



New South Wales Government
Independent Planning Commission

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Oxley Solar Farm

SSD 10346

Statement of Reasons for Decision

Chris Wilson (Chair)
Wendy Lewin
Alison McCabe

11 December 2023

Executive Summary

Oxley Solar Development Pty Ltd (the Applicant) has sought consent for the development of a new 215-megawatt (MW) solar farm and a 50 MW / 50 MW-hour battery, known as the Oxley Solar Farm (SSD-10346) (the Project). The site (the Site) is located approximately 14 kilometres south-east of Armidale in the New England Renewable Energy Zone (REZ).

The Project represents an investment of \$370 million and would generate approximately 300 construction and 5 operational jobs.

The NSW Independent Planning Commission (the Commission) is the consent authority for the Project because more than 50 public objections were made to the Department of Planning and Environment (the Department).

Commissioners Chris Wilson (Chair), Wendy Lewin and Alison McCabe 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 and Armidale Regional Council. The Commission also undertook a site inspection.

The Commission conducted a Public Meeting on 17 October 2023 that was live streamed. The Commission also received written submissions on the Application.

Key issues which are the subject of findings in this Statement of Reasons for Decision relate to land use compatibility, biodiversity, visual impacts (including the ability of the proposal to be integrated within the landscape), traffic and transport, soil and water impacts, socioeconomic impacts, and decommissioning and rehabilitation. After careful consideration, the Commission has determined that consent should be granted to the State significant development application, subject to conditions.

The Commission finds that the Site is suitable for renewable energy development, given its location within a REZ, topography, solar resources, existing land capability class, avoidance of major environmental constraints, and access to both the regional road network and existing electrical transmission network.

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 a number of comprehensive management plans and strategies and will be required to report on mitigation and monitoring outcomes as well as demonstrate compliance with performance criteria on an ongoing basis.

The conditions as imposed include several modifications and additions made by the Commission to both strengthen the environmental management of the development, including the requirement for the complete rehabilitation of the Site. Other conditions have either been amended or incorporated to respond to concerns raised by the community. These modifications and additions include, but are not limited to, requirements for the Applicant to:

- comprehensively update the landscape plan prior to construction which must include additional on-site vegetation to further integrate the development into the broader landscape;
- prepare a Decommissioning and Rehabilitation Plan early in the Project's operation, central to which is the removal of all infrastructure from the Site, with the exception of the sub-station and any necessary infrastructure for its ongoing operation. The plan will need to be updated at regular intervals to reflect, but not limited to, advances in recycling and waste management practices. The plan will need to be implemented on cessation of operations;
- prepare a Community Communication Strategy to facilitate communication between the Applicant, Council and the community during the design, construction, operation and decommissioning stages of the Project;
- prepare a Soil and Water Management Plan;
- prepare a Wildlife Corridor Connectivity Enhancement Plan; and
- ensure there is sufficient water for all stages of the development, including appropriate volumes required for the maintenance and support of proposed vegetation screening for the life of the Project.

After consideration of the material, including additional information received from the Applicant, the Department, and NSW Energy Corporation, and having considered the views of the community, the Commission has determined that development consent should be granted to the Application.

The Commission finds that the Project is consistent with the existing strategic planning and energy frameworks as well the relevant statutory considerations.

The Commission is also satisfied that the Project is in accordance with the Objects of the EP&A Act, all environmental, social and land use safety impacts are acceptable subject to the conditions of consent, and accordingly the Project is in the public interest.

The Commission's reasons for approval of the Project are set out in this Statement of Reasons for Decision.

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Defined terms

ABBREVIATION	DEFINITION
ACCS	Annual Climate Change Statement 2022 (Australian Government)
Applicant	Oxley Solar Development Pty Ltd
Application	Oxley Solar Farm (SSD-10346)
AR para	Paragraph of the Department's Assessment Report
ARLEP 2012	<i>Armidale Regional Local Environmental Plan 2012</i>
BC Act	<i>Biodiversity Conservation Act 2016</i>
BCS	The Department's Biodiversity, Conservation and Science Directorate
BESS	Battery energy storage system
CCPF	NSW Climate Change Policy Framework 2016 (NSW Government)
Commission	NSW Independent Planning Commission
Council	Armidale Regional Council
Department	NSW Department of Planning and Environment
Department's AR	Department's Assessment Report, dated September 2023
DPI Agriculture	NSW Department of Primary Industries Agriculture
EII Act	<i>Electricity Infrastructure Investment Act 2020</i>
EIS	Environmental Impact Statement
EPA	NSW Environmental Protection Agency
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2000</i>
EPI	Environmental Planning Instrument
ESD	Ecologically Sustainable Development
GW	Gigawatts
ICNG	Interim Construction Noise Guideline 2009 (NSW Government)
Infrastructure SEPP	<i>State Environmental Planning Policy (Infrastructure) 2007</i>
ISP	2022 Integrated System Plan (Australian Energy Market Operator)
kV	Kilovolt
LGA	Local Government Area
LVIA Addendum	Applicant's Addendum to the Landscape and Visual Impact Assessment, dated September 2023
Mandatory Considerations	Relevant mandatory considerations, as provided in s 4.15(1) of the EP&A Act
Material	The material set out in section 3.1
MW	Megawatt
MWh	MW-hour
National Park	Oxley Wild Rivers National Park
NEM	National Electricity Market
Net Zero Implementation Plan	Net Zero Plan Stage 1: 2020-2030 Implementation Plan (NSW Government)
Net Zero Plan	Net Zero Plan Stage 1: 2020-2030 (NSW Government)
NPfl	NSW Noise Policy for Industry
NPWS	NSW National Parks & Wildlife Services
NSW DPI	NSW Department of Primary Industries
Planning Systems SEPP	<i>State Environmental Planning Policy (Planning Systems) 2021</i>
Project	Development of a new 215 MW solar farm and a 50 MW / 50 MWh battery, approximately 14 kilometres south-east of Armidale in the New England REZ, known as the Oxley Solar Farm
Resources SEPP	<i>State Environmental Planning Policy (Resources and Energy) 2021</i>
REZ	Renewable Energy Zone
RtS	Response to Submissions
Site	The Oxley Solar Farm site, as illustrated in Figure 1, located in the New England REZ approximately 14 kilometres south-east of Armidale
Solar Energy Guideline	Large-Scale Solar Energy Guideline, 2022 (NSW Government)
SRD SEPP	<i>State Environmental Planning Policy (State and Regional Development) 2011</i>
SSD	State Significant Development
The Roadmap	NSW Electricity Infrastructure Roadmap (NSW Government)
TfNSW	Transport for NSW
VPA	Voluntary Planning Agreement

1. Introduction

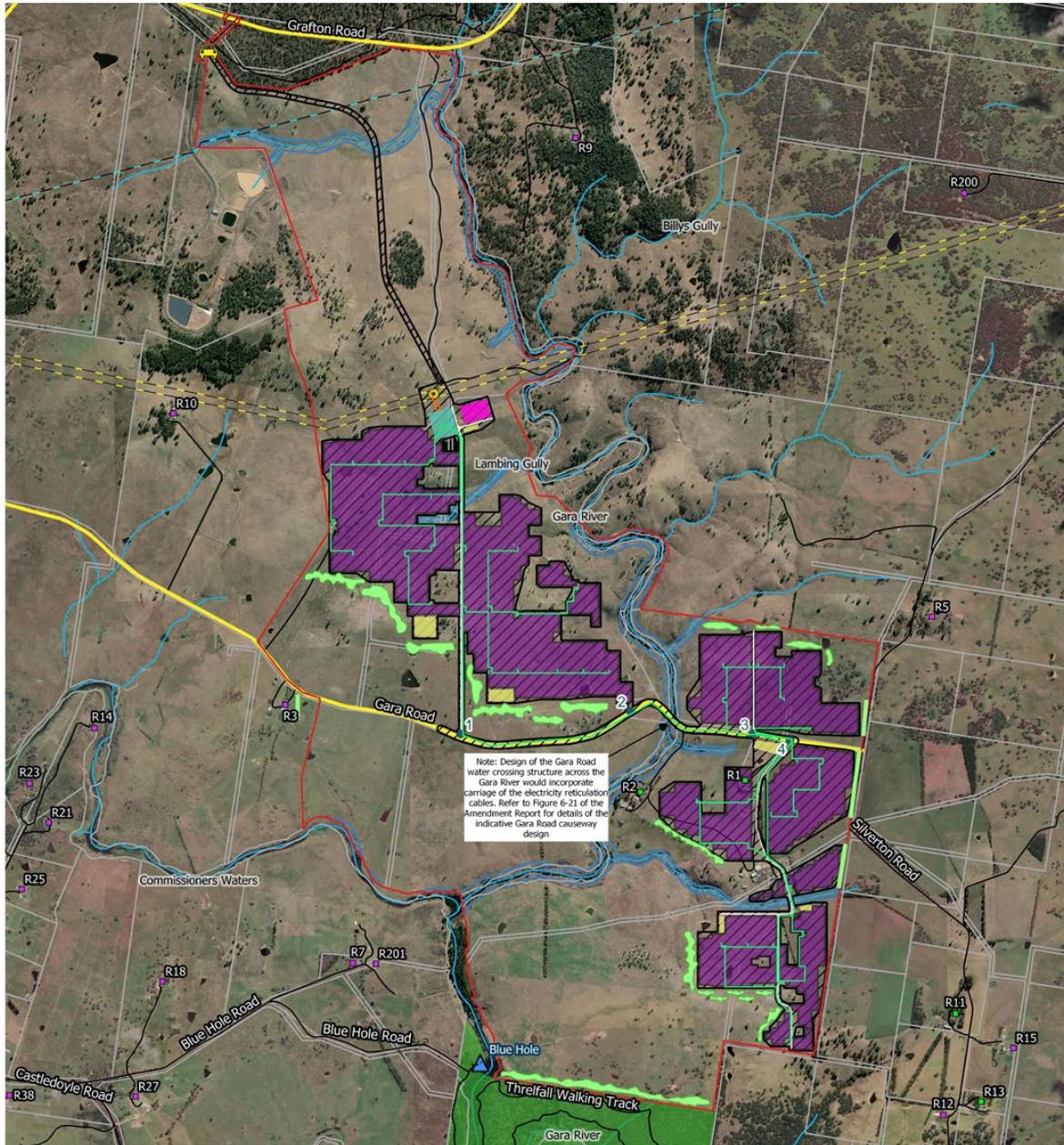
2. On 20 September 2023, the NSW Department of Planning and Environment (**Department**) referred the State significant development (**SSD**) application SSD-10346 (**Application**) from Oxley Solar Development Pty Ltd (**Applicant**) to the NSW Independent Planning Commission (**Commission**) for determination.
3. The Application seeks approval under section 4.38 of the *Environmental Planning and Assessment Act 1979* (**EP&A Act**) for the Oxley Solar Farm (the **Project**) located in the Armidale Regional Council (**Council**) Local Government Area (**LGA**).
4. The Application constitutes SSD under section 4.36 of the EP&A Act and under clause 20 of Schedule 1 of *State Environmental Planning Policy (Planning Systems) 2021* (**Planning Systems SEPP**) as it is development for the purpose of electricity generating works with a capital investment value of more than \$30 million (\$370 million).
5. 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.
6. Professor Neal Menzies, as Acting Chair of the Commission, determined that Chris Wilson (Chair), Wendy Lewin and Alison McCabe would constitute the Commission for the purpose of exercising its functions with respect to the Application.
7. The Department provided its Assessment Report (**AR**) and recommended conditions of consent to the Commission on 20 September 2023 for consideration and determination. The Department concluded that the Project would result in benefits to the State of NSW and the local community and is therefore in the public interest and approvable.

2. The Application

2.1 Site and locality

8. The 'Site' is defined as being within the Project boundary illustrated in Figure 1 below.
9. Paragraph (**para**) 5 of the Department's AR states that the Site is largely cleared grazing and cropping land zoned RU1 Primary Production under the *Armidale Regional Local Environmental Plan 2012* (**ARLEP**). Access to the Site would be via a new site access point off the Armidale Regional Landfill facility access road at the northwest of the Site (AR para 7).
10. The surrounding land is predominantly zoned RU1 Primary Production, with the exception of the Oxley Wild Rivers National Park (**National Park**) located adjacent to the southern boundary of the site (approximately 460 metres (**m**) from the development footprint), which is zoned C1 – National Parks and Nature Reserves (AR para 5).

Figure 1 – The Project Site (Source: Department’s AR, page 3)



Development Footprint

Legend

- Project Boundary
- Development Footprint
- Roads
- Key roads
- National Park
- Travelling Stock Reserves
- ▲ Blue Hole Picnic Area

Infrastructure layout

- Array area
- BATTERY STORAGE
- CONTROL ROOM
- PV-PCU
- Shed
- Site road
- Laydown areas
- Solar array
- Substation
- Internal electricity reticulation cables (underground in trench within development footprint including Gara Road)
- Transmission line electrical connection (overhead)
- Transmission connection point

Electricity transmission lines

- 132kV
- 66kV
- Associated residences
- Non-associated residences
- Vegetation screening
- Site access
- Gara Road access points
- Waterway buffers
- Waterway >1st order (strahler)

0 500 1,000 m

Data Attribution
 © NGH 2023
 © OSD 2023
 © ESRI and their suppliers 2023
 © NSW Government data 2023

Ref: 21-393 Submissions and Amendment workspace
 20220523 \ Development Footprint
 Author: kyle.m
 Date created: 18.09.2023
 Datum: GDA94 / MGA zone 56



2.2 The Project

11. The Applicant is seeking approval for the development of a 215-megawatt (**MW**) solar farm and a 50MW / 50MW-hour (**MWh**) battery energy storage system (**BESS**) in the New England Renewable Energy Zone (**REZ**), approximately 14 kilometres (**km**) southeast of Armidale (AR para 1).
12. The Project would comprise approximately 385,280 solar panels mounted on a fixed or single-axis tracking system up to 4 metres (**m**) high, supported by 43 power conversion units, inverters, transformers and associated control equipment. The Project would include an on-site substation and connection to the two existing 132 kilovolt (**kV**) transmission lines operated by Transgrid that cross the northern end of the Site (AR para 2). The Site is 1,021 hectares (**ha**) in size and the proposed development footprint is 268 ha.
13. The Project would provide approximately 300 construction jobs and support 5 operational jobs.
14. Further detail about the main aspects of the Project is provided in Table 1 of the Department's AR.

3. The Commission's consideration

3.1 Material considered by the Commission

15. In this determination, the Commission has considered the following material (**Material**):
 - the Planning Secretary's Environmental Assessment Requirements issued by the Department, dated 2 August 2019;
 - the following information provided by the Applicant:
 - the Environmental Impact Statement (**EIS**), dated 3 March 2021 and its accompanying appendices;
 - the Amendment Report, dated 23 November 2022 and its accompanying appendices;
 - the Response to Submissions Report (**RtS**), dated 20 September 2023 and its accompanying appendices;
 - all public submissions on the EIS made to the Department during public exhibition;
 - all Government Agency advice to the Department;
 - the Department's AR and recommended conditions of consent, dated 20 September 2023;
 - comments and presentation material at meetings with the Department, Applicant, Council and the Public Meeting as referenced in Table 2;
 - Council's response to the Commission, dated 11 October 2023;
 - the Department's response to questions on notice, dated 19 October 2023;
 - all written submissions made to the Commission up until 5pm 25 October 2023;
 - the Department's AR Addendum, dated 26 October 2023;
 - the following responses provided by the Applicant:
 - the Applicant's response to questions on notice, dated 10 October 2023;
 - the Applicant's response to the Commission, dated 3 November 2023;
 - NSW Energy Corporation's (**EnergyCo**) response to the Commission, dated 14 November 2023;
 - all written comments on the Additional Material received by the Commission between Wednesday 15 November 2023 and 5pm AEDT Wednesday 22 November 2023; and

- the Department's comments (dated 1 December 2023) on the feasibility and workability of proposed conditions.

3.2 Strategic context

16. The Commission has considered the strategic planning policies and guidelines relevant to the Site and the Project. The Commission is of the view that the Project is consistent with both the Federal and NSW Government's strategic planning frameworks as it would deliver up to 215 MW of renewable energy and assist in the transition to a lower emissions energy sector. In addition, the Project would generate benefits to the local community, including up to 300 construction and 5 operational jobs, and would result in flow-on benefits to the local economy through expenditure and the procurement of goods and services. Finally, Council has agreed to the general terms for a Voluntary Planning Agreement (outlined in Table 1) which would deliver a range of broader community benefits for the life of the Project.

3.2.1 Energy context

Australia's Long-Term Emissions Reduction Plan 2021

17. The Australian Government's *Long Term Emissions Reduction Plan 2021* sets out how Australia will achieve net zero emissions by 2050. According to this plan, 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). Further, it states that "energy storage technologies are essential for Australia to shift to lower emission electricity systems" and "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

18. The Australian Government's *Annual Climate Change Statement 2022 (ACCS)* makes commitments about achieving net zero by 2050. According to the ACCS, "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

19. The Australian Energy Market Operator's *2022 Integrated System Plan (ISP)* is a comprehensive road map for the National Electricity Market. According to the ISP, it 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 National Electricity Market (**NEM**) is needed to meet electricity demand, and without coal, a nine-fold increase in utility scale 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

20. 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 and for NSW to be more resilient to the changing climate (page 2).

Net Zero Plan Stage 1: 2020-2030

21. In March 2020, the NSW Government released its *Net Zero Plan Stage 1: 2020-2030 (Net Zero Plan)*, which was then updated in September 2021 with the *Net Zero Plan Stage 1: 2020-2030 Implementation Plan (Net Zero Implementation Plan)*. The Net Zero 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

22. 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. Several entities and stakeholders appointed by the NSW Government are to work together to deliver the Roadmap and coordinate investment in transmission, generation, storage and upgrading infrastructure as NSW’s ageing coal-fired power plants are retired from 2023. The Roadmap is enabled by the *Electricity Infrastructure Investment Act 2020 (EII Act)*.

3.2.2 NSW Solar Energy Guideline

23. The *Large-Scale Solar Energy Guideline* was originally released by the NSW Government in December 2018 to provide the community, industry and regulators with guidance on the planning framework for assessing large-scale solar projects and identifying the key planning considerations relevant to solar energy development in NSW (AR para 19). The Guideline was revised in August 2022 (**Solar Energy Guideline**). The Department states that “*while the revised guideline does not strictly apply to this project as it was lodged prior to [its] release, the project is broadly consistent with the principles in the revised guideline*” (AR para 20). The Commission agrees with the Department and has considered the relevant assessment issues covered by the Solar Energy Guideline in section 5 of this report.

3.2.3 Regional and local plans

24. In determining the Application, the Commission has also considered the following regional and local plans:
- New England and North West Regional Plan 2041;
 - Armidale Plan 2040; and
 - Armidale Regional Local Strategic Planning Statement 2020.

3.2.4 Other energy projects

25. According to the Department, there are seven State significant renewable energy projects within 50km of the Site. There are also two smaller solar farms approved by the Northern Regional Planning Panel in 2020 in closer proximity to the Site. Nearby renewable energy projects are summarised in Table 2 of the Department’s AR and their location is illustrated in Figure 3 of the Department’s AR.

26. The Commission has considered the potential cumulative impacts of these projects, including loss of agricultural land (section 5.1), visual and glare impacts (section 5.4), workforce accommodation (section 5.6.1) and traffic and transport (section 5.5) in this Statement of Reasons.

3.3 Statutory context

3.3.1 State significant development

27. The Project is SSD under section 4.36 of the EP&A Act and under clause 20 of Schedule 1 of the Planning Systems SEPP as it is development for the purpose of electricity generating works with a capital investment value of more than \$30 million (\$370 million). 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 objecting to the project were made to the Department.

3.3.2 Amended Application

28. In accordance with clause 37 of the *Environmental Planning and Assessment Regulation 2021 (EP&A Regulation)*, a development application can be amended at any time before the application is determined. Following consideration of submissions on the Project, the Applicant amended the Application (AR para 55). Table 6 of the Department's AR provides a summary of the amendments made to the Project.
29. The Commission sought clarification from the Applicant on the extent to which the development footprint of the Project was reduced between the EIS and the amended Project. The Applicant provided further information on this matter in its response to the Commission dated 3 November 2023 (refer pages 18-21). The Commission has assessed the impacts of the Project solely as they relate to the amended Project development footprint.

3.3.3 Permissibility

30. The Site is zoned RU1 Primary Production under the ARLEP. Electricity generating works are permissible with consent on any land in a prescribed rural, industrial or special use zone, including RU1 zones, under clause 34 of the *State Environmental Planning Policy (Transport and Infrastructure) 2021 (AR para 27)*.

3.3.4 Subdivision

31. The proposed subdivision of the lots would be below the minimum lot size of 200 ha and prohibited under the ARLEP because of the provisions of cl 4.6(6). Under Section 4.38(3) of the EP&A Act, development consent for the Project can be granted despite the subdivision component of the application being prohibited by the ARLEP.
32. The Commission agrees with the Department that the subdivision should be approved as it is necessary for the operation of the substation, battery and ancillary facilities. The subdivision would not result in any additional dwelling entitlements and is consistent with the objectives of the RU1 zone (AR Table 11).

3.3.5 Integrated and other NSW approvals

33. 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 29). 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

34. Under section 19 of the EII Act, the Minister for Energy may declare a REZ comprising a specified geographical area of the State, and specified generation, storage or network infrastructure. EnergyCo’s webpage for the REZs defines them as the “*equivalent of modern power stations*” which are intended to “*capitalise on economies of scale to deliver cheap, reliable, and clean electricity for homes and businesses in NSW.*” The NSW Government anticipates that REZs will deliver the following benefits:

- energy bill savings from reduced wholesale electricity costs
- emissions reduction from a cleaner energy sector
- reliable energy from significant amounts of new energy supply
- host community benefits through strategic planning and best practice engagement and formalised benefit sharing arrangements.

35. The New England REZ was formally declared by the Minister for Energy and published in the NSW Gazette on 17 December 2021. The New England REZ has an intended network capacity of 8 gigawatts (**GW**) and is expected to deliver up to \$10.7 billion in private sector investment. The New England REZ is also expected to support around 830 operational jobs and 1,250 construction jobs.

36. The Project is located wholly within the New England REZ and is proposed to provide 215 MW of the intended New England REZ network capacity of 8 GW.

3.4 Mandatory considerations

37. 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 and the Department’s response to the Commission, dated 19 October 2023 identifies relevant EPIs for consideration. The key EPIs include:</p> <ul style="list-style-type: none"> • State Environmental Planning Policy 33 – Hazardous and Offensive Development ; • State Environmental Planning Policy 55 – Remediation of Land ; • State Environmental Planning Policy (Infrastructure) 2007 ; and • ARLEP 2012.

The SEPP 33 – *Hazardous and Offensive Development* and SEPP 55 – *Remediation of Land* were consolidated into the State Environmental Planning Policy (Resilience & Hazards) 2021 and the State Environmental Planning Policy (Infrastructure) 2007 was consolidated into the State Environmental Planning Policy (Transport and Infrastructure) 2021. The consolidated SEPPs commenced on 1 March 2022. Provisions from the previous SEPPs were transferred into the consolidated SEPPs and the transfer does not affect the operation or meaning of the provisions and the provisions are to be construed as if they had not been transferred (s.30A, *Interpretation Act 1987* (NSW); s.1.4, SEPP (Transport and Infrastructure) 2021; s.1.4, SEPP (Resilience & Hazards) 2021). References to the former SEPPs are deemed as references to the equivalent provisions in the new consolidated SEPPs.

The Commission agrees with the Department's assessment of EPIs and is satisfied that the proposal is permissible with consent in accordance with the Transport and Infrastructure SEPP.

The Commission notes that the Project was not categorised as potentially hazardous or potentially offensive development (AR page 43), nor is the Site identified as a contaminated site in the NSW Environmental Protection Agency Contaminated Land register (AR page 43).

The Commission is of the view that the Project is consistent with the objectives of the RU1 Primary Production zone as the Project:

- allows for a non-agricultural use that will not restrict the use of other land in the locality for agricultural purposes;
- allows for the Site to be used for agricultural purposes by supporting sheep grazing;
- does not conflict with land uses on adjoining zones;
- minimises the fragmentation of resource lands; and
- will contribute to a diverse regional economy.

The Commission is satisfied that the Project is consistent with the following provisions of the ARLEP:

- Flood planning (clause 5.21);
- Earthworks (clause 6.1); and
- Essential service (clause 6.6)

Relevant DCPs	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.
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Planning agreement	<p>The Commission has considered the in-principle Voluntary Planning Agreement (VPA) the Applicant has with Council for the Project, in accordance with Section 4.15(1)(iia) of the EP&A Act. The VPA consists of:</p> <ul style="list-style-type: none"> • a lump sum payment of \$2,790,000 on commencement of construction; • an annual payment of \$139,500 for 20 years from commencement of construction; • an agreement to assist Council with purchasing solar panels and steel components at the Applicant's corporate rates; • annual sponsorship of Project Zero30 of \$20,000 for 10 years from commencement of construction; and • the provision of four electric vehicle charging stations at agreed locations no later than commencement of operation.
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The Commission notes that Council agreed to the above general terms in August 2022.

Likely impacts of the development	The likely impacts of the Application have been considered in section 5 of this Statement of Reasons.
Suitability of the site for development	<p>The Commission has considered the suitability of the Site and finds that it is suitable for the following reasons:</p> <ul style="list-style-type: none"> • the development is permissible with consent; • the Site is located within the New England REZ and has significant solar resources; • the Site does not include any mapped Biophysical Strategic Agricultural Land (BSAL); • the inherent agricultural capability of the land will not be affected in the long term; • decommissioning and rehabilitation would be capable of returning the land to its pre-development condition; • the Project does not preclude the use of the land for agriculture and managed grazing during operation; • adverse impacts on surrounding receivers have been minimised as far as practicable and would be further managed and mitigated by the conditions of consent as imposed; • the use of the Site is for the purpose of electricity generation and is an orderly and economic use and development of land; • the development of the Site for the purpose of electricity generation will allow the anticipated social and economic benefits to be realised; • the development of the Site will contribute to the orderly transition from coal and gas fired power generations, to power generation with lower emissions; and • the development of the Site will assist in meeting NSW's target of net zero emissions by 2050.
Objects of the EP&A Act	In this determination, the Commission has carefully considered the Objects of the EP&A Act. The Commission is satisfied that the Application has been assessed against the relevant EPIs and, subject to the conditions as imposed, is consistent with the Objects of the EP&A Act for the reasons detailed in section 5 of this Statement of Reasons.
Ecologically Sustainable Development (ESD)	For the reasons detailed in section 5 of this Statement of Reasons the Commission finds that the development is consistent with ESD principles and would achieve an acceptable balance between environmental, economic and social considerations.
The public interest	<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 development 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 has given due consideration to the principles of ESD in its assessment of each of the key issues, as set out in section 5 below. The Commission finds that, on balance, the development is not inconsistent with ESD principles, and that the Project would achieve an appropriate balance between relevant environmental, economic and social considerations. The likely benefits of the Project warrant the conclusion that an appropriately conditioned approval is in the public interest.</p>

3.5 Additional considerations

38. In determining the Application, the Commission has also considered:
- Noise Policy for Industry 2017 (**NPfi**);
 - Interim Construction Noise Guideline 2009 (**ICNG**);
 - NSW Road Noise Policy 2011 (**RNP**);
 - NSW Biodiversity Offsets Scheme;
 - NSW Biodiversity Offsets Policy for Major Projects 2014;
 - Social Impact Assessment Guideline 2021 (**SIA Guideline**);
 - Land and Soil Capability Mapping for NSW (OEH 2017);
 - Renewable energy generation and agriculture in NSW’s rural landscape and economy – growth sectors on a complementary path (NSW Agricultural Commissioner, 2022) (**Agricultural Commissioners Report**); and
 - Managing Urban Stormwater: Soils and Construction (Landcom, 2004).

3.6 The Commission’s meetings

39. As part of the determination process, the Commission met with various persons as set out in Table 2. All meeting and site inspection notes have been made available on the Commission’s website.

Table 2 – Commission’s Meetings

Meeting	Date	Transcript / notes available on
Applicant	6 October 2023	12 October 2023
Council	6 October 2023	11 October 2023
Department	12 October 2023	13 October 2023
Site Inspection	17 October 2023	23 October 2023
Public Meeting	17 October 2023	20 October 2023

4. Community participation

4.1 Community group attendance at the site inspection

40. The Commission conducted an inspection of the Site and surrounds on 17 October 2023. The Commission invited community representatives to attend and observe during the Site inspection. A representative of the Castle Doyle Solar Farm Action Group and two neighbouring property owners were in attendance.

4.2 Public Meeting

41. The Commission conducted a Public Meeting on 17 October 2023. Registered speakers presented to the Commission Panel in-person or via telephone or video conference. The Public Meeting was streamed live on the Commission’s website.
42. The Commission heard from the Department, the Applicant, various community group representatives and individual community members. In total, 15 speakers presented to the Commission during the Public Meeting. Presentations made at the Public Meeting have been considered by the Commission as submissions and are referenced in section 4.3 below.

4.3 Public submissions

- 43. As part of the Commission’s consideration of the Project, all persons were offered the opportunity to make written submissions to the Commission until 5pm, 25 October 2023.
- 44. The Commission received a total of 32 written submissions on the Application, comprising 31 submissions through its website and 1 emailed submission. An overview of the written submissions received by the Commission is provided in Figure 2 below. The key issues raised in submissions are summarised in Figure 3 below.
- 45. 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

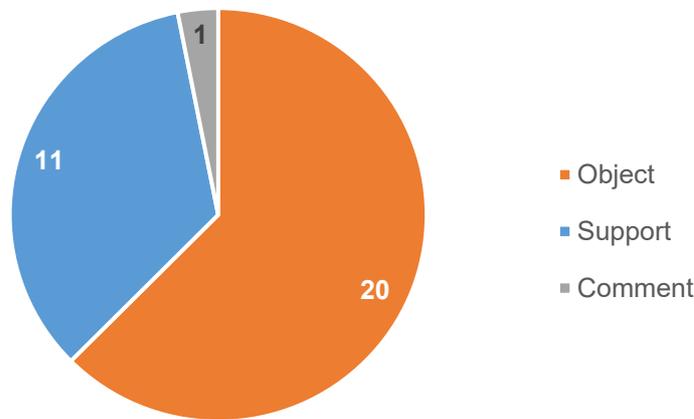
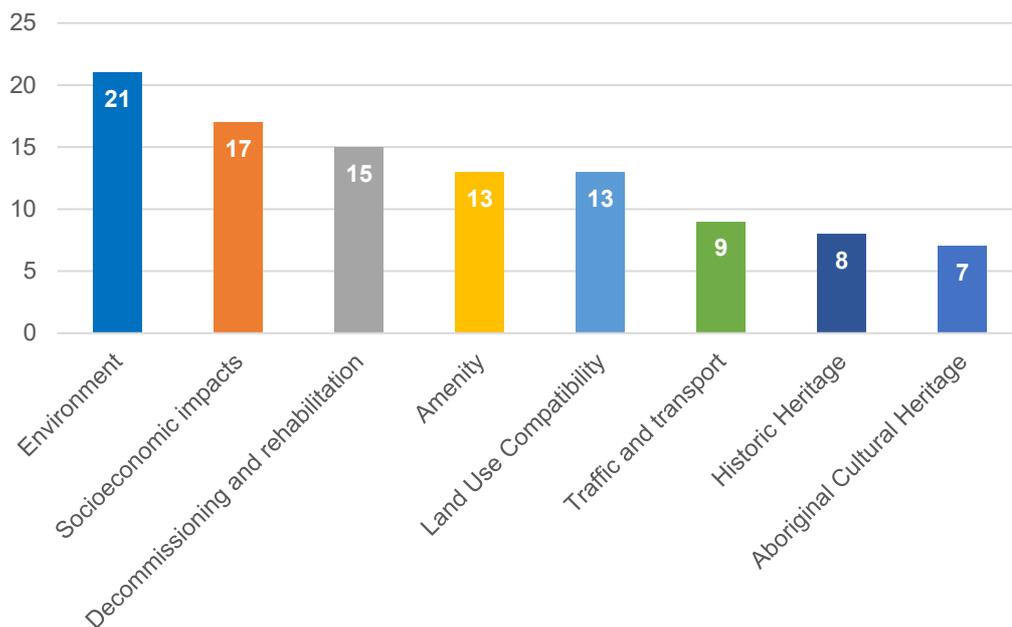


Figure 3 – Overview of key issues raised in submissions



4.3.1 Geographic analysis

46. The Commission observes that the four submissions from neighbouring properties objected to the Project. The majority of submissions from Armidale township were in support of the Project. The majority of submissions from outside the local area were objections to the Project – objections were received from Melbourne, Sydney, regional QLD and the Southern Highlands. Submissions in support were also received from Sydney and the Mid North Coast of NSW.

4.3.2 Key issues raised

47. Submissions to the Commission raised several key issues, which are outlined below. The Commission notes that the submissions referred to below are not an exhaustive report of the submissions considered by the Commission, they are reflective and illustrative of what the Commission regards as the key issues that emerged from the submissions. All submissions are on the Commission's website.

Location and land use compatibility

48. Submissions raised concern regarding the location of the Project and the Applicant's site selection process. Submissions stated that solar farms do not belong on agricultural land and are more suited to industrial areas. A submission stated that the topography of the site is not suitable for a solar farm.

Visual impact

49. Submissions raised concerns regarding the visual impact of the Project, including the introduction of an industrial land use into a rural area and the resulting impacts on landscape character.
50. A submission in support of the Project stated that the extent of proposed vegetation screening would address concerns regarding visual amenity.
51. Specific concerns were raised regarding impacts on the visual amenity of surrounding residences. A submission stated that the screening proposed by the Applicant is unacceptable. A submission from an affected receiver stated that the at receiver screening committed to by the Applicant would be unacceptable. The submission stated that while the plantings would screen views of the Project, they would also block the majority of the view of the landscape from their dwelling.

Gara road upgrades

52. Submissions supported the proposed Gara River crossing upgrade noting that it would enable safe crossing of the river by vehicles at times where it is now not safe to do so as the river levels regularly rise following moderate rainfall.

Traffic impacts

53. Submissions objecting to the Project raised concerns relating to traffic generation and associated impacts on local roads during the construction phase of the Project.
54. A submission supporting the Project recommended that the traffic management plan should recognise the surrounding agricultural context and that vehicles on the proposed access road should give way to livestock.

Economic benefit

55. Submissions supported the Project on the basis of the economic benefits to the region and State of NSW. A submission stated that the 300 construction jobs utilising local labour where possible would have a huge flow on effect to the Armidale community. Submissions supported the economic benefits that would flow from the VPA, including the Armidale community benefit fund payment and the commitment to help source steel and solar panels for Council. A submission supported the broader benefits to NSW through the \$370 million in capital investment.

Social impacts

56. A submission raised concern regarding the negative social impacts associated with the Project. Submissions stated that the Application had not established a social licence. At the Public Meeting, a speaker raised specific concerns regarding the mental health impacts and social disruption that the community has experienced because of the Project.

Property value

57. A submission raised concern regarding the impact of the Project on the landscape and resultant loss of property values.

Project life and decommissioning

58. A submission raised concern regarding the life of the Project, stating that solar farms are considered to be short term installations and the push for nuclear energy in Australia will mean that solar projects will become stranded assets.
59. A submission stated that there is serious and irreversible environmental damage associated with the manufacture, installation, and decommissioning of PV solar panels. The submission stated that solar panels are not recyclable and if buried can cause groundwater impacts. The submission further stated that there is no effective waste management plan to support the decommissioning of solar panels.

Wildlife corridor enhancements

60. Submissions supported the proposed revegetation of riparian zones and improved wildlife connectivity across the Site. A submission objecting to the Project raised concerns regarding solar and wind projects and their impacts on wildlife corridors.

Contamination

61. The Commission heard from speakers at the public meeting and received written submissions raising concern that solar panels, when damaged or degraded, have the potential to leach heavy metals and contaminate agricultural land, water resources and aquatic habitat. Specific concerns were raised regarding heavy metal contamination.

Water

62. Concerns were raised in submissions regarding the availability of water from the Gara River for the Project. A submission also raised concern that there were no conditions of consent proposed to preserve the existing water pipeline running from the pumping shed at the Gara Road causeway, along Gara Road and Silverton Road.

Biodiversity

63. Submissions objecting to the Project raised concerns regarding the site's proximity to the Oxley Wild National Park and its role as a biodiversity hub for threatened species. A submission was specifically concerned about the potential release of contaminants from PV panels damaged during a weather event, and the impact to biodiversity in the area. An objection also recommends that the Site be subject to an independent and objective assessment of the potential impacts to biodiversity.

Supply chain

64. The Commission heard from speakers at the public meeting and received submissions raising concern about the potential use of slavery in supply chains for the solar projects. A submission raised concern regarding unethical labour practices in the supply chain for battery production. Submissions made specific reference to the *Modern Slavery Act 2018* (Cth).

Community consultation

65. A submission raised concern regarding the Applicant's consultation process. The submission stated that it was disingenuous and selective and not a genuine attempt at community engagement. A submission raised concern regarding the Applicant's efforts in engaging with the local aboriginal community.

Grid capacity and BESS performance

66. The Commission heard from speakers at the public meeting who raised concern regarding the Project and its potential impacts on grid security and reliability. Concerns were also raised regarding the capacity and performance of the BESS to meet the electricity storage target for the New England REZ. Concerns were also raised regarding the potential impacts on transmission network costs and energy prices.

Climate change

67. Some submissions supported the Project on the basis it would provide a renewable energy source and would support Australia's shift towards ensuring a secure and reliable energy in NSW and Australia. A submission stated that the Project was consistent with Government policy and climate changes targets such as the Commonwealth Renewable Energy Target, the NSW Climate Change Policy Framework, and the Net Zero Plan.

Dust

68. A submission raised concern in relation to the volume of water that could be required for dust control. A submission supporting the Project suggested that dust suppression should be implemented on the proposed access road during morning and afternoon peaks, particularly around areas associated with livestock.

Tourism

69. Submissions objecting to the Project raised concerns regarding the compatibility of the Project with regional tourism, noting that solar farms do not enhance tourism.

Hazards and risk

70. A submission raised concern regarding the potential for increased fire risk associated with the BESS. The submission cited incidents in the US, QLD, and Victoria where BESS' had caught fire and posed a danger to nearby residents. The submission also raised concern regarding the firefighting challenges associated with battery fires and the increased fire risk associated with substations proposed as part of renewable projects.

4.4 Additional Material

71. On 23 October 2023, the Commission wrote to the Applicant seeking further information on visual impact and landscaping, contamination, traffic and transport, erosion and sediment control, bushfire and the development footprint. The Applicant provided its response to the Commission on 3 November 2023.
72. On 24 October 2023 the Commission wrote to EnergyCo seeking advice on the concerns raised by speakers at the public meeting referenced in 66 above. EnergyCo provided its response to the Commission on 14 November 2011.
73. In addition to the above, the Department provided the Commission with an AR addendum dated 26 October 2023.
74. 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 submissions on this Additional Material, with submissions permitted by email between Wednesday 15 November 2023 and 5pm AEDT Wednesday 22 November 2023.
75. The Commission received 11 submissions on this Additional Material. A summary of these submissions is provided below.

4.4.1 Public submissions on additional material

Transmission, grid security and the BESS

76. A submission supported the response of EnergyCo noting that the Project would not materially affect transmission costs and would contribute to downward pressure on energy prices while helping to meet the NSW government goals in regard to the New England REZ while also supporting to meet NSW's net zero objectives.
77. A submission raised concern regarding the ability and capacity of the BESS to address inadequacies in the electricity supply. The submission suggested that the BESS should require recharging from a source separate to the Project.
78. A submission from a community group stated that the 215 MW contribution from the Project is negligible and it would not contribute to the renewable energy transition.

Landscaping and vegetation screening

79. A submission supported the vegetation screening proposed by the Applicant. The submission stated that the landscape plan would use best practice and that the proposed screening would negate any perceived impacts on views from surrounding landowners.
80. A submission raised concern that the photomontages from the dwelling at R201 were not a true representation of what is seen in person. The submission also raised concern regarding the effectiveness of the proposed vegetation screening.

Glare

81. A submission raised concerns regarding the impacts of glare when seen from their property.

Contamination and waste

82. A submission supported the Applicant's protocols to routinely inspect solar panels and fix or replace damaged panels in a timely manner.

83. A community group raised concern regarding waste management and the potential contamination risks associated with solar panels. The submission cited 'Sustainability Victoria' which, with other states and territories, is investigating suitable management options for PV products across their life cycle. The submission also requested that the Commission consider conditions relating to soil testing across the development footprint.

Road upgrades

84. Submissions supported the Gara Road and causeway upgrades. A submission stated that the upgrades would improve safety for local landholders and would stop the regular occurrence of near-death accidents on the existing causeway.

Fire Risk

85. A submission stated that the Applicant's response and the recommended conditions of consent were sufficient in reducing fire risks.
86. A submission from a community group raised concern regarding the increased risk of fire starting from the Site and spreading to neighbouring properties.

Water

87. A submission raised concern relating to the Applicant's ability to obtain sufficient water during periods of drought and the associated increased fire risk. A community group expressed concern that the water usage for the Project is inadequate and recommended that additional conditions be considered including the requirement to use of 75 litre bagged advanced plants for vegetation screening, the installation of a water reticulation system, and a condition stating that water used for screening is not to be taken from sources available to local residents and farmers.

5. Key issues

5.1 Land use compatibility

88. The Commission acknowledges the concern raised regarding the compatibility of the Project with the existing surrounding land uses. Submissions stated that solar farms do not belong on agricultural land and are more suited to industrial areas.
89. As set out in section 3.3.3 above, the Project is permissible within the RU1 Primary Production zone under the Transport and Infrastructure SEPP. The Commission agrees with the Department that the proposed land use is compatible with the ARLEP 2012, is suitably located within a REZ, and is consistent with key government strategic planning guidance, including the objective to leverage renewable energy opportunities in the region to contribute to the State's transition to lower emissions.
90. The Commission notes that the Site is not mapped as BSAL. The Project largely avoids important agricultural land, with 71.3% of the Site mapped as Class 5 land under the *Land and Soil Capability Mapping for NSW*. According to the Department this indicates that agricultural uses are largely restricted to low-moderate impact uses such as grazing and occasional cultivation for fodder crops. The balance of the Site contains Class 4 (moderate to severe limitations) and Class 6 (very severe limitations) land. The Commission, like the Department, concludes that this is consistent with the Solar Energy Guideline's focus on identifying BSAL and land classes 1, 2 and 3 as land use constraints (AR para 69) for the siting of solar farms.

91. The Commission notes that neither Council nor the NSW Department of Primary Industries Agriculture (**DPI Agriculture**) raised concerns that the Project would compromise the long-term use of the land for agricultural purposes, subject to the removal of Project infrastructure at decommissioning (AR para 72). The Commission also notes that agricultural practices can be continued on Site with the owner of the landowner being able to manage the remaining 782 ha of the Site as they see fit (Amendment Report, pg 87). The Applicant also states that 'solar grazing' may be implemented as a groundcover strategy to ensure vegetation cover is retained beneath the panels (RtS, pg 49). The Commission finds that the agricultural capability of the land would not be affected by the Project and its existing agricultural capability can be fully reinstated at the end of the Project's life.
92. In relation to cumulative impacts, the Department states that the Project's development footprint combined with the other approved and/or operational SSD solar farms in the New England North West region would be approximately 5,302 ha. According to the Department, the loss of 5,302 ha of agricultural land represents a tiny fraction (0.07%) of the 7.9 million ha of land currently used for agricultural output in the region. The Commission agrees with the Department that this would result in a negligible reduction in the overall productivity of the region (AR para 71).
93. Given the above, the Commission concludes that:
- the agricultural capability of the land would not be affected by the Project;
 - the land is capable of being returned to agricultural uses following decommissioning;
 - the Project would not fragment or alienate any resource lands in the LGA; and
 - the Project represents an effective and compatible use of the land within the region.
94. The Commission has imposed condition B15 which states that the Applicant must maintain the agricultural land capability of the site – including maintaining grazing where practicable.
95. This Commission has considered decommissioning and rehabilitation in section 5.7 below.

5.2 Contamination

96. Concerns were raised at the public meeting and in submissions regarding the potential for damaged or degraded solar panels to leach heavy metals and contaminate agricultural land, water sources and aquatic habitat.
97. The Solar Energy Guideline Frequently Asked Questions (**Guideline FAQ**) provides the following advice on whether solar panels contaminate soil (page 4):
- The metals in solar panels (including lead, cadmium, copper, indium, gallium and nickel) cannot be easily released into the environment. This is because metals such as cadmium telluride (CdTe) or cadmium sulfide (CdS) are enclosed in thin layers between sheets of glass or plastic within the solar panel. Because of this, the use of metals in solar panels has not been found to pose a risk to the environment.*
- To readily release contaminants into the environment, solar panels would need to be ground to a fine dust.*
98. The Commission asked the Applicant to provide further information on contamination risks from damaged or degraded solar panels on 23 October 2023.

99. In its response dated 3 November 2023, the Applicant advised that it had contacted suppliers who noted that there is very little contamination risk from PV panels. The Applicant advised that it had also contacted operational solar farms and noted that there had been no contamination incidents. The Applicant provided additional research papers in the response and concluded that *“the likelihood of breakages is very low and the consequence, given the small quantities in question, is considered low. The overall risk of contamination to ecosystems from broken panels is considered negligible and no effects on human health have been identified”* (page 8).
100. The Commission also sought additional information from the Applicant on what protocols would be in place to monitor the condition of the solar panels. The Applicant advised that:
- maintenance personnel would monitor panel performance during operation;
 - extreme weather events would trigger inspections;
 - faulty panels can be detected remotely in addition to physical inspections; and
 - damaged panels will be quickly rectified (by cleaning or they may be removed and replaced where damage has occurred).
101. Whilst acknowledging the concerns raised in relation to potential contamination risk from damaged panels, the Commission accepts both the advice contained in the Guideline FAQ and the material provided by the Applicant, and is satisfied in the absence of any evidence to the contrary, that the risk of contamination from damaged or degraded solar panels is negligible.

5.3 Biodiversity

102. The Department states that of the 268-ha development footprint, the Project would clear 92.78 ha of native vegetation, comprising 90.71 ha of low condition derived native grassland and 1.68 ha of woodland condition, as well as a small amount of sedgeland (0.11 ha), riparian vegetation (0.29 ha) and seven hollow bearing trees. The remainder of the development footprint (174.9 ha) is Category 1 land (AR para 88). Of the 1.68 ha of woodland vegetation, 1.13 ha is listed under the *Biodiversity Conservation Act 2016 (BC Act)* and 0.55 ha is listed under both the BC Act and the *Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)* (AR para 89). The Department's AR provides a summary of the impacts of the Project, and the relevant ecosystem credit liability (Table 8) and species credit liability (Table 9) under the NSW Biodiversity Offset Scheme.
103. The Department states that the Project would impact Box Gum Woodland which is a threatened ecological community that is a serious and irreversible impact (**SAIL**) candidate entity. The Department also notes that the Project has the potential to impact two threatened species that are SAIL candidate entities (the Tusked Frog and Glandular Frog). The Commission notes that the Applicant amended the Project in response to concerns raised by the Department's Biodiversity, Conservation and Science Directorate (**BCS**) reducing the clearing of Box Gum Woodland from 5.75 ha to 1.68 ha. The Commission notes that BCS raised no further concerns about SAIL candidate entities and confirmed the offset requirements in the Department's draft conditions for the three SAIL candidate entities are correct.
104. The Commission finds that the Project is unlikely to significantly impact the biodiversity values of the locality, subject to conditions of consent (AR para 100).
105. The Commission further finds that there is unlikely to be a serious and irreversible impact on the SAIL entities referenced above (AR para 94). The Commission has therefore imposed condition B16 which sets a strict clearing limit for Box Gum Woodland. Condition B16 also states that the Applicant must not clear any native vegetation or fauna habitat located outside the approved disturbance areas.

106. The Commission has imposed condition B17 which requires the Applicant to retire the ecosystem and species credits in accordance with the NSW Biodiversity Offset Scheme, prior to the commencement of construction.
107. The Commission has also imposed condition B19 which requires the Applicant to prepare a Biodiversity Management Plan (**BMP**) in consultation with BCS. As part of the BMP, the Applicant must set out measures to be implemented to manage the remnant vegetation and fauna habitat on Site and rehabilitate temporary disturbance areas.

5.4 Visual impact

108. According to the Applicant's Addendum to the Landscape and Visual Impact Assessment (**LVIA Addendum**), dated September 2023, the majority of the 11 non-associated residences located within 2 km of the development footprint would experience low, very low, or nil visual impacts. The LVIA Addendum states that one non-associated residence (R201) would experience moderate visual impacts.
109. At the site inspection, the Commission stopped at the closest non-associated residences (R5, R201, and R3) to view the Project Site from these properties. It was during these inspections that the Commission raised its concerns with the veracity of the visual impact assessment from these locations, and the need to better understand the exact location of the solar panels and associated infrastructure, with a particular focus on the location and potential effectiveness of the proposed vegetative screening. Subsequently, the Commission requested that the Applicant undertake further visual assessment analysis including additional photomontages from R3 and R201. It also requested the preparation of additional landscaping plans which identified the Applicant's proposed vegetation screening, the vegetation proposed to be removed and retained, and the growth of the proposed screening over time. The Applicant provided this material as part of its response to the Commission dated 3 November 2023.
110. The Commission has considered the additional visual assessment undertaken by the Applicant. The Commission acknowledges that it is not possible to completely integrate the solar farm into the rural landscape, nor should it be required. However, the Commission considers that with additional screening in appropriate locations, along with appropriate species and maintenance, the views of the solar panels and associated infrastructure from R201, and to a lesser extent, R5 will be reasonably interspersed within the broader landscape, particularly after the initial 5 years. To ensure these outcomes are achieved, and to further mitigate potential impacts on R201 and R5, the Commission has included Appendix 7 to the conditions which requires additional vegetation screening within and around the solar panels and associated infrastructure. To complement this requirement, the Commission has also required that all vegetative screening meet certain performance criteria in relation to width, density, method, function, timing of planting and maintenance and monitoring requirements. The consent also includes requirements to plant the screening prior to commencing operation; be comprised of appropriate species and be properly maintained with appropriate weed management for the life of the development.
111. The Commission concludes that both the direct and cumulative visual impacts on all potentially affected residences would be low for the following reasons:
- the reasonable separation distance between the development footprint and the receivers;
 - the undulating topography of land and its ability to screen some views;
 - the intervening vegetation on the Site which is to be retained;
 - the proposed vegetation screening on Site;
 - additional vegetation screening imposed by the Commission; and

- the performance criteria that the Applicant must adhere to in establishing and maintaining the vegetative screening.
112. The Commission acknowledges that the Project will be visible from the residences at R201, and that there will be a change to the visual amenity at this location. However, the Commission is satisfied that the visual amenity impacts at R201 would be low, and therefore acceptable, given that:
- the views of the solar panels and associated infrastructure at this location would be relatively distant (over 1.5km);
 - there is significant intervening vegetation that will be retained; and
 - the additional screening required by the Commission at specific locations to further enhance visual amenity outcomes.
113. The Commission recognises that the Project will 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 is also of the view that after the cessation of operations, the Site will be rehabilitated and returned to its pre-development condition and character.
114. As noted above, the Commission has imposed certain performance criteria to strengthen the delivery and maintenance of the vegetative screening. The Commission has imposed condition B12, requiring the Landscape Plan to be updated to include these criteria. To ensure that the screening is properly implemented, the Commission has imposed condition B13, requiring that the screening be established and maintained for the life of the development.
115. The Commission acknowledges that Project components, especially the solar panels, have the potential to generate glare or reflection. The Commission accepts that this diminishes over time (AR para 144), particularly as vegetation matures. The Commission is satisfied that the existing well-established intervening vegetation and the proposed landscape screening referenced above will assist in preventing glare impacts on surrounding residences and the public road network. The Commission has imposed condition B25 which requires the Applicant to minimise the off-site visual impacts of the development, including the potential for any glare or reflection. Condition B25 also states that the Applicant must ensure the visual appearance of all ancillary infrastructure (including paint colours) blends in as far as possible with the surrounding landscape.
116. The Commission has considered availability of water for landscaping in section 5.8.2 below.

5.5 Traffic and transport

117. The Project involves the delivery of plant, equipment and materials, including the movement of heavy vehicles requiring escort (AR para 103). Road additions and upgrades are also proposed and include widening of the Armidale Regional Landfill (**ARL**) access road, construction of primary and secondary site access, and upgrades to Gara Road and the Gara Road causeway (AR para 113). Submissions supported the proposed Gara River crossing upgrade noting that it would enable safe crossing of the river by vehicles at times where it is currently not safe to do so as the river level regularly rises.
118. The Department, Transport for NSW (**TfNSW**) and Council are all satisfied that the Project would not result in significant impacts on the local, regional or State road network in terms of capacity, efficiency, or safety – subject to conditions (AR para 120).

119. The Commission is satisfied that the key increase in traffic volumes will be during the construction period and that the number of vehicles during construction will be manageable if restricted to the peak volumes identified in the Department's assessment. The Commission has therefore imposed condition B1 which states that the Applicant must ensure that heavy vehicle movements do not exceed 46 per day, and a maximum of 6 heavy vehicle movements per hour.
120. The Commission notes that Gara Road and Silverton Road would not be used to access the Project from Waterfall Way at any stage of the Project except to use Gara Road to upgrade and construct the secondary site access points (AR para 107). The Commission has imposed conditions B3 to B6 which give effect to this requirement.
121. The Commission has imposed condition B11 which requires the Applicant to prepare a Traffic Management Plan in consultation with TfNSW and Council. This plan must include details of the transport route, road upgrades and measures that would be implemented to minimise traffic impacts during construction, upgrading or decommissioning works.
122. The Commission is satisfied that there would be no material cumulative traffic impacts on the State, regional or local road network as a result of the Project (AR para 118).

5.6 Socioeconomic impacts

5.6.1 Accommodation and workforce

123. The Commission notes that up to 300 workers would be required during the peak construction period (AR Table 11). The Commission acknowledges that assessments by both the Applicant and the Department concluded that there is sufficient accommodation in the Armidale region for the Project (AR Table 11).
124. In its meeting with the Commission, Council identified that it had concerns about its capacity to accommodate construction workers for multiple projects and the potential for tourist accommodation to become overburdened given the LGA's low rental vacancy rates.
125. The Commission requested further information from the Applicant regarding the capacity to accommodate construction workers for the Project. The Applicant's response dated 16 October 2023 identifies that "*with approximately 416 rooms available in the Uralla and Armidale LGAs at normal occupancy rates, there is likely to be sufficient accommodation for the workforce at all times*" (page 15).
126. The Commission also requested further information from the Department regarding workforce accommodation and government initiatives. In its response to the Commission dated 19 October 2023, the Department stated (page 2):

The Department's understanding is that [EnergyCo] has committed to coordinate workforce accommodation at a strategic level within Renewable Energy Zones. EnergyCo has established a Steering Committee with relevant councils within the REZs to manage strategic issues like workforce accommodation, which the Department attends. There is also a specific sub-committee (the Housing and Accommodation Working Group) which reports to the Steering Committee).

127. On the basis of the additional information provided by the Applicant and the Department, the Commission accepts that there is likely to be sufficient workforce accommodation for the Project. To manage the potential cumulative impacts associated with multiple projects in the region and to encourage the employment of locally sourced workers, the Commission has imposed condition B39 which states that the Applicant must prepare an Accommodation and Employment Strategy for the development in consultation with Council. As part of this strategy the Applicant must propose measures to ensure there is sufficient accommodation (i.e. ensuring peak construction activity does not conflict with key tourism activity) for the workforce associated with the development and take into consideration other SSD projects in the area.

5.6.2 Social impact and community benefit

128. Submissions to the Commission raised concern regarding the quality of consultation undertaken by the Applicant and the actual benefits of the proposal to the local community. A submission raised concern regarding the mental health impacts and the social disruption that the community has experienced because of the Project. The Commission also received several supporting submissions that raised the positive impacts, for example, of the VPA, local employment opportunities, improved road safety outcomes arising out of the proposed upgrades, and reduced GHG emissions.
129. In addition to its contribution to energy transition, the Project would generate direct and indirect benefits to the local community, including (AR Table 11):
- the 300 construction workers required during the 6-to-9-month peak construction period;
 - expenditure on accommodation and business in the local economy by workers who would reside in the area; and
 - the procurement of goods and services by the Applicant and associated contractors.
130. Page 68 of the Applicant's RtS states that local employment would be maximised. The Applicant expects that approximately 50% of the workforce (approximately 175 workers) would be sourced from the local community.
131. Noting that the Applicant has reached an in-principle agreement with Council to enter into a VPA (refer section 3.4 of this Statement of Reasons), the Commission has imposed condition A15 which states that the Applicant must enter into a VPA with Council in accordance with the terms of that agreement prior to the commencement of construction.
132. The Commission acknowledges that the Project has the potential to result in negative social impacts, particularly for the local community as referenced in paragraph 56 above. The Commission acknowledges that these impacts can be cumulative when considered in the context of other Projects approved or under consideration. However, the Commission is satisfied that these impacts can be minimised and managed through conditions of consent including but not limited to condition A17 requiring a Community Communication Strategy.
133. To ensure that appropriate and substantive communication between the Applicant and community occurs throughout all phases of the Project, the Commission has imposed condition A17 requiring the Applicant to prepare a Community Communication Strategy, prior to the issue of any construction certificate. The Community Communication Strategy must, among other requirements: identify people to be consulted during all phases of the Project; and set out procedures and mechanisms through which the community can provide feedback to the Applicant including how responses are managed to this feedback, as well as processes for dispute resolution.
134. Subject to the imposed conditions, the Commission is satisfied with the Project's capacity to provide an overall community benefit.

5.7 Decommissioning and rehabilitation

135. The Commission notes the number of submissions that raised concern regarding the decommissioning and rehabilitation of the Project's infrastructure.
136. The Solar Energy Guideline identifies the following four key decommissioning and rehabilitation principles (page 31):
- the land on which a large-scale solar energy project and supporting infrastructure is developed must be returned to pre-existing use if the project is decommissioned;
 - if operations cease, infrastructure (including underground infrastructure) should be removed unless there is significant justification for retaining it;
 - land must be rehabilitated and restored to pre-existing use, including the pre-existing LSC class, if previously used for agricultural purposes; and
 - the owner or operator of a solar energy project should be responsible for decommissioning and rehabilitation, and this should be reflected in an agreement with the host landholder.
137. The Commission agrees with DPI Agriculture (advice to the Department dated 19 March 2021 and 21 October 2022) and the Department (meeting with the Commission on 12 October 2023) that all infrastructure including underground cabling should be removed from the Site as part of its decommissioning.
138. The Commission is satisfied that with the implementation of objective-based conditions and monitoring requirements, which are consistent with the key principles above – the Project is capable of being decommissioned and the Site appropriately rehabilitated (AR Table 11).
139. The Commission has imposed condition B40, which states that the Applicant must prepare a Decommissioning and Rehabilitation Plan within 3 years of the commencement of operation and reviewed at years 10 and 20 of the Project, as well as 2 years prior to the Project's decommissioning. A key reason for the early preparation and the periodic review of the plan as required by condition B40, is to ensure that it has the most up to date information relating to recycling technology and waste management initiatives. It also enables the plan to be updated to reflect any rehabilitation that might have occurred over the life of the Project. The Commission has additionally imposed condition B41 which sets specific rehabilitation objectives that the Applicant must meet within 18 months of cessation of operations. This includes removing all infrastructure from the Site (above and below ground apart from the substation and any necessary infrastructure required for its ongoing operation), and returning the development footprint to the pre-existing land and soil capability.

5.8 Other issues

5.8.1 Supply chain

140. Submissions raised concern about ethical supply chains and the potential for overseas modern slavery practices to be associated with panels and infrastructure procured for the Project. The Commission notes that, separate to the development consent granted by the Commission, the Applicant would be required to satisfy the relevant requirements of the Commonwealth *Modern Slavery Act 2018* and the NSW *Modern Slavery Act 2018*.

141. The Commission is satisfied that the Applicant must comply with the relevant requirements of both Modern Slavery Acts in constructing and operating the development. Some submissions have suggested that the Commission impose conditions in relation to this matter. Whilst acknowledging the importance of this issue, the Commission considers that the imposition of conditions to address this issue, even if it was within the power of the planning legislation, would be duplicative and unnecessary.

5.8.2 Water

142. The Department in its response to the Commission dated 19 October 2023 stated that DPE Water is satisfied that sufficient water entitlement and access to viable water supplies is available. The Department stated that if insufficient water is collected on site from rainwater tanks and dams, water would be obtained from commercial water providers.
143. The Applicant in its response to the Commission, dated 3 November 2023 provided the total watering estimates for the proposed landscaping; low range – 561 KL, mid-range – 1495 KL and the upper limit – 2991 KL (worst case). The Applicant states that the most water intensive works, during the 3-month vegetative establishment period, would be carried out during the construction period. During operation the water usage for plantings would be much lower. The Applicant stated that by selecting appropriate species, planting techniques and planting density, and by following up with monitoring and maintenance actions, the planting success is considered highly achievable.
144. The Commission is of the view that the Project would not result in significant impacts on water resources, subject to the conditions (AR Table 11).
145. Notwithstanding the above, the Commission acknowledges the concerns raised in submissions regarding the risk of drought and that the proposed mitigatory vegetation screening is contingent on the availability of water. The Commission has therefore imposed condition B29 which states that the Applicant must ensure that it has sufficient water for all stages of the development - including volumes required for the maintenance and support of vegetation screening for the life of the Project.
146. The Commission also acknowledges the concerns raised in a submission that there were no conditions of consent proposed to preserve the existing water pipeline referenced in paragraph 62. The Commission has therefore imposed condition A10 which states that the Applicant must relocate, or pay the full costs associated with relocating, the Gara Road water pipeline should it need to be relocated as a result of the development.

5.8.3 Noise impacts

147. Submissions raised concerns regarding the impacts of construction noise associated with the Project. The Commission notes that noise generated during construction, upgrading and decommissioning activities are predicted to be well below the 'highly noise affected' criterion of 75dB(A) in the ICNG at all non-associated residential receivers, noting that construction is limited to daytime hours (AR Table 11). Construction noise would also not exceed the noise management level of 45 dB(A) for all non-associated residential receivers.
148. The Commission is satisfied that construction and operational noise impacts would be limited and should be undertaken in accordance with the ICNG and NPfl. The Commission has imposed condition B23 which states that construction, upgrading or decommissioning must be undertaken in accordance with the requirements outlined in the ICNG. Condition B23 also requires that operational noise must meet the requirements of the NPfl. Furthermore, construction, upgrading and decommissioning must be undertaken within the hours set out in condition B20 imposed by the Commission.

5.8.4 Erosion and sediment control

149. The Commission acknowledges that concerns were raised in submissions regarding the potential impacts of erosion as a result of the Project. Specific concerns were raised regarding the impacts on Commissioners Waters (including Platypus habitat) and the National Park. A submission recommended that an Erosion and Sediment Management Strategy be provided as a condition of approval.
150. According to the Department, the National Parks and Wildlife Service (**NPWS**) advised that potential impacts to the National Park could be effectively managed with the implementation of a Soil and Water Management Plan (**SWMP**) (AR Table 11).
151. The Commission is satisfied that any erosion and sedimentation risks associated with the Project can be effectively managed by following the *Managing Urban Stormwater: Soils and Construction*.
152. For the reasons set out above, the Commission has imposed condition B31 which sets out soil erosion and sediment control operating conditions. The Commission has also imposed condition B32 which states that the Applicant must prepare a SWMP in consultation with DPE Water, Council and NPWS and include requirements to monitor the effectiveness of the measures established in the Plan.

5.8.5 Dust

153. Submissions raised concerns regarding the dust impacts associated with the Project. The Commission is satisfied that dust impacts can be mitigated and managed through conditions of consent subject to accepted management measures. The Commission has therefore imposed condition B24 which states that the Applicant must ensure all operations and activities occurring at the Site are carried out in a manner that minimises dust including the emission of wind-blown, or traffic generated dust.

5.8.6 Hazards and risks

154. A small area of the Project's development footprint (3.4%) is mapped as bushfire prone land (AR Table 11). The Commission acknowledges that a heightened fire risk, potentially arising from the BESS and substation, was a concern raised in submissions.
155. The Applicant in its response to the Commission dated 3 November 2023 identifies design elements proposed to mitigate fire risks (pg 13). This includes the installation of water storage tanks for firefighting, run-off capture from the operations and maintenance buildings, and management of vegetation fuel loads. The Applicant also set out several commitments to be outlined in the Fire Safety Plan and Emergency Response Plan (page 13-15).
156. The Commission is satisfied that fire risks associated with the Project can be suitably managed through the implementation of standard fire management procedures and recommendations made by FRNSW and RFS, including compliance with RFS's *Planning for Bushfire Protection 2019* and standards for asset protection zones (AR Table 11). The Commission has also imposed appropriate conditions to ensure there is sufficient water for firefighting purposes.
157. The Commission has imposed conditions relating to bushfire management, including conditions B33 and B36, which require the Applicant to prepare a Fire Safety Study and Emergency Plan, respectively. The Commission has also imposed condition B34 to ensure that all chemicals, fuels, and oils are stored in accordance with Australian Standards and EPA requirements.

5.8.7 Aboriginal cultural heritage

158. The Commission acknowledges that a number of submissions raised concern regarding the Project's impacts on Aboriginal cultural heritage. The Commission notes that site surveys were undertaken by the Applicant in consultation with Registered Aboriginal Parties, and that the Project would avoid the majority of identified sites (48 of 70 items). The Department notes that although some sites with low scientific significance would be subject to direct and indirect impacts by the Project, exclusion zones would be established to protect the three sites with moderate scientific significance, and the two sites of high scientific significance (both scarred trees) would not be impacted by the Project. If Aboriginal artefacts or skeletal material are identified during construction of the project, all work would cease and an unexpected finds procedure would be implemented (AR Table 11).
159. The Commission agrees with the Department and Heritage NSW's views that the project would not significantly impact the Aboriginal heritage values of the locality, and has imposed condition B27 which states that the Applicant must ensure that the Project does not cause any direct or indirect impacts to Aboriginal heritage items identified in the consent or any heritage items outside the approved development footprint.

5.8.8 Historic heritage

160. The Commission notes that both the Department and Heritage NSW are satisfied that the Project would not have any adverse impacts on State, National or World heritage items within or near the Site. This was on the proviso that effective screen planting is established between the Site and the National Park to mitigate any potential visual impacts on the Gondwana Rainforests of Australia. The Commission acknowledges the Applicant's commitments to vegetation screening as set out in section 5.4 above.
161. The Commission has imposed condition B28, requiring the Applicant to prepare a Heritage Management Plan. As part of this plan the Applicant must set out measures that would be implemented to protect heritage items including the Gondwana Rainforests of Australia.

5.8.9 Waste and recycling

162. The Commission acknowledges the submissions that raised concern about waste, particularly regarding the disposal of solar panels. The Commission also notes Council's concerns about waste from renewables projects in the New England REZ and the use of the Armidale Regional Landfill facility (meeting with the Commission on 6 October 2023).
163. The Commission notes that the Applicant is committed to recycling solar panels and their materials as much as possible in line with the best technologies available currently and in the future (meeting with the Commission on 6 October 2023). The Commission notes that this is consistent with the Guideline FAQ, which advises that "*the Department will continue to work with the [EPA] to improve options to recycle and re-use solar panels over time*" (page 4). The Applicant in its response to the Commission dated 3 November 2023 stated that panel repurposing and panel recycling industries are expected to grow and may lead to further local and regional opportunities. In this respect, condition 40 relating to the Decommissioning and Rehabilitation of the Site requires periodic review to ensure that the operators of the solar farm have the most up to date information relating to recycling technology, and waste management initiatives.

164. The Commission has also imposed condition B38, which includes, amongst other requirements, that the Applicant must minimise the waste generated by the Project, not receive or dispose of any waste on site, remove all waste from the site as soon as practicable, and ensure all waste is reused, recycled or sent to an appropriately licensed waste facility for disposal (including consultation with Council for use of Council facilities).

5.8.10 Wildlife corridor

165. The Commission notes that submissions supported the proposed revegetation of riparian zones and improved wildlife connectivity across the Site. The Applicant has proposed a Wildlife Corridor Connectivity Enhancement Plan in the RtS. The Commission strongly supports this commitment but considers that it should be imposed as a condition of consent to ensure that it is implemented. The Commission has therefore imposed condition B14.

5.8.11 Grid capacity and BESS performance

166. The Commission acknowledges the concerns raised at the public meeting regarding the Project and its potential impacts on grid security and reliability. The Commission also acknowledges that concerns were raised regarding the capacity and performance of the BESS to meet the electricity storage target for the New England REZ. These concerns were also echoed in submissions on the Additional Material (as referenced in paragraphs 76, 77 and 78 above).
167. EnergyCo in its response to the Commission dated 14 November 2023 stated (page 2):
- the Project is not expected to materially affect transmission network costs and as a renewable energy generation project it would contribute to putting downward pressure on energy prices;
 - the Project would contribute towards meeting the NSW renewable energy objectives as set out in the Roadmap and EII Act;
 - the Project would support meeting NSW's net zero objectives;
 - the BESS would provide greater control over the dispatch of energy from the Project; and
 - the BESS would contribute towards the NSW Government's objectives to develop additional storage capacity within the New England REZ.
168. The Commission accepts EnergyCo's advice on this matter and is satisfied that the Project is consistent with both the Federal and NSW Government's strategic planning frameworks as it would deliver up to 215 MW of renewable energy and assist in the transition to a lower emissions energy sector.

5.8.12 Subdivision

169. The Commission is of the view that the proposed subdivision is necessary for the operation of the substation, the battery and ancillary facilities (AR Table 11). The Applicant must therefore subdivide the Site as required by condition A12 imposed by the Commission. The subdivision should be approved for the reasons given at Table 11 of the AR. Condition A12 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 proposal not proceed.

6. The Commission's findings and determination

170. The views of the community were expressed through public submissions and comments received (as part of exhibition of the Project by the Department 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.
171. 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 within the New England REZ of an appropriate size and power generation, which will increase the share of renewables 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 ARLEP 2012;
 - the selected Site is a suitable site for renewable energy development, given its location within a REZ, topography, solar resources, existing land capability class, avoidance of major environmental constraints, and access to the regional road network as well as the existing electrical transmission network;
 - the Project represents an effective and compatible use of the land;
 - the risk of contamination from damaged or degraded solar panels – both for the Project and solar farms more generally – has been found, and is likely in this case, to be minimal;
 - there is unlikely to be a serious and irreversible impact on biodiversity present in the area;
 - impacts on visual amenity and landscape character would be low and will be mitigated by separation distance, topography, retained vegetation and proposed vegetation screening;
 - there would be no material cumulative traffic impacts on the State, regional or local road network as a result of the Project;
 - 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 and other initiatives;
 - with the implementation of objective-based conditions and monitoring requirements, the Project is capable of being decommissioned and the Site appropriately rehabilitated;
 - the Project would not result in significant impacts on water resources;
 - erosion and sedimentation risk associated with the Project can be effectively managed;
 - bush and other fire risks can be suitably controlled through the implementation of standard fire management procedures and recommendations;
 - the Project would not significantly impact the Aboriginal or historic heritage values of the locality;
 - the conditions modified and imposed by the Commission in view of community concerns and additional information received will 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 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.
172. For the reasons set out in paragraph 171 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 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.
173. The reasons for the Decision are given in the Statement of Reasons for Decision dated 11 December 2023.



Chris Wilson (Chair)
Member of the Commission



Wendy Lewin
Member of the Commission



Alison McCabe
Member of the Commission



New South Wales Government
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