services in the area. As part of the Commission's conditions of consent the Applicant may only carry out the development generally in accordance with the EIS.

3.7.4 Biodiversity

120. The Project's potential cumulative impacts on biodiversity values are addressed in section 3.4 where it is described that the Project would impact 294.30 ha of Box Gum Woodland, and a total impact of up to 2,000 ha on Box Gum Woodland (inclusive of the Project) within the CWO area in consideration of other renewable energy and mining projects. In the context of the more conservative Committee figure on the extent of Box Gum Woodland in NSW, being 250,729 ha (AR, para 110-111):

- the Project's impact of 294.30 ha represents a 0.11% impact on the total area of Box Gum Woodland in NSW; and
 - a cumulative impact of 2,000 ha with the CWO area represents a 0.85% impact of the total area of Box Gum Woodland in NSW.
121. The Commission agrees with the Department that a cumulative impact on Box Gum Woodland in the CWO region and more broadly across NSW of less than 1% would not contribute significantly to the risk of extinction and therefore would not constitute SAIL. A condition imposed by the Commission which requires the Applicant to restore and enhance 282 ha of Box Gum Woodland within a conservation agreement also serves to minimise net impacts to Box Gum Woodland.
122. With potential impacts to cave dwelling microbats not constituting SAIL (see Section 3.4.5) and the Project's biodiversity offsets commitments having to be completed prior any development that could directly or indirectly impact biodiversity values, the Commission is satisfied that the Project's cumulative biodiversity impacts are acceptable.

3.8 Other issues

123. The Commission's findings on other issues are summarised in Table 2.

Table 2 – Commission's findings on other issues

Issues	Findings
Aviation	<p>The Project is located 6 km south of Coolah Airport and 56 km north of Mudgee Airport. There are also two private air strips in proximity to the Project – Tongy Aerodrome (approximately 1.4 km from the nearest turbine) and Turee Aerodrome (approximately 2.4 km from the nearest turbine). CASA advised the Department that turbine infringements in navigable airspace could be managed with appropriate notification to CASA, which the Applicant has committed to.</p> <p>The Department engaged an independent aviation expert to review the Applicant's assessment of aviation impacts and found that it sufficiently addresses potential risks and mitigation measures associated with wind turbulence and wind turbines as obstacles to the Tongy and Turee aerodromes.</p> <p>The community raised concerns in submissions that wind turbines would impact the ability to fly aeroplanes in poor weather or low visibility conditions and to carry out aerial agricultural activities, including aerial fertilizing, aerial spraying, aerial cropping.</p> <p>The Commission has imposed conditions of consent that require the Applicant to also consult with the Aerial Application Association of Australia and NSW RFS in relation to the development of an Aviation Management Plan which must include procedures to ensure the continued ability to undertake aerial agriculture and aerial firefighting operations within the locality. The Commission's aviation-related conditions require the Applicant to:</p> <ul style="list-style-type: none"> • inform CASA, Airservices Australia, the Australian Department of Defence and the Royal Australian Air Force prior to the construction of any wind turbine or wind monitoring mast; • consult with , Aerial Application Association of Australia, RFS and Tongy and Turee aerodromes, also taking into account any prior advice provided by CASA and Air Services Australia to develop an Aviation Management Plan that mitigates and manages impacts and hazards to aircraft and aerodrome operations, including ongoing aerial agriculture and aerial firefighting activities; and

Issues	Findings
	<ul style="list-style-type: none"> • carry out the development 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. The Commission has given consideration to aerial firefighting below (in this table). <p>The Commission agrees with the Department, CASA, Airservices Australia and the independent aviation expert that the conditions of consent are appropriate to ensure that the proposal is unlikely to result in significant aviation hazards or impacts to aerial activities.</p>
Contamination	<p>The Commission received submissions concerned with contamination as a result of the Project, specifically with the potential use of Bisphenol A (BPA) in wind turbine blade construction and the risk of pollution of the surrounding lands with microplastics and BPA from the degradation of wind turbine blades.</p> <p>As published on the NSW Government's Climate and Energy Action website, the advice of the Australian Medical Association is that <i>"wind turbine electricity does not involve the production of pollutants, emissions or waste which can have significant effects on our health or wellbeing"</i>.</p> <p>Further, the Commission notes that in response to a question on notice taken during the 2023-24 Australian Government Supplementary Budget estimates on 23 October 2023, the Department of Climate Change, Energy, Environment and Water portfolio responded that <i>"there is no evidence in Australia or internationally that erosion of epoxy resins from wind turbines leads to significant Bisphenol A (BPA) emissions"</i> and that <i>"BPA is chemically transformed in the process of making the epoxy resin and is irreversibly bonded into the matrix of the epoxy in the turbine blades. This means it cannot leach or wash out of the turbine blades"</i>.</p> <p>In considering the existing evidence and policy guidance on the issue available to it, the Commission is satisfied that there are unlikely to be contamination risks to human health or agricultural production from BPA in wind turbine blades.</p>
Fire and firefighting	<p>A large proportion of the Site is mapped as bush fire prone land by the RFS. The Department, RFS, National Parks and Wildlife Service, and Fire and Rescue NSW (FRNSW) are satisfied that bushfire risks can be suitably controlled through the implementation of standard fire management plans and procedures (AR Table 9).</p> <p>The Commission has heard the concerns raised by submitters regarding the suitability of fire management plans and procedures to manage fire risks for a wind farm, including the ability for aerial firefighting to take place.</p> <p>The Commission agrees with the advice of the Department, RFS and FRNSW and is satisfied that bushfire risks including to aerial firefighting can be suitably controlled through implementation of standard firefighting management plans and procedures. The proposed measures are consistent with RFS's <i>Planning for Bush Fire Protection 2019</i>, the relevant best practice bushfire protection standards in NSW.</p> <p>The Commission has imposed the following conditions, requiring the Applicant to:</p> <ul style="list-style-type: none"> • minimise risks and plan for bush fire events by preparing a comprehensive Emergency Plan in consultation with NSW RFS; • prepare an Aviation Management Plan in consultation with RFS and the operators of Tongy and Turee aerodromes and include procedures to ensure the continued ability for aerial firefighting operations to be undertaken within the locality;

Issues	Findings
Noise and vibration	<ul style="list-style-type: none"> • develop operational procedures for when turbines would be shut down in a bush fire , the positioning of turbine blades to minimise interference with firefighting operations and turning on aviation lighting; • manage vegetation fuel loads and assist the RFS and emergency services as much as possible; and • minimise the fire risks of the accommodation camp development. • prepare a detailed fire safety study to the satisfaction of FRNSW and the Planning Secretary. <p>The Applicant prepared a Noise Impact Assessment (NIA) in accordance with the Department's <i>Wind Energy: Noise Assessment Bulletin (2016) (Noise Bulletin)</i> (AR, Table 9).</p> <p><u>Construction noise and vibration</u></p> <p>The NIA predicts one non-associated receiver (receiver 236) would experience noise above the 'noise affected' criterion of 45 dB(A) in the EPA's Interim Construction Noise Guideline (2009) (ICNG) during construction. This would only occur during the proposed road upgrades within a six-month period. (AR, Table 9).</p> <p>To minimise construction impacts, conditions imposed by the Commission require the Applicant to implement noise mitigation, including scheduling activities, using quieter equipment, consulting with affected residences prior to undertaking noisy construction works.</p> <p>The Applicant undertook a vibration impact assessment and determined that airblast overpressure and estimated ground vibration levels at all non-associated receivers would be below the criteria for all blasts.</p> <p>To mitigate potential impacts associated with blasting activities, the Commission has imposed a condition which allows for all private landowners within 1.2 km of quarrying areas to request an inspection from the Applicant by an agreed independent expert to establish baseline conditions of buildings and structures on their land.</p> <p><u>Construction traffic noise</u></p> <p>Calculated noise levels provided by the Applicant indicate that compliance would be achieved with the RNP during the construction phase at all identified receivers, both for absolute noise levels and the relative increase criteria (AR, Table 9).</p> <p><u>Operational noise</u></p> <p>The NIA indicated that predicted operational wind turbine noise levels are below the Noise Bulletin minimum criterion of 35 dB for all but one non-associated receiver (Receiver 5). This receiver is predicted to have a small excess of 0.2 dB for one of the three turbine models under worst case scenario modelling (i.e. highest wind speeds and all wind directed towards each receiver).</p> <p>An EIS Noise Assessment Peer review provided to the Department by a community member queries in relation to the ground absorption factor identified in the NIA. In its response to the Commission for additional information on this matter dated 28 May 2025, the Department notes the relevant guideline is the Noise Bulletin which adopted the 2009 South Australian EPA Wind Farms environmental noise guidelines (SA Guidelines). The Applicant's NIA included a conservative ground absorption allowance in accordance with the Institute of Acoustics (IOA) 2013 document '<i>A good practice guide to the application of ETSU-R-97 for the assessment and rating of wind turbine noise</i>', this conservative assumption is more than is required by the SA Guideline or the Noise Bulletin.</p>

Issues	Findings
	<p>The Department considers that the use of a ground impedance factor of $G = 0.5$ for the Valley of Winds Wind Farm is acceptable when additional conservative factors such as those outlined in the IOA document and the Noise Bulletin are also considered. The Commission conditions of consent require contingencies by way of noise curtailment to ensure acceptable levels can be met by an operating wind farm.</p> <p>Some submissions raised concerns about ongoing noise impacts from the wind turbines affecting nearby people and animals, causing distress and impacts to mental health, noting that “[c]onstant humming and vibration can affect sleep, stress levels, and overall well-being of nearby residents”.</p> <p>Under conditions of development consent imposed by the Commission, the Applicant will be required to meet the Noise Bulletin criteria when operational at this receiver and to confirm this through operational monitoring.</p> <p>A cumulative impact assessment considered the nearby Liverpool Range Wind Farm and concluded the compliance outcome of the Project does not change for any relevant receiver. Further operational noise of the four proposed substations is predicted to be below 35 dB LAeq (AR, Table 9).</p> <p>As published on the NSW Government’s Climate and Energy Action website, the advice of the Australian Medical Association is that “<i>infrasound and low frequency sound generated by wind farms are well below the level that is harmful to humans.</i>” The Department in its response to the Commission for additional information dated 28 May 2025 also states “[t]he requirement to assess low frequency noise is not included within the Noise Bulletin nor the SA Guidelines as it is known that excessive low frequency noise is not a feature of modern wind turbines”. The Department further notes in its response to the Commission for additional information dated 28 May 2025, the Project’s NIA was not required to include an additional 5 dB penalty for low frequency noise (as suggested by the EIS Noise Assessment Peer review) or undertake additional assessment of low frequency noise as it had not triggered the relevant screening criteria.</p> <p>The Commission is satisfied that subject to conditions, the Project’s noise and vibration impacts are acceptable. Conditions imposed to mitigate noise and vibration impacts include:</p> <ul style="list-style-type: none"> • restricted construction hours which can only be varied with sufficient justification and further noise impact assessment; • compliance with the ICNG, relevant guidelines and standards; • restrictions to blasting hours and frequency; • blast criteria to be complied with; and • compliance with the Project’s established noise criteria with operational monitoring.
<p>Property values</p>	<p>Concerns were raised in submissions and at the public meeting that the Project would result in adverse impacts on property values within the locality.</p> <p>The Land and Environment Court has ruled on several occasions that the assessment of the impacts of projects on individual property values is not generally a relevant consideration under the EP&A Act, unless the project would have significant and widespread economic impacts on the locality, which the Commission finds is not the case in this instance (AR, Table 9).</p> <p>The Project is located within the CWO REZ, is permissible with consent and would apply with amenity criteria established by the NSW Government for wind farms. The Applicant has also entered into agreements to compensate more highly impacted owners (AR Table 9).</p>

Issues	Findings
	<p>The Commission accepts the Department's assessment of potential property value impacts and agrees that the assessment of individual property value impacts is not a relevant consideration for the Project.</p>
Supply chain and logistics	<p>The Commission received verbal and written submissions about ethical supply chains and the potential for overseas modern slavery practices to be associated with the manufacture of wind farm infrastructure for the Project. The Applicant must comply with legislative requirements regarding modern slavery in the construction and operation of the Project under the <i>Modern Slavery Act 2018</i> (Commonwealth) and the <i>Modern Slavery Act 2018</i> (NSW). Although the issue is significant, it is dealt with through specific legislation that is outside of the Commission's remit in determining the Application.</p>
Water	<p>The amount of water required for the construction of the Project is estimated to be around 1,110 ML. In addition, a maximum of 34,250ML would be required for crushing operations at the proposed quarries.</p> <p>The Applicant proposes to obtain water from various sources, including farm dams with landholder agreements, licensed water sources under the <i>Water Management Act 2000</i> (such as groundwater or Council-supplied water) and by purchasing and transporting water to the Site by tanker. Some submissions raised concerns about the detrimental effects this extraction would have on the aquifer.</p> <p>The Commission has imposed conditions of consent that require the Applicant to:</p> <ul style="list-style-type: none"> • ensure the Project has sufficient water available for all stages of the development through the preparation of a water sourcing plan; • adjust the scale of the development to match the available water supply if necessary; • obtain any necessary license(s) for the operation of the Project under the <i>Water Act 1912</i> and/or the <i>Water Management Act 2000</i>; • undertake assessments and obtain any necessary aquifer interference approvals prior to the commencement of any construction; and • prepare a Soil and Water Management Plan to monitor, reduce, mitigate and monitor soil erosion. <p>The Commission agrees with the Department and NSW DCCEE Water Group that these conditions of consent are appropriate to ensure that the Project is unlikely to have any significant impact on water supply and demand in the region.</p>
Other issues	<p>The Commission agrees with the Department's assessment of all other issues, including heritage, land-use compatibility, flooding, erosion and sedimentation, radiocommunication, electric and magnetic fields, waste, air quality, blade throw and the high pressure gas pipeline at Table 9 of the AR. Subject to the imposed conditions relevant to each of these issues the Commission is satisfied the impacts are minimal and capable of being appropriately monitored and managed.</p>

4. Determination

124. The views of the community were expressed through public submissions and comments received (as part of exhibition and as part of the Commission's determination process), as well as in verbal presentations to the Commission at the Public Meeting. The Commission carefully considered all of these views in making its decision.
125. For the reasons set out in this Statement of Reasons, the Commission finds that the Project is in the public interest and should be approved subject to conditions of consent as set out at Appendix A.



Richard Pearson (Chair)
Member of the Commission



Suellen Fitzgerald
Member of the Commission



Sarah Dinning
Member of the Commission

Appendix A – Development Consent

[Appendix A - Development Consent](#)

Appendix B – Material considered by the Commission

Document	Dated
Secretary's Environmental Assessment Requirements (SEARs)	9 June 2020
Supplementary SEARs (Commonwealth Department of Agriculture, Water and the Environment assessment requirements)	N.D.
Applicant's EIS and its accompanying appendices	28 April 2021
Government agency advice to the Department	Various
Public submissions made to the Department during exhibition	Various
Applicant's Response to Submissions Report	27 October 2023
Applicant's 2023 Amendment Report	27 October 2023
Applicant's 2024 Amendment Report	1 November 2024
Applicant's 2025 Amendment Report	24 January 2025
Department's AR and recommended conditions of consent	18 March 2025
Comments and presentation material from meetings with: <ul style="list-style-type: none"> • Council • Department • Applicant • NSW Energy Corporation 	2 April 2025 2 April 2025 2 April 2025 16 April 2025
Applicant's response to the Commission	8 April 2025
Observations made at the Site Inspection	9 April 2025
Material presented at the Public Meeting	10 April 2025
All written submissions made to the Commission	17 April 2025
The Applicant's responses to the Commission	8 April 2025 and 29 April 2025
The Department's responses to the Commission	1 May 2025 and 28 May 2025
The Department's supplementary assessment information	13 May 2025
Department's advice to the Commission regarding the imposition of conditions	16 May 2025
Concurrence from the NSW Minister for the Environment	23 May 2025

Appendix C – Planning framework

Strategic context	
Energy transition	<p>The Project is located in the declared CWO REZ and would connect directly into the approved CWO REZ transmission line. The Department has set out the Commonwealth and State energy context in Table 3 of the Department's AR. Key policies include:</p> <ul style="list-style-type: none"> • Australia's Long Term Emissions Reduction Plan (2021) and Nationally Determined Contribution (2022); • Climate Change (Net Zero Future) Act 2023; • Australian Energy Market Operator's 2024 Integrated System Plan (ISP); • Climate Change Policy Framework (2016); • Transmission Infrastructure Strategy (2018); • Electricity Strategy (2019); • Electricity Infrastructure Roadmap (2020); • Net Zero Plan Stage 1: 2020 – 2030 (2020) and Implementation update (2022); • Central West and Orana Regional Plan 2041 (2022). <p>The Commission agrees with the Department and finds that the Project is consistent with these policies and guidelines. The Commission has given consideration to the renewable energy transition as a key issue in section 3.1 of this report.</p>
NSW Wind Energy Framework	<p>The NSW Wind Energy Framework, introduced in December 2016, aims to enhance clarity, consistency, and transparency in the assessment of wind energy projects, in particular on visual and noise impacts. While the Department is now implementing a new Energy Policy Framework (finalised in November 2024) it does not apply to the current project. However, elements of the Wind Energy Visual Technical Supplement 2024 have been considered in assessing the Project's visual impact against the existing Visual Assessment Bulletin 2016.</p>
Statutory context	
State Significant Development	<p>The Application is for the purpose of electricity generating works with a capital investment value of more than \$30 million, which is declared as State significant development under section 20 of Schedule 1 of SEPP Planning Systems.</p>
Consent authority	<p>The Application received more than 50 unique public submissions by way of objection and Warrumbungle Shire Council objects to the Project. In accordance with section 4.5(a) of the EP&A Act and section 2.7 of SEPP Planning Systems, the Commission is the consent authority for the Application.</p>
Objects of the EP&A Act and Ecologically Sustainable Development	<p>The Commission has considered the Objects of the EP&A Act and is satisfied that the Application is consistent with those Objects. The Commission finds that the Project is consistent with ESD principles and would achieve an acceptable balance between environmental, economic and social considerations.</p>

Permissibility	<p>The Site is located within land zoned RU1 Primary Production (RU1 zone) under the <i>Warrumbungle Local Environment Plan 2013</i> (Warrumbungle LEP). Pursuant to the Warrumbungle LEP, electricity generating works are not expressly permitted with or without consent in the RU1 zone and are therefore a prohibited land use. However, electricity works are permissible with consent on any land in a prescribed non-residential zone (including the RU1 zone), under section 2.36 of the <i>State Environmental Planning Policy (Transport and Infrastructure) 2021</i> (SEPP Transport and Infrastructure). Therefore, the Project is permissible with development consent.</p>
Amended Application	<p>A development application can be amended at any time before the application is determined, in accordance with section 37 of the EP&A Regulation. The Applicant sought to amend its application on three occasions, which are set out in section 5.4 of the Department's AR and included:</p> <ul style="list-style-type: none"> • removal of 17 wind turbines and associated access tracks; • removal of three, and relocation of seven, meteorological masts; • an additional substation in the Mount Hope cluster; • removal of overhead transmission line running south from the Girragulang Road and Leadville clusters (to now be delivered by EnergyCo as part of the CWO REZ Transmission project); • amendments to proposed access routes; • revision of the Project boundary associated with the removal of unutilised areas and the inclusion of Moorefield Road (west); and • additional upgrades to local roads (Black Stump Way and Moorefield Road (west)) to facilitate construction and operation of the Project. <p>As the Commission's delegate, the Department agreed to the amendments (AR para 27) on the basis that:</p> <ul style="list-style-type: none"> • the amended applications directly respond to the key issues raised in submissions received by the Department during the exhibition of the original application; • the Project amendments have reduced the impacts of the Project as a whole; • the Applicant assessed the impacts of the amended Project; and • the Department made the additional information available online and sent it to the relevant agencies for comment.
Integrated and Other Approvals	<p>Under section 4.41 of the EP&A Act, several other approvals are integrated into the SSD approval process and are therefore not required to be separately obtained for the Project (AR para 31), with the exception of any approvals required for aquifer interference which is regulated via the <i>Water Management Act 2000</i>. The Commission has considered the Department's recommended conditions of consent relating to integrated and other approvals as part of its deliberation process.</p>
Commonwealth Matters	<p>According to the Department, on 13 July 2020, a delegate of AG DCCEEW determined that the Project was a 'controlled action' under the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act). The Commission notes that following the Commission's determination, the matter would be referred to AG DCCEEW for assessment in accordance with the relevant provisions of the EPBC Act.</p>
Mandatory considerations	
Relevant environmental	<p>Appendix I of the AR identifies relevant EPIs for consideration. The key EPIs (in their present, consolidated form) comprise:</p>

planning instruments (EPIs)	<ul style="list-style-type: none"> • <i>State Environmental Planning Policy (Resilience and Hazards) 2021</i>; • <i>State Environmental Planning Policy (Primary Production) 2021</i>; • <i>State Environmental Planning Policy (Biodiversity and Conservation) 2021</i>; • SEPP Planning Systems; • SEPP Transport and Infrastructure; and • Warrumbungle LEP.
Relevant development control plans (DCPs)	Pursuant to section 2.10 of SEPP Planning Systems, DCPs do not apply to SSD.
Any planning agreement or draft planning agreement	The Commission notes the Applicant's offer to pay over the life of the Project \$1,050 per MW generation capacity installed, per year to Council.
Likely impacts of the development	The likely impacts of the Application have been considered in section 4 of this Statement of Reasons.
Suitability of the site for development	<p>The Commission has considered the suitability of the Site and finds that the Site is suitable for the following reasons:</p> <ul style="list-style-type: none"> • the Site has suitable wind resources; • the Site has access to the regional road network; • the Site will directly access the CWO REZ electricity transmission line project; • the use of the Site as a wind farm is an orderly and economic use and development of land; • adverse impacts on surrounding receivers have been minimised as far as practicable and would be further managed and mitigated by the imposed conditions of consent; • the development of the Site for the purpose of electricity generation will facilitate social and economic benefits for the community and for the State of NSW; • the development of the Site will assist in meeting Australia's and NSW's target of net zero emissions by 2050; and • the Site is capable of being decommissioned and rehabilitated to a safe and non-polluting landform.
The public interest	The Commission has considered the public interest in deciding to grant conditional consent to the Application. In doing so, the Commission has evaluated the likely impacts of the Application and considered the relevant ESD principles.

Appendix D – Community Consultation

Public engagement overview

A summary of the Project timeline and key engagement milestones is provided in the below table.

Appendix D – Table 1: Project and engagement timeline

Project stage	Date	Number of submissions
Application accepted by Department	16 May 2022	N/A
Application exhibited by Department	23 May 2022 – 10 June 2022	105
Application amended	14 November 2023	N/A
Application amended	7 November 2024	N/A
Application amended	30 January 2025	N/A
Application referred to the Commission	19 March 2025	N/A
Commission's Public Meeting	10 April 2025	33 speakers
Written submissions to the Commission	20 March 2025 – 17 April 2025	58

Department's public exhibition of the Project

The Department consulted with Council, government agencies and members of the community during its assessment of the Project. Of the 105 public submissions received by the Department, 94 were objections, 6 were in support and 5 provided comment. Further consideration of these submissions by the Department is provided at section 5.1 of the Department's AR.

Amendments to the Application

While under assessment by the Department, the Applicant provided a Response to Submissions (RtS) report, addressing the issues raised in submissions and advice received from government agencies. The Applicant also amended its application on three occasions. A summary of key amendments is provided below (AR para 57):

- removal of 17 wind turbines and associated access tracks;
- removal of three, and relocation of seven, meteorological masts;
- an additional substation in the Mount Hope cluster;
- removal of overhead transmission line running south from the Girragulang Road and Leadville clusters (to now be delivered by EnergyCo as part of the CWO REZ Transmission project);
- amendments to proposed access routes (removal of two light vehicle access routes and removal of the access route to the Girragulang Road cluster through the Uarbry village and replacement with an alternative access route via the Golden Highway and parallel to the proposed CWO REZ transmission line);
- revision of project boundary associated with the removal of unutilised areas and the inclusion of Moorefield Road (west); and

- additional upgrades to local roads (Black Stump Way and Moorefield Road (west)) to facilitate construction and operation of the project.

The Department published the Applicant's RtS and amendment reports on its website and provided them to government agencies and local councils for comment (AR para 58).

The Commission's public consultation

The Commission's meetings

As part of the determination process, the Commission met with various persons as set out in the table below. All meeting transcripts and site inspection notes were made available on the Commission's website.

Appendix D – Table 2: The Commission's meetings

Meeting	Date	Transcript/notes published
Department	2 April 2025	7 April 2025
Applicant	2 April 2025	7 April 2025
Council	2 April 2025	7 April 2025
Site inspection	9 April 2025	16 April 2025
Department and EnergyCo	16 April 2025	17 April 2025

Site inspection and locality tour

On 9 April 2025 the Commission undertook a site inspection and locality tour. In accordance with the Commission's *Site Inspection and Locality Tour Guidelines* and *Transparency Policy*, the Commission Panel may exercise its discretion to invite community observers to attend a site inspection. In this instance, The Commission Panel chose to invite Council to attend the site inspection as an observer. Council accepted the offer with the Warrumbungle Shire Council Deputy Mayor and a council staff member attending the site inspection. Four of the Applicant's representatives also attended.

Public meeting

The Commission conducted a public meeting on 10 April 2025. The public meeting was held in-person at Coolah Youth & Community Centre and was streamed live on the Commission's website. The Commission heard from the Department, the Applicant, Council, and various community group representatives and individual community members. In total, 33 people presented to the Commission during the public meeting.

Several key matters were raised by the community at the public meeting. Appendix D – Table 3 below provides a snapshot of what the Commission heard from the community in their own words.

Appendix D – Table 3: Snapshot of what the Commission heard from the community

Key issue	Representative quote
Cumulative impacts	"The CWO REZ has 40 plus projects inside or immediately adjacent to it. Warrumbungle Shire has 10 generation projects plus the transmission line project.

Key issue	Representative quote
	<i>The New South Wales Government has announced plans to extend the line to Tooraweenah and Burrendong to facilitate even more generation facilities. The New South Wales Government has yet to complete a strategic level that is whole-of-government cumulative impact assessment (CIA) for the CWO REZ.”</i>
Visual and noise impacts	<i>“Visual impacts of the community are going to be vast. We have this beautiful farmland, rolling hills, Coolah Tops National Park, amazing night skies that are real tourist attractions in these areas. These continually flashing lights of the hundreds of proposed wind park turbines are not part of our plan. We do not want them here. The visual impacts will be appalling in this area.”</i>
Aviation safety	<i>“The hazard of 131 tall turbines on hills surrounding the valley when obscured by smoke or low cloud is an obvious aviation hazard that any layman can understand. When arriving or departing from these airstrips, not just in the circuit area, in poor weather or visibility, the turbines will be an obstacle requiring deliberate action to avoid.”</i>
Emergency services and bushfire risk	<i>“There is just no way around the fact that these developments will add to the workload of all emergency services in the region... The men and women of the VRA are truly incredible. Being in this space means that you are a 100% guaranteed to deal with severe trauma and death. They do this to care for their communities and rarely get the acknowledgement they should. It is totally unacceptable that our amazing volunteers should simply be expected to cope with this with the resources currently available to them.”</i>
Socio-economic impacts	<i>“I’ll just speak briefly on the benefits I see to the community or the wind farms. It’ll bring quite a bit of money to landholders and to the community, something like \$4 million a year. We have a VPA or a community enhancement fund which will bring in around \$820,000 to this community every year. That is a pipe dream for most communities to have that sort of additional money coming into their community. It’ll give us economic resilience to cope with things like drought, heatwaves, bushfires, and all those things that are associated with climate change.” <i>“I would like to reiterate that those who speak to object to this project come to do so from a place of deep care and concern for the place we call home, raise our children, and provides our means to live, the disappointment to see our community fractured and in a desire to mend broken relationships. We seek to protect our community, our landscapes and environment, and preserve our unique rural character for the future.”</i></i>
Traffic and transport	<i>“How will our roads, local road users, and businesses cope with the nearly 200% increase in traffic volume from this project alone? Let alone the cumulative impact from all of the projects in the region.”</i>

Written submissions

The community were offered the opportunity to make written submissions to the Commission from 20 March 2025 - 17 April 2025. The Commission received a total of 58 written submissions. Fifty of these indicated their objection to the Project, four indicated their support, and two provided comment.

Consideration of submissions

Key matters raised by the public and the Commission's consideration of these matters is undertaken in the table below. This is not an exhaustive report of the submissions considered by the Commission, are is reflective and illustrative of key issues that emerge from the submissions.

Appendix D – Table 4: Key matters raised in submissions

Issue	Concerns raised in submissions	Panel considerations	References and links
<p>Cumulative impacts</p> <hr/> <p><i>“We are being completely inundated with renewable projects”</i></p>	<ul style="list-style-type: none"> • Cumulative visual impacts will result from multiple windfarms • There was no cumulative impact assessment done for the CWO REZ, and critical mitigative actions for the affected communities have not been identified • The NSW Government's Cumulative Impact Assessment Guidelines have not been followed for the CWO REZ projects • Cumulative impacts will result increases to traffic and road usage generated by this project and others within the locality • A resident living between two projects notes they will suffer significant visual and noise impacts 	<p>The Commission cannot forecast the cumulative impacts of all future development within the CWO REZ. There are many factors which contribute to whether future development proposals will proceed.</p> <p>The Commission has considered the impacts of this Project, together with existing and approved projects in the CWO REZ. With the implementation of the conditions of consent, the cumulative impacts of this Project are not so great that they warrant refusal of the Project.</p>	<p>See section 3.7 of this Statement of Reasons</p>
<p>Visual impact</p>	<ul style="list-style-type: none"> • Visual impacts of the wind turbines will alter the landscape, dominate the skyline and create an industrial feel to what is currently a rural and scenic area. 	<p>The Project, like others occurring throughout the CWO REZ, would result in a broad change to the local landscape character and its visual amenity.</p>	<p>See sections 3.2 and 3.7.1 of this Statement of Reasons</p>

Issue	Concerns raised in submissions	Panel considerations	References and links
<p><i>"[Turbines will] fundamentally change the broader landscape characteristics of the Coolah area in general and Turee and Talbragar valleys"</i></p>	<ul style="list-style-type: none"> Some submissions expressed the view that the visual renderings prepared by the Applicant were inadequate. One submission noted that visual screening should be provided to residents out to 12kms away. 	<p>Visual impacts to individual residences will be reduced by the requirements within the conditions of consent. Further requirements for turbine reductions would place an unreasonable burden on the development that is not justified by its potential impact, nor for a development of this scale and nature.</p> <p>The visual change that will result after the conditions of consent are complied with are an inevitable outcome of a Project of this nature. The Commission finds that these do not outweigh the public interest in delivering on the Government's policy to provide a secure renewable energy resource for the State.</p>	<p>See conditions B1 – B4</p>
<p>Aerial impacts</p> <hr/> <p><i>"...winged aircraft would be rendered useless due to the fact turbines make air space unsafe for all flying activities. Including aerial fire fighting."</i></p>	<ul style="list-style-type: none"> Wind turbines impact the ability to fly aeroplanes in poor weather or low visibility conditions is impacted by wind turbines The presence of wind turbines impact the ability to carry out aerial agricultural activities, including aerial fertilizing, aerial spraying, aerial cropping. 	<p>Conditions of consent placed on this project require the Applicant to consult with the Aerial Application Association of Australia and the Tongy and Turee aerodromes. This includes the need to establish procedures to ensure the continued ability to undertake aerial agriculture and aerial firefighting operations. The Applicant is also required to carry out CASA's recommendations relating to aviation hazard lighting.</p>	<p>See section 3.8 of this Statement of Reasons</p> <p>See conditions B45 – B49</p>
<p>Traffic and transport</p>	<ul style="list-style-type: none"> Increased heavy vehicle use will damage the roads Additional traffic on the roads will create dangerous driving conditions The construction of roads will impact water run-off 	<p>The conditions of consent require the Applicant to carry out local road upgrades. The Applicant also must prepare a transport strategy and a traffic management plan which will, amongst other things, detail transport routes that vehicles travelling to the site will be required to take.</p>	<p>See sections 3.3 and 3.7.2 of this Statement of Reasons</p> <p>See conditions B36 – B44</p>

Issue	Concerns raised in submissions	Panel considerations	References and links
		<p>The Commission is satisfied that any residual traffic and transport impacts would be primarily limited in time (to the construction period) and capable of being minimised and managed.</p>	
Impacts to agricultural industry	<ul style="list-style-type: none"> • The wind farm will lead to a reduction in prime farming land • One host landholder noted that they have previously suffered bush fire and drought and hope that the wind turbines will give them the chance to provide an ongoing future for their family 	<p>Wind farming is a passive land use that can co-exist with grazing activities, which can continue throughout the Project's lifespan.</p> <p>Condition B67 has been imposed requiring the rehabilitation of the Site (including where quarrying has taken place) so that it is available for agricultural production following decommissioning of the Project.</p>	See section 3.6 of this Statement of Reasons
Water	<ul style="list-style-type: none"> • Impacts to surface and ground water during and post construction • The extraction of water would have detrimental effects on the aquifer 	<p>The Commission has included conditions of consent that require the Applicant to prepare and follow a Soil and Water Management Plan to manage impacts on surface water.</p> <p>The Applicant must obtain necessary aquifer interference approvals in accordance with the <i>Water Management Act 2000</i> and also prepare a water sourcing plan in consultation with the Water Group.</p>	<p>See section 3.8 of this Statement of Reasons</p> <p>See conditions B22 – B26</p>
Biodiversity	<ul style="list-style-type: none"> • The project would have a negative impact to birds and bats, including wedge tail eagles • General flora and fauna impacts 	<p>The Commission has reduced significant impacts to these species by requiring the turbines to be constructed away from microbat habitat. The Applicant is also required to prepare a Bird and Bat Adaptive Management Plan, which includes adjustments in turbine operations to reduce collisions.</p>	<p>See section 3.4 of this Statement of Reasons</p> <p>See conditions B27 – B33</p>

Issue	Concerns raised in submissions	Panel considerations	References and links
		<p>The Applicant is required to retire biodiversity credits in accordance the BOM, restore and enhance 282 ha of Box Gum Woodland within a conservation agreement in perpetuity and prepare a comprehensive Biodiversity Management Plan which must include details on how the Applicant will minimise, mitigate and where possible rehabilitate impacts to biodiversity.</p>	
Emergency planning	<ul style="list-style-type: none"> • Local emergency organisations are voluntary and already struggle for staff. With the influx of people due to construction, they will need more funding and more people, and this will fall back to the local community • Health services in the area are struggling to meet current demand – it will be difficult to cope with the increased demand during construction and ongoing operation 	<p>As part of the accommodation camp, the Applicant is required to include measures to provide the camp with health and medical services. The Applicant must also consult with the Western NSW Local Health District for the preparation of the Accommodation Camp Management Plan. The Plan must also incorporate strategies to encourage the accommodation camp's population integrating with the local community, such as (but not limited to) sport and recreation clubs, community events/activities and the like.</p>	See conditions B59 and B61
Socio-economic	<ul style="list-style-type: none"> • Money provided to land holders and the community (e.g. via a Voluntary Planning Agreement / community enhancement fund) will give the community economic resistance to cope with droughts, bushfires, and extreme weather events • Is it fair for this project to be assessed prior to a VPA being negotiated and agreed to by the Warrumbungle Shire Council? There has not been any community consultation around the VPA terms • The community often ends up bearing the brunt of the costs associated with renewable energy development 	<p>The Commission finds that the Project's positive impacts, including its positive social and economic impacts, outweigh any adverse impacts which may arise.</p> <p>The Commission has addressed concerns related to property values at <i>Table 2 – Commission's findings on other issues</i>. It finds that the assessment of property value was not a relevant consideration for the Project.</p> <p>It is a requirement pursuant to the EP&A Act that the VPA be publicly notified and accordingly, the community will be able to have their say on the VPA.</p>	See section 3.5 of this Statement of Reasons

Issue	Concerns raised in submissions	Panel considerations	References and links
	<ul style="list-style-type: none"> • Property values are declining for non-associated properties. Land owners should be compensated for potential decline in the value of their property • Declining trade in agriculture and a concurrent decline in population has had a flow on impact to service in the area. The project would stimulate economic activity in the region and provide jobs, encouraging younger people to stay in the region • The project will create employment opportunities and boost the local economy 		
Sense of place and community	<ul style="list-style-type: none"> • Loss of community cohesion, loss of community character, established community division, impacts to community health and wellbeing • The Warrambungle region and surrounding farms are a beautiful environment, and the wind turbines will change this to an industrial zone • Once the first wind farm is established, this will make it easier to establish the next one as the character of the area will have changed 	<p>Social, economic and visual change will take place within the locality, due to the legislated CWO REZ. The potential impacts of this particular Project will be managed to the fullest extent possible through appropriate mitigation, including conditions of consent which address matters such as economic impacts and visual amenity.</p> <p>Approval of the Project does not establish a legal precedent for further proposals being approved in the area, as each future development must be assessed on its own individual and application specific merits.</p>	Considered throughout this Statement of Reasons
Fire	<ul style="list-style-type: none"> • Concerns were raised that the turbines will impact emergency service aerial operations, including aerial fire suppression • A resident stated that 60% of their property was burnt in the Sir Ivan Bushfire in 2017 and they were not supported by the RFS of aerial support. They believe that road construction and upgrades for the windfarm would mean roads around their property to enable better firefighting access 	<p>Based on advice from RFS and FRNSW, the Commission are satisfied that bushfire risks can be suitably controlled through the implementation of standard fire management plans and procedures.</p> <p>Condition B46 require consultation with the NSW RFS on aerial firefighting activities and condition B52 requires the Applicant to prepare a comprehensive Fire Safety Study.</p>	See section 3.8 of this Statement of Reasons

Issue	Concerns raised in submissions	Panel considerations	References and links
Construction impacts	<ul style="list-style-type: none"> Concerns were raised relating to lack of services and facilities to support workers (e.g. accommodation, food, health services) 	<p>The workforce accommodation camp and associated plans and strategies which must be prepared and implemented by the Applicant will mitigate the potential impacts to services available within the locality. Rather, the Commission finds the Project will contribute to positive economic stimulation within the area.</p>	<p>See section 3.5 of this Statement of Reasons</p>
Noise and vibration	<ul style="list-style-type: none"> Ongoing noise impacts from the wind turbines will affect nearby people and animals, causing distress and impacts to mental health “Constant humming and vibration can affect sleep, stress levels, and overall well-being of nearby residents” 	<p>The Australian Medical Association’s view, on which the Commission has relied, is that <i>“infrasound and low frequency sound generated by wind farms are well below the level that is harmful to humans.”</i></p>	<p>See section 3.8 of this Statement of Reasons</p>
Contamination	<ul style="list-style-type: none"> Pollution of the surrounding lands with microplastics and Bisphenol A (BPA) due to degradation of wind turbine blades 	<p>Based on the available evidence, including from the Australian Medical Association, there are unlikely to be BPA contamination risks to human health and agricultural production from wind turbine blades.</p>	<p>See section 3.8 of this Statement of Reasons</p>
Other	<ul style="list-style-type: none"> Concern that the wind turbines will impact farmers abilities to meet agricultural requirements Who will remove the wind turbines at end of life – who will ensure this is done correctly Who will ensure the Applicant complies with any requirements 	<p>Wind farming is a passive land use that can co-exist with grazing activities which can continue throughout the Project’s lifespan.</p> <p>The Project would not compromise or significantly diminish the availability of land for primary production within the Site or surrounding LGAs.</p> <p>The Applicant is legally required to rehabilitate the Site (including where quarrying has taken place) so that it is available for continued agricultural production following decommissioning.</p>	<p>N/A</p>

Issue	Concerns raised in submissions	Panel considerations	References and links
		The Commission notes that compliance functions are primarily the responsibility of the Department which has a dedicated development compliance team.	



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Appendix E – Department’s Assessment Report

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