



New South Wales Government  
Independent Planning Commission

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# Bowmans Creek Wind Farm SSD-10315

## Statement of Reasons for Decision

Professor Alice Clark (Chair)  
Mr Richard Pearson  
Mr Adrian Pilton

06 February 2024

## Executive summary

Bowmans Creek Wind Farm Pty Ltd, owned by Ark Energy Projects Pty Ltd (the Applicant), has sought consent for the development of a new 347-megawatt (MW) wind farm, known as Bowmans Creek Wind Farm (SSD-10315) (the Project). The site (Site) is located approximately 10 kilometres east of Muswellbrook in the Hunter-Central Coast Renewable Energy Zone (REZ).

The Project represents an investment of approximately \$569 million and is proposed to generate approximately 156 construction jobs and 15 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 then Department of Planning and Environment on the Project.

Commissioners Professor Alice Clark (Chair), Mr Richard Pearson and Mr Adrian Pilton 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 of Planning, Housing and Infrastructure (formerly the Department of Planning and Environment), Muswellbrook Shire Council, Singleton Shire Council and Upper Hunter Shire Council. The Commission also undertook a site inspection and locality tour.

A Public Meeting about the Project was held on 7 December 2023 where the Commission heard from 18 speakers, including community members and local stakeholders. The Commission also received 47 written submissions on the Application.

Key issues that are the subject of findings in this Statement of Reasons for Decision relate to amenity impacts, including visual and noise impacts; traffic and transport; social and economic impacts; decommissioning and rehabilitation; 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 Hunter-Central Coast 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 Federal 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 335 MW of renewable energy and assist in 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 impacted landowners, 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:

- construct and operate a maximum of 54 wind turbines on the Site (up to a maximum of 335 MW), with no consent granted for turbines T64 and T68;
- remain within the approved development disturbance area and envelope, including within the approved height limit (220 metres), should the Applicant upgrade the wind turbines and ancillary infrastructure;

- prepare a Traffic Management Plan prior to commencing the identified road upgrades, which must include, among other requirements, notification of the local community about development-related traffic impacts and details for ongoing consultation with landowners affected by road upgrade works and the haulage route where these impact the local road network;
- ensure that any heavy vehicles and heavy vehicles requiring escort are scheduled to minimise potential conflict with school buses and other road users as far as practicable, including avoiding where reasonable and feasible the transport of material along the local bus routes on Hebden Road when school buses are in operation;
- implement visual impact mitigation measures (e.g. landscape screening) on the land of any non-associated residence within 4.4km of any turbine within 5 years from the commencement of construction of the turbine (should the landowners request it);
- ensure that the noise generated by the operation of the Project's turbines and ancillary infrastructure does not exceed set noise criteria at any non-associated residence as well as undertake noise monitoring within 6 months of the commencement of operations to determine whether the Project is compliant with the noise-related conditions of the development consent. The monitoring data is to be published on the Applicant's website within one week of the completion of monitoring;
- prepare an Accommodation and Employment Strategy for the Project, in consultation with Council and informed by consultation with local accommodation and employment service providers;
- prepare a Decommissioning and Rehabilitation Plan, early in the operation of the Project, which will need to be updated halfway through the operational life of the Project and within 2 years prior to decommissioning, to reflect, but not be limited to, advances in recycling and waste management practices. The plan will need to be implemented on cessation of operations;
- rehabilitate the Site in accordance with a number of robust rehabilitation objectives, including in relation to revegetation, above ground infrastructure, wind turbine pads, and the Site's land capability; and
- ensure that sufficient funds are held for the purpose of decommissioning in accordance with the Applicant's stated commitments.

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

ABBREVIATION	DEFINITION
<b>Amendment Report</b>	The Applicant's Amendment Report, dated 8 October 2021, and its accompanying appendices
<b>Applicant</b>	Ark Energy Projects Pty Ltd (formerly Epuron Projects Pty Ltd)
<b>Application</b>	Bowmans Creek Wind Farm (SSD-10315)
<b>APZ</b>	Asset Protection Zone
<b>AR para</b>	Paragraph of the Department's Assessment Report
<b>BSAL</b>	Biophysical Strategic Agricultural Land
<b>CASA</b>	Civil Aviation Safety Authority
<b>CCPF</b>	NSW Climate Change Policy Framework 2016 (NSW Government)
<b>Commission</b>	NSW Independent Planning Commission
<b>Department</b>	NSW Department of Planning, Housing and Infrastructure (formerly NSW Department of Planning and Environment)
<b>Department's AR</b>	Department's Assessment Report, dated November 2023
<b>DNG</b>	Derived native grassland
<b>EII Act</b>	<i>Electricity Infrastructure Investment Act 2020</i>
<b>EIS</b>	The Applicant's Environmental Impact Statement, dated 17 March 2021, and its accompanying appendices
<b>EP&amp;A Act</b>	<i>Environmental Planning and Assessment Act 1979</i>
<b>EP&amp;A Regulation</b>	<i>Environmental Planning and Assessment Regulation 2000</i>
<b>EPI</b>	Environmental Planning Instrument
<b>ESD</b>	Ecologically Sustainable Development
<b>Framework</b>	NSW Wind Energy Framework
<b>FRNSW</b>	Fire and Rescue NSW
<b>ha</b>	Hectares
<b>Infrastructure SEPP</b>	<i>State Environmental Planning Policy (Infrastructure) 2007</i>
<b>ISP</b>	2022 Integrated System Plan (Australian Energy Market Operator)
<b>LGA</b>	Local Government Area
<b>LVIA</b>	Landscape and Visual Impact Assessment
<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
<b>MLEP 2009</b>	<i>Muswellbrook Local Environmental Plan 2009</i>
<b>MW</b>	Megawatt
<b>MWh</b>	Megawatt hour
<b>NASAG Guidelines</b>	National Airports Safeguarding Framework Guideline D: Managing the Risk to Aviation Safety of Wind Turbine Installations (Wind Farms)/Wind Monitoring Towers
<b>NEM</b>	National Electricity Market
<b>NPfi</b>	NSW Noise Policy for Industry
<b>OHD</b>	O'Hanlon Design Landscape Architects
<b>Planning Systems SEPP</b>	<i>State Environmental Planning Policy (Planning Systems) 2021</i>
<b>Project</b>	Construction and operation of a 347 MW wind farm with up to 56 wind turbines and associated infrastructure, approximately 10 kilometres east of Muswellbrook in the Hunter-Central Coast REZ
<b>RAPs</b>	Registered Aboriginal Parties
<b>REZ</b>	Renewable Energy Zone
<b>RFS</b>	NSW Rural Fire Service

<b>RtS</b>	The Applicant's Response to Submissions Report, dated 8 October 2021, and its accompanying appendices
<b>SEARs</b>	Planning Secretary's Environmental Assessment Requirements
<b>SEPP Resources and Energy</b>	<i>State Environmental Planning Policy (Resources and Energy) 2021</i>
<b>SEPP Transport and Infrastructure</b>	<i>State Environmental Planning Policy (Transport and Infrastructure) 2021</i>
<b>Site</b>	The site as described in section 2.1
<b>SLEP 2013</b>	<i>Singleton Local Environmental Plan 2013</i>
<b>SRD SEPP</b>	<i>State Environmental Planning Policy (State and Regional Development) 2011</i>
<b>SSD</b>	State Significant Development
<b>The Roadmap</b>	NSW Electricity Infrastructure Roadmap, 2020 (NSW Government)
<b>UHLEP 2013</b>	<i>Upper Hunter Local Environmental Plan 2013</i>
<b>VPA</b>	Voluntary Planning Agreement

# 1. Introduction

1. On 20 November 2023, the then NSW Department of Planning and Environment (now the NSW Department of Planning, Housing and Infrastructure) (the **Department**) referred the State significant development (**SSD**) application SSD-10315 (**Application**) from Bowmans Creek Wind Farm Pty Ltd, owned by Ark Energy Projects Pty Ltd (Ark Energy) (formerly Epuron Projects Pty Ltd) (the **Applicant**) to the NSW Independent Planning Commission (**Commission**) for determination.
2. The Application seeks approval under section 4.38 of the *Environmental Planning and Assessment Act 1979* (**EP&A Act**) for the Bowmans Creek Wind Farm (the **Project**) located in the Muswellbrook Shire Council, Singleton Shire Council and Upper Hunter Shire Council Local Government Areas (**LGA**s).
3. The Application constitutes SSD under section 4.36 of the EP&A Act and under section 20 of Schedule 1 of *State Environmental Planning Policy (Planning Systems) 2021* (**Planning Systems SEPP**) (previously clause 20 of Schedule 1 of *State Environmental Planning Policy (State and Regional Development) 2011* (**SRD SEPP**), which was in force at the time of lodgement). The development meets the criteria for SSD because it is for the purpose of electricity generating works with a capital investment value of more than \$30 million (\$569 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 because more than 50 unique public submissions were made to the Department during public exhibition by way of objection.
5. Professor Neal Menzies, as Acting Chair of the Commission, determined that Professor Alice Clark (Chair), Mr Adrian Pilton and Mr Richard Pearson would constitute the Commission Panel 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 20 November 2023. The Department's AR concluded that the site is suitable for a wind farm and the Project would result in benefits to the local community and State of NSW, 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 Project boundary illustrated in Figure 1 below (**Site**), and is located near the localities of Bowmans Creek, Davis Creek, Goorangoola, Greenlands, Hebden, McCullys Gap, Muscle Creek and Rouchel Brook, which are sparsely populated rural properties.
8. Paragraph 5 of the Department's AR (**AR para**) states that the Site is predominantly a rural landscape and is interspersed with infrastructure including transmission lines, roads and rail lines. The Site has been extensively cleared for agricultural and mining purposes and is primarily used for beef cattle grazing. It does not include any mapped Biophysical Strategic Agricultural Land (**BSAL**).

- 9. The Site is zoned RU1 Primary Production, with part of the transmission corridor zoned SP2 Infrastructure and a small portion zoned RE1 Public Recreation.

Figure 1 – Regional context map (source: Applicant's Response to Request for Information, October 2023 (Appendix C) – Bowmans Creek Wind Farm Figures, Figure 1)

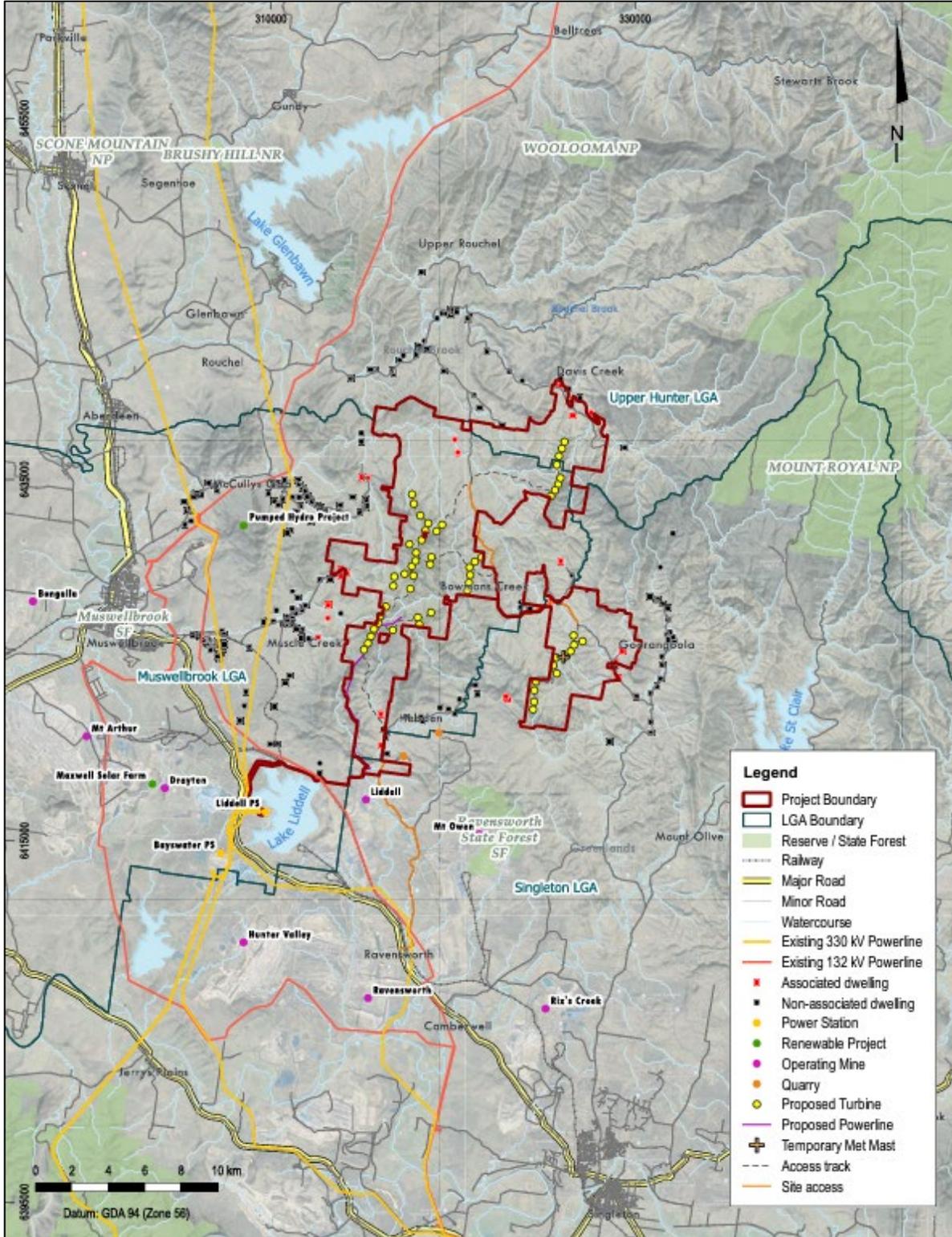
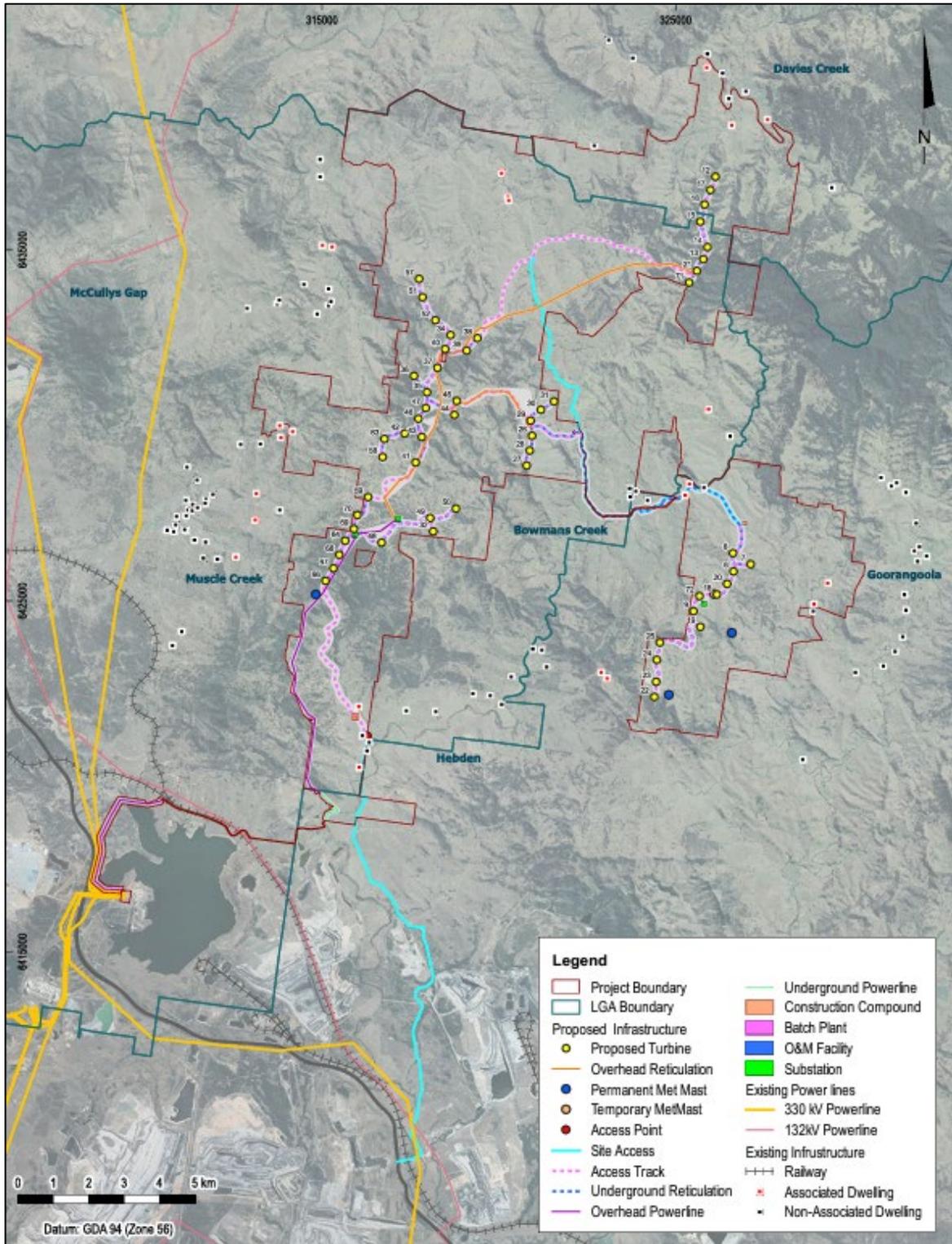


Figure 2 – Project layout (source: Applicant’s Response to Request for Information, October 2023 (Appendix C) – Bowmans Creek Wind Farm Figures, Figure 2)



## 2.2 The Project

10. The Applicant is seeking approval for the development of a 347-megawatt (MW) wind farm in the Hunter-Central Coast Renewable Energy Zone (**REZ**). The Project would comprise up to 56 turbines up to 220 metres high, and associated ancillary infrastructure, including two onsite substations and a new 330 kilovolt (kV) transmission line to connect to TransGrid's existing network at the Liddell substation. Road upgrades are proposed along the Project access route. The construction timeframe for the Project would be approximately 18 months.
11. The Project would generate enough electricity to power over 172,600 homes and save over 957,800 tonnes of greenhouse gas emissions per year (excluding emissions associated with manufacturing and building the proposed wind turbines).
12. Further detail about the main aspects of the Project is set out in Table 1 of the Department's AR.

## 3. The Commission's consideration

### 3.1 Material considered by the Commission

13. In this determination, the Commission has considered the following material (**Material**):
  - the Planning Secretary's Environmental Assessment Requirements (**SEARs**) issued by the Department, dated 23 July 2019, and Supplementary SEARs issued by the Department (not dated);
  - the following information provided by the Applicant:
    - the Environmental Impact Statement dated 17 March 2021 (**EIS**), and its accompanying appendices;
    - the Response to Submissions Report dated 8 October 2021 (**RtS**), and its accompanying appendices; and
    - the Amendment Report dated 8 October 2021 (**Amendment Report**), and its accompanying appendices;
  - all public submissions on the EIS made to the Department during public exhibition;
  - all Government Agency advice to the Department;
  - all requests for and responses to additional information;
  - all referral documents from the Department, including its referral letter, dated 20 November 2023, AR, dated November 2023, Addendum to the AR (Independent Expert Review), dated 16 November 2023, and recommended Conditions of Consent;
  - comments and presentation material at meetings with the Department, Applicant, and local Councils, as referenced in Table 2 below;
  - the Applicant's response to the Commission's questions on notice, dated 5 December 2023;
  - the Department's response to the Commission's questions on notice, dated 12 December 2023;
  - the Applicant's response to the Commission's request for further information, dated 15 December 2023;
  - all verbal submissions and material presented to the Commission at the Public Meeting;
  - all observations and material gathered at the Site Inspection and Locality Tour on 6 and 7 December 2023;

- all written public submissions received and accepted by the Commission up until 5pm, 21 December 2023;
- the Department's comments (dated 19 January 2024) on the feasibility, workability, and any potential unintended consequences of the proposed conditions.

## 3.2 Strategic context

14. 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 Federal and NSW Government's strategic planning frameworks as, with conditions imposed, it would deliver up to 335 MW of renewable energy and assist in the transition to lower emissions energy generation. In addition, the Project would generate benefits to the local and regional community, including up to 156 construction and 15 operational jobs, powering approximately 172,600 homes, and flow-on benefits to the local and regional economies through expenditure and the procurement of goods and services. Muswellbrook, Singleton and Upper Hunter Shire Councils have each agreed to the general terms for a Voluntary Planning Agreement (refer section 5.5 of this report) which would deliver broader community benefits for the life of the Project.

### 3.2.1 Energy context

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

15. 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*

16. According to 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*

17. 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*

18. 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*

19. 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*

20. 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**

21. 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 14).
22. The Department is currently implementing a new *Energy Policy Framework* (AR para 17), 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 17).

## **3.2.3 Regional and Local Plans**

23. In determining the Application, the Commission has also considered the following regional and local plans:
- Hunter Regional Plan 2041;
  - Upper Hunter Strategic Regional Land Use Plan;
  - Muswellbrook Shire Council 2022-2032 Community Strategic Plan;
  - Muswellbrook Local Strategic Planning Statement 2020-2040;
  - Singleton Shire Council Community Strategic Plan 2022-2032;
  - Singleton Local Strategic Planning Statement 2041;
  - Community Strategic Plan – Upper Hunter 2032; and
  - Upper Hunter Local Strategic Planning Statement 2020.

24. The Commission considers that the Project is in accordance with the above regional and local strategies, particularly the Hunter Regional Plan 2041, which identifies renewable energy generation and investment as a future growth opportunity for the region.

### 3.3 Statutory context

#### 3.3.1 State significant development

25. The Application is SSD under section 4.36 of the EP&A Act and as per section 20 of Schedule 1 of the Planning Systems SEPP (previously clause 20 of Schedule 1 of the SRD SEPP, which was in force at the time of lodgement). 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 because the Application is SSD and more than 50 unique public submissions objecting to the Project were made to the Department.

#### 3.3.2 Amended Application

26. In accordance with clause 55 of the *Environmental Planning and Assessment Regulation 2000 (EP&A Regulation)*, 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, reducing the maximum number of proposed turbines from 60 to 56.

#### 3.3.3 Permissibility

27. The Site is zoned as RU1 Primary Production under the *Muswellbrook Local Environmental Plan 2009 (MLEP 2009)*, *Singleton Local Environmental Plan 2013 (SLEP 2013)* and *Upper Hunter Local Environmental Plan 2013 (UHLEP 2013)*, with part of the transmission corridor zoned SP2 Infrastructure and passing through a small portion of land zoned RE1 Public Recreation under the MLEP 2009. Electricity generating works are permissible with consent on any land in a prescribed rural, industrial or special use zone, including land zoned RU1, SP2 or RE1, under Clause 34 of the *State Environmental Planning Policy (Infrastructure) 2007 (Infrastructure SEPP)* (AR para 26). Therefore, the Project is permissible with development consent.

##### *Subdivision*

28. The Applicant proposes to subdivide the two parcels of land that the substations will be located on. The proposed subdivision of the lots would be below the minimum lot size under a strict reading of the MLEP 2009 (80 ha) and SLEP 2013 (40 ha) (the subdivisions would occur in these two LGAs only). However, under section 4.38(3) of the EP&A Act, development consent for the Project as a whole can be granted despite the subdivision component of the application being prohibited by the MLEP 2009 and SLEP 2013 (AR Table 9).

#### 3.3.4 Integrated and other NSW approvals

29. 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 27). The Commission Panel has considered the Department's recommended conditions of consent relating to integrated and other approvals as part of its deliberation process.

### 3.3.5 Renewable Energy Zone

30. 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.
31. The Project is located in the geographical area specified in the Hunter-Central Coast REZ, which is declared under section 23 of the EII Act. The Hunter-Central Coast REZ is “an area traditionally associated with supplying coal and energy to national and global markets” (AR para 58), and as such the region has an existing electricity network infrastructure, transport infrastructure and skilled workforce. The Project would have access to the electrical grid at a location with available network capacity (AR para 57).

## 3.4 Mandatory considerations

32. 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 1 – Mandatory Considerations

Mandatory Considerations	Commission’s comments
Relevant EPIs	<p>Appendix I 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>• SRD SEPP;</li> <li>• <i>State Environmental Planning Policy (Resources and Energy) 2021 (SEPP Resources and Energy)</i>;</li> <li>• <i>State Environmental Planning Policy (Transport and Infrastructure) 2021 (SEPP Transport and Infrastructure)</i>;</li> <li>• <i>State Environmental Planning Policy (Resilience and Hazards) 2021</i>;</li> <li>• <i>State Environmental Planning Policy (Primary Production) 2021</i>;</li> <li>• <i>State Environmental Planning Policy (Koala Habitat Protection) 2020</i>;</li> <li>• <i>State Environmental Planning Policy (Biodiversity and Conservation) 2021</i>;</li> <li>• MLEP 2009;</li> <li>• SLEP 2013; and</li> <li>• UHLEP 2013.</li> </ul> <p>The Commission agrees with the Department’s assessment of EPIs set out in Appendix I of the AR and therefore adopts the Department’s assessment that the Project is consistent with these EPIs.</p>

<b>Relevant DCPs</b>	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.
<b>Likely Impacts of the Development</b>	The likely impacts of the Application have been considered in section 5 of this Statement of Reasons.
<b>Suitability of the Site for Development</b>	<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 Application is permissible with consent;</li> <li>• the Project does not preclude the use of the land for agriculture during operation;</li> <li>• the inherent agricultural capability of the land will not be affected in the long term;</li> <li>• decommissioning and rehabilitation would be capable of returning the land to its pre-development condition;</li> <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 Site is located close to existing electricity transmission networks;</li> <li>• the Site has suitable wind resources;</li> <li>• the Site has access to the regional road network;</li> <li>• the use of the Site for the purpose of electricity generation is an orderly and economic use and development of land;</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; and</li> <li>• the development of the Site will assist in meeting Australia's and NSW's target of net zero emissions by 2050.</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>

### 3.5 Additional considerations

33. 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

34. As part of the determination process, the Commission met with various organisations and individuals as set out in Table 2. All meetings, notes and transcripts have been made available on the Commission's website.

Table 2 – Commission's Meetings

Meeting	Date	Transcript/notes available on
Department	28 November 2023	30 November 2023
Applicant	28 November 2023	6 December 2023
Muswellbrook Shire Council	28 November 2023	30 November 2023
Upper Hunter Shire Council	28 November 2023	6 December 2023
Singleton Shire Council	28 November 2023	6 December 2023
Site inspection and locality tour	6 and 7 December 2023	14 December 2023 and re-published on 20 December 2023 to amend an incorrectly numbered turbine (no other changes made)
Public Meeting	7 December 2023	13 December 2023

## 4. Community participation & public submissions

### 4.1 Community attendance at the Site inspection

35. On 6 December 2023, the Commission Panel conducted an inspection of the Site, and on 6 and 7 December 2023 the Commission Panel undertook a locality tour of the areas surrounding the Site.
36. 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 representatives of the three impacted local Councils to attend the site inspection as observers and representatives of the community. Muswellbrook Shire Council and Upper Hunter Shire Council accepted the Commission's offer to attend and observe the site inspection. The Applicant and four host landowners also attended the site inspection.

- 37. The Commission Panel viewed the Site from representative private residences surrounding the Site during its locality tour. The Commission acknowledges the residents of the private properties it visited and recognises the efforts made to allow the Commission Panel access to their properties.
- 38. The Commission published site inspection and locality tour notes on its website, as indicated in Table 2 above.

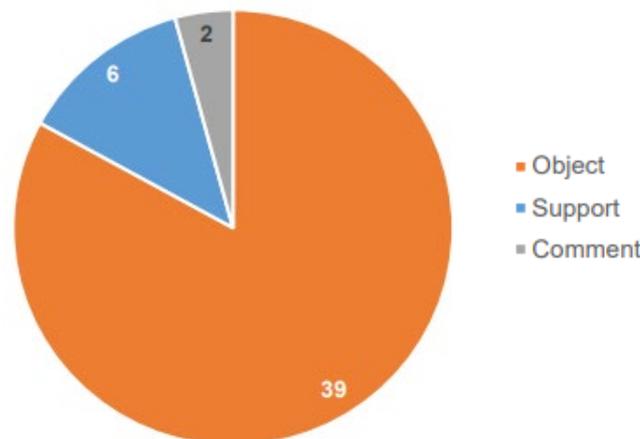
## 4.2 Public Meeting

- 39. The Commission conducted a Public Meeting at the Upper Hunter Conservatorium of Music in Muswellbrook on 7 December 2023. The Public Meeting was held in-person with registered speakers presenting to the Commission Panel in-person or via videoconference or telephone.
- 40. The Commission heard from the Department, the Applicant, community group representatives and individual community members. In total, 18 speakers presented to the Commission during the Public Meeting.
- 41. Presentations made at the Public Meeting have been considered by the Commission as submissions and are referenced in relation to specific issues raised in section 4.3.1.

## 4.3 Public submissions

- 42. Consideration has been given to the matters raised in the submissions received by the Commission (see section 5 below).
- 43. All persons were offered the opportunity to make written submissions to the Commission until 5.00pm, Thursday 21 December 2023. The deadline for making written submissions was extended from 15 December 2023 to Thursday 21 December 2023 to provide the community with additional time prior to the Christmas period.
- 44. The Commission received a total of 47 written submissions on the Application. An overview of the written submissions received by the Commission is provided in Figure 3 below.

Figure 3 – Submissions received by the Commission



### 4.3.1 Key issues raised

45. Submissions to the Commission raised a number of key issues, which are outlined below. The submissions referred to below are not an exhaustive report of the submissions considered by the Commission, but are reflective and illustrative of what the Commission regards as the key issues that were raised in the submissions.

#### *Amenity impacts – visual, noise and dust*

46. Submissions received by the Commission that opposed the Project raised concern about the visual impacts of the Project, particularly the impact of the wind turbines when viewed from private properties adjoining the Site. Submissions commented that the proposed turbines, which are generally situated on visually prominent ridgelines, would change the rural character of the area and reduce its landscape value and scenic amenity. Some submissions commented that wind turbines are ‘unsightly’ structures in the landscape. Some also contended that the photomontages of the proposed wind farm presented in visual impact assessments did not appropriately reflect the reality of the likely impact.
47. Submissions raised concern about the effectiveness of the proposed vegetation screening designed to reduce visual impacts. They commented that the proposed plantings would not adequately screen the wind turbines from view because they would take years to grow to the required height and may still be ineffective in obscuring the turbines when fully grown because of the topography of the landscape. Submissions also raised concern about the potential for the vegetation screening close to residences to increase bushfire risks.
48. A submission in support of the Project commented that wind turbines are not visually offensive structures, and stated that the Project would cause less visual impact than the existing overburden heaps from large number of mines in the local area.
49. Submissions commented on the potential impacts of background noise caused by wind turbines and raised concern about noise traveling large distances to residences. Some expressed concern about unknown impacts of wind turbine noise on human health. Submissions also questioned the noise modelling undertaken for the Project, raised concern about the limited future noise monitoring proposed, and requested that strategically placed real-time noise monitoring be installed to accurately understand the noise impacts.
50. Submissions also raised concerns about dust impacts during construction, including from vehicle and machinery movements along unsealed roads and concrete batching plants, and the potential associated health impacts.

#### *Site suitability*

51. The Commission received submissions raising concerns about the suitability of the Site for the Project. Environmental impacts, including the amenity impacts discussed above, were the key reason that community members found the Site unsuitable. Some commented that the wind resource at the Site was insufficient to support a wind farm project.
52. One submission in support of the Project commented that the Site is suitable for the proposed development because the Project can operate in conjunction with agricultural uses.

### *Community consultation*

53. The Commission received submissions raising concerns about the suitability of community consultation undertaken by the Applicant to date. Submissions commented that there has been a lack of information and transparency about the Project – particularly in the last two years – and that this has caused significant stress and anxiety for many community members.

### *Traffic and transport*

54. The Commission received submissions raising concerns about construction traffic traveling along the local road network. These submissions contended that increased traffic volumes from the Project – including heavy vehicles – would result in increased road noise and vibrations, traffic delays, reduced road safety and wear-and-tear of local roads.
55. Submissions also raised concerns about the proposed road widening to allow heavy vehicle access to the Site and its associated impacts, such as tree removal and changes to property access driveways.

### *Lighting*

56. Submissions raised concern about the visual impact of night lighting of the wind turbines and light pollution. Submissions commented that the Civil Aviation Safety Authority (**CASA**) requirements for lighting of the turbines had not been clearly communicated by the Applicant. Submissions also raised concerns about the impact of lighting on nocturnal species.

### *Bushfire risk*

57. Submissions raised concern about the potential for increased bushfire risk because of the Project, including the potential for higher incidence of lightning strikes and fire risks associated with the proposed electrical infrastructure (such as new transmission lines). Some submissions commented that firefighting services may not be able to access remote parts of the Site.
58. Submissions also raised concerns about the increased bushfire risk caused by vegetation being planted close to residential dwellings for visual impact mitigation.

### *Decommissioning and rehabilitation*

59. The robustness of decommissioning agreements was a key concern raised through submissions received by the Commission. Submissions commented that there is a lack of financial security to prevent landowners, Council and the community from bearing environmental risks and economic costs associated with potential abandonment of the Project before decommissioning or adequate rehabilitation.

### *Social and economic impacts*

60. Submissions in objection to the Project queried its economic feasibility, including its capacity to reliably generate energy to contribute to the electricity network.
61. Submissions in support of the Project commented on its contribution to the renewable energy transition in NSW and the associated social, environmental, and economic benefits, including that the Project will provide new jobs in the region during the transition away from mining.

## 5. Key issues

### 5.1 Visual impact

62. The Commission acknowledges that the potential visual impacts of the Project were a significant issue in submissions both to the Commission and the Department, particularly in relation to impacts on views of the landscape and overall change to the rural character of the area.
63. During its site inspection and locality tour, the Commission viewed the Site from representative non-associated private residences surrounding the Site, including residences along Bowmans Creek Road, Muscle Creek Road, Sandy Creek Road and Studleigh Road.
64. The Applicant considered the visual impacts of the Project in its Landscape and Visual Impact Assessment (**LVIA**), prepared as part of its EIS, and updated the LVIA to address amendments made to the Project, after receiving submissions on the EIS. During the Department's assessment, the Applicant provided additional information, including further assessment of receivers and confirmed additional neighbour agreements (AR para 62).
65. The Commission notes that the Department raised concerns about the potential visual impacts of the Project from an early stage and throughout the assessment process. The Department engaged an independent consultant, O'Hanlon Design Landscape Architects, (**OHD**) to review the Applicant's LVIA, visit non-associated residences and provide independent advice (AR para 63). OHD's Independent Expert Review, dated November 2023, found that the LVIA has been prepared in accordance with the *Wind Energy: Visual Assessment Bulletin* (dated December 2016) and "that the methodology used for assessment is reasonable for the purpose of identifying the likely visual impacts" (page 22). The Independent Expert Review recommended visual mitigation measures including additional landscape screening and removal of turbine T64, and that conditions of consent should require the Applicant to undertake consultation with individual landowners regarding any additional screening, and clearly identify who is responsible for care of screenings.
66. As part of its assessment of the Project's visual impacts, the Department considered the avoidance and mitigation measures identified in the *Wind Energy: Visual Assessment Bulletin*. The Department found that "re-siting or removing turbines is generally the most effective mitigation option, given that re-sizing specific turbines is not a viable option for commercial and maintenance reasons" (AR para 65). The Department notes that the Applicant reduced the proposed number of turbines from 72 to 60 during the design process prior to submitting the EIS, and further reduced the number of turbines from 60 to 56 following exhibition of the EIS. Through its assessment, the Department found that the number of turbines should be further reduced, from 56 to 54 turbines.
67. Subject to reducing the total number of turbines to 54 and implementing its recommended mitigation measures, the Department considers that there would be no significant visual impacts from surrounding non-associated residences and the public road network because of the distance, intervening topography, and existing and proposed vegetation providing screening.

68. Although the Commission acknowledges that the Project will impact views from surrounding non-associated residences, it finds that the impacts can be effectively reduced through mitigation measures in most instances. The Commission acknowledges that there are instances where the impacts are unable to be fully mitigated to the satisfaction of the non-associated residence and understands that consultation and/or negotiations have reached a stalemate. The Commission has included direction in the conditions of consent to ensure the recommencement and continuation of consultation processes. Notwithstanding, the Commission finds overall that the visual impacts caused by the Project are balanced by the benefits of the Project.
69. The Commission has imposed condition A5, which limits the Project to a maximum of 54 turbines (with no consent granted for turbines T64 and T68), as well as condition A6, which sets micro-siting<sup>1</sup> restrictions for the turbines and ancillary infrastructure. These restrictions include, but are not limited to, that no wind turbine is moved more than 100 metres from the relevant GPS coordinates (refer Appendix 1 of the conditions of consent), that turbine T8 must not be micro-sited closer to non-associated residence S17-2, and that turbines T66 and T67 must not be micro-sited closer to non-associated residence G17-1.
70. In view of the submissions received and the recommendations of OHD's Independent Expert Review, the Commission has imposed condition B13 to reduce the visibility of wind turbines from impacted nearby properties through vegetation screening. The vegetation screening is intended to mitigate view impacts from the residence of the property and its curtilage, not any other location on the property. The Commission notes that the selection of appropriate locations for vegetation screening will be more effective following the construction of the wind turbines. Whilst owners may ask for the implementation of visual impact mitigation measures shortly after the commencement of construction, it is recommended that owners consider whether there is benefit in delaying such a request until the relevant wind turbines are visible from their residence or its curtilage.
71. Regarding concerns raised about the potential for increased bushfire risks as a result of vegetation planting close to residences, condition B13 requires the provisions of the NSW Rural Fire Service's (**RFS**) *Planning for Bushfire Protection 2019* to be considered when selecting appropriate locations for vegetation screening.
72. The Commission has also imposed condition B14, which requires the Applicant to minimise the visual appearance of the wind turbines through paint colours and surface treatments to ensure the turbines blend in as far as possible with the surrounding landscape. Further to this and noting the concerns about the amenity impacts of lighting raised in submissions, the Commission notes that condition B15 additionally requires the Applicant to minimise the off-site lighting impacts of the development and the visual impacts of any aviation lighting by implementing measures as appropriate in the circumstances (further discussion of aviation safety and lighting impacts is provided at sections 5.6.7 and 5.6.8 of this Statement of Reasons).
73. The Commission acknowledges the concerns raised in submissions about the accuracy of photomontages prepared for the Project. Whilst OHD's Independent Expert Review was critical of the photomontages in the LVIA, the Commission found some to be useful when taken in conjunction with the Site Inspection and Locality Tour as well as other evidence. The Commission is satisfied that the imposed conditions will appropriately mitigate most of the visual impacts to the extent that is possible for affected properties.

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<sup>1</sup> Within the meaning of section 4.3.3 of the NSW Government's *Wind Energy Guideline* (2016).

## 5.2 Noise

### 5.2.1 Construction noise

74. The Commission notes that noise levels are predicted to comply with the recommended 'noise affected' criterion of 45 dB(A) as specified under the ICNG at all non-associated receivers during standard construction hours during construction of the turbines (AR para 141).
75. The Commission finds that construction noise levels can be appropriately managed and has therefore imposed conditions requiring the Applicant to take all reasonable steps to minimise construction noise, including associated traffic noise (condition B20); implement mitigation measures set out in the ICNG (condition B21); comply with construction hours (condition B17); and comply with blasting limits and hours (condition B23).
76. Regarding construction noise associated with road works, the Commission notes that six non-associated residences are predicted to experience impacts. During standard construction hours, noise levels up to the 'highly noise affected' criterion of 75 dB(A) as specified under the ICNG are predicted to occur at one residence (S17-2). Noise levels at the remaining five residences (Q17-1, Q17-2, Q17-3, I24-2 and K23-1) are predicted to exceed the recommended 'noise affected' criterion of 45 dB(A) under the ICNG, with noise levels predicted ranging between 49 dB(A) and 68 dB(A) (AR para 148-149). Noting this, the Commission has imposed condition B20, which requires the Applicant to take all reasonable steps to minimise the construction or decommissioning noise of the development. In line with the recommendations of the Applicant's Noise and Vibration Assessment dated February 2021, this includes:
- informing the landowners of receivers Q17-1, Q17-2, I24-2 and K23-1 of the nature of works to be carried out, the expected noise levels and duration, and providing relevant contact details, where construction noise associated with road works is above 45db(A); and
  - identifying appropriate, feasible, and reasonable respite and repose periods in consultation with the landowner of receiver S17-2, where construction noise associated with road works is above 75db(A).
77. Two non-associated receivers (S17-2 and I24-2) are located between 45 metres and 100 metres of the proposed road works. The Applicant proposes to monitor construction activities in proximity to these receivers, and if required, implement mitigation measures to ensure compliance with the criteria provided in *Assessing Vibration: A Technical Guideline* (DECC, 2006) (AR para 153). The Commission has imposed this commitment through condition B21.
78. The Commission agrees with the Department that construction works associated with the proposed road upgrades would be short-term and intermittent and are unlikely to result in significant adverse noise impacts during daytime hours at most residential receivers (AR para 150).

### 5.2.2 Operational noise

79. The Commission acknowledges the concerns raised in submissions regarding operational noise impacts, including concerns about background noise.

80. Operational noise levels were assessed by the Applicant in accordance with the requirements of the Department's *Wind Energy: Noise Assessment Bulletin* (2016). The Commission notes that the modelling predicts the Project would comply with the relevant environmental noise criteria at all receiver locations during all wind speeds (AR para 161 and 165). The Commission agrees with the views of the Department and the EPA that the operational noise impacts of the Project can comply with the requirements of the Bulletin.
81. The NSW Environment Protection Authority has indicated that it would be able to issue an Environment Protection Licence for the Project subject to the noise limits as identified in Appendix I of the EIS (AR para 169).
82. The Commission has imposed condition B24 requiring the Applicant to measure operational noise in accordance with the requirements of the Bulletin, including in relation to tonality and low frequency noise.
83. The Commission has also imposed condition B26 requiring the Applicant to undertake noise monitoring within six months of the commencement of operations to determine whether the Project is complying with relevant operational noise conditions and publish the monitoring data on its website within one week of the completion of monitoring.

### 5.3 Traffic and transport

84. The Project would include the delivery of plant, equipment and materials, including the movement of light and heavy vehicles. To support the movement of heavy vehicles, including those requiring escort, the Applicant proposes a series of road upgrades and network improvements along Hebden Road (south), Scrumlo Road, Albano Road and Bowmans Creek Road. The construction period for the Project is estimated to be 18 months in duration, with vehicle movements peaking at 75 light vehicles and 66 heavy vehicles per day. A total of 560 heavy vehicles requiring escort would be required for the delivery of wind turbine components to the Site during construction (10 per turbine) (AR paras 117, 126-127 and 129).
85. Singleton and Muswellbrook Shire Councils are supportive of the proposed road upgrades, and the Applicant provided further information regarding upgrades to the satisfaction of Transport for NSW (TfNSW) (AR para 131 and 133).
86. In its meeting with the Commission on 28 November 2023, Muswellbrook Shire Council raised concerns regarding dilapidation surveys of the upgraded roads, and requested that dilapidation surveys be required following the completion of roadworks and before construction of the Project infrastructure commences. The Commission finds that this will ensure the roads are maintained in their new, upgraded condition and has accordingly imposed condition B4.
87. The Commission understands that heavy vehicles utilising the haulage and access routes will be scheduled to avoid morning and southbound peaks at the New England Highway and Hebden Road intersection. At the Public Meeting, the Applicant noted that its Traffic Management Plan will seek to ensure that heavy vehicle trips avoid school bus routes where practicable, and where these can't be avoided, that the trips avoid peak school bus times (Public Meeting Transcript, page 17). The Commission has therefore imposed conditions B5 and B6 to ensure these traffic arrangements.
88. The Commission acknowledges the concerns raised in submissions regarding the impacts of construction traffic and the proposed road upgrades upon residential receivers. Following the Public Meeting, and the Commission's tour of the Site and locality, the Commission requested further information from the Applicant regarding these matters, including information on potential property access changes and cattle grid removals and the extent of consultation undertaken with impacted receivers.

89. The Commission acknowledges the Applicant's response, dated 15 December 2023, however noting the residual uncertainty for residents on Albano Road and Bowmans Creek Road, the Commission has imposed condition B6 requiring ongoing consultation with landowners affected by road upgrade works along the haulage route, to ensure that as far as practicable, the needs of residents can be accommodated with upgrades undertaken, particularly where the works directly affect private properties, for example, in the provision of new driveways or cattle crossings.
90. The Commission agrees with the Department that, with road upgrades, regular road maintenance, and the implementation of a Traffic Management Plan, the Project would not result in unacceptable impacts on the capacity, efficiency or safety of the road network subject to the imposed conditions.

## 5.4 Decommissioning and rehabilitation

91. The Commission received submissions from the community and Council that raised concern about the lack of financial security mechanisms in place to prevent potential abandonment of the Project before decommissioning and rehabilitation is completed.
92. The Department, at its meeting with the Commission on 28 November 2023, stated that "the recommended conditions require the applicant to rehabilitate the site in accordance with a number of objectives which are that the site must be safe, stable and non-polluting, native vegetation must be restored, aboveground infrastructure, access roads and underground cabling must be removed, unless the Planning Secretary agrees otherwise". (Meeting Transcript, page 9). Regarding decommissioning bonds, the Department stated "it is the NSW Government's policy that financial assurances should not be required by conditions of consent and any financial assurances should be dealt with in the commercial arrangements outside of the planning system" (Meeting Transcript, page 9).
93. The Commission notes the NSW Wind Energy Guideline 2016 states (page 13):  
*The NSW Government's policy is that a wind energy project owner or operator, and not the 'host' landholder, should be responsible for decommissioning and rehabilitation at the end of life of a wind energy project or a particular turbine. Proponents must identify and address all relevant issues for decommissioning and rehabilitation in their project EIS, and include a commitment that the operator will be responsible for decommissioning and rehabilitation.*
94. The Commission requested further information from the Department and the Applicant about the decommissioning arrangements for the Project. The Commission also asked the Applicant about its agreements with involved landowners, its estimate of decommissioning costs and how such an estimate was calculated.
95. In its response to the Commission dated 12 December 2023, the Department reiterated that it is the NSW Government's policy not to require financial assurances or bonds from Applicants and noted that the Department has limited options to facilitate financial securities under the planning system and EP&A Act. It stated that decommissioning arrangements "should be reflected in a host agreement with the landholder, which may also prescribe assurances to fund decommissioning, including ongoing evidence that the applicant has the capacity to fund decommissioning activities" (page 1). The Department also noted that "[i]f an applicant or landholder fails to meet the obligations prescribed by the relevant development consent, the Department can use its enforcement powers under the EP&A Act to address any breaches of the consent conditions" (page 2).
96. The Applicant, in its response to the Commission dated 5 December 2023, provided detailed information about its decommissioning arrangements with involved landowners. The Applicant stated:

*Ark Energy has developed decommissioning arrangements with involved landowners which consist of obligations related to make good and decommissioning in lease agreements as well as a Decommissioning Security Deed (DSD).*

*The DSD provides for a security amount to be built up over a number of years to be available to the landowners in the event the wind farm company does not meet all of its obligations under the make good and decommissioning provisions of the Lease.*

*The Decommissioning Security Deed commences at the commencement of the Lease[.]*

97. At the Public Meeting on 7 December 2023, the Applicant described its proposed decommissioning fund further, stating:
- [The] fund would reach 100 percent of the cost at year 10 of the project, and that is not year 10 of operational life, that's year 10 after the start of construction, and the fund is proposed to be paid into from the start of construction (Public Meeting Transcript, page 18).*
98. The Applicant also stated that the decommissioning calculation used “is gross decommissioning as opposed to net” and includes the assumption that there is no cost benefit for recycling of materials and therefore is an estimate of “the worst case scenario” (Public Meeting Transcript, pages 18-19).
99. In a letter to the Commission dated 15 December 2023, the Applicant provided further information about the calculation of its decommissioning cost estimate and confirmed that it had included provisions for changes to decommissioning costs to be accommodated and payments into the fund adjusted accordingly.
100. The Panel finds that the Applicant’s decommissioning and rehabilitation arrangements are suitable and that, with the implementation of objective-based conditions and monitoring requirements, the Project is capable of being decommissioned and the Site is capable of being rehabilitated appropriately.
101. The Commission has therefore imposed condition B43, which requires the Applicant to prepare a Decommissioning and Rehabilitation Plan within 3 years of the commencement of operations which is to be reviewed halfway through the operational life of the Project, as well as two years prior to the Project’s decommissioning. The Commission has imposed condition B44 which sets specific rehabilitation objectives that the Applicant must meet within 18 months of cessation of operations. The Commission has also imposed condition B47 which requires the Applicant to ensure that sufficient funds are held for the purpose of decommissioning, as described in its letter to the Commission dated 5 December 2023.

## 5.5 Social and economic impacts

102. In addition to its contribution to the energy transition, the Project would generate direct and indirect benefits to the local community, including (AR Table 9):
- generating up to 156 jobs during the 18-month construction period;
  - providing up to 15 ongoing full-time jobs during operation;
  - expenditure on accommodation and business in the local economy by workers involved in the Project who would reside in local areas;
  - the procurement of goods and services by the Applicant and associated contractors; and
  - upgrades and maintenance to local roads used for the Project.

### 5.5.1 Community enhancement

103. The Applicant has offered to enter into a Voluntary Planning Agreement (**VPA**) with each Council to support the provision of social infrastructure via a community benefit fund. The VPA is comprised of an annual contribution payable at \$686 per MW installed (adjusted annually to increases in CPI), within the relevant LGA over the operational life of the Project. Payments would commence when development begins generation and will cease when the development is decommissioned (AR Table 9). Accordingly, the Commission has imposed condition A19 that requires the Applicant to enter into a VPA with each Council in accordance with the terms of the agreement, or, if the Applicant offers other terms, then on those terms if agreed by Council..
104. The Commission notes it has corrected the dates of the letters referenced in condition A19, as requested by Muswellbrook Shire Council and Upper Hunter Shire Council during its meetings with the Commission.
105. Subject to imposed condition A19, the Commission is satisfied with the Project's capacity to provide community benefit.

### 5.5.2 Workforce accommodation

106. The Commission heard concerns from the community about the local impacts of the Project's workforce requirements during construction, including the potential adverse impacts on local short-term accommodation demand.
107. To manage the potential workforce accommodation impacts, and to encourage the employment of locally sourced workers, the Commission has imposed condition B42 which requires the Applicant to prepare an Accommodation and Employment Strategy for the development in consultation with the affected Councils that:
- proposes measures to ensure there is sufficient accommodation for the workforce associated with the development;
  - considers the cumulative impacts associated with other SSD projects in the area;
  - investigates options for prioritising the employment of local workers for the construction and operation of the development, where feasible; and
  - includes a program to monitor and review the effectiveness of the strategy over the life of the development, including regular monitoring and review during construction.

## 5.6 Other issues

### 5.6.1 Dust

108. The Commission acknowledges that submissions raised concern about dust generation during the construction period, as well as the potential for ongoing dust generation. The Commission has imposed condition B28 which requires the Applicant to minimise the off-site dust, fume and blast emissions of the development, and minimise the surface disturbance of the site. Subject to this, the Commission is satisfied that dust impacts can be mitigated and managed on an ongoing basis through conditions of consent.

### 5.6.2 Hazards and risk

#### *Bushfire risk*

109. The Site is mapped as bushfire prone land (AR Table 9). The Commission acknowledges the concerns raised in submissions regarding the management of bushfire risk at the Site and the impact this might have on surrounding properties.

110. The Commission agrees with the Department, RFS and FRNSW that the bushfire risks can be suitably controlled through the implementation of standard fire management plans and procedures. The Commission has therefore imposed condition B39 and condition B40, which require the Applicant to:
- establish a 10m Asset Protection Zone (**APZ**) around each wind turbine, wind monitoring masts and operation and maintenance facilities;
  - comply with the RFS's *Planning for Bushfire Protection (2019)*;
  - provide a 20,000 litre water supply tank fitted with a 65 mm Storz fitting at each substation compound within the APZ and a Fire and Rescue NSW (**FRNSW**) compatible suction connection located adjacent to each substation; and
  - prepare an Emergency Response Plan to manage the fire risk.
111. As discussed at paragraph 71, the Commission has also imposed condition B13 which requires compliance with the RFS's *Planning for Bushfire Protection (2019)* for any vegetation planted close to residential dwellings for the purpose of visual impact mitigation.

### 5.6.3 Biodiversity

112. This Site is located on hilly slopes and ridges characterised by woodlands, dry rainforests, open forests and derived native grassland (**DNG**). The Site also has large areas that have historically been cleared for agricultural purposes, including pasture and grazing, and are dominated by exotic species (AR para 172).
113. The Department's AR states that the Project "has the potential to impact biodiversity values during construction of the wind farm through native vegetation clearing and direct and indirect impacts to listed threatened flora and fauna species and communities, and through bird and bat strike during operation of the wind turbines" (AR para 170). The Department notes that in NSW (and Australia), the best wind resources are usually located on ridges at higher elevations, which have often had less historical vegetation clearing, so most wind farm projects cannot be developed without a moderate level of vegetation clearing (AR para 171).
114. The Project's development footprint (including disturbance associated with road upgrades) is approximately 411 hectares (**ha**), of which 280 ha is native vegetation, comprising (AR para 179):
- 98.4 ha of dry rainforest;
  - open forest and woodland in moderate condition;
  - 178.6 ha of DNG; and
  - 3.3 ha of poor condition or planted vegetation.
115. The Commission refers to the Department's assessment of native vegetation at section 6.5.2 of the AR, and flora impacts at section 6.5.3 of the AR, including its assessment of Serious and Irreversible Impact (SII) entities and the application of the Biodiversity Assessment Method (BAM). The Commission also refers to the Department's assessment of fauna impacts at section 6.5.4 of the AR. The Commission notes that the Project has the potential to impact flora and fauna species listed under the *Biodiversity Conservation Act 2016* and *Environment Protection and Biodiversity Conservation Act 1999* through direct habitat loss from vegetation clearing, and indirect impacts.
116. The Department is of the view that impacts to native vegetation can be appropriately avoided and/or minimised and has therefore recommended strict conditions of consent to protect native vegetation. The Commission has imposed condition B7 to ensure the Applicant does not clear any native vegetation located outside the development corridor.

117. The Commission has also imposed conditions to minimise and manage impacts to flora and fauna. Conditions imposed by the Commission will restrict habitat clearing (condition B8); require biodiversity offsets (conditions B9 and B10); require the Applicant to prepare a Biodiversity Management Plan (condition B11); and require the Applicant to prepare a Bird and Bat Adaptive Management Plan in consultation with the Biodiversity Conservation and Science Directorate within the Department (condition B12).
118. The Commission notes that in addition to offsetting biodiversity impacts of the Project in accordance with the requirements of NSW Biodiversity Offset Scheme, the Applicant has committed to avoid and minimise clearing of Box-Gum Woodland and all other threatened ecological communities where feasible via micro-siting during the detailed design stage (AR para 198).
119. Subject to the imposed conditions, the Commission is satisfied that the Project would not have any significant impacts on the biodiversity of the Site or surrounding region.

#### 5.6.4 Aboriginal cultural heritage

120. Site surveys were undertaken by the Applicant in consultation with Registered Aboriginal Parties (**RAPs**). 18 sites were identified in the updated Aboriginal Cultural Heritage Assessment Report, and of these, 10 sites would be located outside the proposed development corridor and would not be impacted.
121. The Applicant has committed to avoid and minimise impacts on all partially impacted and potentially impacted sites and Heritage NSW has agreed that subsurface testing of potential archaeological deposits is only required if impacts are confirmed at the detailed design stage. Subsurface testing would then inform the appropriate mitigation and management in consultation with RAPs (AR Table 9).
122. The Commission agrees with the Department and Heritage NSW that the Project would not significantly impact the Aboriginal heritage values of the locality and has imposed condition B32, which requires the Applicant to ensure the development does not cause any direct or indirect impacts to identified aboriginal heritage items, historic heritage items, and any items located outside the disturbance area.

#### 5.6.5 Historic heritage

123. No heritage items listed on Commonwealth, National or State registers are located within or near the Site.
124. At Table 9 of the AR, the Department states:
- *there are three locally listed heritage items within 1km of the site, however there would be no physical impacts to these sites or their associated curtilages;*
  - *the Applicant has committed to avoid impacts on two sites identified through surveys sites through the installation of exclusion zones; and*
  - *the NSW Heritage Council and [Local Councils] were consulted regarding the Project but did not raise any concerns in their advice to the Department.*
125. The Commission finds that the potential impacts to historic heritage values can be appropriately managed and has therefore imposed condition B33 requiring the Applicant to prepare a Heritage Management Plan.

### 5.6.6 Agriculture and land use

126. The Site comprises Land and Soil Capability Class 5 land (moderate-low capability) and Class 7 land (very low capability) that is characterised by undulating topography, steep elevations and rugged landscape. It is generally not suited to agricultural uses other than grazing activities. As noted by the Department, grazing is expected to continue concurrently throughout the Project lifespan, with land being rehabilitated upon project decommissioning (AR Table 9).
127. The Commission finds the Project will not compromise or significantly diminish the availability of land for primary production purposes within the Site or surrounding area. The Commission has imposed condition B44, which sets specific rehabilitation objectives that the Applicant must meet within 18 months of cessation of operations, including maintaining or restoring the land capability of the Site to the pre-existing use.

### 5.6.7 Aviation safety

128. The Commission heard submissions at the Public Meeting about the Project's potential impacts on aviation safety, including risks related to poor weather conditions and aerial firefighting.
129. Airservices Australia advised that the Project would not have an adverse impact on aviation communications or navigation and surveillance equipment, nor the safety, efficiency or regularity of operations at nearby airports. In line with the recommendations of CASA and the Department of Defence, the Applicant committed to install medium intensity steady lighting to the turbines when below 5000 lux.
130. In relation to aerial firefighting, the Commission notes that the Department, RFS and FRNSW are satisfied that the bushfire risks can be suitably controlled through the implementation of standard fire management plans and procedures (AR Table 9).
131. The Commission agrees with the Department's assessment that hazards from the turbines can be appropriately managed 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 (NASAG Guidelines)*, and that the Project is unlikely to result in any significant aviation hazards or impacts to aerial agricultural activities (AR Table 9). The Commission has imposed condition B15, which requires the Applicant to consult with CASA and RFS regarding night-time obstacle lighting requirements and ensure that any aviation hazard lighting complies with CASA's recommendations. The Commission has also imposed conditions B34 relating to mitigation of aviation related impacts, and conditions B35 and B36, which set notification of aviation authorities requirements for the Applicant.

### 5.6.8 Lighting

132. The Commission received submissions raising concerns about the visual impact of night lighting of the wind turbines, including the aviation safety lighting requirements discussed in section 5.6.7 above. Submissions also raised concerns about the impact of lighting on nocturnal species.
133. Although the Commission has imposed the aviation safety lighting requirements, in accordance with CASA's advice, it notes that under the NASAG Guidelines, obstacle lights may be partially shielded, provided that shielding does not compromise their operational effectiveness (AR para 104). The Applicant has committed to implement permissible lighting mitigation options, such as downward light shielding (AR para 107). The Commission notes that CASA also supports low intensity lighting.

134. The Commission has imposed conditions requiring the Applicant to consult with CASA regarding the installation of hazard lighting and operate hazard lighting in accordance with CASA requirements to minimise adverse visual impacts.
135. The Commission finds that the proposed hazard lighting is acceptable and has imposed condition B15 which requires partial shielding of lights; operating the lights only at night or during times of reduced visibility; and turning the lights on and off simultaneously. Condition B15 also ensures that all external lighting:
- is installed as low intensity lighting (except where required for safety or emergency purposes);
  - does not shine above the horizontal;
  - uses best management practice for bat deterrence; and
  - complies with the relevant Australian Standard for reducing obtrusive outdoor lighting.

### **5.6.9 Subdivision**

136. The Commission agrees with the Department that the proposed subdivision is necessary for transfer of the substations to TransGrid and the ongoing operation of the Project, and should be approved for the reasons given at Table 9 of the AR. The Applicant is required to subdivide the Site in accordance with condition A14 imposed by the Commission, which also requires that the subdivision not occur until the Project is built to ensure that the land to which the Project applies is not unnecessarily subdivided should the Project not proceed.

## 6. The Commission's findings and determination

138. The views of the community were expressed through written public submissions (as part of exhibition of the Project by the Department 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 these views in making its decision.
139. The Commission has carefully considered the Material before it as set out in section 3.1 of this report. 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 a renewable energy development in NSW, which will increase the proportion of renewable energy generation within the electricity grid;
  - the use of the Site for renewable energy development is consistent with the relevant EPIs, including the Planning Systems SEPP and Transport and Infrastructure SEPP;
  - the use of the Site for the purpose of electricity generation is an orderly and economic use and development of land;
  - the Site is a suitable site for renewable energy development given its location within the Hunter-Central Coast REZ, proximity to existing electricity transmission networks, topography, wind resources, access to the regional road network and avoidance of major environmental constraints;
  - there is unlikely to be a serious and irreversible impact on biodiversity in the area;
  - the inherent agricultural capability of the land will not be affected in the long term and the Project does not preclude the use of the land for agriculture during operation;
  - adverse amenity impacts on surrounding receivers – including visual and noise impacts – have been minimised as far as practicable and will be further managed and mitigated by the imposed conditions of consent;
  - provided there is an emphasis on maximising local employment, there is likely to be sufficient workforce accommodation for the Project;
  - the Project will generate direct and indirect benefits to the local community, including through the proposed VPA;
  - the Project is capable of being decommissioned and the Site appropriately rehabilitated;
  - bush fire risks can be suitably controlled through the implementation of fire management procedures and recommendations;
  - the Project will not significantly impact the Aboriginal cultural heritage nor historic heritage values of the locality;
  - the conditions imposed by the Commission require the Applicant to recommence and continue consultation to ensure that the residual impacts of the Project are appropriately mitigated and managed into the future and on cessation of operations;
  - the Project is consistent with the ESD principles and will 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.
140. For the reasons set out in paragraph 139 above, the Commission has determined that the consent should be approved subject to conditions. These conditions are designed to:
- prevent, minimise and/or offset adverse environmental, social and economic 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.
141. The reasons for the Decision are given in the Statement of Reasons for Decision dated 06 February 2024.



Professor Alice Clark (Chair)  
Member of the Commission



Mr Richard Pearson  
Member of the Commission



Mr Adrian Pilton  
Member of the Commission



**New South Wales Government**  
Independent Planning Commission

**For more information, please contact  
the Office of the Independent Planning  
Commission NSW.**

**[ipcn.nsw.gov.au](http://ipcn.nsw.gov.au)**

Phone (02) 9383 2100

Email [ipcn@ipcn.nsw.gov.au](mailto:ipcn@ipcn.nsw.gov.au)

Mail Level 15 135 King Street Sydney NSW 2001

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