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Independent Planning Commission

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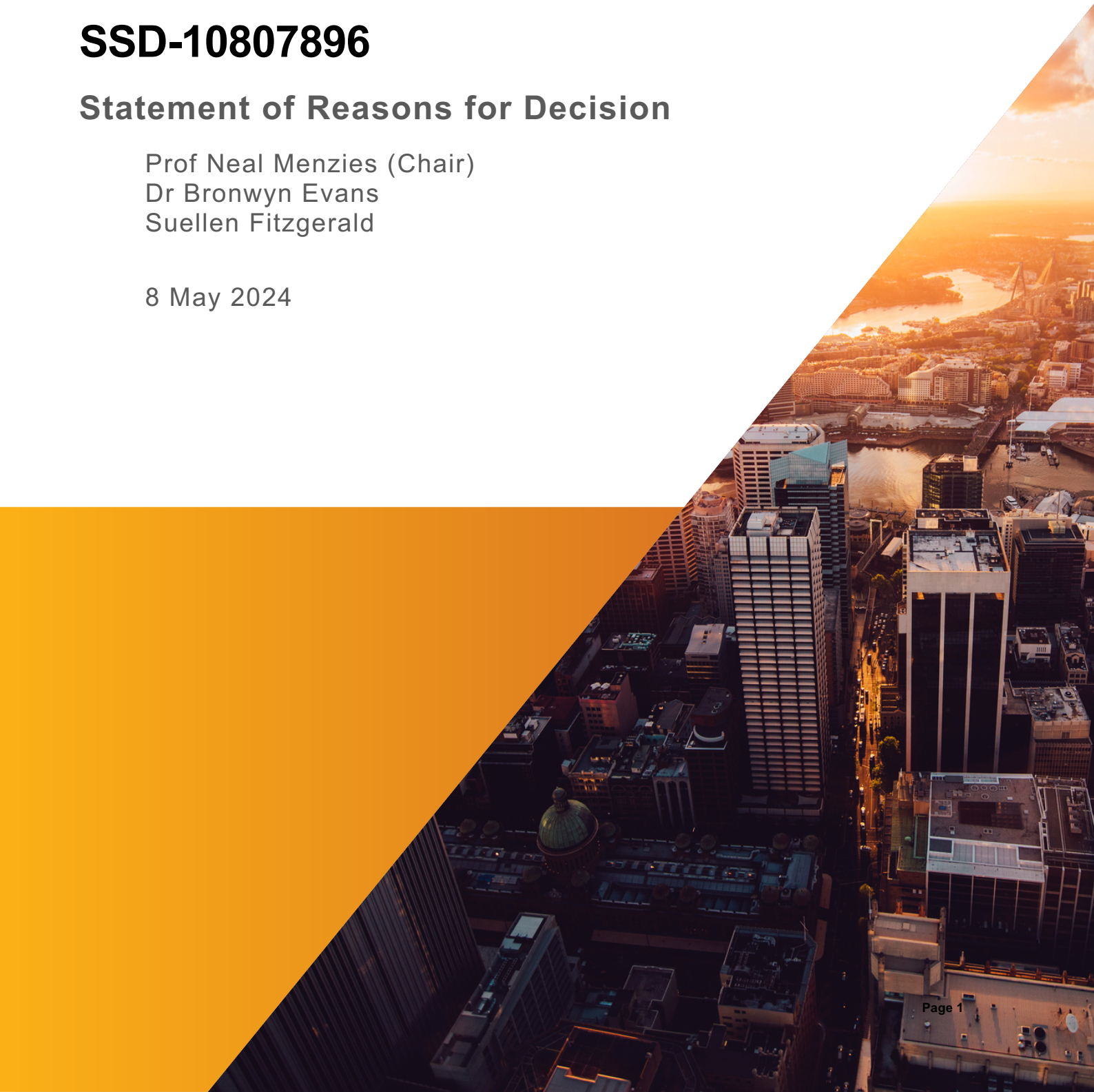
# Thunderbolt Wind Farm

## SSD-10807896

### Statement of Reasons for Decision

Prof Neal Menzies (Chair)  
Dr Bronwyn Evans  
Suellen Fitzgerald

8 May 2024



## Executive Summary

Neoen Australia Pty Ltd (Applicant) has sought consent for the development of a new 192-megawatt (MW) wind farm for the purpose of generating renewable energy, known as Thunderbolt Wind Farm (SSD-10807896) (the Project). The site (Site) is located approximately 47 kilometres north-east of Tamworth near Kentucky, Uralla and Bendemeer in the New England Renewable Energy Zone (REZ).

The Project represents an investment of approximately \$373 million and is proposed to support approximately 285 construction jobs and 9 operational jobs.

The NSW Independent Planning Commission (the Commission) is the consent authority for the Project because more than 50 public objections were received by the Department of Planning, Housing and Infrastructure (the Department) and Uralla Shire Council objected to the Project.

Commissioners Neal Menzies (Chair), Bronwyn Evans and Suellen Fitzgerald were appointed to constitute the Commission Panel in determining the application. As part of its determination process, the Commission met with representatives of the Applicant, the Department, Uralla Shire Council and Tamworth Regional Council. The Commission also undertook a site inspection and a locality tour.

The Commission conducted a Public Meeting on 14 March 2024 that was live streamed. The Commission also received 99 written submissions on the Application.

Key issues that are the subject of findings in this Statement of Reasons for Decision relate to biodiversity impacts; amenity impacts, including visual, noise and vibration impacts; traffic and transport; and the energy transition to renewables.

After careful consideration, the Commission has determined that consent should be granted to the Application, subject to conditions. The Commission finds that the Site is suitable for renewable energy development given its location within the New England REZ, proximity to existing electricity transmission networks, topography, wind resources, access to the regional road network and avoidance of major environmental constraints.

The Commission finds that the Project is consistent with both the Australian and NSW Government's strategic planning and energy frameworks, including the Australian Energy Market Operator's *2022 Integrated System Plan*, the *NSW Climate Change Policy Framework 2016*, and the *NSW Electricity Infrastructure Roadmap*. With conditions imposed, the Project would deliver up to 192 MW of renewable energy and would contribute to the transition to lower emissions energy generation.

The Commission has imposed conditions which seek to prevent, minimise and/or offset adverse impacts of the Project and to ensure appropriate ongoing monitoring and management of any residual impacts. The Applicant will be required to prepare and implement comprehensive management plans and strategies, consult with the community, and report on mitigation outcomes on an ongoing basis.

The conditions strengthen the environmental and social management of the development and respond to concerns raised by the community and stakeholders during the Commission's consideration of the Project. The imposed conditions include, but are not limited to, requirements for the Applicant to:

- remain within the approved disturbance area and envelope, including within the approved 260 metre height limit;
- implement visual impact mitigation measures (such as landscaping and vegetation screening) on the land of any non-associated residence within 5.1km of any wind turbine from the commencement of construction;
- prepare a Traffic Management Plan prior to commencing road upgrade work, which must include details of the transport route to be used for all development-related traffic, details of the measures to be implemented to minimise traffic impacts during construction, upgrading or decommissioning works, and a driver code of conduct;

- develop a Biodiversity Management Plan, including measures taken to minimise impacts to threatened species (including Bell's Turtle) and a detailed program to monitor and report on the effectiveness of implemented measures;
- an Accommodation and Employment Strategy, including measures to ensure there is sufficient accommodation for the workforce associated with the development in consideration of the cumulative impacts associated with other SSD projects in the area, and investigation of options for prioritising the employment of local workers for the construction and operation of the development;
- establish a community consultative committee to ensure communication between the Applicant and the community occurs throughout all phases of the Project;
- decommission and undertake progressive rehabilitation of the Site in accordance with the performance objectives set by the Commission;
- undertake water turbidity monitoring of Carlisles Gully Catchment to the extent necessary to monitor any material negative impact of the development on local waterways; and
- develop an Emergency Plan, including measures for bushfire emergency management planning prior to commencing construction and in consultation with RFS.

The Commission has considered the material, including responses to requests for information received from the Applicant and the Department, and has taken into account the views of the community. The Commission finds that the Project is consistent with applicable strategic planning and energy policies and frameworks and relevant statutory considerations.

The Commission is satisfied that the Project is in accordance with the Objects of the EP&A Act and is in the public interest.

The Commission's reasons for granting development consent to the Application subject to conditions are set out in this Statement of Reasons for Decision.

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## Defined Terms

<b>ABBREVIATION</b>	<b>DEFINITION</b>
<b>Additional Material</b>	Material provided by the Department as requested by the Commission, dated 3 April 2024
<b>AG DCCEEW</b>	Australian Government Department of Climate Change, Energy, the Environment and Water
<b>Applicant</b>	Neoen Australia Pty Ltd
<b>Application</b>	Thunderbolt Wind Farm Project (SSD-10807896)
<b>AR para</b>	Paragraph of the Department's Assessment Report
<b>BC Act</b>	<i>Biodiversity Conservation Act 2016</i>
<b>BCD</b>	Biodiversity Conservation Division
<b>CASA</b>	Civil Aviation Safety Authority
<b>CIV</b>	Capital Investment Value
<b>Commission</b>	Independent Planning Commission of NSW
<b>Council</b>	Uralla Shire Council and Tamworth Regional Council
<b>DCCEEW</b>	NSW Department of Climate Change, Energy, the Environment and Water
<b>Department</b>	NSW Department of Planning, Housing and Infrastructure
<b>Department's AR</b>	Department's Assessment Report, dated 19 February 2024
<b>EII Act</b>	<i>Electricity Infrastructure Investment Act 2020</i>
<b>EIS</b>	Environmental Impact Statement
<b>EPA</b>	NSW Environment Protection Authority
<b>EP&amp;A Act</b>	<i>Environmental Planning and Assessment Act 1979</i>
<b>EPBC Act</b>	<i>Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth)</i>
<b>EPI</b>	Environmental Planning Instrument
<b>ESD</b>	Ecologically Sustainable Development
<b>FRNSW</b>	Fire and Rescue NSW
<b>ICNG</b>	Interim Construction Noise Guideline
<b>LGA</b>	Local Government Area
<b>Mandatory Considerations</b>	Relevant mandatory considerations, as provided in s 4.15(1) of the EP&A Act
<b>Material</b>	The material set out in section 3.1 of this report
<b>Minister</b>	NSW Minister for Planning and Public Spaces
<b>MNES</b>	Matters of National Environmental Significance
<b>NEM</b>	National Electricity Market
<b>NPfi</b>	Noise Policy for Industry
<b>PCTs</b>	Plant Community Types
<b>Planning Systems SEPP</b>	State Environmental Planning Policy (Planning Systems) 2021
<b>Project</b>	Thunderbolt Wind Farm
<b>Regulations</b>	Environmental Planning and Assessment Regulation 2001
<b>Resources SEPP</b>	State Environmental Planning Policy (Resources and Energy) 2021
<b>REZ</b>	Renewable Energy Zone
<b>RFS</b>	NSW Rural Fire Service
<b>RtS</b>	Response to Submissions
<b>SEARs</b>	Secretary's Environmental Assessment Requirements
<b>Site</b>	The site as described in section 2.1 of this report
<b>SSD</b>	State significant development
<b>VPA</b>	Voluntary Planning Agreement

# 1. Introduction

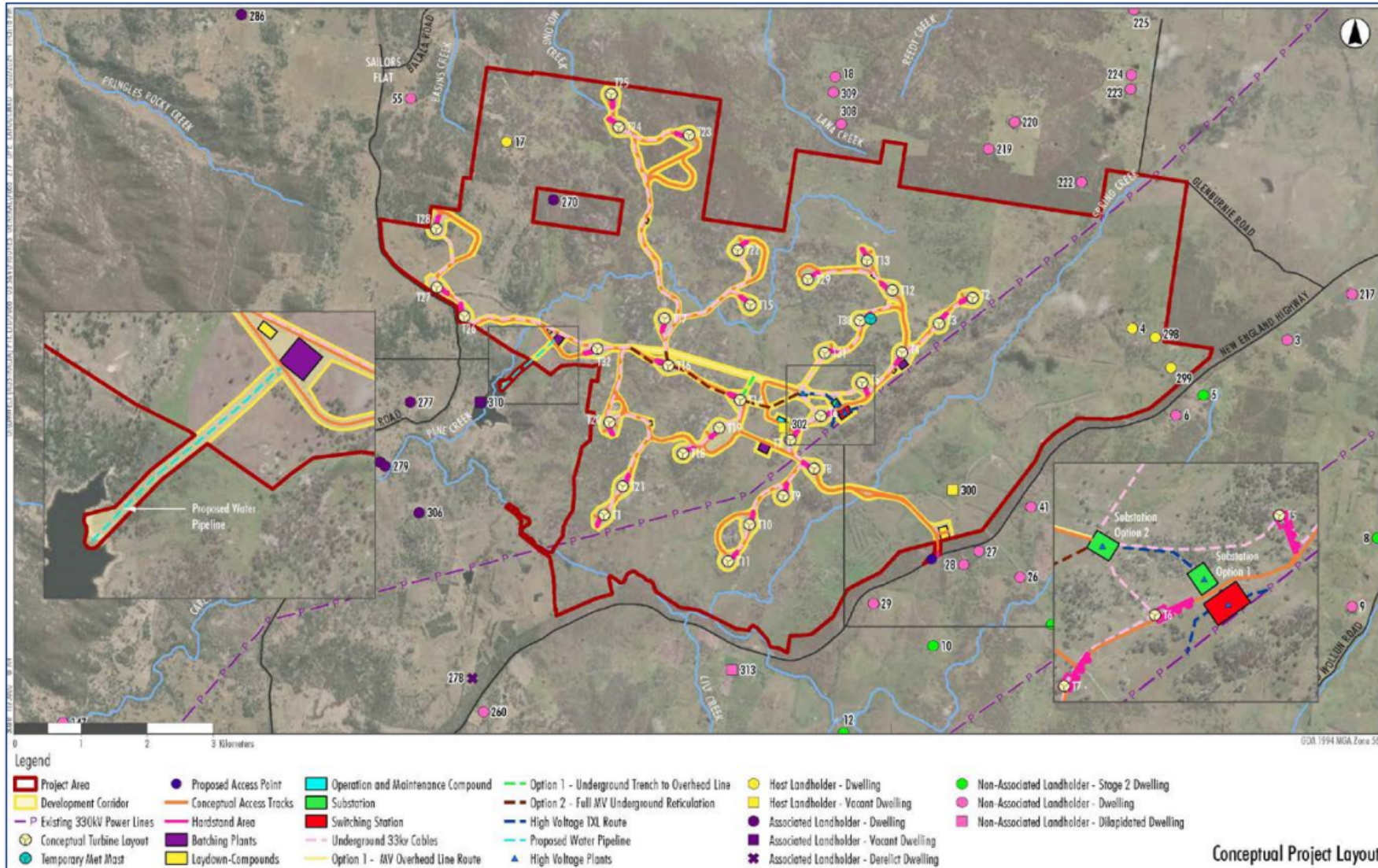
1. On 19 February 2024, the NSW Department of Planning, Housing and Infrastructure (**Department**) referred the State significant development (**SSD**) application SSD-10807896 (**Application**) from Neoen Australia Pty Ltd (**Applicant**) to the NSW Independent Planning Commission (**Commission**) for determination.
2. The Applicant seeks consent under section 4.38 of the *Environmental Planning and Assessment Act 1979* (**EP&A Act**) for the Thunderbolt Wind Farm (the **Project**) located in Tamworth Regional Council local government area (**LGA**) and Uralla Shire Council LGA.
3. The Application constitutes SSD under section 4.36 of the EP&A Act and under section 20 of Schedule 1 to the *State Environmental Planning Policy (Planning Systems) 2021* (**Planning Systems SEPP**). The development meets the criteria for SSD because it is for the purpose of electricity generating works with a capital investment value (**CIV**) of more than \$30 million (\$373 million).
4. In accordance with section 4.5(a) of the EP&A Act and section 2.7 of the Planning Systems SEPP, the Commission is the consent authority as more than 50 unique public submissions have been made by way of objection, and Uralla Shire Council objected to the Project.
5. Professor Neal Menzies, as the nominee of the Chair of the Commission, appointed Professor Menzies (as Chair), Dr Bronwyn Evans and Suellen Fitzgerald to constitute the Commission for the purpose of exercising its functions with respect to the Application.
6. The Department provided its Assessment Report (**AR**) and recommended conditions of consent to the Commission on 19 February 2024. The Department's AR concluded that the site is suitable for a wind farm, the Project would result in benefits to the local community and State of NSW and that it is in the public interest and is approvable subject to its recommended conditions of consent.

## 2. The Application

### 2.1 Site and Locality

7. The site is defined as the land within the Project Area illustrated in Figure 1 below (**Site**) and is located near Kentucky, Wollun and Bendemeer which have populations of 179, 44 and 486 respectively. The Department's AR paragraph (**AR para**) 5 states that the area surrounding the Site is sparsely populated by neighbours with large land holdings, with 16 non-associated residences located within 3.45km of a proposed turbine location, with the closest inhabited dwelling being 2.1km from a turbine.
8. According to the Department, the Site has an undulating topography, with hills, ridgelines and intervening valleys, including some areas of steep slopes (AR para 10). Land within the Site is mainly cleared agricultural land used for sheep and cattle grazing, with native vegetation generally located on the outskirts of the Site (AR para 11).
9. The Site is located on land zoned RU1 Primary Production under the *Tamworth Regional LEP 2010* (**TLEP 2010**) and includes small parcels of land zoned RU2 Rural Landscape under the *Uralla LEP 2012* (**ULEP 2012**).

Figure 1 - Project layout (Source: Department's AR)



## 2.2 The Project

10. The Applicant is seeking approval for the development of a 192-megawatt (**MW**) wind farm in the New England Renewable Energy Zone (**REZ**). The Project would comprise up to 32 wind turbines with a blade tip height of up to 260 metres, and associated ancillary infrastructure, including an onsite substation, and switching station. The Project would connect to the existing 330 kilovolt (kV) transmission network that traverses the Site. Road upgrades are proposed along the Project access route. The construction timeframe for the Project would be approximately 18 to 24 months.

*Table 1 – Key components of the Project (Source: Department's AR)*

<b>Aspect</b>	<b>Description</b>
<b>Project summary</b>	Up to 32 wind turbines and associated infrastructure
<b>Project area</b>	<ul style="list-style-type: none"> <li>• Project Site: 5,918 ha;</li> <li>• Development corridor: 568 ha; and</li> <li>• Disturbance footprint: 215 ha.</li> </ul>
<b>Wind turbine dimensions</b>	<ul style="list-style-type: none"> <li>• Maximum tip height of 260m;</li> <li>• Turbine hub height of 170 m; and</li> <li>• Maximum blade length of 90m (split blade).</li> </ul>
<b>Ancillary infrastructure</b>	<ul style="list-style-type: none"> <li>• Connection to existing 330 kV transmission line within the Site;</li> <li>• A substation and switching station;</li> <li>• Operation and maintenance facility, utility services and signage;</li> <li>• Temporary facilities, including construction compound, mobile concrete batching plants, materials storages, and laydown areas;</li> <li>• Up to 50 km of new internal access tracks; and</li> <li>• Up to six permanent (up to 170 m in height) and two temporary meteorological masts (80 and 110 m).</li> </ul>
<b>Off-site road works</b>	<ul style="list-style-type: none"> <li>• Upgrades to intersections and surrounding road network; and</li> <li>• Waterway crossings within the project area.</li> </ul>
<b>Construction</b>	<ul style="list-style-type: none"> <li>• 18 to 24 months construction period; and</li> <li>• Construction hours to be limited to Monday to Friday 7am to 6pm, and Saturday 8am to 1pm.</li> </ul>
<b>Operation</b>	Approximately 25 – 30 years. However, the Project may involve infrastructure upgrades that could extend its operation.
<b>Access routes</b>	Access from Port of Newcastle via the New England Highway and local roads via one of two proposed routes to a new Site access from the New England Highway.
<b>Decommissioning and rehabilitation</b>	The Project includes decommissioning at the end of the Project life, which would involve removing all above ground infrastructure.
<b>Employment</b>	Up to 285 construction jobs and 9 operational jobs



<b>CIV</b>	\$373 million
<b>Voluntary planning agreement (VPA)</b>	The Applicant has committed to pay over the life of the Project \$2,242,200 to Uralla Shire Council and \$3,363,300 to Tamworth Regional Council.

## 3. The Commission's Consideration

### 3.1 Material Considered by the Commission

11. In this determination, the Commission has considered the following material (**Material**):
- the Planning Secretary's Environmental Assessment Requirements (**SEARs**) and Supplementary SEARs issued by the Department, dated 16 December 2020 and 11 November 2021 respectively;
  - the following information provided by the Applicant:
    - Environmental Impact Statement (**EIS**), dated 3 March 2022;
    - Amendment Report, dated 17 August 2023;
    - Response to Submissions (**RtS**), dated 22 August 2023;
  - all public submissions on the EIS made to the Department during public exhibition;
  - all Government Agency advice to the Department;
  - the Department's AR, dated 19 February 2024;
  - the Department's recommended conditions of consent, dated 19 February 2024;
  - comments and presentation material at meetings with the Department, Applicant, Uralla Shire Council and Tamworth Regional Council, as referenced in section 4 below;
  - the Applicant's response to the Commission, dated 13 March 2024;
  - all written comments made to the Commission and material presented at the Public Meeting;
  - all written comments received by the Commission up until 5pm, 25 March 2024;
  - the Department's response to the Commission (**Additional Material**), dated 3 April 2024;
  - all written comments on the Additional Material received by the Commission up until 5pm, 12 April 2024; and
  - the Department's comments (dated 18 April 2024 and 2 May 2024) on the feasibility and workability of proposed conditions.

### 3.2 Strategic Context

12. The Commission has considered the strategic planning policies and guidelines relevant to the Site and the Project. The Commission finds that the Project is consistent with both the Australian and NSW Government's strategic planning frameworks (set out in section 3.2.1) as, with conditions imposed, it would deliver up to 192 MW of renewable energy and assist in the transition to lower emissions energy generation.
13. The Project would also generate benefits to the local and regional community, including up to 285 construction and 9 operational jobs, powering approximately 99,000 homes, and flow-on benefits to the local and regional economies through expenditure and the procurement of goods and services. The Applicant has also made offers to both Tamworth Regional and Uralla Shire Councils for a VPA (refer to section 5.5.5 of the report) which would deliver broader community benefits for the life of the Project.

### 3.2.1 Energy Context

#### *Australia's Long-Term Energy Emissions Reduction Plan 2021*

14. 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" (page 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" (pages 45 and 52).

#### *Annual Climate Change Statement 2022*

15. According to the Australian Government's *Annual Climate Change Statement 2022*, "ensuring access to secure, reliable and affordable renewable energy is critical to meeting net zero targets" (page 6). The Australian Government has committed to a "national renewable energy target of 82% by 2030", noting that this target will "help the Government to achieve the legislated emissions reduction target of 43% by 2030 and set Australia on the path to net zero by 2050" (page 32).

#### *Australian Energy Market Operator's 2022 Integrated System Plan*

16. The Australian Energy Market Operator's *2022 Integrated System Plan (ISP)* is a comprehensive road map for the National Electricity Market (**NEM**). The ISP provides a "robust whole of system plan" for "supplying affordable and reliable electricity to homes and businesses in the eastern and south-eastern states, while supporting Australia's net zero ambitions" (page 3). The ISP states that significant investment in the NEM is needed to meet electricity demand and, without coal, a nine-fold increase in utility scale variable renewable energy capacity is required. The ISP states that "the transformation of the NEM will deliver low-cost renewable electricity with reliability and security, help meet regional and national climate targets, and contribute significantly to regional jobs and economic growth" (page 8).

#### *NSW Climate Change Policy Framework*

17. The *NSW Climate Change Policy Framework 2016 (CCPF)* aims to "maximise the economic, social and environmental wellbeing of NSW in the context of a changing climate and current and emerging international and national policy settings and actions to address climate change" (page 1). The CCPF describes the NSW Government's objective to achieve net zero emissions by 2050 (page 2).

#### *Net Zero Plan Stage 1: 2020-2030*

18. The NSW Government's *Net Zero Plan Stage 1: 2020-2030*, updated in September 2021 with the *Net Zero Plan Stage 1: 2020-2030 Implementation Plan*, states that based on the new initiatives it sets out, "emissions in New South Wales are expected to reduce by 35.8 megatonnes by 2030", which means that "the State's annual emissions are forecast to reduce by 35% on 2005 levels" (page 13).

### *NSW Electricity Infrastructure Roadmap*

19. In November 2020, the NSW Government released the *NSW Electricity Infrastructure Roadmap (the Roadmap)*, which is NSW's 20-year plan to transform the electricity system by coordinating investment in transmission, generation, storage and upgrading infrastructure as NSW's ageing coal-fired power plants are retired. The Roadmap is enabled by the *Electricity Infrastructure Investment Act 2020 (EII Act)*.

### **3.2.2 NSW Wind Energy Framework**

20. The *NSW Wind Energy Framework (the Framework)* was originally released by the NSW Government in December 2016 to provide "greater clarity, consistency and transparency for industry and the community regarding assessment and decision-making on wind energy projects" in NSW (AR para 14). The key documents comprising the Framework include the *Wind Energy Guideline*, the *Visual Assessment Bulletin* and the *Noise Assessment Bulletin*. The Department states that "the Framework provides a merit-based approach to the assessment of wind energy projects, which is focused on the issues unique to wind energy, particularly visual and noise impacts" (AR para 19).
21. The Department is currently implementing a new *Energy Policy Framework*, including a new *Wind Energy Guideline*. The new Framework is currently in draft form publicly exhibited from 14 November 2023 to 29 January 2024 and will not be finalised until later in 2024. Accordingly, the new draft Framework, including the draft Guideline, does not apply to the assessment of this Project (AR para 21).

### **3.2.3 Regional and Local Plans**

22. In determining the Application, the Commission has also considered the following regional and local plans:
- New England North West Regional Plan 2041;
  - Tamworth Regional Blueprint 100;
  - Tamworth Local Strategic Planning Statement 2020;
  - Uralla Community Strategic Plan 2022-2031;
  - Uralla Local Strategic Planning Statement 2020.
23. The Commission considers that the Project is in accordance with the above regional and local strategies, particularly the New England North West Regional Plan 2041, which identifies the New England Renewable Energy Zone as a driver of renewable energy generation, regional investment and job creation, and community benefit.

## **3.3 Statutory Context**

### **3.3.1 State Significant Development**

24. The Application is SSD under section 4.36 of the EP&A Act and section 20 of Schedule 1 of the Planning Systems SEPP. The Commission is the consent authority for the reasons set out in paragraph 4 above.

### 3.3.2 Amended Application

25. With the agreement of the consent authority (or its delegate), a development application can be amended at any time before the application is determined. Following consideration of submissions made to the Department on public exhibition of the Project, the Applicant amended the Application to include an above-ground pipeline associated with water supply during the construction phase (AR para 24).

### 3.3.3 Permissibility

26. The Site is zoned as RU1 Primary Production under TLEP 2010. Electricity generating works are permitted with consent in the RU1 zone. The Site is also partly zoned RU2 Rural Landscape under the ULEP 2012, in which electricity generating works are explicitly permitted with consent.

### 3.3.4 Commonwealth Matters

27. According to the Department, on 28 October 2021, a delegate of the Australian Government Department of Climate Change, Energy, the Environment and Water (**AG DCCEEW**) determined that the Project was a 'controlled action' under the *Environment Protection and Biodiversity Conservation Act 1999* (**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.

### 3.3.5 Integrated and other NSW Approvals

28. Under section 4.41 of the EP&A Act, several other approvals are integrated into the SSD approval process, and therefore are not required to be separately obtained for the Project (AR para 31). The Commission has considered the Department's recommended conditions of consent relating to integrated and other approvals as part of its deliberation process.

### 3.3.6 Renewable Energy Zone

29. The NSW Government has declared five 'renewable energy zones' (**REZs**) across the State to help expand transmission and generation capabilities in strategic areas. This is to support development in appropriate areas that are close to existing transmission and distribution infrastructure.
30. The Project is located in the geographical area specified as the New England REZ, which is declared under section 23 of the EII Act. The New England REZ is "*an area identified as strategically advantageous with strong renewable energy resource potential, proximity to the existing electricity network, and consideration of potential interactions with existing land uses, including agricultural lands and biodiversity conservation*" (AR para 6).

### 3.4 Mandatory Considerations

31. In determining this Application, the Commission is required by section 4.15(1) of the EP&A Act to take into consideration such of the listed matters as are of relevance to the development the subject of the Application (**Mandatory Considerations**). The mandatory considerations are not an exhaustive statement of the matters the Commission is permitted to consider in determining the Application. To the extent that any of the Material does not fall within the mandatory considerations, the Commission has considered that Material where it is permitted to do so, having regard to the subject matter, scope and purpose of the EP&A Act.

Table 2 – Mandatory Considerations

Mandatory Considerations	Commission's Comments
Relevant EPIs	<p>Appendix H of the Department's AR identifies relevant EPIs for consideration. The key EPIs (in their present, consolidated form) include:</p> <ul style="list-style-type: none"> <li>• Planning Systems SEPP;</li> <li>• State Environmental Planning Policy (Resources and Energy) 2021 (<b>SEPP Resources and Energy</b>);</li> <li>• State Environmental Planning Policy (Transport and Infrastructure) 2021 (<b>SEPP Transport and Infrastructure</b>);</li> <li>• State Environmental Planning Policy (Resilience and Hazards) 2021 (<b>SEPP Resilience and Hazards</b>);</li> <li>• State Environmental Planning Policy (Primary Production and Rural Development) 2019 (<b>SEPP Primary Production and Rural Development</b>);</li> <li>• State Environmental Planning Policy (Koala Habitat Protection) 2021 (<b>Koala SEPP</b>);</li> <li>• State Environmental Planning Policy (Biodiversity and Conservation) 2021 (<b>SEPP Biodiversity and Conservation</b>);</li> <li>• Tamworth Regional LEP 2010; and</li> <li>• Uralla LEP 2012.</li> </ul> <p>The Commission agrees with the Department's assessment of EPIs set out in Appendix H of the AR. The Commission therefore adopts the Department's assessment.</p>
Relevant DCPs	<p>Section 2.10 of the Planning Systems SEPP states that development control plans do not apply to SSD. The Commission does not consider any development control plans to be relevant to the determination of the Application.</p>
Planning agreement	<p>The Commission notes the Applicant's offer to pay over the life of the Project \$2,242,200 to Uralla Shire Council and \$3,363,300 to Tamworth Regional Council.</p>
Likely Impacts of the Development	<p>The likely impacts of the Application have been considered in section 5 of this Statement of Reasons.</p>
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"> <li>• the development is permissible with consent;</li> </ul>

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	<ul style="list-style-type: none"> <li>• 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;</li> <li>• the use of the site as an appropriately regulated wind farm is an orderly and economic use and development of land;</li> <li>• the Site contains access to the existing electricity transmission network;</li> <li>• the Site has suitable wind resources;</li> <li>• the Site has access to the regional road network;</li> <li>• 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;</li> <li>• the development of the Site for the purpose of electricity generation will contribute to the orderly transition from traditional coal and gas fired power generation to power generation with lower emissions;</li> <li>• the development of the Site will assist in meeting Australia's and NSW's target of net zero emissions by 2050; and</li> <li>• the Site is capable of being decommissioned and rehabilitated to a safe and non-polluting landform;</li> </ul>
<b>Objects of the EP&amp;A Act</b>	The Commission is satisfied that the Application is consistent with the Objects of the EP&A Act.
<b>Ecologically Sustainable Development (ESD)</b>	The Commission finds that the Project is consistent with ESD principles and would achieve an acceptable balance between environmental, economic and social considerations.
<b>The Public Interest</b>	<p>The Commission has considered whether the grant of consent to the Application is in the public interest. In doing so, the Commission has weighed the predicted benefits of the Application against its predicted negative impacts.</p> <p>The Commission's consideration of the public interest has also been informed by consideration of the principles of ESD.</p> <p>The Commission finds that, on balance, the likely benefits of the Project warrant the conclusion that an appropriately conditioned approval is in the public interest.</p>

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### 3.5 Additional Considerations

32. In determining the Application, the Commission has also considered:

- NSW Noise Policy for Industry (**NPFI**);
- Interim Construction Noise Guideline (**ICNG**);
- NSW Road Noise Policy 2011 (**RNP**);
- Social Impact Assessment Guideline 2021 (**SIA Guideline**); and
- Wind Farms and Bushfire Operations, Guideline Version 3.0, 2018, Australasian Fire and Emergency Service Authorities Council Limited.

### 3.6 The Commission's Meetings

33. As part of the determination process, the Commission met with various persons as set out in Table 3. All meeting and site inspection notes were made available on the Commission's website.

Table 3 – Commission’s Meetings

<b>Meeting</b>	<b>Date</b>	<b>Transcript/Notes Available on</b>
<b>Department</b>	4 March 2024	13 March 2024
<b>Applicant</b>	4 March 2024	13 March 2024
<b>Tamworth Regional Council (Council Officers)</b>	4 March 2024	13 March 2024
<b>Tamworth Regional Council (Councillors)</b>	12 March 2024	20 March 2024
<b>Uralla Shire Council</b>	11 March 2024	20 March 2024
<b>Site Inspection</b>	11 March 2024	22 March 2024
<b>Public Meeting</b>	14 March 2024	22 March 2024

## 4. Community Participation & Public Submissions

### 4.1 Public Meeting

34. The Commission conducted a Public Meeting on 14 March 2024. The Commission heard from the Department, the Applicant, various community group representatives and individual community members. In total, 24 speakers presented to the Commission during the Public Meeting. Presentations made at the Public Meeting have been considered by the Commission as submissions.

### 4.2 Public Submissions

35. As part of the Commission’s consideration of the Project, all persons were offered the opportunity to make written submissions to the Commission up until 5pm, Monday 25 March 2024.

36. The Commission received a total of 99 written submissions on the Application, comprising 97 submissions through its website, 1 postal submission and 1 emailed submission. An overview of the submissions is illustrated in Figure 2 and Figure 3 below.

37. For the reasons set out in this Statement of Reasons, the Commission considers that the matters raised in submissions do not preclude the grant of development consent and that the matters can be satisfactorily addressed by the conditions of consent imposed by the Commission.

Figure 2 – Submissions received by the Commission

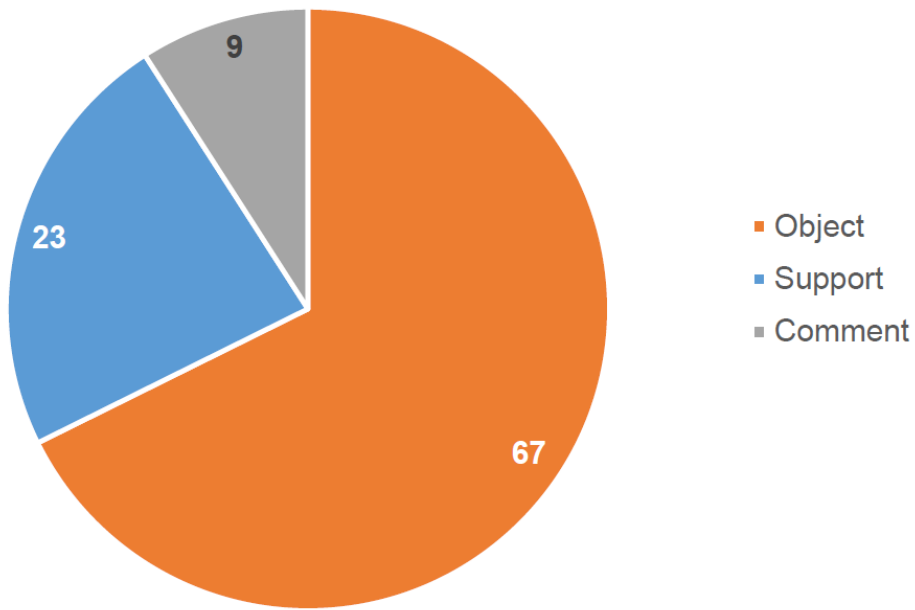
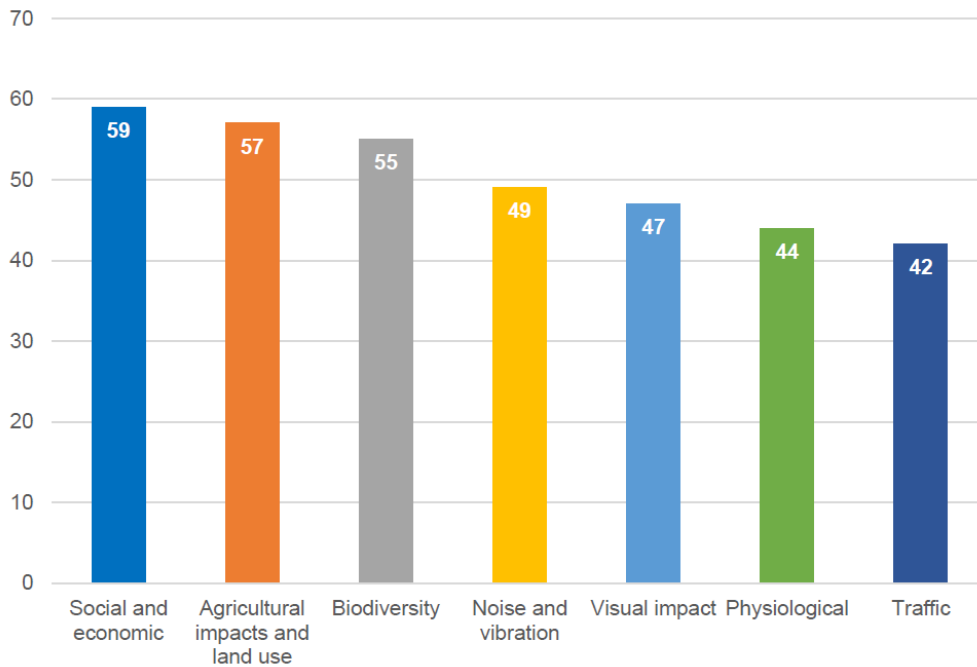


Figure 3 – Overview of issues raised in submissions





### 4.2.1 Geographic Distribution

38. Submissions to the Commission were received from various locations within the immediate region (82) with 65 objections, 10 in support and 7 comments on the Application. A further 15 submissions were received from elsewhere within NSW and 2 from interstate.

### 4.2.2 Issues Raised

39. Submissions to the Commission raised a number of key issues, which are outlined below. The Commission notes that the issues referred to below are reflective and illustrative of what the Commission regards as the key issues that emerge from the submissions rather than an exhaustive report of the submissions considered by the Commission.

#### *Social and Economic*

40. Submissions supported and raised concern with the potential economic benefits to the community through local job creation and the flow-on effects to local tourism and hospitality businesses.
41. Uralla Shire Council raised concerns with the ongoing and cumulative impact of the growing number of projects in the New England region on employment, accommodation and local services.

#### *Agricultural Land Use*

42. Submissions raised concerns as to the suitability of the Site for the wind farm being agricultural land and the potential for the Project to impact the ongoing agricultural operations on the Site and surrounding land.

#### *Biodiversity*

43. Submissions raised concerns regarding the potential impacts of clearing in preparation for the development on resident endangered species, including the Koala population, and the downstream impacts on aquatic species and the Namoi River Snapping Turtle (Bell's Turtle) as a result of sediment runoff.

#### *Noise*

44. Submissions received from the public raised concerns regarding operational noise impacts, including concerns about background noise. Other submissions raised concerns regarding the impact of construction noise on local businesses which rely on the quiet character of the area for the promotion and attraction of visitors.
45. Submissions also reflected both concern and doubt regarding the potential impacts of infrasound.

#### *Visual Impacts*

46. Submissions received by the Commission from the public expressed concerns as to the visual impacts of the development, particularly in relation to the accuracy of the photomontages/images shown in the Applicant's Landscape and Visual Impact Assessment (**LVIA**), and the night-time impact of the proposed aviation navigation lights.

#### *Transport*

47. Public submissions raised concern with the potential for the Project to create traffic issues, particularly congestion on the New England Highway.

48. A submission received from Tamworth Regional Council identified potential issues with the proposed transport route through the town of Tamworth in catering for blades or components with lengths greater than 65m.
49. Muswellbrook Shire Council made a submission to the Commission objecting to the Project's proposed heavy vehicle transport routes due the impact oversized and over mass vehicles (**OSOM**) would have on local roads and bridges. Muswellbrook Shire Council stated that the impacts of the Project's transport route contributed to a larger cumulative impact created by many large-scale renewable energy projects north and west of the Shire.

#### *Voluntary Planning Agreement*

50. Submissions received by the Commission from the public raised concerns as to the appropriate management of the funds collected through the VPA for the purposes of community benefit. The submissions noted a preference for the management of the funds via a community organisation under a Community Benefit Fund model rather than the relevant Council. Submissions also raised disagreements on the ratio of funds allocated between the two Councils, whether based on land area, the number of affected residents or extent of roads impacted.
51. Both Tamworth Regional Council and Uralla Shire Council have requested that any agreement reached between the Applicant and Council be conditioned as part of the consent.

#### *Decommissioning*

52. Members of the community expressed concerns regarding the likelihood of the decommissioning being properly completed and for turbine components to be disposed of appropriately.
53. Submissions received from Uralla Shire Council expressed doubts as to the commitment and the ability of the Applicant to complete the decommissioning and rehabilitation to bring the Site to its original state once the operation ceases.

#### *Water Use*

54. Submissions raised concerns in relation to the security of water to be used by the Project during construction and operation, in particular during times of low rainfall. Submitters were concerned about the impacts on the wider community, should the demand for water restrict other water allocations.

#### *Erosion and Sedimentation*

55. Concerns were raised by Uralla Shire Council and the community through submissions regarding the potential impact the Project could have on waterways, particularly during construction and decommissioning. The submissions detailed the potential for water quality and turbidity to be impacted downstream of the Site.

#### *Firefighting Operations*

56. Public submissions raised concerns as to the ongoing safety and effectiveness of aerial firefighting. Concerns were also raised as to the additional hazard caused by the presence of the turbines in the area. The recommended 20,000L onsite water storage was seen to be inadequate to defend the Site.

### *Waste Management*

57. Submissions from Tamworth Regional Council and Uralla Shire Council raised concerns regarding the waste management requirements of the development and the consequential impacts on the capacity of regional waste facilities.

### *Renewable Energy Transition*

58. Public submissions reflected both opposition and support for the use of wind energy, and/or renewable energy in general for electricity generation. Submissions also disagreed with the identification of the New England region as being a suitable location for a Renewable Energy Zone.

### *Community Consultation*

59. Submissions expressed disappointment in the level of community consultation and engagement carried out by the Applicant in the lead up to and during the application process.

### *Blade-Throw*

60. Tamworth Regional Council raised concerns with the risk of blade-throw and the proximity of some of the turbines to a public road.

## **4.3 Additional Material**

61. On 22 March 2024 the Commission wrote to the Department requesting clarification on matters related to water resources, firefighting operations and accommodation. The Department provided its response to the Commission dated 3 April 2024. The Department's response also provided additional information relating to the VPA offers made by the Applicant to Uralla Shire and Tamworth Regional councils.
62. The Commission considered that it would be assisted by public submissions on the material referenced above (**Additional Material**). In accordance with the Commission's *Public Submissions Guidelines*, the Commission re-opened public submission on this Additional Material, with submissions permitted by email between Monday 8 April 2024 and 5pm AEST Friday 12 April 2024.
63. The Commission received 31 submissions on this Additional Material. A summary of these submissions is provided below. The Commission notes that the submissions referred to below are not an exhaustive report of the submissions considered by the Commission, but rather is reflective and illustrative of what the Commission regards as the key issues that emerge from those submissions.

### *Firefighting operations*

64. The Commission received submissions objecting to the Project on the basis that aerial firefighting on and around the Site would no longer be possible as a result of the proposed turbines. Submitters acknowledged the NSW Rural Fire Service (**RFS**) input to the Department's response to the Commission, however, did not agree that aerial firefighting would be possible. Submissions also disagreed with the RFS advice that 20,000L would be sufficient for firefighting purposes on the Site, especially during a drought where there would be a lack of surface water available.

### *Water resources*

65. Submissions raised doubts as to whether the Project would have enough water and whether the Applicant had suitably estimated the water required during construction, including the actual capacity of Pine Creek Dam. Submitters also raised the concern that the Applicant had not considered alternative water supply options in the event that construction (peak water use) coincided with a severe drought.

### *Bell's Turtle*

66. Submissions expressed concern for the Bell's Turtle either in Pine Creek Dam, on Site or downstream from the Site. Submitters were concerned about the potential impact that water used by the Project could have on the turtles, especially if they were already under stress.

### *Accommodation and employment*

67. Submitters were of the view that there is a lack of policy, strategy, guidelines or consultation related to the impact of this Project and other SSD developments on local accommodation and employment. Submissions highlighted a perceived lack of accommodation to house the itinerant workers associated with the construction of the Project.

## 5. Key Issues

### 5.1 Biodiversity

#### 5.1.1 Threatened flora and fauna and biodiversity offsets

68. The Applicant's EIS notes that the Project will directly impact 212.26ha of vegetation within the 558ha development corridor (EIS, section 5.1.1). The Project also has the potential to indirectly impact on the biodiversity values of the land through noise, air quality, weeds, water quality and pest animal species. The Applicant has committed to preparing a Construction Environmental Management Plan (**CEMP**) to mitigate impacts as a result of clearing, traffic, weeds, fencing and erosion and sediment control.
69. Flora surveys undertaken as part of the investigation for the Project revealed the presence of two Threatened Ecological Communities (**TECs**) as identified under the NSW *Biodiversity Conservation Act 2016* (**BC Act**), and one TEC listed under the *Environment Protection and Biodiversity Conservation Act 1999* (**EPBC Act**). The flora surveys also revealed the presence of five Plant Community Types (**PCTs**) in varying condition.
70. A referral submitted in May 2021 regarding Matters of National Environmental Significance (**MNES**) led to a 'Controlled Action' decision being made by the Commonwealth in October 2021. The Project was determined to have significant impacts on various MNES, including the White Box Yellow Box Blakely's Red Gum Grassy Woodland, Koalas, the Spot-tailed Quoll, White-throated Needletail, Border thick-tailed Gecko, McKie's Stringybark and Bluegrass. Subsequent targeted assessments determined significant impacts were likely to the White Box Yellow Box Blakely's Red Gum Grassy Woodland, Koalas, the Spot-tailed Quoll, White-throated Needletail and therefore the impacts on these species are required to be offset.

### *Commission's findings*

71. The Commission acknowledges the need for clearing and disturbance of land to facilitate the Project and understands that any environmental impacts must be given detailed consideration. The Commission notes the concerns raised by the community in public submissions, particularly in relation to the potential impacts on Koala habitat and behaviour, and downstream aquatic species, including the Bell's Turtle.
72. The Commission is satisfied that the Project has avoided environmental impacts where possible by positioning most of the wind turbines and ancillary infrastructure in historically cleared areas, or areas which contain exotic vegetation or derived native grasslands. Micro-siting arrangements will further allow the Applicant to position the wind turbines in such a way that avoids immediate impacts. Where the positioning of a wind turbine subsequently requires vegetation clearing, the Applicant has proposed a Biodiversity Offset Strategy (**BOS**). Calculation under the Biodiversity Assessment Method for the applicable residual effects for PCTs or Species-credit species to be impacted provides that the Project is required to offset 4,373 ecosystem credits and 3,253 species credits. The Commission agrees with the advice provided by the Department and BCD (AR para 81 and 105) and is satisfied that the Applicant has undertaken their environmental assessment in accordance with the requirements of the *Biodiversity Conservation Act 2016*. The Commission has imposed condition B23 which sets out the biodiversity offset requirements for the Project.
73. To ensure that vegetation clearing does not occur outside the development corridor the Commission has imposed condition B21. Condition B22 imposed by the Commission states that the Applicant must not exceed the vegetation and habitat clearing limits that have been assessed and specified in the consent. The Commission has also imposed a requirement for the Applicant to prepare a Biodiversity Management Plan (**BMP**) under condition B25. As part of this condition the Applicant must describe measures to minimise clearing of native vegetation and impacts on threatened flora and fauna species (including the Bell's Turtle). The Applicant must also include a detailed program to monitor and report on the effectiveness of measures required by the BMP.
74. The Commission considers that opportunities for local conservation groups to participate in revegetation activities should be explored by the Applicant and therefore imposes condition A18, which includes the requirement for the Applicant to investigate these opportunities in consultation with the Community Consultative Committee.

#### **5.1.2 Bird and Bat Strike**

75. In its AR (para 88), the Department notes that bird and bat strike is considered a "prescribed impact" rather than a direct or indirect impact on biodiversity and that there is no established policy for calculating or quantitatively assessing prescribed impacts related to bird and bat strike, nor is there a requirement for biodiversity offset credits.
76. The Department detailed (AR para 90) that the approach adopted for assessing bird and bat strike at wind farms in NSW involves a risk assessment followed by post-determination adaptive management which involves baseline and ongoing monitoring of any strikes during operations, and triggers for adaptive management measures to avoid and/or minimise impacts. The risk assessment considers factors like conservation status, flight character, distribution across the site, and migratory patterns of species. This approach was accepted by BCD.

77. Additionally, in considering Matters of National Environmental Significance (AR, Appendix J), the risk of blade strike on bird and bat species was raised with particular concern for turbines T23, T24 and T25 located near a habitat corridor. BCD acknowledged that the parameters used in the BDAR for the assessment of at-risk species were acceptable and that it would be consulted in the development of the Bird and Bat Adaptive Management Plan (**BBAMP**). BCD considers that all threatened species likely to be impacted have been assessed adequately under the BAM, with the exception of the risk of blade strike to the White-throated Needletail, however the BBAMP to be developed and implemented in consultation with BCD and DCCEEW would be effective in mitigating this risk.

### *Commission's findings*

78. The Commission is satisfied that the risk of bird and bat strikes can be effectively managed through a comprehensive adaptive management regime. The Commission has imposed condition B26, requiring the Applicant to develop a Bird and Bat Adaptive Management Plan in consultation with BCD and AG DCCEEW. This Plan must include:
- a description of measures for minimising bird and bat strikes on Site;
  - specific thresholds for unacceptable adverse impacts to 'at risk' species for turbines T23, T24 and T25;
  - an adaptive management program to be implemented if the development is having an adverse impact on 'at risk' species;
  - a detailed monitoring program to report on the effectiveness of the Plan; and
  - all raw data to be submitted to BCD and the Planning Secretary.
79. The Commission also imposes condition B27, requiring the Applicant to prepare and allocate \$100,000 to a research program aimed at enhancing scientific understanding of the indirect impacts of wind energy projects on avifauna species.

## **5.2 Visual Impact**

80. A Landscape and Visual Impact Assessment (**LVIA**) was conducted by Neoen and submitted as part of the EIS, in accordance with the NSW Wind Energy: Visual Assessment Bulletin 2016 (**Visual Assessment Bulletin**).
81. The Department assessed the visual impact of the proposal against the visual performance objectives in the Visual Assessment Bulletin and classified the turbines in one of three Visual Impact Zones (**VIZ**): High (VIZ1), moderate (VIZ2) and low (VIZ3), based on various criteria such as visual magnitude, multiple wind turbine effects, landscape scenic integrity, key feature disruption, shadow flicker and blade glint and aviation hazard lighting (AR para 122). The Department then grouped the non-associated dwellings into three clusters for assessment, considering their proximity to turbines and general arrangement around the Site (AR para 123).
82. The northern cluster contains 14 non-associated dwellings and is located around Balala and Kingstown Road. The Department's assessment indicates that visual performance objectives are met for all receivers within this cluster due to factors such as distance, intervening topography, and existing vegetation screening, and did not recommend any further mitigations beyond visual screening (AR Table 9).
83. The New England Highway cluster is located to the south and southeast of the Site and contains 13 non-associated dwellings. The Department's assessment indicates that visual performance objectives are met for all receivers within this cluster due to existing vegetation screening and landform topography (AR Table 10).

84. The Kentucky cluster is situated east of the Site, with no non-associated receivers within 5.1 km of turbines. The Department did not find that specific mitigation measures were warranted for this cluster due to limited visual impacts (AR para 139).
85. The Department further considered the visual impacts of the Project on 23 adjoining public viewpoints (AR para 140). VIZ2 viewpoints in locations on the New England Highway and Green Valley Road are able to partially view the Project, but existing mature vegetation along roadsides and the direction of travel minimise these views. VIZ3 viewpoints, mainly located along local roads in Kentucky and Balala, have limited traffic and short-duration views, with existing vegetation and landforms partially obstructing views of turbines. The Department considers that the visual performance objectives would be achieved at all public viewpoint locations (AR para 143).

### *Commission's findings*

86. The Commission acknowledges the concerns raised in submissions regarding the accuracy of photomontages and images used in the Applicant's LVIA. However, the Commission notes that the Department's assessment was conducted independently to the LVIA and the Commission supports the Department's methodology and accepts that it has been undertaken consistent with the Visual Assessment Bulletin (AR para 122).
87. The Commission acknowledges that the wind farm infrastructure would have visual impacts. Notwithstanding these impacts, the Commission finds that the visual performance objectives as assessed in the Department's AR are met for all non-associated dwellings in the clusters identified by the Department. For the reasons set out below, the Commission concludes that the visual impacts on sensitive receivers would be limited and would meet the visual magnitude objectives:
- the reasonable separation distance between the turbines and receivers;
  - topographical features screening some views; and
  - the existing intervening vegetation.
88. Given the limited visual impacts on the non-associated dwellings in the Northern and New England Highway clusters, the Commission does not consider that mitigation measures beyond visual screening are warranted for receivers in these clusters. The Commission has imposed condition B1 which states that the owner of any non-associated residence within 5.1 km of any wind turbine may request that the Applicant implement visual impact mitigation measures (including landscape and vegetation screening). Due to the greater separation between the Project and the Kentucky cluster (over 5.1km), the Commission does not consider that specific mitigation measures are warranted (AR para 139). The Commission is also of the view that any vegetation relied upon for visual impact mitigation screening should be replaced if removed for road upgrade works and has imposed condition B1(d) which states that the Applicant must consider vegetation that may have been removed by the Applicant for road upgrades or other works within the Site in implementing these visual screening mitigation measures.
89. In relation to impacts on public viewpoints, the Commission acknowledges that some wind turbines would be visible from most public viewpoints identified in the Department's assessment, however the visual impact at these locations would not be significant due to the distance, intervening topography and existing vegetation (AR para 142).
90. The Commission accepts that shadow flicker is projected to be below the Visual Assessment Bulletin's objective of no more than 30 hours per year at any non-associated residences (AR para 149). The Commission has therefore imposed condition B4 which states that the Project must not exceed this limit.

91. The Commission agrees with the Department that blade glint is addressed through the Applicant's commitment to using subtle colours and low reflectivity surface treatments on turbines (AR para 151). The Commission also finds that the Project's ancillary infrastructure is unlikely to have a significant impact given the intervening topography and vegetation and its location away from non-associated sensitive receivers (AR para 146). For the reasons set out above, the Commission has imposed condition B2 which states that the Applicant must take all reasonable steps to minimise the off-site visual impacts of the Project. As part of this condition the Applicant must ensure the wind turbines are finished with a surface treatment that minimises the potential for glare and reflection. The Applicant must also ensure the visual appearance of ancillary infrastructure blends in with the surrounding landscape as far as possible.
92. The Commission acknowledges that the Civil Aviation Safety Authority (**CASA**) has made recommendations for the Project to be lit with steady medium intensity red lighting in accordance with the *National Airports Safeguarding Framework, Guideline D* (AR para 154). The Commission agrees with these recommendations and has therefore imposed condition B3 which sets out the requirements to consult with CASA and install night-time obstacle lighting requirements.
93. The Commission recognises that the Project would result in a change to the local landscape, however the Commission concludes that the impacts of the Project on the character of the landscape can be suitably mitigated and are acceptable. The Commission also notes that the Site will be rehabilitated and returned to its pre-development condition and character after the cessation of operations. The Commission has given consideration to decommissioning and rehabilitation in Section 5.5.8 below.

### 5.3 Traffic and Transport

94. The Applicant proposes to transport large plant, equipment and materials to the Site with heavy vehicles requiring escort along a route developed by EnergyCo from the Port of Newcastle. Two routes are proposed depending on the height of the vehicle, with Route 2 bypassing Muswellbrook town. The Department's AR states that road upgrades would need to be undertaken along the proposed routes, including the construction of an upgraded entrance into the Project Site from the New England Highway.
95. During peak construction times, the Project would generate 64 heavy and 188 light vehicle movements per day. In addition, the transport of turbines would generate 18 vehicle movements per day, six of those being heavy vehicles requiring escort. The Department's AR states that an assessment of capacity found that the construction of the Project would have minimal impacts on the capacity of the New England Highway between Tamworth and Armidale, with all increase in daily traffic volumes forecast to be within the operating capacity of the highway. Traffic generated during operations would be minimal, with nine staff members commuting to the Site daily and approximately one heavy vehicle accessing the Site per week. The Department's AR states that traffic associated with decommissioning is expected to represent approximately 70% of peak construction vehicle movements, and is therefore not anticipated to result in significant traffic and transport impacts (AR Table 11).



### *Commission's findings*

96. The Commission acknowledges that concerns were raised in submissions regarding the Project's traffic impacts, particularly during construction and on the New England Highway. However, the Commission finds that at the peak of the construction period the number of vehicle movements (including heavy vehicles requiring escort) would not have a significant impact on the capacity of the New England Highway between Tamworth and Armidale. The Commission finds that the traffic and transport impacts during construction, operation and decommissioning as assessed by the Department are acceptable and would not have a significant impact on the local road network. Therefore, the Commission has imposed condition B34, which requires the Applicant to develop a detailed Traffic Management Plan. This plan must include details of the proposed transport route, road upgrades and measures to be implemented to minimise traffic impacts. It also requires the Applicant to develop a driver's code of conduct to be adhered to by all vehicle drivers associated with the Project.
97. The Commission acknowledges the concerns raised by Tamworth Regional Council regarding the inability for any vehicle over 65m to pass through Tamworth town centre and agrees that a 90m full blade would not fit through on the currently proposed route. The Commission notes that the Applicant will only finalise the procurement of wind turbines following approval and cannot completely guarantee the use of a split blade (2 x 45m) system. The Commission has therefore imposed condition B30, which includes a requirement for the Applicant to set out the proposed heavy vehicle routes for the Project. Any proposed deviation to this route must be made in consultation with the local roads authority and agreed to by the Planning Secretary.
98. The Commission heard the concern of Muswellbrook Shire Council, which raised issues regarding the suitability of its local roads forming part of the heavy vehicle and OSOM transport routes. The Commission is of the view that the routes should be adopted with any route deviations, dilapidation surveys and associated road maintenance to be executed in consultation with the relevant council, including Muswellbrook Shire Council. Condition B30 imposed by the Commission sets out the heavy vehicle routes - unless otherwise agreed to by the Planning Secretary and in consultation with the local roads authority.
99. The Commission is also of the view that road upgrades must be undertaken along the proposed routes prior to use by OSOM vehicles and has therefore imposed condition B31 which gives effect to this requirement. Additionally, the Commission imposes condition B32, requiring the Applicant to undertake independent dilapidation surveys and subsequent repairs on the proposed route and any deviations as agreed to by the Planning Secretary in consultation with the relevant council. The requirements of condition B32 also apply to any alternate route on local roads that the Applicant receives approval to use during construction and/or decommissioning (beyond a short-term temporary use).

## 5.4 Noise and Vibration

### 5.4.1 Construction noise and vibration

100. The Department's AR states that the noisiest works during the 24-month construction period would occur during road construction, excavation, foundation construction and electrical installation. Six non-associated dwellings would fall into the 'noise affected management' level as set by the ICNG as they would exceed 45 decibels (**dB(A)**). No dwellings would trigger the 'highly noise affected' level of 75dB(A). The Department's AR accepts that the proposed construction activities would be unlikely to result in significant adverse impacts, given that works would be limited to standard construction hours (AR table 11).
101. The Applicant also proposes to utilise controlled blasting during excavations where significant rock is located near turbine foundation locations. The Applicant's Noise and Vibration Impact Assessment (**NVIA**) dated February 2022 found that no vibration impacts are projected at any sensitive receiver at a separation distance exceeding 150m. The proposed turbines are located at least 2km from non-associated residences. The Department considers that that the proposed controlled blasting has merit as it has the potential to reduce construction duration and noise impacts, when conducted in a limited manner (AR table 11).

#### *Commission's findings*

102. Public submissions raised concerns regarding the potential impacts of construction noise for individuals and businesses which rely on the quiet character of the area. The Commission acknowledges these concerns, however, it finds that construction noise would be temporary and is unlikely to result in significantly adverse impacts and these impacts can be managed by restricting construction to standard daytime construction hours (7am – 6pm Monday to Friday and 8am – 1pm on Saturday). The Commission imposes condition B5 setting standard construction hours and condition B8 which requires the Applicant to take all reasonable steps to minimise the construction noise of the development.
103. The Commission accepts that controlled blasting, when used in a limited manner, can have the benefit of reducing the overall construction time and window in which residences could experience noise impacts. The Commission finds that the use of blasting is acceptable subject to condition B12 which sets out maximum airblast overpressure and ground vibration criteria which the Applicant must comply with. The Commission also imposes condition B11 which limits blasting to between 9am – 5pm Monday to Friday and between 9am – 1pm on Saturday.

### 5.4.2 Construction traffic noise

104. The Department's AR states that increased traffic as a result of the construction of the Project has the potential to create noise impacts, with disturbance levels directly related to the proximity of a residence to an access route. Modelling undertaken by the Applicant found that construction traffic noise levels would be below the criterion of 68dB(A) as set out in the NSW Road Noise Policy 2011, with dwelling setback distances from the New England Highway greater than 40m.

### *Commission's findings*

105. The Commission finds that construction traffic noise would be low and is capable of being managed through conditions of consent. The Commission has therefore imposed condition B8 which states that the Applicant must take all reasonable steps to minimise the construction or decommissioning noise of the development, including any associated traffic noise.

### **5.4.3 Operational noise**

106. The Applicant's NVIA presented the results of an operational noise assessment based on modelling which was conducted in accordance with the requirements of the Department's *Wind Energy: Noise Assessment Bulletin (2016) (Noise Bulletin)*. The noise modelling concluded that there would be no operational noise exceedances of the relevant 35 dB(A) criterion at any non-associated dwelling. The NVIA also found that the highest predicted low frequency noise level to be experienced would be at 50dB(A), significantly under 60dB(A) which is the level at which the Noise Bulletin requires further assessment (AR Table 11).
107. The Department's AR states that the Applicant's NVIA provided an acceptable noise assessment based on modelling that is in accordance with the Noise Bulletin. The Department found that the noise criteria and predicted noise levels have been correctly calculated for the Project and noted that the EPA had indicated it would be able to issue an Environment Protection Licence (EPL) consistent with the noise limits identified in the Applicant's EIS (AR Table 11).

### *Commission's findings*

108. The Commission agrees with the EPA and the Department and is satisfied that the noise criteria and the predicted noise levels have been correctly calculated for the Project.
109. Concerns were raised by members of the community regarding the impacts of operational noise, including concerns about background noise. The Commission acknowledges these concerns, however, finds that there would be no operational noise exceedances beyond the Noise Bulletin's 35dB(A) criterion at any non-associated dwelling and that any operational noise impacts would be below the applicable limits.
110. The Commission acknowledges the concerns regarding the impact of infrasound and low frequency noise. However, the Commission accepts that the highest predicted instance of low frequency noise would be 10dB(A) below the Noise Bulletin's criterion for requiring further assessment. The Commission is satisfied that any low frequency noise impacts would be minor and within the acceptable limits.
111. The Commission has therefore imposed conditions B13 and B14 which set operational noise criteria for the wind turbines and ancillary infrastructure. Condition B15 imposed by the Commission requires the Applicant to undertake operational noise monitoring to ensure compliance with the operational noise criteria.

## 5.5 Other Issues

### 5.5.1 Firefighting Operations

112. The Site is mapped as bushfire prone land by the RFS. The Department, RFS 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 11). The Commission has heard the concerns raised by submitters regarding RFS's advice on the suitability of standard fire management plans and procedures to manage fire risks for a wind farm, specifically the adequacy of a 20,000L water tank and the ability for aerial firefighting to take place.
113. The Commission agrees with the advice of the Department, RFS and FRNSW and is satisfied that bushfire risks including aerial firefighting can be suitably controlled through implementation of standard fire management plans and procedures. The Commission also notes that the proposed measures are consistent with RFS's *Planning for Bush Fire Protection 2019*, the relevant best practice provision of bushfire protection standards in NSW.
114. The Commission has imposed condition B42, requiring the Applicant to develop a comprehensive Emergency Plan, which details the procedures and practices to minimise risks and plan for bushfire events. The Applicant will be required to shut down turbines during the event of bushfires and position turbine blades to minimise interference with firefighting operations. In addition, the Commission has imposed condition B41, which states that the Applicant must manage vegetation fuel loads and assist the RFS and emergency services as much as practicable.

### 5.5.2 Water Use

115. The Commission is satisfied with the proposed water use of the Project. The Commission has heard concerns related to the availability of water in the locality, including in times of drought and has imposed condition B18 which requires the Applicant to ensure the Project has sufficient water available for all stages of the development, and if necessary, to adjust the scale of the development to match its available water supply. The Applicant is required to obtain any necessary license for the operation of the Project under the *Water Act 1912* and/or the *Water Management Act 2000*. The Commission notes that the RFS is satisfied with the inclusion of the 20,000L onsite water storage, as required by the Commission through condition B41.

### 5.5.3 Aboriginal Cultural Heritage

116. Site surveys were undertaken by the Applicant for the preparation of an Aboriginal Cultural Heritage Assessment which identified 7 Aboriginal heritage items located within the proximity of the Project and an additional 4 potential archaeological deposits. Test excavations confirmed the presence of subsurface artefacts across all 4 of these locations. Aboriginal party representatives identified an additional 9 potential Aboriginal heritage sites. The Department and Heritage NSW consider that the Project would not significantly impact the aboriginal heritage values of the locality (AR Table 11).

117. The Commission agrees with the assessment of the Department and Heritage NSW and finds that with appropriate conditions of consent, impacts to aboriginal heritage values can be managed and minimised. The Commission imposes condition B28 which ensures the development does not cause any direct or indirect impacts to Aboriginal heritage items as well as requiring the Applicant to salvage and relocate items that would be impacted to a suitable alternate location. Condition B29 requires the Applicant to develop a heritage management plan in consultation with Aboriginal stakeholders and reviewed by Heritage NSW.

#### **5.5.4 Energy Transition**

118. The Project would have the capacity to generate around 192MW of renewable energy, sufficient to power roughly 99,000 homes and reduce greenhouse gas emissions by up to 550,000 tonnes per year (AR para 69). The Project would also connect to an existing 330kV transmission line within the Site, reducing the need for additional transmission infrastructure and allowing the wind farm to begin operating relatively quickly.
119. The Commission acknowledges both community support and opposition regarding the broader transition to renewable energy, especially as generated by wind farms. The Commission also received submissions objecting to the New England region being declared a renewable energy zone. As the applicable EPIs already provide that the Project is permitted with development consent at the Site, these policy matters are beyond the Commission's remit. The Commission finds that the development of the Site for the purposes of wind energy generation will facilitate social and economic benefits for the community and the State of NSW. The Project will also contribute to the orderly transition away from coal and gas fired power generation, which currently contributes to global greenhouse gas emissions and climate change. This also applies to the State's objectives in establishing renewable energy zones.

#### **5.5.5 Planning Agreements / Community Benefit**

120. The Department, in its response to the Commission dated 3 April 2024, stated that the Applicant had agreed to a VPA with Uralla Shire Council. It is proposed to consist of a total contribution of \$2,242,200 over the life of the of the Project (indexed to CPI) payable by the Applicant to Uralla Shire Council. The Applicant had also made an offer to Tamworth Regional Council of \$3,363,300 over the life of the Project and indexed to CPI, payable by the Applicant to Tamworth Regional Council.
121. The Commission acknowledges concerns raised by submitters regarding the nature of the VPA arrangements between the Applicant and Councils. However, the Commission is not able to dictate the terms of a VPA beyond requiring that one be entered into by the Applicant on terms offered by the Applicant.
122. The Commission acknowledges both the Applicant's offers and that at the time of determination, the Applicant and Uralla Shire Council had reached an in-principle agreement and acceptance of the offer made to Tamworth Regional Council was still pending. The Commission has therefore imposed conditions A19 – A21, requiring the Applicant to enter into a VPA with both Councils in accordance with Division 7.1 of Part 7 of the EP&A Act and the terms of the Applicant's offer.

### 5.5.6 Social and Economic Impacts

123. The Commission acknowledges both support and concerns raised regarding the potential social and economic impacts of the Project, as raised in public submissions and by Uralla Shire Council and Tamworth Regional Council in their respective meetings with the Commission. Submitters acknowledged potential benefits for businesses from increased numbers of construction workers in the area; however, submitters and both Councils emphasised their concerns that the Project could impact on the availability of local accommodation capacity and workers especially when considering cumulative impacts with other major projects and local tourism and entertainment events. Public submissions also raised a perceived risk related to the lack of policy, strategy, or consultation regarding impacts of major projects on local accommodation.
124. The Commission considers that the Project would have an overall positive social and economic impact. In addition to its contribution to energy transition, the Project would generate direct and indirect benefits to the local community, including (AR Table 11):
- up to 285 construction jobs, of which Neoen has committed to sourcing 135 from the surrounding LGAs of Armidale, Tamworth, Uralla and Walcha;
  - up to 9 full-time or equivalent ongoing jobs during operation, of which 5 will be sourced locally from the aforementioned LGAs;
  - expenditure in the local economy by workers who would reside in the area; and
  - the procurement of goods and services by Neoen and associated constructors.
125. As discussed in section 5.5.5, the Applicant has proposed to contribute over the life of the development \$2,242,200 payable to Uralla Shire Council and \$3,363,300 to Tamworth Regional Council.
126. The Commission finds that the Applicant has satisfactorily considered the potential negative social impacts of the proposal such as noise and vibration, traffic and visual impacts. The Commission acknowledges the submissions which raised these impacts as a concern and finds that when weighed against the benefit of renewable energy generation, impacts to social amenity are acceptable and manageable.
127. The Commission heard the concerns from Uralla Shire Council and Tamworth Regional Council, as set out in paragraph 123 and finds that the Project could have some potential to negatively impact local employment and accommodation resources if unmanaged. The Commission has therefore imposed condition B44, requiring the Applicant to prepare and implement an accommodation and employment strategy in consultation with both Uralla Shire Council and Tamworth Regional Council, as informed by consultation with local accommodation and employment service providers. The Applicant must also propose measures to ensure there is sufficient accommodation for the workforce with consideration of potential conflicts with key local tourism and entertainment related events and other SSD projects in the area.
128. The Commission also acknowledges the concerns raised through submissions and at the Commission's public meeting regarding the level of community consultation and engagement carried out by the Applicant, including some division the Project has been reported to have created in the community. To ensure that appropriate and substantive communication between the Applicant and the community occurs throughout all phases of the Project, and to establish good working relationships between the Applicant and the community, the Commission has imposed condition A18 requiring the Applicant to operate a community consultative committee in accordance with the Department's guideline.
129. Subject to the imposed conditions, the Commission is satisfied with the Project's capacity to provide an overall benefit to the community.

### 5.5.7 Agricultural Impacts and Land Use

130. The Site and surrounds are dominated by existing agricultural land uses, particularly cattle grazing as the area (including the Site) is generally unsuitable for broadacre cropping due to the undulating topography and rugged landscape. The Department noted that wind harvesting is a passive land use which can co-exist with grazing activities and that the Site can be rehabilitated without compromising agricultural uses following decommissioning (AR table 11).
131. The Commission acknowledges the concerns of the community raised in public submissions relating to the potential for the operation of the Project to affect the current and ongoing use of the land for agricultural activities. However, the Commission agrees with the Department's assessment and finds that the Project would not impact long-term agricultural uses of the Site and that agricultural land uses and wind farm activities can coexist in the locality (AR table 11).

### 5.5.8 Decommissioning and Rehabilitation

132. The Commission is satisfied that the Project is capable of being decommissioned and the Site appropriately rehabilitated. The Commission has imposed conditions including clear decommissioning triggers and rehabilitation objectives, to ensure proper closure and rehabilitation at the end of the Project's life cycle. The Department has provided guidance on how host landowner agreements should consider refurbishment, decommissioning and rehabilitation. The Commission acknowledges the concerns raised regarding whether the Site will actually be rehabilitated. However, the Commission finds that through the imposition of condition B45 which requires the Applicant to rehabilitate the Site in line with rehabilitation objectives, Project infrastructure would be suitably decommissioned. This applies to the appropriate disposal of turbine components, which was a concern raised in submissions. Additionally, condition B46 requires the Applicant to rehabilitate progressively, minimising the total exposed area at any given time during the life of the Project.

### 5.5.9 Electric and Magnetic Fields (EMF)

133. The Department's AR states that the main sources of EMF from the Project would be the substation, electrical equipment within the turbine structures, interconnecting underground and overhead cables and transmission lines. EMF levels for all nearby dwellings would be below relevant exposure limits and indistinguishable from background levels, including at the closest dwelling, located 180m from the underground cabling network. The Department acknowledges that the Project would comply with international guidelines for electric, magnetic and electromagnetic fields (AR table 11). The Commission is satisfied that the Project is not likely to have any significant EMF-related impacts and has imposed condition B40, setting out requirements for the Applicant to ensure the Project and its operations comply with the relevant industry standards for electric and magnetic fields.

### 5.5.10 Radio-communications

134. Concerns were raised in submissions regarding the potential impacts of the Project on telecommunications, particularly disruptions to mobile phone coverage and TV reception. The Applicant's assessment of electromagnetic signals for telecommunications stated that the signals operate most effectively with a clear line of sight between transmitting and receiving locations and found that wind farms and other infrastructure can disrupt this line of sight, causing interference. The assessment concluded that there may be interference with point-area signals like mobile phones and TV broadcasting, especially in areas with existing poor or marginal signal coverage. However, impacts on satellite TV and internet are unlikely, and impacts on radio broadcasting and CB radio are considered to be minor. The Applicant has committed to implementing management and mitigation measures to address any potential impacts on telecommunications. The NSW Telco Authority reviewed the Project and did not raise any concerns. The Commission has imposed condition B38, setting out requirements for the Applicant to rectify any interference or loss of signal caused by the operation of the turbines or ancillary infrastructure, should this occur. The Commission is therefore satisfied that the Project is unlikely to have significant impacts on telecommunications.

### 5.5.11 Riparian Areas and Erosion

135. The Department's AR states that the Site sits within catchments leading to the Namoi and Gwydir Rivers and that there is potential for erosion of soils and pollution of surface water resources in the disturbance areas.
136. The Commission notes that the Department and EPA have assessed the risk and are satisfied that given the proposed mitigation measures, the erosion-related risks of the Project can be adequately managed (AR Table 11). The Commission acknowledges the concerns raised in public submissions and by Uralla Shire Council regarding the risk of erosion within the Project Site and its potential impacts on downstream waterways. The Commission agrees with the Department and EPA that erosion risks are capable of being managed. However, the Commission finds that the soil within the Site is highly erodible and is of the view that water turbidity monitoring may potentially be required by the Applicant during construction, operation and decommissioning to monitor any Project related erosion impacts. The Commission has therefore imposed condition B20(f) which states that the Applicant must undertake water turbidity monitoring of Carlisles Gully Catchment for the life of the development to the extent necessary to monitor any material negative impact of the development on local waterways.
137. The Commission also imposes condition B20(a - b) requiring the Applicant to minimise erosion and control sediment generation, including through controls designed in accordance with *Managing Urban Stormwater – Soils and Construction Volume 2C Unsealed Roads* (DECC, 2008).

### 5.5.12 Blade Throw

138. The Applicant's risk assessment of blade throw (where a turbine blade falls off a tower) found that at a distance of 95m (which encompasses local roads surrounding the Project) there would be a 1 in 100,000 chance of death per year. The Department's AR acknowledges that this rate is lower than the annual risk of death on Australian roads. Furthermore, the risk of blade-throw at 260m would be a 1 in 1 million chance per year. All associated and non-associated dwellings are located more than 260m from the closest turbine except for associated dwelling 302, which the Applicant has committed to keeping unoccupied for the life of the Project.



139. A report by the Australian Energy Infrastructure Commissioner: *Governance and Compliance of Standards and Permit Conditions*, recommended “*In addition to a setback distance between a turbine and a residence, a minimum default setback distance of 200 metres (as measured at ground level from the centre of the tower or 150 metres from the extended horizontal blade tip, whichever is greater) and a neighbour’s boundary fence line or public road carriageway, should also be considered to mitigate potential amenity impacts AND safety risks. An appropriate risk assessment should be considered for setbacks from roads, particularly for low use roads, which may support a reduced setback*” (pg 14). The Commission wrote to the Department seeking comment on the workability of a micro-siting condition requiring that the revised location of a wind turbine be at least 150 metres away from a public road. The Department in its response to the Commission dated 2 May 2024, noted the risk of blade throw in the Applicant’s Blade Throw Risk Assessment is extremely low as set out in paragraph 138 above. The Commission agrees with the Department’s advice that given the road conditions and actual traffic volumes of public roads in close proximity to a turbine, actual risk is expected to be much lower than predicted – and that in this case a reduced setback is appropriate. The Department also stated that concerns about the potential impact on Council infrastructure would be addressed by condition A11 requiring the Applicant to repair any public infrastructure that is damaged by the development. The Commission accepts the advice of the Department and finds that the Project is unlikely to pose significant blade throw risk to the community. The Commission has imposed condition A11 as described above.

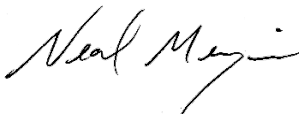
### 5.5.13 Waste Management

140. The Department’s AR states that the Project is not expected to generate large volumes of waste and that the Applicant has committed to developing a waste management plan to detail measures to reduce waste generated by the Project (AR Table 11). The Commission acknowledges the concerns raised by both Tamworth Regional Council and Uralla Shire Council regarding the impacts of the Project on the capacity of Council waste facilities. The Commission has therefore imposed condition B43, requiring the Applicant to remove all waste, and ensure it is reused, recycled or sent to an appropriately licensed waste facility in consultation with the relevant Council.

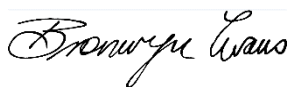
## 6. The Commission’s Findings and Determination

141. 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 oral presentations to the Commission at the Public Meeting. The Commission carefully considered all of these views as part of making its decision.
142. The Commission has carefully considered the Material before it as set out in section 3.1 and has weighed the broader strategic, social and economic benefits of renewable energy generation in the context of the impacts on the environment and local amenity of residents which were set out in section 5. Based on its consideration of the Material, the Commission finds that the Project should be approved subject to conditions of consent for the following reasons:
- the Project is consistent with the existing strategic planning and energy framework as it will deliver up to 192 MW of renewable energy, contributing to the transition to lower emissions energy generation;


- the Site is suitable for renewable energy development given its location within the New England REZ, proximity to existing electricity transmission networks; topography, wind resources, access to the regional road network and avoidance of major environmental constraints;
  - visual impacts on sensitive receivers would be limited, and where required would be mitigated by vegetation screening;
  - the visual impact from public viewpoints would not be significant due to the distance, intervening topography and existing vegetation;
  - the impacts of the Project on the character of the landscape are acceptable and can be suitably mitigated. After the cessation of operations, the Site would be rehabilitated and returned to its pre-development condition and character;
  - traffic and transport impacts during construction, operation and decommissioning are acceptable and would be mitigated;
  - the Project has avoided environmental impacts where possible and biodiversity impacts would be offset in accordance with the NSW Biodiversity Offset Scheme;
  - bushfire risks including aerial firefighting can be suitably controlled through the implementation of standard fire management plans and procedures;
  - the Project would not significantly impact on aboriginal heritage values;
  - the Project would generate direct and indirect benefits to the local community;
  - the Project would not impact long-term agricultural uses of the Site and agricultural land uses and wind farm activities can coexist in the locality;
  - the Project is capable of being decommissioned and the Site appropriately rehabilitated;
  - erosion risks are capable of being managed and monitored through water turbidity monitoring;
  - the Project is consistent with the ESD principles and would achieve an acceptable balance between environmental, economic and social considerations;
  - the Project is in accordance with the Objects of the EP&A Act; and
  - the Project is in the public interest.
143. For the reasons set out in paragraph 142 above, the Commission has determined that the Application should be approved subject to conditions. These conditions are designed to:
- prevent, minimise, mitigate and/or offset adverse environmental impacts;
  - set standards and performance measures for acceptable environmental performance;
  - require regular monitoring and reporting; and
  - provide for the on-going environmental management of the development.
144. The reasons for this Decision are given in the Statement of Reasons for Decision dated 8 May 2024.



Prof Neal Menzies (Chair)  
Member of the Commission



Dr Bronwyn Evans  
Member of the Commission



Suellen Fitzgerald  
Member of the Commission



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Independent Planning Commission

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